CONSIDERATION OF THE SECONSIDER	REQUEST FOR PROPOSAL (RFP) DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION
RFP NUMBER	119077
RFP TITLE	Forensic Medical Transcription Service
	October 1, 2019 2:00 p.m. (CST)
RFP DEADLINE	Late proposals, faxed proposals, electronic mail proposals or unsigned proposals will be rejected.
	CITY COUNTY BUILDING

	proposals will be rejected.	
SUBMIT PROPOSAL TO THIS ADDRESS	CITY COUNTY BUILDING DANE COUNTY PURCHASING DIVISION 210 MARTIN LUTHER KING JR BLVD ROOM 425 MADISON, WI 53703-3345	
	NAME	Carolyn A. Clow
DIRECT	TITLE	Purchasing Agent
ALL INQUIRES TO	PHONE #	608/266-4966
	EMAIL	Clow.carolyn@countyofdane.com
	WEB SITE	www.danepurchasing.com
DATE ISSUED: August 14, 2019		

PROPOSAL SUBMISSION CHECKLIST		
# of Proposals	Proposal Delivery	
 (1) original (5) copies (1) electronic copy of your proposal and cost proposal in PDF format on a flash drive Cost proposal original and one copy in a separate envelope per Section 5.1. Up-to-date Vendor Registration 	 Sealed envelope/package containing proposals and labeled with: Vendor Name Bid Number Bid Deadline Date/Time 	
PROPOSALS MUST BE DATE/TIME STAMPED BY A DANE COUNTY DEPARTMENT OF ADMINISTRATION STAFF MEMBER		

Revised 10/2018

1.0 GENERAL INFORMATION

- 1.1 Introduction
- 1.2 Clarification of the Specifications
- 1.3 Reasonable Accommodations
- 1.4 Addendums and/or Revisions
- 1.5 Calendar of Events
- 1.6 Contract Term and Funding
- 1.7 Submittal Instructions
- 1.8 Multiple Proposals
- 1.9 Required Copies
- 1.10 Proposal Organization and Format
- 1.11 Proprietary Information
- 1.12 Cooperative Purchasing
- 1.13 Vendor Registration
- 1.14 Local Purchasing Ordinance
- 1.15 Dane County Sustainability Principles
- 1.16 Fair Labor Practice Certification

2.0 PROPOSAL SELECTION AND AWARD PROCESS

- 2.1 Preliminary Evaluation
- 2.2 Proposal Scoring
- 2.3 Oral Presentations/Interview
- 2.4 Evaluation Criteria
- 2.5 Right to Reject Proposals and Negotiate Contract Terms
- 2.6 Award and Final Offers
- 2.7 Notification of Intent to Award

3.0 PROJECT OVERVIEW AND SCOPE OF SERVICES

- 3.1 Definitions and Links
- 3.2 Scope of Services/Specification Overview

4.0 PROPOSAL PREPARATION REQUIREMENTS

- 4.1 Required Form Attachment A Vendor Information
- 4.2 Table of Contents
- 4.3 Tab 1: Organization capabilities
- 4.4 Tab 2: Staff qualifications
- 4.5 Tab 3: Report receipt and format
- 4.6 Tab 4: Timing & method for initiating reports
- 4.7 Tab 5: References
- 4.8 Required Form Attachment B Designation of Confidential & Proprietary Information

5.0 COST PROPOSAL

- 5.1 General Instructions on Submitting Cost Proposals
- 5.2 Format for Submitting Cost Proposals
- 5.3 Fixed Price Period

6.0 REQUIRED FORMS – ATTACHMENTS

- 6.1 Attachment A Vendor Information
- 6.2 Attachment B Designation of Confidential & Proprietary Information
- 6.3 Attachment C Cost Proposal

7.0 STANDARD TERMS AND CONDITIONS

8.0 REQUIRED FORMS – APPENDICES

- 8.1 Appendix 1 Basic Pediatric Autopsy Template
- 8.2 Appendix 2 ETOH Example
- 8.3 Appendix 3 Gunshot Wound Autopsy Template
- 8.4 Appendix 4 Homicide Example 1
- 8.5 Appendix 5 Homicide Example 2

TABLE OF CONTENTS

- 8.6 Appendix 6 Infant Example 1
 8.7 Appendix 7 Infant Example 2
 8.8 Appendix 8 Motor Vehicle Accident Example
 8.9 Appendix 9 Overdose Example
 8.10 Appendix 10 Rogalska Autopsy Template

1.0 GENERAL INFORMATION

1.1 Introduction

The purpose of this document is to provide interested parties with information to enable them to prepare and submit a proposal to provide forensic medical transcription services for the Dane County Medical Examiner's Office according to the specifications set forth within this document.

The County intends to use the results of this process to award a contract or issue of purchase order for the product(s) and or services(s) stated.

The Dane County Purchasing Division is the sole point of contact for questions and issues that may arise during the RFP process.

1.2 Clarification of the Specifications

All inquiries concerning this RFP must be directed to the **person indicated on the cover page** of the RFP Document. (Electronic mail is the preferred method)

Any questions concerning this RFP must be submitted in writing by mail, fax or e-mail on or before the stated date on the **Calendar of Events** (Section 1.5).

Proposers are expected to raise any questions, exceptions, or additions they have concerning the RFP document at this point in the RFP process. If a proposer discovers any significant ambiguity, error, conflict, discrepancy, omission, or other deficiency in this RFP, the proposer should immediately notify the contact person of such error and request modification or clarification of the RFP document.

Proposers are prohibited from communicating directly with any employee of Dane County, except as described herein. No County employee or representative other than those individuals listed as County contacts in this RFP is authorized to provide any information or respond to any question or inquiry concerning this RFP.

1.3 <u>Reasonable Accommodations</u>

The County will provide reasonable accommodations, including the provision of informational material in an alternative format, for qualified individuals with disabilities upon request. If you need accommodations at a proposal opening/vendor conference, contact the Purchasing Division at (608) 266-4131 (voice) or 608/266-4941 (TTY).

1.4 Addendums and/or Revisions

In the event that it becomes necessary to provide additional clarifying data or information, or to revise any part of this RFP, revisions/amendments and/or supplements will be posted on the Purchasing Division <u>website</u>.

It shall be the responsibility of the proposers to regularly monitor the Purchasing Division web site for any such postings. Proposers must acknowledge the receipt/review of any addendum(s) at the bottom of the Vendor Information Page.

Each proposal shall stipulate that it is predicated upon the terms and conditions of this RFP and any supplements or revisions thereof.

1.5 <u>Calendar of Events</u>

Listed below are specific and estimated dates and times of actions related to this RFP. The actions with <u>specific</u> dates must be completed as indicated unless otherwise changed by the County. In the event that the County finds it necessary to change any of the specific dates and times in the calendar of events listed below, it will do so by issuing an addendum to this RFP and posting such addendum on the Dane County <u>website</u>. There may or may not be a formal notification issued for changes in the estimated dates and times.

DATE	EVENT
August 14, 2019	RFP Issued
September 13, 2019	Last day to submit written inquiries (2:00 p.m. CST)
September 17, 2019	Addendums or supplements to the RFP posted on the Purchasing Division website
October 1, 2019	Proposals due (2:00 p.m. CST)
Late October 2019	Interviews (if needed)
November 2019	Vendor Selection/Award

1.6 Contract Term and Funding

The contract shall be effective on the date indicated on the purchase order or the contract execution date and shall run for one year(s) from that date, with an option by mutual agreement of the County and contractor, to renew for four (4) additional one-year periods.

1.7 Submittal Instructions

Proposals must be received in by the County Purchasing Division by the specified time stated on the cover page. All proposals must be time-stamped in by the Purchasing Division by the stated time. Proposals not so stamped will not be accepted. Proposals received in response to this solicitation will not be returned to the proposers.

Dane County is not liable for any cost incurred by proposers in replying to this RFP.

All proposals must be packaged, sealed and show the following information on the outside of the package:

- Proposer's name and address
- □ Request for proposal title
- □ Request for proposal number
- □ Proposal due date

1.8 <u>Multiple Proposals</u>

Multiple proposals from a vendor will be permissible, however each proposal must conform fully to the requirements for proposal submission. Each such proposal must be separately submitted and labeled as Proposal #1, Proposal #2, etc.

1.9 <u>Required Copies</u>

Proposers must submit **an original and the required number of copies** of all materials required for acceptance as instructed on the cover page of the RFP.

All hard copies of the proposal must be on 8.5"x11" individually securely bound. In addition, proposers must submit one complete electronic copy in Microsoft Word or PDF format saved on a Flash Drive.

1.10 Proposal Organization and Format

Proposals should be organized to comply with the section numbers and names as shown in Section 4.0: Proposal Preparation Requirements.

1.11 **Proprietary Information**

All restrictions on the use of data contained within a proposal and all confidential information must be clearly stated on the Required Form – Attachment B "Designation of Confidential and Proprietary Information". Proprietary information submitted in a proposal, or in response to the RFP, will be handled in accordance with the applicable Wisconsin State Statute(s).

To the extent permitted by law, it is the intention of Dane County to withhold the contents of the proposal from public view until such times as competitive or bargaining reasons no longer require non-disclosure, in the opinion of Dane County. At that time, all proposals will be available for review in accordance with the Wisconsin Open Records Law.

1.12 Cooperative Purchasing

Participating in cooperative purchasing gives vendors opportunities for additional sales without additional bidding. Municipalities use the service to expedite purchases. A "municipality" is defined as any county, city, village, town, school district, board of school directors, sewer district, drainage district, vocational, technical and adult education district, or any other public body having authority to award public contracts (s. 16.70(8), Wis. Stats.). Federally recognized Indian tribes and bands in this state may participate in cooperative purchasing with the state or any municipality under ss. 66.0301(1) and (20, Wis. Stats.)

On the Vendor Information page, you will have the opportunity to participate in allowing other municipalities to piggyback this bid. Participation is not mandatory. A vendor's decision on participating in this service has no effect on awarding the bid.

Dane County is not a party to these purchases or any dispute arising from these purchases and is not liable for delivery or payment of any of these purchases.

1.13 Vendor Registration Program:

All proposers are strongly encouraged to be a registered vendor with Dane County. Registering allows vendors an opportunity to receive notifications for solicitations issued by the County and provides the County with up-to-date company contact information.

Provide your Dane County Vendor # in the Vendor Information section of the proposal submission packet.

For Non-Registered Vendors:

Complete vendor registration by visiting www.danepurchasing.com. On the top menu bar, click Vendor Registration and then click Create Vendor Account. You will receive an email confirmation once your account is created and again when your vendor registration is complete. Retain your user name/email address and password for ease of re-registration in future years. Within 2-4 days of completing the registration, a vendor number will be assigned and emailed to you.

For Registered Vendors:

Check to make sure your vendor information including commodity codes is up-to-date by signing into your account at www.danepurchasing.com. On the top menu bar, click Vendor Registration and then click Vendor Log In.

1.14 Local Purchasing Ordinance

Under County ordinances, a Local Vendor is defined as a supplier or provider of equipment, materials, supplies or services that has an established place of business within the County of Dane. An established place of business means a physical office, plant or other facility. A post office box address does not qualify a vendor as a Local Vendor.

County ordinance provides that a local vendor automatically receive five points toward the evaluation score.

Vendors located within the counties adjacent to Dane County (Columbia, Dodge, Green, lowa, Jefferson, Rock, Sauk) automatically receive two points toward the evaluation score.

1.15 Dane County Sustainability Principles

On October 18, 2012, the Dane County Board of Supervisors adopted Resolution 103, 2012-2013 establishing the following sustainability principles for the county:

- Reduce and eventually eliminate Dane County government's contribution to fossil fuel dependence and to wasteful use of scarce metals and minerals;
- Reduce and eventually eliminate Dane County government's contribution to dependence upon persistent chemicals and wasteful use of synthetic substances;
- Reduce and eventually eliminate Dane County government's contribution to encroachment upon nature and harm to life-sustaining ecosystems (e.g., land, water, wildlife, forest, soil, ecosystems);
- Reduce and eventually eliminate Dane County government's contribution to conditions that undermine people's ability to meet their basic human needs.

1.16 Fair Labor Practice Certification

Dane County Ord. 25.09 (1) is as follows:

(28) BIDDER RESPONSIBILITY. (a) Any bid, application or proposal for any contract with the county, including public works contracts regulated under chapter 40, shall include a certification indicating whether the bidder has been found by the National Labor Relations Board (NLRB) or the Wisconsin Employment Relations Committee (WERC) to have violated any statute or regulation regarding labor standards or relations within the last seven years. The purchasing manager shall investigate any such finding

SECTION 1 – GENERAL INFORMATION

and make a recommendation to the committee, which shall determine whether the conduct resulting in the finding affects the bidder's responsibility to perform the contract.

If you indicated that you have been found by the NLRB or WERC to have such a violation, you must include a copy of any relevant information regarding such violation with your proposal, bid or application.

Additional information can be found using the following links: <u>www.nlrb.gov</u> and <u>http://werc.wi.gov</u>.

2.0 PROPOSAL SELECTION AND AWARD PROCESS

2.1 <u>Preliminary Evaluation</u>

The proposals will first be reviewed to determine if requirements in Section 1 and Section 4 are met. Failure to meet mandatory requirements will result in the proposal being rejected. In the event that all vendors do not meet one or more of the mandatory requirements, the County reserves the right to continue the evaluation of the proposals and to select the proposal which most closely meets the requirements specified in this RFP.

2.2 <u>Proposal Scoring</u>

Accepted proposals will be reviewed by an evaluation team and scored against the stated criteria. This scoring will determine the ranking of vendors based upon their written proposals. If the team determines that it is in the best interest of the County to require oral presentations, the highest-ranking vendors will be invited to make such presentations. Those vendors that participate in the interview process will then be scored, and the final ranking will be made based upon those scores.

2.3 Oral Presentations/Interview

Top ranked selected proposers may be required to make oral interview presentations and/or site visits to supplement their proposals, if requested by the County. The County will make every reasonable attempt to schedule each presentation at a time and location that is agreeable to the proposer. Failure of a proposer to conduct a presentation to the County on the date scheduled may result in rejection of the vendor's proposal.

2.4 Evaluation Criteria

The proposals will be scored using the following criteria:

Proposal Requirements	Percent
Organization Capabilities	400/
(Section 4.3 & 4.5)	40%
Staff Qualifications	15%
(Section 4.4)	15%
Timing & Method for Initiating Reports	200/
(Section 4.6)	20%
Cost	Percent
Cost	250/
(Section 5)	25%
Total	100%

2.5 Right to Reject Proposals and Negotiate Contract Terms

The County reserves the right to reject any and all proposals and to negotiate the terms of the contract, including the award amount, with the selected proposer prior to entering into a contract. If contract negotiations cannot be concluded successfully with the highest scoring proposer, the County may negotiate a contract with the next highest scoring proposer.

2.6 <u>Award and Final Offers</u>

The award will be granted in one of two ways. The award may be granted to the highest scoring responsive and responsible proposer. Alternatively, the highest scoring proposer or proposers may be requested to submit final and best offers. If final and best offers are requested, they will be evaluated against the stated criteria, scored and ranked. The award will then be granted to the highest scoring proposer.

2.7 Notification of Intent to Award

As a courtesy, the County may send a notification of award memo to responding vendors at the time of the award.

3.0 PROJECT OVERVIEW AND SCOPE OF SERVICES

3.1 <u>Definitions and Links</u>

The following definitions and links are used throughout the RFP. **County:** Dane County **County Agency:** Department/Division utilizing the service or product. **Proposer/Vendor/Firm/Contractor:** a company submitting a proposal in response to this RFP. **Dane County Purchasing website:** www.depenurchasing.com

Dane County Purchasing website:www.danepurchasing.comFair Labor Practices websites:www.nlrb.govand http://werc.wi.gov

3.2 <u>Scope of Services/Specification Overview</u>

The Dane County Medical Examiner's Office are requesting a quotation for medical transcription services. The yearly amount of transcriptions that will be required varies depending on the number of autopsies performed by the Dane Medical Examiner's Office However, there are approximately 400 - 800 reports per year that will be required by the

The Dane County Medical Examiner's Office has oversight over 5 Wisconsin County Medical Examiner Offices and performs autopsies for addition Counties as requested. The Medical Examiner pathologists use dictation templates. See Appendices 1-10 for examples of templates and reports.

Vendors shall indicate in their proposals that they are providing medical transcription services from dictation transmitted via telephone.

The Medical Examiner's Office currently uses an off-site medical transcription service that provides dedicated telephone lines for doctors and others to call and dictate case reports. The service provides phone key strokes for various tasks such as pause, rewind, replay, etc.

4.0 PROPOSAL PREPARATION REQUIREMENTS

Proposals should be organized to comply with the section numbers and names as shown below. Each section heading should be separated by tabs or otherwise clearly marked. Hardcopies shall be bound in an $8\frac{1}{2}$ " x 11" format, but 11"x17" pages for graphics may be included. The RFP sections which should be submitted/responded to are:

4.1 <u>Required Form – Attachment A – Vendor Information</u>

4.2 <u>Table of Contents</u>

Provide a table of contents that, at a minimum, includes all of the sections as identified below. Listings of sub-sections and graphics/tables also may be included. Section dividers are encouraged.

4.3 Tab 1: Organization Capabilities

Describe the firm's experience and capabilities in providing medical transcription services, particularly as related to autopsies, similar services to those required. Be specific and identify projects, dates, and results. The firm selected will provide a state-wide criminal history search/report for each staff member having access to confidential medical examiner reports. The vendor will also yearly provide a National Crime Information Center (NCIC) Criminal History for each employee with access to confidential medical examiner reports. The firm selected will also provide a copy of the confidentiality policy in place at the firm as well as copies of any updates or changes that are made to the policy within 30 days of the changes. Include a copy of the current confidentiality policy with proposal response.

4.4 Tab 2: Staff Qualifications

Provide resumes describing the educational and work experiences for each of the <u>key</u> staff who would be assigned to the project. Providers shall be well versed in medical terminology and have experience providing medical transcription services.

4.5 Tab 3: Report receipt and format

Proposer shall provide narrative to describe how the following requirements shall be met.

- 1. Vendor shall transcribe reports using format specified in the appendices;
- Access to reports shall be limited to the vendor and/or the vendor's employees. Confidentiality for this material must be maintained as reports contain medical material pertaining to the criminal justice system and citizen's protected health information;
- Vendor shall provide written certification that all records have been purged from the vendor's files, including computerized records, upon termination and/or at the end of the contract period;
- 4. Any corrections, including, but not limited to, errors in transcribing and typographical errors caused by vendor are to be corrected at vendor's own expense;
- 5. County will dictate into the telephone to transmit medical information into vendor's system;
- 6. Vendor shall be capable of transcribing from cassette tapes and/or electronic audio files in the event that telephones are temporarily unavailable;
- 7. Vendor shall perform all medical transcription services off-site; and

SECTION 4 – PROPOSAL PREPARATION REQUIREMENTS

8. Vendor shall use its own equipment to perform medical transcription services. This includes, but is not limited to, hardware and computer software systems necessary for dictation to be received by the vendor via telephone and computer equipment necessary to return reports to the County via e-mail

4.6 Tab 4: Timing & Method for Initiating Reports

Provide a narrative regarding the firm's process for initiating and completing reports, including the County's roles and resource requirements for this work.

- Vendor shall have a system that is auditable by case number/patient name/ physician name by date dictation received in order to match billing to the number of dictations;
- 2. Vendor shall transcribe in the order the dictation is received from the County;
- 3. Vendor shall deliver the transcriptions completed in Microsoft Word, via email, within three (3) working days from the date received;
- 4. Vendor shall add on to any previously dictated report;
- 5. Rush reports may be required from time to time. A "**RUSH**" report is defined as any report that is required to be completed and delivered in less than a 24-hour period from time received, including weekends and holidays.

4.7 Tab 5: References

Proposers must include in their RFPs a list of organizations, including points of contact (name, address, and telephone number), which can be used as references for work performed in the area of service required. Selected organizations may be contacted to determine the quality of work performed and personnel assigned to the project.

4.8 <u>Required Form – Attachment B – Designation of Confidential & Proprietary</u> Information

5.0 COST PROPOSAL

5.1 <u>General Instructions on Submitting Cost Proposals</u>

Proposers must submit an original and the required number of copies of the cost proposal as instructed on the **cover page of the RFP** (Special Instructions).

Cost Proposal Form (Attachment C) should be submitted in a separate envelope labeled **Cost Proposal** with the written proposal.

The proposal will be scored using a standard quantitative calculation where the most cost criteria points will be awarded to the proposal with the lowest cost.

5.2 Format for Submitting Cost Proposals

See Required Form – Attachment C – Cost Proposal.

For purposes of evaluating proposer's responses, the term "*CHARACTER*"shall be defined as: Any printable letter, number, symbol (i.e., commas, periods, quotation marks, etc.). The definition of a "*CHARACTER*"does not include: underscore, bold, spaces, or any function key or formatting codes necessary for final appearance of the report.

5.3 Fixed Price Period

All prices, costs, and conditions outlined in the proposal shall remain fixed for 180 days.

SECTION 6 – REQUIRED FORMS – ATTACHMENT A

VENDOR INFORMATION

VENDOR NAME:

Vendor Information (address below will be used to confirm Local Vendor Preference)			
Address			
City		County	
State		Zip+4	
Vendor Rep. Name		Title	
Email		Telephone	
Dane County Vendor #			

Fair Labor Practice Certification (check only 1)		
	Vendor has not been found by the National Labor Relations Board ("NLRB") or the Wisconsin Employment Relations Commission ("WERC") to have violated any statute or regulation regarding labor standards or relations in the seven years prior to the date this bid submission is signed.	
	Vendor has been found by the National Labor Relations Board ("NLRB") or the Wisconsin Employment Relations Commission ("WERC") to have violated any statute or regulation regarding labor standards or relations in the seven years prior to the date this bid submission is signed.	

Local Vendor Purchasing Preference			
Are you claiming a local purchasing preference under DCO 25.08(7)?	□ No□ Yes (complete remainder of this section)		
Preference as a Dane County Business:	□ Dane		
Preference as a business located in a county adjacent to Dane County:	□ Columbia □ Green □ Jefferson		

Cooperative Purchasing		
	I agree to furnish the commodities or services of this bid to other municipalities.	
	I do not agree to furnish the commodities or services of this bid to other municipalities.	

Addendums – this vendor herby acknowledges receipt/review of the following addendums, if any.				
Addendum #1	Addendum #2	Addendum #3	Addendum #4	None 🗆

	Signature Affidavit		
In signing this bid, we certify that we have not, either directly or indirectly, entered into any agreement or participated in any collusion or otherwise taken any action in restraint of free competition; that no attempt has been made to induce any other person or firm to submit or not to submit a bid; that this bid has been independently arrived at without collusion with any other bidder, competitor or potential competitor; that this bid has not been knowingly disclosed prior to the opening of bids to any other bidder or competitor; that the above statement is accurate under penalty of perjury.			
The undersigned agrees to hold the County harmless for any damages arising out of the release of any material unless they are specifically identified on Attachment B. The undersigned, submitting this bid, hereby agrees with all the terms, conditions, and specifications required by the County in this Request for Bid, and declares that the attached bid and pricing are in conformity therewith.			
Signature		Title	
Name (Printed)		Date	

DESIGNATION OF CONFIDENTIAL AND PROPRIETARY INFORMATION

 The attached material submitted in response to this Proposal includes proprietary and confidential information which qualifies as a trade secret, as provided in Sect 19.36(5), Wisconsin State Statutes, or is otherwise material that can be kept confidential under the Wisconsin Open Records law. As such, we ask that certain pages, as indicated below, of this proposal response be treated as confidential material and not be released without our written approval. Attach additional sheets if needed.

 Section
 Page #

 Topic

Proposer is not designating any information as proprietary and confidential which qualifies as trade secret.

Prices always become public information when proposals are opened, and therefore cannot be designated as confidential.

Other information cannot be kept confidential unless it is a trade secret. Trade secret is defined in Sect. 134(80)(1)(c) Wis. State Statutes, as follows: "Trade secret" means information, including a formula, pattern, compilation, program, device, method technique or process to which all of the following apply:

- 1. The information derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by other persons who can obtain economic value from its disclosure or use.
- 2. The information is the subject of efforts to maintain its secrecy that are reasonable under the circumstances.

In the event the Designation of Confidentiality of this information is challenged, proposer hereby agrees to provide legal counsel or other necessary assistance to defend the Designation of Confidentiality.

Failure to include this form in the proposal response may mean that all information provided as part of the proposal response will be open to examination or copying. The County considers other markings of confidential in the proposal document to be insufficient. The undersigned agrees to hold the County harmless for any damages arising out of the release of any material unless they are specifically identified above.

COST PROPOSAL VENDOR NAME:

Pricing shall be inclusive of all labor, delivery costs and other expenses necessary to provide product in accordance with the specifications and terms and conditions of this bid document and your proposal.

Proposers must quote "cost per character" rate based on approximately 600 reports annually for a term of three years with the option to renew for an additional two (2), one (1) year periods. The attached appendices 1-10 are samples of the some standard reports and their formats.

Cost per Character

\$

Medical Transcriptions via Telephone	\$
--------------------------------------	----

Rush Medical Transcriptions via Telephone

Percentage increase for	2021	%
Percentage increase for	2022	%

Descentage increases for 2022

- Percentage increase for 2023 ____%
- Percentage increase for 2024 ____%

STANDARD TERMS AND CONDITIONS Request for Bids/Proposals/Contracts

Rev. 03/2018

1.0 APPLICABILITY: The terms and conditions set forth in this document apply to Requests for Proposals (RFP), Bids and all other transactions whereby the County of Dane acquires goods or services, or both.

1.1 ENTIRE AGREEMENT: These Standard Terms and Conditions shall apply to any contract, including any purchase order, awarded as a result of this request. Special requirements of a resulting contract mayalso apply. Said written contract with referenced parts and attachments shall constitute the entire agreement, and no other terms and conditions in any document, acceptance, or acknowledgment shall be effective or binding unless expressly agreed to in writing by the County. Unless otherwise stated in the agreement, these standard terms conditions supersede any other terms and/or conditions applicable to this agreement.

1.2 DEFINITIONS: As used herein, "vendor" includes a provider of goods or services, or both, who is responding to an RFP or a bid, and "bid" includes a response to either an RFP or a bid.

2.0 SPECIFICATIONS: The specifications herein are the minimum acceptable. When specific manufacturer and model numbers are used, they are to establish a design, type of construction, quality, functional capability or performance level, or any combination thereof, desired. When alternates are proposed, they must be identified by manufacturer, stock number, and such other information necessary to establish equivalency. Dane County shall be the sole judge of equivalency. Vendors are cautioned to avoid proposing alternates to the specifications that may result in rejection of their bid.

3.0 DEVIATIONS AND EXCEPTIONS: Deviations and exceptions from terms, conditions, or specifications shall be described fully in writing, signed, and attached to the bid. In the absence of such statement, the bid shall be accepted as in strict compliance with all terms, conditions, and specifications and vendor shall be held liable for injury resulting from any deviation.

4.0 QUALITY: Unless otherwise indicated in the request, all material shall be first quality. No pre-owned, obsolete, discontinued or defective materials maybe used.

5.0 QUANTITIES: The quantities shown herein are based on estimated needs. The County reserves the right to increase or decrease quantities to meet actual needs.

6.0 DELIVERY: Deliveries shall be FOB destination freight prepaid and included unless otherwise specified. County will reject shipments sent C.O.D. or freight collect.

7.0 PRICING: Unit prices shown on the bid shall be the price per unit of sale as stated on the request or contract. For any given item, the quantity multiplied by the unit price shall

establish the extended price, the unit price shall govern in the bid evaluation and contract administration.

7.1 Prices established in continuing agreements and term contracts may be lowered due to market conditions, but prices shall not be subject to increase for the term specified in the award. Vendor shall submit proposed increases to the Purchasing Division thirty (30) calendar days before the proposed effective date of the price increase. Proposed increases shall be limited to fully documented cost increases to the vendor that are demonstrated to be industry wide. Price increases maynot be granted unless they are expressed in bid documents and contracts or agreements.

7.2 Submission of a bid constitutes bidder's certification that no financial or personal relationship exists between the bidder and any county official or employee except as specially set forth in writing attached to and made a part of the bid. The successful bidder shall disclose any such relationship which develops during the term of the contract.

8.0 ACCEPTANCE-REJECTION: Dane County reserves the right to accept or reject any or all bids, to waive any technicality in any bid submitted and to accept any part of a bid as deemed to be in the best interests of the County. Submission of a proposal or a bid constitutes the making of an offer to contract and gives the County an option valid for 60 days after the date of submission to the County.

8.1 Bids **MUST** be dated and time stamped by the Dane County Purchasing Division Office on or before the date and time that the bid is due. Bids deposited or time stamped in another office will be rejected. Actual receipt in the office of the purchasing division is necessary; timely deposit in the mail system is not sufficient. THERE WILL BE NO EXCEPTIONS TO THIS POLICY.

9.0 METHOD OF AWARD: Award shall be made to the lowest responsible responsive bidder conforming to specifications, terms, and conditions, or to the most advantageous bid submitted to the County on a quality versus price basis.

10.0 ORDERING/ACCEPTANCE: Written notice of award to a vendor in the form of a purchase order or other document, mailed or delivered to the address shown on the bid will be considered sufficient notice of acceptance of bid. A formal contract containing all provisions of the contract signed by both parties shall be used when required by the Dane County Purchasing Division.

11.0 PAYMENT TERMS AND INVOICING: Unless otherwise agreed, Dane County will pay properly submitted vendor invoices within thirty (30) days of receipt of goods and services. Payment will not be made until goods or services are delivered, installed (if required), and accepted as specified. Invoices presented for payment must be submitted in accordance with instructions contained on the purchase order.

SECTION 7 – STANDARD TERMS AND CONDITIONS

11.1 NO WAIVER OF DEFAULT: In no event shall the making of any payment or acceptance of any service or product required by this Agreement constitute or be construed as a waiver by County of any breach of the covenants of the Agreement or a waiver of any default of the successful vendor, and the making of any such payment or acceptance of any such service or product by County while any such default or breach shall exist shall in no way impair or prejudice the right of County with respect to recovery of damages or other remedyas a result of such breach or default.

12.0 TAXES: The County and its departments are exempt from payment of all federal tax and Wisconsin state and local taxes on its purchases except Wisconsin excise taxes as described below. The State of Wisconsin Department of Revenue has issued tax exempt number ES41279 to Dane County.

12.1 The County is required to pay the Wisconsin excise or occupation tax on its purchase of beer, liquor, wine, cigarettes, tobacco products, motor vehicle fuel and general aviation fuel. The County is exempt from Wisconsin sales or use tax on these purchases. The County may be subject to other states' taxes on its purchases in that state depending on the laws of that state. Vendors performing construction activities are required to pay state use tax on the cost of materials.

13.0 GUARANTEED DELIVERY: Failure of the vendor to adhere to delivery schedules as specified or to promptly replace rejected materials shall render the vendor liable for all costs in excess of the contract price when alternate procurement is necessary. Excess costs shall include administrative costs.

14.0 APPLICABLE LAW AND VENUE: This contract shall be governed under the laws of the State of Wisconsin, and venue for any legal action between the parties shall be in Dane County Circuit Court. The vendor shall at all times comply with and observe all federal and state laws, local laws, ordinances, and regulations which are in effect during the period of this contract and which in any manner affect the work or its conduct.

15.0 ASSIGNMENT: No right or duty in whole or in part of the vendor under this contract may be assigned or delegated without the prior written consent of Dane County.

NONDISCRIMINATION/AFFIRMATIVE ACTION: 16.0 During the term of this Agreement the vendor agrees, in accordance with sec. 111.321, Wis. Stats., and Chapter 19 of the Dane County Code of Ordinances, not to discriminate against any person, whether an applicant or recipient of services, an employee or applicant for employment, on the basis of age, race, ethnicity, religion, color, gender, disability, marital status, sexual orientation, national origin, cultural differences, ancestry, physical appearance, arrest record or conviction record, military participation or membership in the national guard, state defense force or any other reserve component of the military forces of the United States, or political beliefs. The vendor shall provide a harassment-free work environment. These provisions shall include, but not be limited to, the employment, upgrading, demotion, transfer, followina: recruitment, advertising, layoff, termination, training, including apprenticeships, rates of pay or other forms of compensation.

16.1 Vendors who have twenty (20) or more employees and a contract of twenty thousand dollars (\$20,000) or more must

submit a written affirmative action plan to the County's Contract Compliance Officer within fifteen (15) working days of the effective date of the contract. The County may elect to accept a copy of the current affirmative action plan filed with and approved by a federal, state or local government unit.

16.2 The vendor agrees to post in conspicuous places, available for employees and applicants for employment, notices setting forth the provisions of this Agreement as they relate to affirmative action and nondiscrimination.

16.3 Failure to comply with these Terms and Conditions may result in the vendor being debarred, termination of the contract and/or withholding of payment.

16.4 The vendor agrees to furnish all information and reports required by Dane County's Contract Compliance Officer as the same relate to affirmative action and nondiscrimination, which may include any books, records, or accounts deemed appropriate to determine compliance with Chapter 19, D.C. Ords. and the provisions of this Agreement.

16.5 AMERICANS WITH DISABILITIES ACT: The vendor agrees to the requirements of the ADA, providing for physical and programmatic access to service delivery and treatment in all programs and activities.

PATENT, 17.0 COPYRIGHT AND TRADEMARK INFRINGEMENT: The vendor guarantees goods sold to the County were manufactured or produced in accordance with applicable federal labor laws, and that the sale or use of the articles described herein do not infringe any patent, copyright or trademark. The vendor covenants that it will, at its own expense, defend every suit which shall be brought against the County (provided that such vendor is promptly notified of such suit, and all papers therein are delivered to it) for any alleged infringement of any patent, copyright or trademark by reason of the sale or use of such articles, and agrees that it will pay all costs, damages, and profits recoverable in any such suit.

18.0 SAFETY REQUIREMENTS: All materials, equipment, and supplies provided to the County must fully comply with all safety requirements as set forth by the Wisconsin Department of Commerce and all applicable OSHA Standards.

18.1 MATERIAL SAFETY DATA SHEET: If any item (s) on an order(s) resulting from this award(s) is a hazardous chemical, as defined under 29 CFR 1910.1200, provide one (1) copy of the Material Safety Data Sheet for each item with the shipped container(s) and one (1) copy with the invoice(s).

19.0 WARRANTY: Unless specifically expressed otherwise in writing, goods and equipment purchased as a result of this request shall be warranted against defects by the vendor for one (1) year from date of receipt. An equipment manufacturer's standard warranty shall apply as a minimum and must be honored by the vendor.

20.0 INDEMNIFICATION & INSURANCE.

20.1. Vendor shall indemnify, hold harmless and defend County, its boards, commissions, agencies, officers, employees and representatives against any and all liability, loss (including, but not limited to, property damage, bodily injury and loss of life), damages, costs or expenses which County, its officers, employees, agencies, boards, commissions and

SECTION 7 – STANDARD TERMS AND CONDITIONS

representatives may sustain, incur or be required to pay by reason of vendor furnishing the services or goods required to be provided under this Agreement, provided, however, that the provisions of this paragraph shall not apply to liabilities, losses, charges, costs, or expenses caused by or resulting from the acts or omissions of County, its agencies, boards, commissions, officers, employees or representatives. The obligations of vendor under this paragraph shall survive the expiration or termination of this Agreement.

20.2. In order to protect itself and Countvits officers, boards. commissions, agencies, agents, volunteers, employees and representatives under the indemnity provisions of the subparagraph above, vendor shall, at vendor's own expense, obtain and at all times during the term of this Agreement keep in full force and effect the insurance coverages, limits, and endorsements listed below. When obtaining required insurance under this Agreement and otherwise, vendor agrees to preserve County's subrogation rights in all such matters that may arise that are covered by vendor's insurance. Neither these requirements nor the County's review or acceptance of vendor's certificates of insurance is intended to limit or qualify the liabilities or obligations assumed by the vendor under this Agreement. The County expressly reserves the right to require higher or lower insurance limits where County deems necessary.

20.2.1. Commercial General Liability.

Vendor agrees to maintain Commercial General Liability insurance at a limit of not less than \$1,000,000 per occurrence. Coverage shall include, but not be limited to, Bodily Injury and Property Damage to Third Parties, Contractual Liability, Personal Injury and Advertising Injury Liability, Premises-Operations, Independent vendors and Subcontractors, and Fire Legal Liability. The policy shall not exclude Explosion, Collapse, and Underground Property Damage Liability Coverage. The policy shall list DANE COUNTY as an Additional Insured.

20.2.2. Commercial/Business Automobile Liability.

Vendor agrees to maintain Commercial/Business Automobile Liability insurance at a limit of not less than \$1,000,000 Each Occurrence. Vendor further agrees coverage shall include liability for Owned, Non-Owned & Hired automobiles. In the event vendor does not own automobiles, vendor agrees to maintain coverage for Hired & Non-Owned Auto Liability, which may be satisfied by way of endorsement to the Commercial General Liability policy or separate Business Auto Liability policy.

20.2.3. Environmental Impairment (Pollution) Liability

Vendor agrees to maintain Environmental Impairment (Pollution) Liability insurance at a limit of not less than \$1,000,000 per occurrence for bodily injury, property damage, and environmental cleanup costs caused by pollution conditions, both sudden and non-sudden. This requirement can be satisfied by either a separate environmental liability policy or through a modification to the Commercial General Liability policy. Evidence of either must be provided.

20.2.4. Workers' Compensation.

Vendor agrees to maintain Workers Compensation insurance at Wisconsin statutory limits.

20.2.5. Umbrella or Excess Liability.

Vendor may satisfy the minimum liability limits required above for Commercial General Liability and Business Auto Liability under an Umbrella or Excess Liability policy. There is no minimum Per Occurrence limit of liability under the Umbrella or Excess Liability; however, the Annual Aggregate limit shall not be less than the highest "Each Occurrence" limit for the Commercial General Liability and Business Auto Liability. vendor agrees to list DANE COUNTY as an "Additional Insured" on its Umbrella or Excess Liability policy.

Upon execution of this Agreement, vendor shall furnish 20.3. County with a Certificate of Insurance listing County as an additional insured and, upon request, certified copies of the required insurance policies. If vendor's insurance is underwritten on a claims-made basis, the retroactive date shall be prior to or coincide with the date of this Agreement, the Certificate of Insurance shall state that professional malpractice or errors and omissions coverage, if the services being provided are professional services coverage is claims-made and indicate the retroactive date, vendor shall maintain coverage for the duration of this Agreement and for six (6) years following the completion of this Agreement. Vendor shall furnish County, annually on the policy renewal date, a Certificate of Insurance as evidence of coverage. It is further agreed that vendor shall furnish the County with a 30-day notice of aggregate erosion, in advance of the Retroactive Date, cancellation, or renewal. It is also agreed that on claims-made policies, either vendor or County may invoke the tail option on behalf of the other party and that the extended reporting period premium shall be paid by vendor. In the event any action, suit or other proceeding is brought against County upon any matter herein indemnified against, County shall give reasonable notice thereof to vendor and shall cooperate with vendor's attorneys in the defense of the action, suit or other proceeding. Vendor shall furnish evidence of adequate Worker's Compensation Insurance. In case of any sublet of work under this Agreement, vendor shall furnish evidence that each and every subcontractor has in force and effect insurance policies providing coverage identical to that required of vendor. In case of any sublet of work under this Agreement, vendor shall furnish evidence that each and every subcontractor has in force and effect insurance policies providing coverage identical to that required of vendor.

20.4. The parties do hereby expressly agree that County, acting at its sole option and through its Risk Manager, may waive any and all requirements contained in this Agreement, such waiver to be in writing only. Such waiver may include or be limited to a reduction in the amount of coverage required above. The extent of waiver shall be determined solely by County's Risk Manager taking into account the nature of the work and other factors relevant to County's exposure, if any, under this Agreement.

21.0 CANCELLATION: County reserves the right to terminate any Agreement due to non-appropriation of funds or failure of performance by the vendor. This paragraph shall not relieve County of its responsibility to pay for services or goods provided or furnished to County prior to the effective date of termination.

22.0 PUBLIC RECORDS ACCESS: It is the intention of the County to maintain an open and public process in the solicitation, submission, review, and approval of procurement activities. Bid openings are public unless otherwise specified. Records are not available for public inspection prior to issuance of the notice of intent to award or the award of the contract. Bid results maybe obtained by visiting the Dane County Purchasing Office Monday – Friday, between 8:00 a.m. and 4:00 p.m. Prior appointment is advisable.

SECTION 7 – STANDARD TERMS AND CONDITIONS

22.1 PROPRIETARY INFORMATION: If the vendor asserts any of its books and records of its business practices and other matters collectively constitute a trade secret as that term is defined in s. 134.90(1)(c), Wis. Stats., County will not release such records to the public without first notifying the vendor of the request for the records and affording the vendor an opportunity to challenge in a court of competent jurisdiction the requester's right to access such records. The entire burden of maintaining and defending the trade secret designation shall be upon the vendor. The vendor acknowledges and agrees that if the vendor shall fail, in a timely manner, to initiate legal action to defend the trade secret designation or be unsuccessful in its defense of that designation, County shall be obligated to and will release the records.

22.2 Any material submitted by the vendor in response to this request that the vendor considers confidential and proprietary information and which vendor believes qualifies as a trade secret, as provided in section 19.36(5), Wis. Stats., must be identified on a designation of Confidential and Proprietary Information form. Pricing will not be held confidential after award of contract.

22.3 Data contained in a bid, all documentation provided therein, and innovations developed as a result of the contracted commodities or services cannot be copyrighted or patented. All data, documentation, and innovations shall be the property of the County.

23.0 RECYCLED MATERIALS: Dane County is required to purchase products incorporating recycled materials whenever technically and economically feasible. Vendors are encouraged to bid products with recycled content which meet specifications.

24.0 PROMOTIONAL ADVERTISING: Reference to or use of Dane County, any of its departments or sub-units, or any county official or employee for commercial promotion is prohibited.

25.0 ANTITRUST ASSIGNMENT: The vendor and the County of Dane recognize that in actual economic practice,

overcharges resulting from antitrust violation are in fact usually borne by the Purchaser. Therefore, the successful vendor herebyassigns to the County of Dane any and all claims for such overcharges as to goods, materials or services purchased in connection with this contract.

26.0 RECORDKEEPING AND RECORD RETENTION-COST REIMBURSEMENT CONTRACTS: Where payment to the vendor is based on the vendor's costs, vendor shall establish and maintain adequate records of all expenditures incurred under the contract. All records must be kept in accordance with generally accepted accounting procedures. The County contracting agency shall have the right to audit, review, examine, copy, and transcribe any pertinent records or documents relating to any contract resulting from this bid/proposal held by the vendor. The vendor will retain all documents applicable to the contract for a period of not less than three (3) years after final payment is made.

27.03 COMPLIANCE WITH FAIR LABOR STANDARDS. During the term of this Agreement, vendor shall report to the Controller, within ten (10) days, any allegations to, or findings by the National Labor Relations Board (NLRB) or Wisconsin Employment Relations commission (WERC) that vendor has violated a statute or regulation regarding labor standards or relations within the seven years prior to entering this Agreement. If an investigation by the Controller results in a final determination that the matter adversely affects vendor's responsibilities under this Agreement, and which recommends termination, suspension or cancellation of this agreement, the County may take such action.

27.04 VENDOR may appeal any adverse finding by the Controller as set forth in sec. 25.08(20)(c) through (e).

27.05 VENDOR shall post the following statement in a prominent place visible to employees: "As a condition of receiving and maintaining a contract with Dane County, this employer shall comply with federal, state and all other applicable laws prohibiting retaliation for union organizing"



Office of the **Dane County Medical Examiner**



Dr. Vincent Tranchida, Chief Medical Examiner

ME Case #: 18-Name of Decedent: Autopsy Performed By: Agnieszka Rogalska, MD Date of Autopsy:

FINAL DIAGNOSES

- I. UNDETERMINED (INFANT RECOVERED FROM UNSAFE SLEEP ENVIRONMENT) a. INFANT BED-SHARING WITH ADULTS AND DOG
 - b. CHILD SLEEPING IN ADULT BED AND BEDDING
 - c. NO ANATOMIC CAUSE OF DEATH
- II. NO ANATOMIC CAUSE OF DEATH
- **III. GROWTH PARAMETERS**
- IV. PERINATAL MEDICAL HISTORY:
- V. MICROBIOLOGY:
 - a. NASOPHARYNGEAL SWAB: NO BORDATELLA SPECIES DETECTED
 - b. BLOOD CULTURE: (CONSISTENT WITH POSTMORTEM CONTAMINATION)
 - c. CEREBROSPINAL FLUID CULTURE: NO GROWTH
 - d. LEFT LUNG CULTURE: PROBABLE CONTAMINANT
 - e. RIGHT LUNG CULTURE: PROBABLE CONTAMINANT
 - f. LEFT EAR CULTURE: PROBABLE CONTAMINANT
 - g. RIGHT EAR CULTURE: PROBABLE CONTAMINANT
 - h. HEART CULTURE: PROBABLE CONTAMINANT
- VL VIROLOGY:
 - a. NASOPHARYNGEAL SWAB:
 - i. NO RESPIRATORY VIRUS NUCLEI DETECTED
 - ii. NO INFLUENZA A OR B VIRUS DETECTED
 - b. TRACHEA SWAB:
 - i. NO RESPIRATORY VIRUS NUCLEI DETECTED
 - ii. NO INFLUENZA A OR B VIRUS DEFECTED
 - c. RIGHT LUNG SWAB:
 - i. NO RESPIRATORY VIRUS NUCLEI DETECTED
 - ii. NO INFLUENZA A OR B VIRUS DEFECTED
 - d. LEFT LUNG SWAB:
 - i. NO RESPIRATORY VIRUS NUCLEI DETECTED
 - ii. NO INFLUENZA A OR B VIRUS DETECTED
 - e. HEART SWAB
 - f. MENINGES SWAB

VILTOXICOLOGY (SEE SEPARATE REPORT):

a. NEGATIVE FOR ALCOHOL OR DRUGS OF ABUSE

18-

1 of 8

Agnieszka Rogalska, M.D.

b. VITREOUS ELECTROLYTES:

i.	SODIUM	mmol/L
ii.	POTASSIUM	mmol/L
iii.	CHLORIDE	mmol/L
iv.	GLUCOS E	mg/dL
v.	UREA	mg/dL
vi.	CREATININE	mg/dL

CAUSE OF DEATH:

CONTRIBUTING CAUSE OF DEATH:

MANNER OF DEATH:

I hereby certify that I, Agnieszka Rogalska, M.D., Deputy Chief Medical Examiner of Dane, Rock, Brown, Door, and Oconto Counties of Wisconsin, have performed an autopsy on the body of on in the Dane County Mortuary.

This autopsy was performed in the presence of and Dane County Medical Examiner's Office Morgue Technician.

The body was received in a sealed, labeled white body bag. The red security seal "" was cut at am to begin the examination.

EXTERNAL EXAM:

The body is that of a well developed, well nourished, Kilogram, cm long without dysmorphic features whose appearance is consistent with the reported age of *. The weight-for-age is the percentile[†]. The

18-2 of 8 Agnieszka Rogalska, M.D.

length-for-age is the percentile^{\dagger}. The crown-rump length is * cm. The head circumference is * cm. The head-circumference-for-age is * the * percentile^{\dagger}. The weight-for-length is in the * percentile^{\dagger}.

[†]All growth percentiles are developed by the National Center for Health Statistics in collaboration with the National Center for Chronic Disease Prevention and Health Promotion (2000) and is calculated using <u>http://www.medcalc.com/growth/chart.php</u>

The inch long scalp hair is present in a normal distribution.

The nose and facial bones are palpably intact. The nares are patent.

The ears are normally set and unremarkable.

The eyes have irides and the conjunctivae are pink, without hemorrhage, petechiae, edema, or jaundice. The inner canthal distance is cm; the outer canthal distance is cm.

The decedent is edentulous. The lips, gums, and all three frenula are atraumatic. The lips and palate are intact. The oral mucosa is pink and moist.

The anterior and posterior fontanelles are flat.

The chest circumference is cm at the nipples. The chest is symmetric. The abdominal circumference is cm at the umbilicus. The abdomen is slightly protuberant. The spine is without external defect. The external genitalia are atraumatic and those of a normal (un)circumcised. The testes are descended. The anus is atraumatic.

There are normal numbers and configurations of fingers and toes, without abnormal palmar or plantar creases. The fingernails are short, intact, clean, and unpolished.

The hand length is cm; the foot length is cm.

SCARS:

The following well-healed scars are present:

POSTMORTEM CHANGES:

The corneas are cloudy. There is no rigor mortis of the upper and lower extremities, neck, or jaw. Lividity is pink, blanchable and posterior. The body is cold (refrigerated).

CLOTHING/PERSONAL PROPERTY:

The following are on the body at the time of autopsy:

THERAPEUTIC PROCEDURES:

The following therapeutic procedures are in place:

INJURIES (EXTERNAL AND INTERNAL):

18-3 of 8 Agnieszka Rogalska, M.D.

Add appropriate injury template

INTERNAL EXAMINATION:

* Anticipated weights for a month old infant are taken from: <u>Pediatric Pathology</u>. JT Stocker, LP Dehner LP (Eds.) 2nd ed. (vol. 2) Philadelphia: Lippincott Williams & Wilkins (2001) Appendix *

HEAD:

The scalp has no contusion. The skull has no fracture. The anterior fontanelle measures cm; the posterior fontanelle measures cm. There is no epidural, subdural, or subarachnoid hemorrhage. The brain weighs grams $(\pm \text{ grams})^*$. The cerebral hemispheres are symmetrical with the usual pattern of sulci and gyri. The leptomeninges are smooth and glistening. The cerebral vessels are without aneurysms. The cranial nerves are normally distributed. The white and grey matter, deep nuclei, and ventricles are unremarkable. There are no focal lesions. The brainstem, cerebellum, and spinal cord have the usual patterns on cut surfaces. The optic nerves are without hemorrhage. There is no fluid in the inner ears. *The eyes, optic nerves, brain and spinal cord, and dura are retained for formalin fixation before further examination*.

NECK:

The cervical vertebrae, hyoid bone, tracheal and laryngeal cartilages, and paratracheal soft tissues are without trauma. The upper airway is not obstructed. The tongue is unremarkable. The larynx, epiglottis and trachea have a tan-pink mucosa.

BODY CAVITIES:

There are abnormal fluid collections in the pleural, pericardial and peritoneal cavities. The organs are in their normal situs without fibrous adhesions. The diaphragm is intact. The abdominal pannus is inch thick.

CARDIOVASCULAR SYSTEM:

The heart weighs grams $(\pm \text{ grams})^*$ and the coronary arteries pursue normal courses. The myocardium is homogeneous, dark-red, and firm without pallor, hemorrhage, softening, or fibrosis.

The coronary arteries arise and branch normally, with a right/left dominant distribution.

The left and right ventricle walls and interventricular septum measure , , and cm thick, respectively.

The endocardial surfaces and four cardiac valves are unremarkable.

The foramen ovale is but there are no other interatrial or interventricular septal defects. The ductus arteriosus is.

The aorta, venae cavae, and pulmonary arteries and veins arise and branch normally. There is no aortic coarctation.

RESPIRATORY SYSTEM:

The right lung weighs grams and the left weighs grams (combined weight \pm grams)*. The parenchyma is edematous. There is no focal consolidation, hemorrhage, obstruction, or cavitary lesion. The bronchial

18-4 of 8 Agnieszka Rogalska, M.D.

distribution and vasculature are unremarkable. The bronchi are unremarkable. There is no tracheoesophageal fistula.

LIVER, GALL BLADDER, AND PANCREAS:

The liver weighs grams (\pm grams)* and has an intact, smooth capsule with soft dark brown parenchyma without slippery or nodular texture or masses.

The gallbladder contains approximately ml of yellow bile without stones or sludge. The extrahepatic biliary system is unremarkable.

The pancreas is without hemorrhage or mineralization.

HEMIC AND LYMPHATIC SYSTEM:

The spleen weighs grams $(\pm \text{ grams})^*$, is firm, and has a dark purple intact capsule and dark parenchyma with moderately prominent white pulp. There are no major lymph node enlargements. The thymus weighs $(\pm \text{ grams})^*$ and has a lobulated tan-pink parenchyma.

GENITOURINARY SYSTEM:

The right kidney weighs grams and the left weighs grams (combined weight \pm grams)*. Each kidney has a smooth, red-brown surface with fetal lobation and an unremarkable architecture and vasculature.

The ureters maintain uniform caliber into an unremarkable empty bladder.

The prostate is not enlarged. The testes are unremarkable.

The ovaries, fallopian tubes, and uterus are juvenile. The vagina is atraumatic.

ENDOCRINE SYSTEM:

The pituitary, thyroid, and adrenal glands are normal color, size, and consistency. The right and left adrenal glands weigh and grams, respectively (combined weight \pm grams).

DIGESTIVE SYSTEM:

The esophagus and gastroesophageal junction are unremarkable. There is no tracheoesophageal fistula.

The stomach contains approximately ml of without recognizable fragments of pills, tables, or solid food.

The gastric mucosa, small intestine, appendix, and large intestine are unremarkable.

The small intestine contains scanty tan-yellow chyme throughout; the large intestine contains abundant, semi-solid brown fecal content throughout.

MUSCULOS KELETAL SYSTEM:

The vertebrae, clavicles, sternum, ribs, and pelvis are without fracture. Stripping of the pleura reveals no

18-5 of 8 Agnieszka Rogalska, M.D.

evidence of recent or remote rib fracture. The musculature is normally distributed and unremarkable. Reflection of the skin of the back and extremities reveals no evidence of recent or remote injury.

HISTOLOGY:

<u>(x 1, 1A):</u>
<u>(x 1, 1B):</u>
<u>(x 1, 1C):</u>
<u>(x 1, 1D):</u>
<u>(x 1, 1E):</u>
<u>(x 1, 1F):</u>
<u>(x 1, 1G):</u>
<u>(x 1, 1H):</u>
<u>(x 1, 1I):</u>
<u>(x 1, 1J):</u>
<u>(x 1, 1K):</u>
<u>(x 1, 1L):</u>
<u>(x 1, 1M):</u>
<u>(x 1, 1N):</u>
<u>(x 1, 10):</u>
<u>(x 1, 1 P):</u>
<u>(x 1, 1Q):</u>
<u>(x 1, 1R):</u>
<u>(x 1, 1S):</u>
<u>(x 1, 1T):</u>
<u>(x 1, 2A):</u>
<u>(x 1, 2B):</u>
<u>(x 1, 2C):</u>
<u>(x 1, 2 D):</u>

(x 1, 2E): (x 1, 2F): (x 1, 2G): (x 1, 2H): (x 1, 2I): (x 1, 2J):

Representative sections of major organs are retained in formalin.

VIROLOGY:

Swabs of the nasopharynx and lungs are submitted for virology testing at the Wisconsin State Laboratory of Hygiene, and swabs of the heart was submitted to St. Mary's Hospital microbiology laboratory; separate reports were received and reviewed. Significant findings are summarized on the front page of this autopsy report under "Final Diagnoses".

MICROBIOLOGY:

Cultures of blood, cerebrospinal fluid, and bacterial swabs of the bilateral lungs, the heart and the left ear are submitted for microbiology testing at St. Mary's Hospital microbiology laboratory; separate reports were received and reviewed. Significant findings are summarized on the front page of this autopsy report under "Final Diagnoses".

RADIOLOGY :

Post-mortem radiographs of the entire body obtained at UW Hospital are reviewed and show no evidence of recent or remote injury.

EVIDENCE:

Submitted as evidence are:

TOXICOLOGY:

Submitted for toxicologic analysis at A.I.T. Toxicology Laboratories were samples of femoral blood, urine, and vitreous fluid; a separate report was received and reviewed. Significant findings are summarized on the front page of this autopsy report under "Final Diagnoses".

Samples of femoral blood, scalp hair, brain tissue, liver, gastric contents, and bile are retained.

SUMMARY COMMENT:

18-7 of 8 Agnieszka Rogalska, M.D.

Agnieszka Rogalska, M.D. Deputy Chief Medical Examiner Dane County, Wisconsin

18-8 of 8 Agnieszka Rogalska, M.D.



Office of the **Dane County Medical Examiner**



Dr. Vincent Tranchida, MD Chief Medical Examiner

ME Case #: Name of Decedent:

Autopsy Performed By: , M.D. Date of Autopsy:

FINAL DIAGNOSES

- I. ACUTE AND CHRONIC ALCOHOL ABUSE, WITH:
 - A. DERMAL AND CONJUNCTIVAL JAUNDICE.
 - B. DILATED ALCOHOLIC CARDIOMYOPATHY, WITH:
 - i. PULMONARY EDEMA (1010 GRAMS COMBINED WEIGHT).
 - ii. BILATERAL PLEURAL EFFUSIONS (660 ML COMBINED).
 - C. HEPATOSTEATOSIS.
 - D. HEPATIC CIRRHOSIS.
 - E. PANCREATIC FIBROSIS.
 - F. ASCITES (1000 ML).
 - G. CHRONIC UPPER GASTROINTESTINAL TRACT HEMORRHAGE, WITH:
 - i. "COFFEE GROUND"/HEMORRHAGIC FLUID AT NARES.
 - ii. HEMOGASTRIUM (170 ML).
 - iii. HEMORRHAGIC CONTENTS OF SMALL INTESTINES.
 - iv. SLIGHT HEMOASPIRATION.
 - H. POSTMORTEM CARDIAC BLOOD ETHANOL CONCENTRATION OF 0.122% (W/V).
 - I. POSTMORTEM VITREOUS FLUID ETHANOL CONCENTRATION OF 0.102% (W/V).
 - J. SEE TOXICOLOGY REPORT.
- II. ATHEROSCLEROTIC CARDIOVASCULAR DISEASE, WITH:
 - A. MODERATE CORONARY ARTERY ATHEROSCLEROSIS.
 - **B. SLIGHT AORTIC ATHEROSCLEROSIS.**
- III. MINOR BLUNT FORCE TRAUMA OF HEAD AND BILATERAL LOWER EXTREMITIES, WITH DERMAL ABRASIONS AND CONTUSIONS.
- IV. BILOBED RIGHT LUNG.
- V. VERRUCAE VULGARIS OF THE RIGHT HAND (DERMAL WARTS).
- VI. ADVANCED POSTMORTEM PUTREFACTIVE CHANGES.

CAUSE OF DEATH: Acute and chronic alcohol abuse.

CONTRIBUTORY CAUSES OF DEATH: Atherosclerotic cardiovascular disease.

MANNER OF DEATH: Natural.



I hereby certify that I, M.D., M.D., of Dane, Counties of Wisconsin, have performed an autopsy on the body of /2018 in the Dane County Mortuary.
This autopsy was performed in the presence of Dane County Medical Examiner's Office Morgue Technician
The body was received in an intact, sealed, labeled white body bag. ", , , and "Sealed", and sealed",

The red security seal (") was cut at 11:47 am to begin the examination.

EXTERNAL EXAM:

The body is of a jaundiced, well-developed, well-nourished, average-framed (with distended abdomen with fluid shift), 6', 0", 151 lb (Body Mass Index [BMI]=20.5) White man whose appearance is consistent with the given age of 45 years.

The straight, dark brown scalp hair is receding at the temples and thinning over the frontal and apical scalp. It measures up to 2-1/8". A 3/4" mustache and 1-1/4" goatee and "soul patch" are present.

The nose and facial bones are palpably intact. Hemorrhagic fluid mixed with "coffee ground"-type material (*Comment: Consistent with partially digested blood*) is present at the nares.

The ears are normally formed. The left earlobe is pierced once. Bilateral ear lobe creases are present.

The irides are brown. The conjunctivae are jaundiced and without hemorrhage, petechiae, or edema. The right periocular conjunctivae are congested.

The oral cavity has natural teeth in fair repair. The oral mucosa is atraumatic.

The torso is unremarkable. The external genitalia are atraumatic and of a normal circumcised adult male. Both testes are descended. The anus is atraumatic.

There are roughly circular, well-circumscribed, hyperkeratotic raised nodules on the dorsal and palmar aspects of the right hand and the palmar aspect of the left hand as follows:

- 1. Two, 1/8" and 5/16" nodules on the knuckle of the right index finger.
- 2. A 5/16" nodule on the dorsal aspect of the proximal interphalangeal joint of the right index finger.
- 3. A 1/8" nodule on the palmar aspect of the middle phalange of the right middle finger.
- 4. A 3/16" nodule on the dorsal aspect of the distal phalange of the right middle finger.
- 5. A 5/16" nodule on the palmar aspect of the proximal interphalangeal joint of the right little finger.
- 6. A 3/16" nodule on the hypothenar aspect of the palm of the left hand.

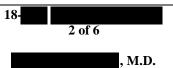
(Comment: The appearance of these nodules are suggestive of verrucae vulgaris, or dermal warts).

The fingernails and toenails are short, intact, and unpolished.

SCARS:

The following well-healed scars are present:

- 1. A $\frac{1}{2}$ " x $\frac{1}{16}$ " vertical linear scar on the inner aspect of the left elbow.
- 2. A $\frac{1}{2}$ " x $\frac{3}{16}$ " irregular scar on the anterior aspect of the distal right leg.



TATTOOS:

There are no tattoos.

POSTMORTEM CHANGES:

The corneas are cloudy. Rigor mortis of the upper and lower extremities, neck, and jaw is passing. Lividity is fixed, purple-green, and posteriorly distributed. The body is cold (refrigerated).

Advanced postmortem putrefactive changes include foul odor of putrefaction, brown-green skin changes, marbling, fluid-filled dermal blebs, skin slippage involving 20% of the total body surface area (Comment: Predominantly involving the anterior aspect of the abdomen and the right thigh), bloating, and slight drying/mummification of the fingertips.

The combined pleural cavities contain 660 ml of watery, dark red putrefactive fluid (mixed with pleural edematous effusions).

Internal organs are slightly soft and light (see below for weights).

CLOTHING/PERSONAL PROPERTY:

The body is received clad in a pair of red and white plaid boxers ("Fruit of the Loom", size medium).

THERAPEUTIC PROCEDURES:

None present.

INJURIES:

There are minor blunt trauma injuries of the head and bilateral lower extremities. These injuries are described with reference to the standard anatomical planes with the body examined in the horizontal position. No order or sequence is implied.

HEAD:

Abrasion: There is a 1/8" irregular abrasion on the lateral aspect of the helix of the right ear.

LEFT LOWER EXTREMITY:

Abrasions: The following abrasions are present:

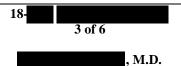
- 1. A 1/16" crusted, punctate abrasion on the inner aspect of the left ankle.
- 2. A 1/8" x 1/16" crusted, vertical linear abrasion on the anterior aspect of the distal left leg.

Contusions: There is a 5/16" x ¹/4" resolving, irregular subungual hematoma beneath the nail of the left first ("great") toe.

RIGHT LOWER EXTREMITY:

Abrasions: The following abrasions are present:

1. A 5/18" x 3/8" irregular abrasion on the anterior aspect of the middle of the right leg.



2. A 1/8" crusted, irregular abrasion on the anterior aspect of the middle of the right leg.

Contusion: There is a 1-1/4" x ³/4" irregular purple contusion on the anterior aspect of the distal right leg.

These injuries, having been described, will not be repeated.

INTERNAL EXAMINATION:

HEAD:

The scalp has no contusion. The skull has no fracture. There is no epidural, subdural, or subarachnoid hemorrhage. The brain weighs 1500 grams and has normal distributions of unremarkable cranial nerves and cerebral vessels. The leptomeninges are thin, clear, and delicate. The brain is symmetrical with normal distributions of white and grey matter, deep nuclei, and ventricles. There are no focal lesions.

NECK:

The cervical vertebrae, hyoid bone, tracheal and laryngeal cartilages, and paratracheal soft tissues are without trauma. The upper airway is not obstructed. The tongue is unremarkable.

BODY CAVITIES:

60 ml of watery, dark red fluid (*Comment: Likely combination of pulmonary edema effusion and putrefactive fluid*) in the left pleural cavity and 600 ml are present in the right. 10 ml of clear, amber-colored fluid are present in the pericardial sac. 1000 ml of clear, dark amber-colored ascites fluid are present in the peritoneal cavity. The organs are in their normal situs, without fibrous adhesions. The abdominal pannus is 7/8" thick.

CARDIOVASCULAR SYSTEM:

The heart weighs 380 grams and is soft and "floppy", with moderate four-chamber symmetrical dilatation. It has a normal distribution of right predominant coronary arteries.

Moderate coronary artery atherosclerosis is present as follows:

- 1. Left Main: Less than or equal to 30% atherosclerotic stenosis.
- 2. Left Anterior Descending: Proximal less than or equal to 30% atherosclerotic stenosis, Middle 50%, Distal less than or equal to 30% atherosclerotic stenosis.
- 3. Left Circumflex: Proximal less than or equal to 30% atherosclerotic stenosis, Middle and Distal widely patent.
- 4. Right Coronary: Proximal widely patent, Middle less than or equal to 30% atherosclerotic stenosis, Distal widely patent.

The myocardium is uniformly dark red-brown without gross pallor, hemorrhage, or fibrosis. The left ventricle and interventricular septum are each 1.3 cm thick. The right ventricle is 0.3 cm thick.

The endocardial surfaces and four cardiac valves are unremarkable.

The aorta is with slight atherosclerosis (few intimal atheromatous streaks and plaques).

The venae cavae and pulmonary arteries are without thromboemboli or thrombi.



RESPIRATORY SYSTEM:

The right lung weighs 600 grams and the left lung weighs 410 grams. The right lobe is bilobed. The pinkpurple parenchyma is soft, congested, and edematous. Frothy, serosanguinous fluid is expressed from cut surfaces. There is moderate subpleural and interstitial anthracotic pigment deposition. There are no focal areas of consolidation or masses. The bronchial distribution and vasculature are unremarkable. The bronchi contain trace blood (slight hemoaspiration).

LIVER, GALLBLADDER, AND PANCREAS:

The liver weighs 2680 grams and has an intact, nodular capsule with fibrotic, nodular, slippery, yellowgreen parenchyma without masses.

The gallbladder contains approximately 60 ml of yellow bile without stones or sludge. The extrahepatic biliary system is unremarkable.

The pancreas has slight interstitial fibrosis.

HEMIC AND LYMPHATIC SYSTEM:

The spleen weighs 190 grams, is intact, and has a purple-grey capsule and dark, slightly diffluent parenchyma. There are no major lymph node enlargements.

GENITOURINARY SYSTEM:

The right kidney weighs 170 grams and the left weighs 190 grams. Each kidney has a smooth, yellow-tan surface and an unremarkable architecture and vasculature.

The ureters maintain uniform caliber into an unremarkable bladder with 150 ml of slightly cloudy, dark yellow urine.

The prostate is not enlarged. The testes are unremarkable.

ENDOCRINE SYSTEM:

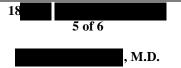
The pituitary, thyroid, and adrenal glands are normal color, size, and consistency.

DIGESTIVE SYSTEM:

The distal esophagus and gastroesophageal junction is slightly autolyzed; esophageal varices are not appreciated.

The gastric mucosa is diffusely autolyzed. The stomach contains approximately 170 ml of frankly hemorrhagic fluid, including blood clots. There are no recognizable fragments of food or pills or tablets. The small intestine contains hemorrhagic chime. The stool in the large intestine is brown and soft, without melena.

The stomach, small intestine, appendix, and large intestine are otherwise unremarkable.



MUSCULOSKELETAL SYSTEM:

The sternum, vertebrae, clavicles, ribs, and pelvis are without fracture.

The musculature is normally distributed and unremarkable.

HISTOLOGY:

Representative sections of major organs are retained in formalin.

TOXICOLOGY:

Submitted for toxicologic analysis at AXIS Toxicology Laboratories were samples of postmortem cardiac blood, vitreous fluid, and urine; a separate report was received and reviewed. Significant findings are included on the front page of this autopsy report under "Final Diagnoses".

Samples of postmortem cardiac blood, scalp hair, brain tissue, liver, gastric contents, vitreous fluid, and bile are retained.

At the completion of the autopsy, the body was subsequently re-sealed in its original body bag with security seal "0009664" at 13:28 pm.

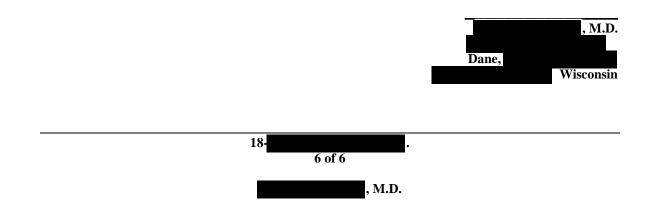
SUMMARY COMMENT

It is my medical opinion that **the example of** died from complications of his acute and chronic alcohol abuse, including dilated alcoholic cardiomyopathy with congestive heart failure, liver disease secondary to alcoholic steatosis and cirrhosis, and chronic upper gastrointestinal tract hemorrhage.

Alcohol is also acutely cardiotoxic and pro-arrhythmogenic, and the decedent was found to have a postmortem cardiac blood ethanol concentration of 0.122% (w/v). While a portion of this may be secondary to postmortem putrefactive fermentation of the decedent's remains, the high concentration in the setting of a history of chronic alcoholism and multiple empty beer cans and bottles of vodka at the scene are consistent with an acute intoxication.

As the decedent's atherosclerotic cardiovascular disease reduced his cardiac reserve and ability to withstand the stress of his alcohol abuse on his system, it will be included as a contributory cause of death.

The manner of death will be certified as Natural.





Office of the **Dane County Medical Examiner**



Dr. Vincent Tranchida, MD Chief Medical Examiner

ME Case #: Name of Decedent: Autopsy Performed By: Agnieszka Rogalska, M.D. Date of Autopsy: , 2018

FINAL DIAGNOSES

- I. Gunshot Wound of the *, * Range
 - a. Entrance:
 - b. Pathway:
 - c. Associated Injuries:
 - i. *
 - ii. *
 - d. Exit:
 - e. Projectile:
 - f. Direction:
- II. Gunshot Wound of the *, * Range
 - a. Entrance:
 - b. Pathway:
 - c. Associated Injuries:
 - i. *
 - ii. *
 - d. Exit:
 - e. Projectile:
 - f. Direction:

III. Gunshot Wound of the *, * Range

- a. Entrance:
- b. Pathway:
- c. Associated Injuries:
 - i. *
 - ii. *
- d. Exit:
- e. Projectile:
- f. Direction:

IV. Gunshot Wound of the *, * Range

- a. Entrance:
- b. Pathway:
- c. Associated Injuries:
 - i. *
 - ii. *
- d. Exit:
- e. Projectile:
- f. Direction:
- V. Gunshot Wound of the *, * Range

- a. Entrance:
- Pathway: b.
- c. Associated Injuries:
 - i. *
 - ii. *
- Exit: d.
- Projectile: e.
- f. Direction:

VI. Gunshot Wound of the *, * Range

- a. Entrance:
 - b. Pathway:
 - Associated Injuries: с.
 - i. *
 - ii. *
 - d. Exit:

e.

- Projectile:
- f. Direction:

VII. Gunshot Wound of the *, * Range

- a. Entrance:
- b. Pathway:
- c. Associated Injuries:
 - i. *
 - ii. *
- d. Exit:

e.

- Projectile:
- f. Direction:

VIII. Gunshot Wound of the *, * Range

- a. Entrance:
 - b. Pathway:
 - Associated Injuries: c.
 - i. *
 - ii. *
 - d. Exit:
 - Projectile: e.
 - f. Direction:

IX. Gunshot Wound of the *, * Range

- a. Entrance:
- b. Pathway:
- Associated Injuries: c.
 - i. *
 - ii. *
- d. Exit:
- Projectile: e.
- f. Direction:
- X. Gunshot Wound of the *, * Range
 - a. Entrance:
 - b. Pathway:
 - Associated Injuries: c.
 - i. * *
 - ii.
 - d. Exit:

- e. Projectile:
- f. Direction:
- XI. No natural disease

XII. See separate Toxicology report

CAUSE OF DEATH:

CONTRIBUTING CAUSES OF DEATH:

MANNER OF DEATH:

I hereby certify that I, Agnieszka Rogalska, M.D., Deputy Chief Medical Examiner of Dane, Rock, Brown, Door, and Oconto Counties of Wisconsin, have performed an autopsy on the body of on in the Dane County Mortuary of the city of Madison, Wisconsin.

This autopsy was performed in the presence of Dane County Medical Examiner's Office Morgue Technician Amy Brinkman.

The body was received in a sealed, labeled white body bag. The red security seal "" was cut at to begin the examination.

The body was received in a white evidence sheet.

Securing the right hand is a blue hand bag secured with red evidence tape labeled ""; the bag is labeled and cut by the author on this date and time. Securing the left hand is a blue hand bag secured with red evidence tape labeled ""; the bag is labeled and cut by the author on this date and time.

Securing the right foot is a blue foot bag secured with red evidence tape labeled ""; the bag is labeled and cut by the author on this date and time. Securing the left foot is a blue foot bag secured with red evidence tape labeled ""; the bag is labeled and cut by the author on this date and time.

The body bag was subsequently sealed with red security seal "" at, upon completion of the autopsy.

EXTERNAL EXAM:

The body is of a well-developed, well-nourished, -framed inch long, pound (Body Mass Index [BMI] =), White man whose appearance is consistent with the given age of years.

Injuries are described in section "Injuries" below.

The scalp hair is present in a normal distribution. The hair on the upper lip, cheeks and chin comprise a mustache and beard.

The nose and facial bones are palpably intact.

The ears are normally formed and atraumatic.

The irides are and the conjunctivae are without jaundice, hemorrhage, petechiae, or edema.

The oral cavity has natural teeth in good repair. The oral mucosa is atraumatic.

The chest is symmetric. The breasts are free of palpable masses. The abdomen is flat. Pubic hair is present in a normal distribution. The external genitalia are atraumatic and of a normal circumcised adult male. Both testes are descended. The anus is atraumatic.

The upper and lower extremities are symmetric without clubbing or edema. There are no needle tracks. The fingernails and toenails are short, intact, and unpolished.

SCARS:

The following well-healed scars are present:

TATTOOS:

The following tattoos are present:

POSTMORTEM CHANGES:

The corneas are cloudy. Moderate, symmetrical rigor mortis of the upper and lower extremities, neck, and jaw is present. Lividity is unfixed, purple, and posteriorly distributed. The body is cold (refrigerated).

CLOTHING/PERSONAL PROPERTY:

The body is received clad in the following items:

THERAPEUTIC PROCEDURES:

The following therapeutic procedures are present:

INJURIES (EXTERNAL AND INTERNAL):

The following injuries are described by body region, with the body examined in the horizontal standard anatomic position. No order or sequence is implied.

L GUNSHOT WOUND OF THE *, * RANGE

Entrance: On the *, centered * inches from the top of the head and inches left of the *midline, is an entrance gunshot wound. The * inch * defect is circumferentially surrounded by an eccentric abrasion collar ranging from * inch wide at the *o'clock position to * inch wide at the * o'clock position. Circumferentially around the wound *. There is no soot-staining, muzzle imprint or powder stippling associated with this wound.

Pathway: The wound pathway continues through the

Associated injuries: Associated with this wound are:

Projectile: A * x * inch copper- and lead-colored projectile is recovered from the *

Exit: On the *, centered * inches from the top of the head and inches left of the *midline, is the corresponding exit gunshot wound. The * x * inch * defect is composed of radiating * to * inch skin tags pointing towards the center of the wound. There is no soot staining, muzzle imprint or powder stippling associated with this wound.

Direction: The wound direction is *.

II. GUNSHOT WOUND OF THE *, * RANGE

Entrance: On the *, centered * inches from the top of the head and inches left of the *midline, is an entrance gunshot wound. The * inch * defect is circumferentially surrounded by an eccentric abrasion collar ranging from * inch wide at the *o'clock position to * inch wide at the * o'clock position. Circumferentially around the wound *. There is no soot-staining, muzzle imprint or powder stippling associated with this wound.

Pathway: The wound pathway continues through the

Associated injuries: Associated with this wound are:

Projectile: A * x * inch copper- and lead-colored projectile is recovered from the *

Exit: On the *, centered * inches from the top of the head and inches left of the *midline, is the corresponding exit gunshot wound. The * x * inch * defect is composed of radiating * to * inch skin tags pointing towards the center of the wound. There is no soot staining, muzzle imprint or powder stippling associated with this wound.

Direction: The wound direction is *.

III. GUNSHOT WOUND OF THE *, * RANGE

Entrance: On the *, centered * inches from the top of the head and inches left of the *midline, is an entrance gunshot wound. The * inch * defect is circumferentially surrounded by an eccentric abrasion collar ranging from * inch wide at the *o'clock position to * inch wide at the * o'clock position. Circumferentially around the wound *. There is no soot-staining, muzzle imprint or powder stippling associated with this wound.

Pathway: The wound pathway continues through the

Associated injuries: Associated with this wound are:

Projectile: A * x * inch copper- and lead-colored projectile is recovered from the *

Exit: On the *, centered * inches from the top of the head and inches left of the *midline, is the corresponding exit gunshot wound. The * x * inch * defect is composed of radiating * to * inch skin tags pointing towards the center of the wound. There is no soot staining, muzzle imprint or powder stippling associated with this wound.

Direction: The wound direction is *.

IV. GUNSHOT WOUND OF THE *, * RANGE

Entrance: On the *, centered * inches from the top of the head and inches left of the *midline, is an entrance gunshot wound. The * inch * defect is circumferentially surrounded by an eccentric abrasion collar ranging from * inch wide at the *o'clock position to * inch wide at the * o'clock position.

Circumferentially around the wound *. There is no soot-staining, muzzle imprint or powder stippling associated with this wound.

Pathway: The wound pathway continues through the

Associated injuries: Associated with this wound are:

Projectile: A * x * inch copper- and lead-colored projectile is recovered from the *

Exit: On the *, centered * inches from the top of the head and inches left of the *midline, is the corresponding exit gunshot wound. The * x * inch * defect is composed of radiating * to * inch skin tags pointing towards the center of the wound. There is no soot staining, muzzle imprint or powder stippling associated with this wound.

Direction: The wound direction is *.

V. GUNSHOT WOUND OF THE *, * RANGE

Entrance: On the *, centered * inches from the top of the head and inches left of the *midline, is an entrance gunshot wound. The * inch * defect is circumferentially surrounded by an eccentric abrasion collar ranging from * inch wide at the *o'clock position to * inch wide at the * o'clock position. Circumferentially around the wound *. There is no soot-staining, muzzle imprint or powder stippling associated with this wound.

Pathway: The wound pathway continues through the

Associated injuries: Associated with this wound are:

Projectile: A * x * inch copper- and lead-colored projectile is recovered from the * **Exit:** On the *, centered * inches from the top of the head and inches left of the *midline, is the corresponding exit gunshot wound. The * x * inch * defect is composed of radiating * to * inch skin tags pointing towards the center of the wound. There is no soot staining, muzzle imprint or powder stippling associated with this wound.

Direction: The wound direction is *.

VI GUNSHOT WOUND OF THE *, * RANGE

Entrance: On the *, centered * inches from the top of the head and inches left of the *midline, is an entrance gunshot wound. The * inch * defect is circumferentially surrounded by an eccentric abrasion collar ranging from * inch wide at the *o'clock position to * inch wide at the * o'clock position. Circumferentially around the wound *. There is no soot-staining, muzzle imprint or powder stippling associated with this wound.

Pathway: The wound pathway continues through the

Associated injuries: Associated with this wound are:

Projectile: A * x * inch copper- and lead-colored projectile is recovered from the *

Exit: On the *, centered * inches from the top of the head and inches left of the *midline, is the corresponding exit gunshot wound. The * x * inch * defect is composed of radiating * to * inch skin tags pointing towards the center of the wound. There is no soot staining, muzzle imprint or powder stippling associated with this wound.

Direction: The wound direction is *.

VII GUNSHOT WOUND OF THE *, * RANGE

Entrance: On the *, centered * inches from the top of the head and inches left of the *midline, is an entrance gunshot wound. The * inch * defect is circumferentially surrounded by an eccentric abrasion collar ranging from * inch wide at the *o'clock position to * inch wide at the * o'clock position. Circumferentially around the wound *. There is no soot-staining, muzzle imprint or powder stippling associated with this wound.

Pathway: The wound pathway continues through the

Associated injuries: Associated with this wound are:

Projectile: A * x * inch copper- and lead-colored projectile is recovered from the *

Exit: On the *, centered * inches from the top of the head and inches left of the *midline, is the corresponding exit gunshot wound. The * x * inch * defect is composed of radiating * to * inch skin tags pointing towards the center of the wound. There is no soot staining, muzzle imprint or powder stippling associated with this wound.

Direction: The wound direction is *.

VIII. GUNSHOT WOUND OF THE *, * RANGE

Entrance: On the *, centered * inches from the top of the head and inches left of the *midline, is an entrance gunshot wound. The * inch * defect is circumferentially surrounded by an eccentric abrasion collar ranging from * inch wide at the *o'clock position to * inch wide at the * o'clock position. Circumferentially around the wound *. There is no soot-staining, muzzle imprint or powder stippling associated with this wound.

Pathway: The wound pathway continues through the

Associated injuries: Associated with this wound are:

Projectile: A * x * inch copper- and lead-colored projectile is recovered from the *

Exit: On the *, centered * inches from the top of the head and inches left of the *midline, is the corresponding exit gunshot wound. The * x * inch * defect is composed of radiating * to * inch skin tags pointing towards the center of the wound. There is no soot staining, muzzle imprint or powder stippling associated with this wound.

Direction: The wound direction is *.

IX. GUNSHOT WOUND OF THE *, * RANGE

Entrance: On the *, centered * inches from the top of the head and inches left of the *midline, is an entrance gunshot wound. The * inch * defect is circumferentially surrounded by an eccentric abrasion collar ranging from * inch wide at the *o'clock position to * inch wide at the * o'clock position. Circumferentially around the wound *. There is no soot-staining, muzzle imprint or powder stippling associated with this wound.

Pathway: The wound pathway continues through the

Associated injuries: Associated with this wound are:

Projectile: A * x * inch copper- and lead-colored projectile is recovered from the *

Exit: On the *, centered * inches from the top of the head and inches left of the *midline, is the corresponding exit gunshot wound. The * x * inch * defect is composed of radiating * to * inch skin tags pointing towards the center of the wound. There is no soot staining, muzzle imprint or powder stippling associated with this wound.

Direction: The wound direction is *.

X. GUNSHOT WOUND OF THE *, * RANGE

Entrance: On the *, centered * inches from the top of the head and inches left of the *midline, is an entrance gunshot wound. The * inch * defect is circumferentially surrounded by an eccentric abrasion collar ranging from * inch wide at the *o'clock position to * inch wide at the * o'clock position. Circumferentially around the wound *. There is no soot-staining, muzzle imprint or powder stippling associated with this wound.

Pathway: The wound pathway continues through the

Associated injuries: Associated with this wound are:

Projectile: A * x * inch copper- and lead-colored projectile is recovered from the *

Exit: On the *, centered * inches from the top of the head and inches left of the *midline, is the corresponding exit gunshot wound. The * x * inch * defect is composed of radiating * to * inch skin tags pointing towards the center of the wound. There is no soot staining, muzzle imprint or powder stippling associated with this wound.

Direction: The wound direction is *.

XL OTHER INJURIES:

•

HEAD: Abrasions:

Contusions:

Lacerations:

Subsequent internal examination reveals:

TORSO: Abrasions:

Contusions:

Lacerations:

Subsequent internal examination reveals:

LEFT UPPER EXTREMITY: Abrasions:

Contusions:

Lacerations:

Subsequent internal examination reveals:

RIGHT UPPER EXTREMITY: Abrasions:

Contusions:

Lacerations:

Subsequent internal examination reveals:

LEFT LOWER EXTREMITY: Abrasions:

Contusions:

Lacerations:

Subsequent internal examination reveals:

RIGHT LOWER EXTREMITY: Abrasions:

Contusions:

Lacerations:

Subsequent internal examination reveals:

These injuries, having been described, will not be repeated.

INTERNAL EXAMINATION:

HEAD:

Injuries of the head are described in section "Injuries" above. The scalp has no contusion. The skull has no fracture. There is no epidural, subdural, or subarachnoid hemorrhage. The brain weighs grams and has normal distributions of unremarkable cranial nerves and cerebral vessels. The leptomeninges are thin, clear, and delicate. The brain is symmetrical with normal distributions of white and grey matter, deep nuclei, and ventricles. There are no focal lesions.

NECK:

Injuries of the neck are described in section "Injuries" above. The cervical vertebrae, hyoid bone, tracheal and laryngeal cartilages, and paratracheal soft tissues are without trauma. The upper airway is not obstructed. The tongue is unremarkable. The atlanto-occipital joint is stable.

BODY CAVITIES:

Injuries of the body cavities are described in section "Injuries" above. No fluid is present in the pleural or peritoneal cavities. There are 10 ml of clear, straw-colored fluid in the pericardial sac. The organs are in their normal situs without fibrous adhesions. The abdominal pannus is inches thick.

CARDIOVASCULAR SYSTEM:

Injuries of the heart are described in section "Injuries" above. The heart weighs grams and has a normal distribution of right-dominant coronary arteries. Cross sections of the coronary arteries reveal eccentric, yellow, atheromatous plaques narrowing vessel lumina as follows:

- I. Left main coronary artery: widely patent
- II. Left anterior descending coronary artery:
 - a. Proximal segment:
 - b. Mid segment:
 - c. Distal segment:
- III. Left circumflex coronary artery
 - a. Proximal segment:
 - b. Mid segment:
 - c. Distal segment:
- IV. Right coronary artery:
 - a. Proximal segment:
 - b. Mid segment:
 - c. Distal segment:

The myocardium is uniformly dark red without pallor, hemorrhage, or fibrosis. The left and right ventricle walls, and interventricular septum measure -, -, and - cm thick, respectively, as measured 1 cm below the respective valve annuli.

The endocardial surfaces and four cardiac valves are unremarkable.

Injuries of the ... are described in section "Injuries" above. The aorta is with slight atherosclerosis (rare intimal atheromatous streaks and plaques).

The venae cavae and pulmonary arteries are without thromboemboli or thrombi.

RESPIRATORY SYSTEM:

Injuries of the ...are described in section "Injuries" above. The right lung weighs grams and the left lung weighs grams. The pink-purple parenchyma is. Frothy, serosanguinous fluid is expressed from cut surfaces. There is no focal consolidation, obstruction, or cavitary lesion. The bronchial distribution and vasculature are unremarkable. The bronchi are unremarkable.

LIVER, GALLBLADDER, AND PANCREAS:

Injuries of the ... are described in section "Injuries" above. The liver weighs grams and has an intact, smooth capsule with soft, dark brown parenchyma without slippery or nodular texture or masses.

Injuries of the ... are described in section "Injuries" above. The gallbladder contains approximately ml of dark-green bile without stones or sludge. The extrahepatic biliary system is unremarkable.

The pancreas is without hemorrhage or mineralization.

HEMIC AND LYMPHATIC SYSTEM:

Injuries of the ... are described in section "Injuries" above. The spleen weighs grams, is firm, and has a dark purple, intact capsule and dark parenchyma with moderately prominent white pulp. There are no major lymph node enlargements.

GENITOURINARY SYSTEM:

Injuries of the ... are described in section "Injuries" above. The right kidney weighs grams and the left weighs grams. Each kidney has a smooth, red-brown surface and an unremarkable architecture and vasculature.

The ureters maintain uniform caliber into an unremarkable bladder with ml of yellow urine.

The prostate is not enlarged. The testes are unremarkable.

The ovaries, fallopian tubes, and uterus are unremarkable. The endometrium is thin and tan. The cervix is unremarkable and has a round/slitlike os. The vaginal vault is atraumatic.

ENDOCRINE SYSTEM:

Injuries of the ... are described in section "Injuries" above. The pituitary, thyroid, and adrenal glands are normal color, size, and consistency.

DIGESTIVE SYSTEM:

Injuries of the ... are described in section "Injuries" above. The esophagus and gastroesophageal junction are unremarkable.

The stomach contains approximately ml of thick/watery fluid. There are no recognizable fragments of food or pills or tablets.

The stomach, small intestine, appendix, and large intestine are unremarkable.

MUSCULOS KELETAL SYSTEM:

Injuries of the ... are described in section "Injuries" above. The sternum, vertebrae, clavicles, ribs, and pelvis are without fracture.

Injuries of the ... are described in section "Injuries" above. The musculature is normally distributed and unremarkable.

HISTOLOGY:

(x 1, 1A):

<u>(x 1, 1B):</u>

<u>(x 1, 1C):</u> <u>(x 1, 1D):</u> <u>(x 1, 1E):</u> <u>(x 1, 1):</u> (x 1, 1):

Representative sections of major organs are retained in formalin.

RADIOLOGY:

Postmortem radiographs of the reveal radiopaque projectiles in the areas of the

EVIDENCE:

Released to are the following:

- 1. One evidence sheet
- 2. Bilateral hand bags
- 3. Bilateral foot bags
- 4. Bilateral nail clippings
- 5. Swabs of the following:
 - a. Bilateral forehead
 - b. Bilateral cheeks
 - c. Bilateral chin
 - d. Bilateral neck
 - e. Bilateral wrists
 - f. Bilateral palms
 - g. Bilateral knuckles (backs of hands)
 - h.

TOXICOLOGY:

Submitted for toxicologic analysis at AXIS Forensic Toxicology Laboratories were samples of femoral blood, urine, and vitreous fluid; a separate report was received and reviewed. Significant findings are summarized on the front page of this autopsy report under "Final Diagnoses".

Samples of femoral blood, scalp hair, brain tissue, liver, gastric contents, bile and vitreous fluid are retained.

SUMMARY COMMENT

It is my medical opinion that

Agnieszka Rogalska, M.D. Deputy Chief Medical Examiner Dane, Rock, Brown, Door, and Oconto Counties, Wisconsin



Office of the **Dane County Medical Examiner**



Dr. Vincent Tranchida, MD Chief Medical Examiner

ME Case #: Dane 17-Name of Decedent:

Autopsy Performed By:	, M.D.
Date of Autopsy: //	2017

FINAL DIAGNOSES

- I. GUNSHOT WOUND OF HEAD, WITH:
 - A. ENTRANCE WOUND OF RIGHT TEMPORAL SCALP.
 - **B. PERFORATIONS OF:**
 - i. RIGHT TEMPORAL SCALP.
 - ii. RIGHT TEMPORALIS MUSCLE.
 - iii. RIGHT TEMPORAL BONE.
 - iv. RIGHT CONVEXITY OF DURA MATER.
 - v. CEREBRUM.
 - vi. LEFT CONVEXITY OF DURA MATER.
 - vii. LEFT TEMPORAL BONE.
 - viii. LEFT TEMPORALIS MUSCLE.
 - ix. LEFT TEMPORAL SCALP.
 - C. HEMORRHAGIC, LIQUEFIED BRAIN MATTER (ADVANCED POSTMORTEM PUTREFACTION).
 - D. RADIATING FRACTURES INVOLVING:
 - i. SPHENOID BONE.
 - ii. ETHMOID BONE.
 - iii. BILATERAL ORBITAL PLATES.
 - iv. RIGHT MAXILLA.
 - v. RIGHT ZYGOMATIC BONE.
 - E. EXIT WOUND OF LEFT TEMPORAL SCALP.
 - F. DIRECTIONALITY: RIGHT TO LEFT, BACK TO FRONT, AND DOWNWARDS.
- II. CHRONIC SUBSTANCE ABUSE, ANAMNESTIC.
- III. TOXICOLOGY:

B.

- A. PUTREFIED POSTMORTEM SPLENIC BLOOD GABAPENTIN CONCENTRATION OF >100 MCG/ML.
 - PUTREFIED POSTMORTEM LIVER CONCENTRATIONS OF:
 - i. CODEINE: 73.7 NG/G.
 - ii. HYDROCODONE: 16.9 NG/G.
 - iii. HYDROCODONE METABOLITE (HYDROMORPHONE): 20.1 NG/G.
 - iv. ACETAMINOPHEN: 32.7 MCG/G.
 - v. CYCLOBENZAPRINE: 25344 NG/G.
 - vi. GABAPENTIN: 471 MCG/G.
 - vii. PAROXETINE: 768 NG/G.
 - viii. CHLOROPHENYLPIPERAZINE: 4400 NG/G.
 - ix. DIPHENHYDRAMINE: 2097 NG/G.



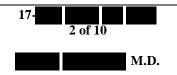
- x. DOXYLAMINE: 3486 NG/G.
- xi. DEXTROMETHORPHAN: 14478 NG/G.
- xii. POSITIVE FOR TRAZODONE.
- xiii. POSITIVE FOR CAFFEINE.
- C. SEE TOXICOLOGY REPORT.

IV. HYPEROSTOSIS FRONTALIS.

V. ADVANCED POSTMORTEM PUTREFACTIVE CHANGES.

CAUSE OF DEATH: Gunshot wound of head.

MANNER OF DEATH: Homicide (Shot by other with unknown caliber firearm).



I hereby certify that I, M.D. , M.D. , M.D. , Counties of Wisconsin , have performed an autopsy on the body of M.D. , M.
This autopsy was performed in the presence of:
1. Police Department Detective
2. Police Department Investigator
3. Fire Department
4. Fire Department
5. Dane County Medicolegal Investigator .
6. Dane County Medical Examiner's Office Morgue Technician

The body was received in an intact, sealed, labeled white body bag.

"Sealed	/17 @	PM #	is written	in bla	ack marker on the outside of the	bag.
The red secu	urity seal ("S	SEALED	was cut at		am to begin the examination.	

EXTERNAL EXAM:

The body is received wrapped in a white evidence collection sheet.

The body is of a well-developed, well-nourished, average-framed, 5' 7", 90 lb (Body Mass Index [BMI]=14.1) White woman whose appearance is consistent with the given age of 50 years.

(Comment: Body measurements and calculated body mass index are done in the setting of markedly advanced postmortem putrefaction and mummification, with tissue loss and drying).

The straight, blonde scalp hair is matted and partially sloughing off the scalp. It measures up to 8-1/2".

The nose is palpably intact.

The ears are normally formed and atraumatic.

The eyes are putrefied and collapsed. The color of the irides cannot be assessed. The conjunctivae are putrefied, but without gross hemorrhages or petechiae.

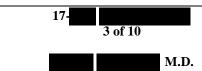
The oral cavity has natural teeth in good repair. The residual lower lip is atraumatic (see "Postmortem Changes" below).

The torso is unremarkable. The external genitalia are atraumatic and of a normal adult female The anus is atraumatic.

The extremities show no needle tracks.

The hands and feet are received previously bagged with blue evidence bags, secured at the wrists and ankles with red evidence tape. They are labeled as follows:

- 1. Right hand: "RT Hand 17 -17 The red evidence tape associated with this bag is labeled "
- 3. Left hand: "The red evidence tape associated with this bag is labeled "VT".



4. Left foot: -17 . The red evidence tape associated with this bag is labeled

The left thumb nail and the left middle finger nail are detached (*Comment: Recovered separately from body in white evidence sheet*). Otherwise, the fingernails are intact, of varying length, and are polished with pink nail polish. Few wisps of white/light-colored fibrous material are attached at the end of the right thumb nail.

The toenails are short, intact, and polished with silver nail polish.

SCARS:

No surgical scars are identified.

TATTOOS:

The following tattoos are present:

- 1. A 5" x 4" polychromatic, professional tattoo on the upper aspect of the left side of the back (a design with the words "the second of the back (a and a heart with a sword and a banner (the words "the second of the second of the second of the back (a 'the second of the back (a banner (the words "the second of the back (a 'the second of the second o
- 2. A 3-1/4" x 2-1/8" polychromatic, professional tattoo on the upper aspect of the midline of the back (a design of the initials "with wings).
- 3. A 7-5/8" x 6" polychromatic, professional tattoo on the upper aspect of the right side of the back (a design of the word "with a web and a black widow spider).
- 5. A 4-3/8" x 4" polychromatic, professional tattoo on the outer aspect of the right shoulder (a design of a **base of a base o**
- 6. A 2-1/2" x 1" monochromatic, professional tattoo on the volar aspect of the proximal right forearm (a design of an ankh).
- 7. A 10" x 3/8" polychromatic, professional tattoo on the outer aspect of the left leg (a design of a phoenix).
- 8. A 3-1/2" x 3" polychromatic, professional tattoo on the dorsal aspect of the left foot (a design of a bird on a flowering branch).
- 9. A 5" x 2-7/8" polychromatic, professional tattoo on the outer aspect of the right leg (a design of a cobra).
- 10. A 7-1/2" x 5" polychromatic, professional tattoo on the right ankle and dorsal aspect of the right foot (an ankleband design, a cross, and flowers).

POSTMORTEM CHANGES:

The eyes are putrefied, opaque, and collapsed. Rigor mortis of the upper and lower extremities, neck, and jaw has passed Lividity is fixed, dark brown, and posteriorly-distributed. The body is cold (refrigerated).

Markedly advanced postmortem putrefactive changes include:

- 1. Foul odor of putrefaction.
- 2. Brown skin changes.
- 3. Pink discoloration of the teeth.
- 4. Skin and hair slippage involving the majority (>95%) of the body surface area.
- 5. Partial mummification of the face, torso, and extremities (both proximally and distally).
- 6. Postmortem anthropophagy, with tissue loss of:



- a. The lower aspect of the left side of the forehead (an area measuring approximately 1-1/4" x 3/8).
- b. Periorbital soft tissues (an area measuring approximately 1-1/2" on the left and 1-1/4" x 1" on the right).
- c. The midline of the face, including the nose, upper lip, and anterior aspect of the chin (an area measuring approximately 5" x 4-1/2").
- d. The right parietal scalp (an area measuring approximately 2-1/2" x 1-1/2").
- e. The right temporal scalp (an area measuring approximately 3" x 1-1/2). (*Comment: This area of anthropophagy partially effaces a gunshot wound of the right temple; see "Injuries" below*).
- f. The superior aspect of the helix of the right ear (an area measuring approximately $\frac{1}{2}$ " x $\frac{1}{4}$ ").
- g. The tongue is absent.
- 7. Insect casings and multiple maggots of various instar stages recovered from body as follows:
 - a. <u>Body bag:</u> Small, dry insect casings, ranging in size up to 0.4 x 0.1 cm.
 - b. Head:
 - i. Small, predominantly smooth, dry insect casings, ranging in size up to 0.3 x 0.1 cm.
 - ii. Predominantly 1st instar maggots, ranging in size up to 0.4 x 0.1 cm.
 - c. <u>Torso:</u>
 - i. Small, predominantly smooth, dry insect casings, ranging in size up to 0.4 x 0.1 cm.
 - ii. Few curled, prominently segmented, dry insect casings, ranging in size up to 0.8 x 0.2 cm.
 - ii. Predominantly 1st instar maggots, ranging in size up to 0.6 x 0.1 cm.
 - d. <u>Extremities:</u>
 - i. Small, predominantly smooth, dry insect casings, ranging in size up to 0.4 x 0.1 cm.
 - ii. Few curled, prominently segmented, dry insect casings, ranging in size up to 0.7 x 0.2 cm.
 - iii. Predominantly 1st instar maggots, ranging in size up to 0.5 x 0.1 cm.

Representative samples of maggots and casings from each body area are submitted dry (with liver tissue), in saline, in 70% alcohol, and in formalin for further etymological evaluation.

The combined internal body cavities contain 80 ml of putrefactive fluid (see "Body Cavities" below).

Internal organs are soft and light (see below for weights).

CLOTHING/PERSONAL PROPERTY:

The body is received clad in the following:

- 1. A pair of pink pajama pants with a pattern of a woman's outline ("Speedway Princess", size XL/XG).
- 2. A pair of light blue-green briefs ("Fruit of the Loom", size 8).
- 3. A short-sleeved, "V-necked" purple t-shirt ("Mossimo Supply Co. Boyfriend Tee", size large).
- 4. A black brassiere ("Victoria's Secret Push-up" size 38 C). The brassiere has two sets of posterior hooks and clasps fastened and in place.

Also recovered with the body are the following:

- 1. A 3 x 0.7 x 0.6 cm tan, tube-like object recovered from the left hip (*Comment: Object grossly resembles dried, flattened, macaroni-like pasta*).
- 2. A 1.7 x 0.8 x 0.2 cm light blue fragment of plastic recovered from the left hip.



3. A 1.7 x 1.3 x 0.7 cm tan, roughly oval, fragment of partially melted plastic recovered from the left parietal scalp hair.

THERAPEUTIC PROCEDURES:

None present.

INJURIES:

There is a perforating gunshot wound of the head. This injury is described with reference to the standard anatomical planes with the body examined in the horizontal position.

Entrance: A gunshot entrance wound of the right temple is located 3-1/4" from the top of the head, 2-1/4" right of midline, and 4-1/2" from the glabella. When facing the right side of the decedent's head, it is located 1-3/4" from the 1 o'clock position of the tragus of the right ear. From the 6 o'clock to the 12 o'clock position, the right/posterior margin of skin of the gunshot wound is effaced by A 2-1/2" x 1-1/2" area of postmortem anthropophagy (see "Postmortem Changes" above). The wound is a ¹/4" circular defect with a roughly symmetric, 1/8" residual margin of abrasion (*Comment: The right/posterior margin of the skin cannot be assessed due to postmortem anthropophagy*). There is a surrounding, asymmetric rim of contusion, measuring ¹/4" superiorly, 5/16" inferiorly, and 5/8" to the left (*Comment: The right/posterior margin of the skin cannot be assessed due to postmortem anthropophagy*).

Track: After perforating the skin and soft tissues of the right temporal scalp, the bullet perforates the right temporalis muscle, the right temporal bone (creating a roughly ¼" circular defect with internal beveling), the right convexity of the cerebral dura mater, the cerebrum, the left convexity of the dura mater, the left temporal bone, the left temporalis muscle, and the left temporal scalp. There are radiating fractures extending from this defect, involving the sphenoid bone (including a roughly 3" x 2" comminuted area of fragmentation of the right middle cerebral fossa), the ethmoid bone, both orbital plates, the right maxilla, and the right zygomatic bone. The cerebrum is liquefied and hemorrhagic. Soot is not visible in the proximal wound track.

Site of Exit: The site of exit is at the left temple, located 3-1/2" from the top of the head, 2-1/4" left of midline, and 3-1/2" from the glabella. When facing the left side of the decedent's head, it is located $\frac{1}{2}$ " from the 9 o'clock position of the tragus of the left ear. It is a 3/8" vertical linear defects with edges that re-approximate easily. It is associated with a 5"x 2" area of hemorrhage of the surrounding left temporal skin, the left pre-auricular skin, and the skin of the lateral aspect of the left cheek.

Direction: The direction of this bullet is from right to left, back to front, and slightly downwards.

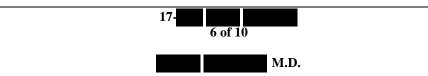
This injury, having been described, will not be repeated.

INTERNAL EXAMINATION:

HEAD:

There is hyperostosis frontalis of the inner table of the frontal bone. The putrefied residual brain matter weighs 520 grams and is liquefied, hemorrhagic, and diffusely infiltrated with maggot activity.

NECK:



The cervical vertebrae, hyoid bone, tracheal and laryngeal cartilages, and paratracheal soft tissues are without trauma. The upper airway is not obstructed. The tongue is absent (see "Postmortem Changes" above).

BODY CAVITIES:

50 ml of congealed, yellow-red putrefactive fluid are present in the left pleural cavity and 20 ml are present in the right. 10 ml of congealed, yellow putrefactive fluid are present in the pericardial sac. No fluid is present in the peritoneal cavity. The organs are in their normal situs, without fibrous adhesions. The abdominal pannus is 3/4" thick.

CARDIOVASCULAR SYSTEM:

The heart weighs 150 grams. It has a normal distribution of right predominant, widely patent coronary arteries.

The myocardium is uniformly brown, soft, and putrefied, without gross pallor, hemorrhage, or fibrosis. The left ventricle and interventricular are each 0.9 cm thick. The right ventricle is 0.2 cm thick.

The endocardial surfaces and four cardiac valves are unremarkable.

The aorta is with slight atherosclerosis (few intimal atheromatous streaks).

The venae cavae and pulmonary arteries are without thromboemboli or thrombi.

RESPIRATORY SYSTEM:

The right lung weighs 260 grams and the left lung weighs 180 grams. The grey-brown-purple parenchyma is soft and putrefied. There is slight subpleural and interstitial anthracotic pigment deposition. There are no focal areas of consolidation or masses. The bronchial distribution and vasculature are unremarkable. The bronchi are unremarkable. No soot is present in the airways.

LIVER, GALLBLADDER, AND PANCREAS:

The liver weighs 230 grams and has an intact, smooth capsule with soft, putrefied, brown-grey parenchyma without slippery or nodular texture or masses.

The gallbladder is empty. The extrahepatic biliary system is unremarkable.

The pancreas is without hemorrhage or mineralization.

HEMIC AND LYMPHATIC SYSTEM:

The spleen weighs 30 grams and has a grey-brown, intact capsule and putrefied, brown parenchyma. There are no major lymph node enlargements.

GENITOURINARY SYSTEM:

The right kidney weighs 30 grams and the left weighs 40 grams. Each putrefied kidney has a smooth, grey-



red-brown surface and an otherwise unremarkable architecture and vasculature.

The ureters maintain uniform caliber into an unremarkable empty, putrefied bladder.

The ovaries, fallopian tubes, and uterus are putrefied, but otherwise unremarkable. The endometrium is thin and pink. The cervix has a slitlike os. The vaginal vault is atraumatic.

ENDOCRINE SYSTEM:

The pituitary, thyroid, and adrenal glands are putrefied, but of otherwise normal color, size, and consistency.

DIGESTIVE SYSTEM:

The esophagus and gastroesophageal junction are putrefied, but otherwise unremarkable.

The stomach is empty.

The stomach, small intestine, and large intestine are putrefied, but otherwise unremarkable. The large intestine contains soft, brown stool, without melena or constipated boluses. The appendix is not appreciated.

MUSCULOSKELETAL SYSTEM:

The sternum, vertebrae, clavicles, ribs, and pelvis are without fracture.

The musculature is normally distributed and unremarkable.

HISTOLOGY:

(Comment: Histological diagnoses should be assessed in the setting of diffuse putrefactive artifact of tissues).

<u>HEART (x 2, 1A)</u>: Advanced postmortem putrefactive changes. Otherwise, no significant histologic abnormality.

<u>LUNG (x 2, 1B-C)</u>: Advanced postmortem putrefactive changes. Slight subpleural and interstitial anthracotic pigment deposition.

<u>LIVER (x 1, 1D)</u>: Advanced postmortem putrefactive changes. Otherwise, no significant histologic abnormality.

KIDNEY (x 2, 1E): Advanced postmortem putrefactive changes. Scattered renal tubular calcifications.

<u>SKIN OF RIGHT TEMPLE (x 12, 1F-I):</u> Advanced postmortem putrefactive changes (including cross section of maggot infiltration into tissues). Fragment with focal abrasion of epidermis, with slight nuclear elongation and streaming. Subcutaneous soft tissue hemorrhage. Moderate tinctorial change and fusion of dermal collagen present. Rare fragments of black particulate debris in wound.

<u>RIGHT TEMPORALIS MUSCLE (x 1, 1J)</u>: Advanced postmortem putrefactive changes. Rare fragments of black particulate debris in tissues. Fragments of calcified bone ("bone dust").



SKIN OF LEFT POSTERIOR PARIETAL SCALP (x 1, 1K): Advanced postmortem putrefactive changes.

SKIN OF RIGHT POSTERIOR PARIETAL SCALP (x 1, 1L): Advanced postmortem putrefactive changes.

<u>SKIN OF LEFT TEMPLE (x 12, 1N-Q)</u>: Advanced postmortem putrefactive changes (including cross section of maggot infiltration into tissues). Subcutaneous soft tissue hemorrhage. Slight tinctorial change and fusion of dermal collagen present. Rare fragments of black particulate debris in wound.

LEFT TEMPORALIS MUSCLE (x 1, 1R): Advanced postmortem putrefactive changes.

Representative sections of major organs are retained in formalin.

TOXICOLOGY:

Submitted for toxicologic analysis at AXIS Toxicology Laboratories were samples of putrefied splenic blood and liver; a separate report was received and reviewed.

Gabapentin, codeine, hydrocodone, hydromorphone, acetaminophen, cyclobenzaprine, paroxetine, trazodone, chlorophenylpiperazine, diphenhydramine, doxylamine, dextromethorphan, and caffeine were qualitatively noted in the decedent's submitted samples.

Given the substitute tissues/fluids tested due to lack of available peripheral blood, the advanced state of putrefaction of these tissues/fluids, and that most of these substances exhibit postmortem artefactual redistribution within tissue and fluid compartments of the body, the undersigned is unable to interpret the quantitative measurements seen in testing.

Samples of putrefied splenic blood, scalp hair, putrefied brain tissue, and putrefied liver tissue are retained.

RADIOLOGY:

Postmortem radiographs are made and retained as evidence.

EVIDENCE:

1.

4.

Submitted as Evidence to Police Department Investigator are the following:

- The white evidence collection sheet previously wrapped around the decedent's body.
- 2. Blue evidence bags previously taped around the decedent's hands and feet, with accompanying tape (four total).
- 3. Seventeen containers for etymology analysis, including:
 - a. Specimens from head in dry containers with liver tissue, in saline, in 70% alcohol, and in formalin.
 - b. Specimens from torso in dry containers with liver tissue, in saline, in 70% alcohol, and in formalin.
 - c. Specimens from extremities in dry containers with liver tissue, in saline, in 70% alcohol, and in formalin.
 - d. Adult fly recovered from torso in formalin.
 - The entirety of the decedent's clothing:
- a. Pink pajama pants.
 - b. Light blue-green briefs.



- c. Purple t-shirt.
- d. Black brassiere
- 5. A completed sexual assault evidence collection kit.
- 6. Fingernails of the left and right hands.
- 7. Additional swabs as follows:
 - a. Left and right sides of the forehead.
 - b. Left and right cheeks.
 - c. Left and right sides of the chin.
 - d. Left and right sides of the neck.
 - e. Left and right nipples.
 - f. Left and right breasts.
 - g. Left and right arms.
 - h. Left and right forearms.
 - i. Left and right wrists.
 - j. The palmar aspects of the left and right hands.
 - k. The dorsal aspects of the left and right hands.
 - 1. The dorsal and plantar aspects of both feet.

At the completion of the autopsy, the body was subsequently re-sealed in a new body bag with security seal "**Constant**" at **Constant** pm.

SUMMARY COMMENT

It is my medical opinion that died from a perforating gunshot wound of the head, with ensuing skull fractures and brain injuries.

The manner of death will be certified as a Homicide (shot by other with unknown caliber firearm).

		M.D.
Chief	Medical Exam	iner
Dane,		
	ounties, Wise	consin





Office of the **Dane County Medical Examiner**



Dr. Vincent Tranchida, MD Chief Medical Examiner

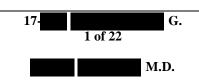
ME Case #: Dane 17-Name of Decedent: Autopsy Performed By: M.D. Date of Autopsy: 2017

FINAL DIAGNOSES

- I. MULTIPLE SHARP FORCE INJURIES OF HEAD, NECK, TORSO, AND EXTREMITIES, WITH:
 - A. STAB WOUNDS (41) WITH INJURIES OF:
 - i. SKIN, SOFT TISSUES, AND MUSCULATURE OF HEAD, NECK, TORSO, AND EXTREMITIES.
 - ii. NASAL BONE.
 - iii. TONGUE.
 - iv. LARYNX.
 - v. PHARYNX.
 - vi. BILATERAL JUGULAR VEINS.
 - vii. CERVICAL VERTEBRAE (C2, C3, C4, AND C6).
 - viii. CERVICAL SPINAL CORD.
 - ix. UPPER LOBE OF LEFT LUNG, WITH:
 - a. **RIGHT PNEUMOTHORAX.**
 - b. RIGHT HEMOTHORAX, SLIGHT (30 ML).
 - B. INCISED WOUNDS (35) OF HEAD, NECK, TORSO, AND EXTREMITIES, WITH:
 - i. INJURIES OF SKIN, SOFT TISSUES, AND MUSCULATURE.
 - ii. PARTIAL AMPUTATION OF HELIX OF RIGHT EAR.
- II. BLUNT FORCE TRAUMA OF TORSO AND EXTREMITIES, WITH:
 - A. DERMAL ABRASIONS AND CONTUSIONS.
 - B. DISLOCATION OF PROXIMAL INTERPHALANGEAL JOINT OF RIGHT LITTLE FINGER.
- III. ACUTE INTOXICATION DUE TO THE COMBINED EFFECTS OF CITALOPRAM AND ALCOHOL, WITH:
 - A. BLOOD CITALOPRAM CONCENTRATION OF 102 NG/ML.
 - B. BLOOD ETHANOL CONCENTRATION OF 0.137% (W/V).
 - C. VITREOUS FLUID ETHANOL CONCENTRATION OF 0.158% (W/V).
 - D. SEE TOXICOLOGY REPORT.

IV. PULMONARY EMPHYSEMA, WITH:

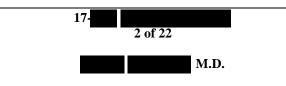
- A. BILATERAL RARE EMPHYSEMATOUS PLEURAL BLEBS.
- B. MODERATE SUBPLEURAL AND INTERSTITIAL ANTHRACOTIC PIGMENT DEPOSITION.
- C. SEE HISTOLOGY.



- V. REMOTE BLUNT FORCE TRAUMA OF HEAD, STATUS-POST RIGHT CRANIOTOMY.
- VI. STATUS-POST REMOTE APPENDECTOMY.
- VII. CHRONIC SUBSTANCE ABUSE (ANAMNESTIC).
- VIII. HUMAN IMMUNODEFICIENCY VIRUS INFECTION (ANAMNESTIC).

CAUSE OF DEATH: Multiple sharp force injuries of head, neck, torso, and extremities.

MANNER OF DEATH: Homicide (Stabbed and cut by other(s)).



I hereby certify that I, Markov M.D. , M.D. , of Dane , of Dane, Counties of Wisconsin, have performed an autopsy on the body of Markov on /2017 in the Dane County Mortuary of the city of Madison, Wisconsin.
This autopsy was performed in the presence of:
1. Dane County
2. Police Department Detective
3. Police Department
4. Police Department
5. Police Department Investigator
6. Dane County Medicolegal Death Investigator
7. Dane County Medical Examiner's Office Morgue Technician .
The body was received in an intact, sealed, labeled white body bag. "The body bag." and "are written in black marker on the outside of the bag.

The red security seal ("SEALED") was cut at am to begin the examination.

EXTERNAL EXAM:

The body was received wrapped in a white evidence collection sheet.

The hands and feet are previously bagged with blue evidence bags which were secured at the wrists and ankles with red evidence tape. The bags are labeled as follows:

- 1. Left hand: -17 1844".
- 2. Right hand: -17 1845"
- 3. Left foot: "/// 1840"
- 4. Right foot: " -17 1842"

The evidence sheet and bags are removed, inspected for evidentiary value, and submitted to as evidence.

The body is of a well-developed, well-nourished, average-framed, 5', 8" 132.6 lb (Body Mass Index [BMI]=20.2) White man whose appearance is consistent with the given age of years.

The straight, brown scalp hair measures up to 2-3/8". A 3/16" mustache, goatee, and "soul patch" are present. Stubble is present on the cheeks and anterior aspect of the neck, measuring less than 1/16".

The nose and facial bones are palpably intact.

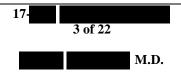
The ears are normally formed (see "Injuries" below for further description).

The irides are brown. The conjunctivae are pale and without jaundice, hemorrhage, petechiae, or edema.

The oral cavity has natural teeth in good repair. .

Except where described (see "Injuries" below for further description), the torso is unremarkable. The umbilicus ("belly button") is remotely pierced once; the piercing is scarred closed. The external genitalia are atraumatic and of a normal circumcised adult male. Both testes are descended. The anus is atraumatic.

The extremities show no needle tracks. Smeared dried blood and blood droplets are present on the dorsal and palmar surfaces of the right hand. The fingernails are short, intact, and unpolished. Trace brown grime is present under the nails of the right hand. The toenails are short, intact, clean, and unpolished.



SCARS:

The following well-healed scars are present:

- 1. A 6" curvilinear scar extending over the right frontal, temporal and parietal scalp. Subsequent internal examination reveals that the decedent is status-post remote right craniotomy, with a 3" x 2-1/2" bone plate is affixed in place by six sets of grey metal orthopedic fixation bolts.
- 2. A ¹/₂" vertical linear scar on the midline of the lower aspect of the abdomen, just below the umbilicus ("belly button"). Subsequent internal examination reveals that the decedent is statuspost remote appendectomy, with grey metal surgical staples present on the inferior aspect of the cecum.

TATTOOS:

There is a 9-1/2" x 1-1/4" polychromatic, professional, armband-style tattoo on the proximal aspect of the right forearm (a design of interlocking/intertwining blue bands on a black background).

POSTMORTEM CHANGES:

The corneas are slightly cloudy. There is slight, symmetrical rigor mortis of the upper and lower extremities, neck, and jaw. Lividity is purple, faint, partially fixed anteriorly, and unfixed posteriorly. The body is cold (refrigerated).

CLOTHING/PERSONAL PROPERTY:

The body is received clad in a blue, fluorescent yellow, and black "jockstrap" style underwear with a "TROPHY BOY" design at the waist ("**Constant on the inner surface of the front of the jockstrap**", no size label). Dried, white residue is present on the inner surface of the front of the jockstrap.

A dark grey metal wristwatch ("FOLIO") is present on the left wrist. A protective clear plastic film is present on the face of the watch.

A dark grey metal ring is present on the middle finger of the left hand. "Titanium" is inscribed on the inner surface of the ring.

The underwear, wristwatch, and ring are submitted as evidence.

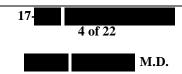
THERAPEUTIC PROCEDURES:

None present.

INJURIES:

There are sharp force injuries of the head, neck, torso, and extremities. There are blunt force trauma injuries of the torso, right upper extremity, and both lower extremities. These injuries are described with reference to the standard anatomical planes with the body examined in the horizontal position. No order or sequence is implied.

I. SHARP FORCE INJURIES:



A. STAB WOUNDS (41):

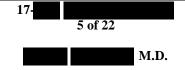
Stab wound of right temporal scalp, superior to right ear (labeled "A" in DCME photographs, diagrams, and notes): A stab wound of the right temporal scalp is located 2-3/4" from the top of the head, 2-1/8" right of midline of the body, and 4" from the glabella. This is a obliquely oriented stab wound with a blunt end pointing superiorly and anteriorly and a sharp end pointing inferiorly and posteriorly. With the edges of the wound re-approximated, the stab wound measures ½" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound hits scalp, dura mater, and outer table of the right temporal bone. The estimated depth of penetration is approximately 1/2". The direction of this stab wound is from right to left, front to back, and downwards.

Stab wound of right temporal scalp, anterior to right ear (labeled "B" in DCME photographs, diagrams, and notes): A stab wound of the right temporal scalp (anterior to the right ear) is located 5" from the top of the head, 2-5/8" right of midline of the body, and 4-1/4" from the glabella. This is a vertically oriented stab wound with a blunt end pointing superiorly and a sharp end pointing inferiorly. With the edges of the wound re-approximated, the stab wound measures 1-1/4" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound perforates the right cheek (including the right masseter and buccinators muscles) and enters the right oral cavity. The estimated depth of penetration is approximately 2". The direction of this stab wound is from right to left, straight inwards, and without significant deviation upwards or downwards or anteriorly or posteriorly.

Stab wound of posterior aspect of right temporal scalp (labeled "D" in DCME photographs, diagrams, and notes) : A stab wound of the posterior aspect of the right temporal scalp is located 4-3/4 from the top of the head, 3" right of midline of the body, and 6-3/8" from the glabella. This is a horizontally oriented stab wound with a blunt end pointing anteriorly and a sharp end pointing inferiorly. With the edges of the wound re-approximated, the stab wound measures ³/₄"long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the right temporal scalp, the galea aponeurotica, and the right temporal bone. The estimated depth of penetration is approximately 1-3/8". The direction of this stab wound is from right to left, back to front, and downwards.

Stab wound of inferior aspect of right side of occipital scalp (labeled "E" in DCME photographs, diagrams, and notes): A stab wound of the inferior aspect of the right side of the occipital scalp is located 5-1/4" from the top of the head, 1-7/8" right of midline of the body, and 7-1/4" from the glabella. This is an obliquely oriented stab wound with a blunt end pointing posteriorly and inferiorly and a sharp end pointing anteriorly and superiorly. With the edges of the wound re-approximated, the stab wound reveals that the stab wound sequentially hits the occipital scalp, the galea aponeurotica, and the occipital bone. The estimated depth of penetration is approximately 1-1/2". The direction of this stab wound is from back to front, left to right, and downwards..

Stab wound of posterior aspect of the upper third of the right side of the Neck (labeled "F" in DCME photographs, diagrams, and notes) : A stab wound of the posterior aspect of the upper third of the right side of the neck is located 6-3/8" from the top of the head, 1-1/8" right of midline of the body, and 8" from the glabella. This is an obliquely oriented stab wound with a blunt end pointing posteriorly and superiorly and a sharp end pointing anteriorly and inferiorly. With the edges of the wound reapproximated,, the stab wound measures 5/8" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the right side of the neck. The estimated depth of



penetration is approximately 1-7/8" The direction of this stab wound is from back to front, left to right, and downwards.

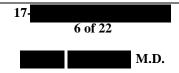
Stab wound of the right temporal scalp, posterior to right ear (labeled "G" in DCME photographs, diagrams, and notes): A stab wound of the right temporal scalp, posterior to the right ear, is located 5-3/4" from the top of the head, 2-1/4" right of midline of the body, and 6" from the glabella. This is a horizontally oriented stab wound with a blunt end pointing anteriorly and a sharp end pointing posteriorly. With the edges of the wound re-approximated, the stab wound measures $\frac{3}{4}$ " long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the right side of the neck. The estimated depth of penetration is approximately $\frac{3}{4}$ ". The direction of this stab wound is from right to left, front to back, and downwards.

Stab wound of the posterior aspect of the upper third of the right side of the Neck (labeled "H" in DCME photographs, diagrams, and notes): A stab wound of the posterior aspect of the upper third of the right side of the neck is located 6-1/4" from the top of the head, 1-3/4" right of midline of the body, and 6-3/8" from the glabella. This is an obliquely oriented stab wound with a blunt end pointing inferiorly and posteriorly and a sharp end pointing superiorly and anteriorly. With the edges of the wound re-approximated, the stab wound measures 1" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the right side of the neck. The estimated depth of penetration is approximately 4". The direction of this stab wound is from back to front, left to right, and downwards.

Stab wound of the posterior aspect of the middle third of the right side of the neck (labeled "I" in DCME photographs, diagrams, and notes) : A stab wound of the posterior aspect of the middle third of the right side of the neck is located 6-3/8" from the top of the head, 2" right of the midline of the body, and 6-1/2" from the glabella. This is an obliquely oriented stab wound with a blunt end pointing anteriorly and inferiorly and a sharp end pointing posteriorly and superiorly. With the edges of the wound re-approximated, the stab wound measures ³/₄" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the right side of the neck, and right side of the cervical vertebra C3 (without injury to the underlying cord). The estimated depth of penetration is approximately 1-3/8". The direction of this stab wound is from right to left, back to front, and upwards..

Stab wound of the posterior aspect of the middle third of the right side of the neck (labeled "J" in DCME photographs, diagrams, and notes): A stab wound of the posterior aspect of the middle third of the right side of the neck is located 7" from the top of the head, 1" right of midline, and 7-1/4" from the glabella. This is a horizontally oriented stab wound with a blunt end pointing posteriorly and a sharp end pointing anteriorly. With the edges of the wound re-approximated, the stab wound measures $\frac{1}{2}$ " long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the right side of the neck and the posterior aspect of the cervical vertebra C3 (without injury to the underlying cord). The estimated depth of penetration is approximately 1-1/2". The direction of this stab wound is from right to left, back to front, and downwards.

Stab wound of the posterior aspect of the middle third of the right side of the neck (labeled "K" in DCME photographs, diagrams, and notes): A stab wound of the posterior aspect of the middle third of the right side of the neck is located 7-3/16" from the top of the head, ³/₄" right of midline, and 8-1/2" from the glabella. This is a



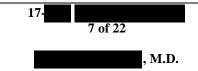
horizontally oriented stab wound with a blunt end pointing posteriorly and a sharp end pointing anteriorly. With the edges of the wound re-approximated, the stab wound measures $\frac{1}{2}$ " long and the blunt tip is less than $\frac{1}{16}$ " wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the right side of the neck. The estimated depth of penetration is approximately $\frac{5}{8}$ ". The direction of this stab wound is from left to right, back to front, and downwards.

Stab wound of the posterior aspect of the middle third of the right side of the neck (labeled "L" in DCME photographs, diagrams, and notes): A stab wound of the posterior aspect of the middle third of the right side of the neck is located 7-1/8" from the top of the head, 2" right of midline of the body, and 7" from the glabella. This is an obliquely oriented stab wound with a blunt end pointing anteriorly and superiorly and a sharp end pointing posteriorly and inferiorly. With the edges of the wound re-approximated, the stab wound measures 5/8" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the right side of the neck. The estimated depth of penetration is approximately 2-5/8". The direction of this stab wound is from left to right, back to front, and downwards.

Stab wound of the posterior aspect of the middle third of the right side of the neck (labeled "M" in DCME photographs, diagrams, and notes) : A stab wound of the posterior aspect of the middle third of the right side of the neck is located 7-5/8" from the top of the head, 1-3/4" right of midline of the body, and -1/4" from the glabella. This is an obliquely oriented stab wound with a blunt end pointing anteriorly and superiorly and a sharp end pointing posteriorly and inferiorly. With the edges of the wound re-approximated, the stab wound measures 3/8" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the right side of the neck. The estimated depth of penetration is approximately 1-1/4". The direction of this stab wound is from left to right, back to front, and downwards.

Stab wound of the posterior aspect of the lower third of the right side of the neck (labeled "N" in DCME photographs, diagrams, and notes): A stab wound of the posterior aspect of the lower third of the right side of the neck is located 8" from the top of the head, 1-3/8" right of midline, and 8-1/4" from the glabella. This is an obliquely oriented stab wound with a blunt end pointing anteriorly and superiorly and a sharp end pointing posteriorly and inferiorly. With the edges of the wound reapproximated, the stab wound measures 5/8" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the right side of the neck The estimated depth of penetration is approximately 1-3/4". The direction of this stab wound is from left to right, back to front, and downwards.

Stab wound of the posterior aspect of the lower third of the right side of the neck (labeled "O" in DCME photographs, diagrams, and notes) : A stab wound of the posterior aspect of the lower third of the right side of the neck is located 9" from the top of the head, 2-1/2" right of midline, and 8" from the glabella. This is an obliquely oriented stab wound with a blunt end pointing anteriorly and superiorly and a sharp end pointing posteriorly and inferiorly. With the edges of the wound re-approximated, the stab wound measures 1" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the right side of the neck The estimated depth of penetration is approximately 1-5/8". The direction of this stab wound is from right to left, back to front, and upwards.



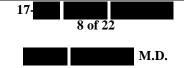
Stab wound of the superior aspect of the right shoulder (labeled "P" in DCME photographs, diagrams, and notes) : A stab wound of the superior aspect of the right shoulder is located 8-3/4" from the top of the head and 2-3/4" right of midline of the body. This is an obliquely oriented stab wound with a blunt end pointing anteriorly and superiorly and a sharp end pointing inferiorly and posteriorly. With the edges of the wound re-approximated, the stab wound measures 5/8" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the right side of the neck. The estimated depth of penetration is approximately 1-5/8". The direction of this stab wound is from right to left, back to front, and upwards.

Stab wound of the lateral aspect of the upper third of the right side of the neck (labeled "Q" in DCME photographs, diagrams, and notes) : A stab wound of the lateral aspect of the upper third of the right side of the neck is located 7-1/2" from the top of the head , 2-3/8" right of midline of the body, and 6-3/4" from the glabella. This is an obliquely oriented stab wound with a blunt end pointing anteriorly and inferiorly and a sharp end pointing posteriorly and superiorly. With the edges of the wound reapproximated, the stab wound measures 1-5/8" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the right side of the neck. The estimated depth of penetration is approximately ³/4". The direction of this stab wound is from right to left, front to back, and downwards.

Stab wound of the lateral aspect of the middle third of the right side of the neck (labeled "R" in DCME photographs, diagrams, and notes) : A stab wound of the lateral aspect of the middle third of the right side of the neck is located 8-1/2" from the top of the head, 2-1/2" right of midline of the body, and 6-3/4" from the glabella. This is an obliquely oriented stab wound anteriorly and inferiorly and a sharp end pointing posteriorly and superiorly. With the edges of the wound re-approximated, the stab wound measures $\frac{3}{4}$ " long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the right side of the neck, as well as the right side of the pharynx and the larynx. Liquid blood is present in the lumen of the pharynx and larynx. The estimated depth of penetration is approximately 2". The direction of this stab wound is from right to left, front to back, and downwards.

Stab wound of the lateral aspect of the upper third of the right side of the Neck (labeled "S" in DCME photographs, diagrams, and notes) : A stab wound of the lateral aspect of the upper third of the right side of the neck is located 8-1/2" from the top of the head, 2-1/4" right of midline of the body, and 6-1/2" from the glabella. This is an obliquely oriented stab wound with a blunt end pointing anteriorly and inferiorly and a sharp end pointing posteriorly and superiorly. With the edges of the wound reapproximated, the stab wound measures 5/8" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the right side of the neck as well as the lateral aspect of cervical vertebra C4 (without injury to the underlying cord) The estimated depth of penetration is approximately 1-3/4". The direction of this stab wound is from right to left, back to front, and downwards.

Stab wound of the lateral aspect of the lower third of the right side of the neck (labeled "T" in DCME photographs, diagrams, and notes): A stab wound of the lateral aspect of the lower third of the right side of the neck is located 9-3/4" from the top of the head, 2-3/8" right of midline of the body, and 8-1/4" from the glabella. This is an obliquely oriented stab wound with a blunt end pointing anteriorly and inferiorly and a sharp end pointing posteriorly and superiorly. With the edges of the wound re-



approximated, the stab wound measures ³/₄" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin and soft tissues of the right side of the neck, as well as the lateral aspect of cervical vertebra C6 with injury of the underlying spinal cord (including subdural hemorrhage). The estimated depth of penetration is approximately ³/₄". The direction of this stab wound is from right to left, front to back, and downwards.

Stab wound of the inner aspect of the left eyebrow (labeled "U" in DCME

photographs, diagrams, and notes) : A stab wound of the inner aspect of the left eyebrow is located 3" from the top of the head, 3/8" left of midline of the body, and $\frac{1}{2}$ " from the glabella. This is a curvilinear stab wound with a blunt end pointing superiorly and a sharp end pointing inferiorly. With the edges of the wound re-approximated, the stab wound measures $\frac{1}{2}$ " long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin and soft tissues of the nose, perforates the nasal bone, and enters into the nasal cavity. The estimated depth of penetration is approximately $\frac{1}{2}$ ". The direction of this stab wound is from left to right, front to back, and downwards.

Stab wound of the right side of the chin (labeled "V" in DCME photographs,

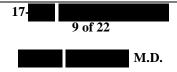
diagrams, and notes) : A stab wound of the right side of the chin is located 7" from the top of the head, 1-7/8" right of the midline of the body, and 4-3/4" from the glabella. This is a vertically oriented stab wound with a blunt end pointing superiorly and a sharp end pointing inferiorly. With the edges of the wound re-approximated, the stab wound measures $\frac{3}{4}$ " long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the chin before perforating the mandible and right side of the tongue. The estimated depth of penetration is approximately 1-1/2". The direction of this stab wound is from right to left, front to back, and upwards

Stab wound of the lateral aspect of the middle third of the left side of the

Neck (labeled "W" in DCME photographs, diagrams, and notes) : A stab wound of the lateral aspect of the middle third of the left side of the neck is located 8-5/8" from the top of the head, 3-1/8" left of midline of the body, and 6-3/4" from the glabella. This is an obliquely oriented stab wound with a blunt end pointing posteriorly and superiorly and a sharp end pointing anteriorly and inferiorly. With the edges of the wound re-approximated, the stab wound measures ½" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and left jugular vein. The estimated depth of penetration is approximately 1-3/4". The direction of this stab wound is from left to right, back to front, and upwards.

Stab wound of the lateral aspect of the left side of the occipital scalp (labeled "X" in DCME photographs, diagrams, and notes) : A stab wound of the lateral aspect of the left side of the occipital scalp is located 6-1/2" from the top of the head, 2-1/4" left of midline of the body, and 7-1/4" from the glabella. This is a horizontally oriented stab wound with a blunt end pointing towards the left and a sharp end pointing towards the right. With the edges of the wound re-approximated, the stab wound measures 7/8" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the left side of the occipital scalp. The estimated depth of penetration is approximately 1-1/2". The direction of this stab wound is left to right, back to front, and downwards.

Stab wound of the posterior aspect of the upper third of the right side of the Neck (labeled "Y" in DCME photographs, diagrams, and notes) : A stab wound of the posterior aspect of the upper third of the right side of the neck is located 6" from the top of the head, $\frac{1}{2}$ " right of midline of the body, and 7-1/8" from the glabella. This is an



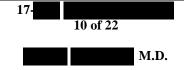
obliquely oriented stab wound with a blunt end pointing inferiorly and towards the left and a sharp end pointing superiorly and towards the right. With the edges of the wound re-approximated, the stab wound measures ³/₄" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the posterior neck before striking the occipital bone. The estimated depth of penetration is approximately ³/₄". direction of this stab wound is left to right, back to front, and upwards.

Stab wound of the posterior aspect of the upper third of the right side of the neck (labeled "Z" in DCME photographs, diagrams, and notes): A stab wound of the posterior aspect of the upper third of the right side of the neck is located 6-1/8" from the top of the head, $\frac{1}{2}$ " right of midline, and 7-1/4" from the glabella. This is an obliquely oriented stab wound with a blunt end pointing inferiorly and towards the left and a sharp end pointing superiorly and towards the right. With the edges of the wound re-approximated, the stab wound measures $\frac{3}{4}$ " long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the posterior neck before striking the occipital bone. The estimated depth of penetration is approximately $\frac{3}{4}$ ". The direction of this stab wound is from left to right, back to front, and upwards.

Stab wound of the upper third of the posterior aspect of the neck, at midline (labeled "a" in DCME photographs, diagrams, and notes): A stab wound of the upper third of the posterior aspect of the neck is located 6-1/2" from the top of the head, at the midline of the body, and 7-1/4" from the glabella. This is an obliquely oriented stab wound with a blunt end pointing inferiorly and towards the left and a sharp end pointing superiorly and towards the right. With the edges of the wound re-approximated, the stab wound measures 7/8" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the posterior aspect of the neck, striking the posterior aspect of cervical vertebra C3 (without injury to the underlying cord). The estimated depth of penetration is approximately 1-3/8". The direction of this stab wound is from right to left, back to front, and downwards.

Stab wound of the upper third of the posterior aspect of the neck, just to the right of midline (labeled "b" in DCME photographs, diagrams, and notes): A stab wound of the upper third of the posterior aspect of the neck, just to the right of midline, is located 6-1/2" from the top of the head, ³/₄" right of midline of the body, and 7-1/4" from the glabella. This is an obliquely oriented stab wound with a blunt end pointing inferiorly and towards the left and a sharp end pointing superiorly and towards the right. With the edges of the wound re-approximated, the stab wound measures 5/8" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits skin, soft tissues, and musculature of the posterior aspect of the neck. The estimated depth of penetration is approximately ³/₄". The direction of this stab wound is from left to right, back to front, and downwards.

Stab wound of the middle third of the posterior aspect of the neck, just to the right of midline (labeled "c" in DCME photographs, diagrams, and notes): A stab wound of the middle third of the posterior aspect of the neck, just to the right of midline, is located 7" from the top of the head, ¹/₂" right of midline of the body, and 7-1/4" from the glabella. This is an obliquely oriented stab wound with a blunt end pointing inferiorly and towards the left and a sharp end pointing superiorly and towards the right. With the edges of the wound re-approximated, the stab wound measures 7/8" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the posterior aspect of the neck, penetrating into cervical vertebra C2 and injuring the spinal cord (including subdural



hemorrhage). The estimated depth of penetration is approximately 1-1/2" The direction of this stab wound is from right to left, back to front, and downwards..

Stab wound of the posterior aspect of the lower third of the left side of the neck (labeled "d" in DCME photographs, diagrams, and notes): A stab wound of the posterior aspect of the lower third of the left side of the neck is located 8" from the top of the head, $\frac{1}{2}$ " left of midline of the body, and 7-3/8" from the glabella. This is a horizontally oriented stab wound with a blunt end pointing towards the left and a sharp end pointing towards the right. With the edges of the wound re-approximated, the stab wound measures 5/8" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the left side of the neck, striking the occipital bone. The estimated depth of penetration is approximately 1-1/2". The direction of this stab wound is back to front and upwards, without significant deviation towards the left or right.

Stab wound of the posterior aspect of the middle third of the right side of the neck (labeled "e" in DCME photographs, diagrams, and notes): A stab wound of the posterior aspect of the middle third of the right side of the neck is located 7-1/4" from the top of the head, 1" right of midline of the body, and 7-1/4" from the glabella. This is an obliquely oriented stab wound with a blunt end pointing inferiorly and towards the left and a sharp end pointing superiorly and towards the right. With the edges of the wound re-approximated, the stab wound measures 7/8" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the right side of the neck. The estimated depth of penetration is approximately 7/8". The direction of this stab wound is from left to right, back to front, and upwards.

Stab wound of the posterior aspect of the middle third of the right side of the neck (labeled "f" in DCME photographs, diagrams, and notes) : A stab wound of the posterior aspect of the middle third of the right side of the neck is located 7-1/2" from the top of the head, 5/8" right of midline of the body, and 7-1/2" from the glabella. This is a obliquely oriented stab wound with a blunt end pointing inferiorly and towards the left and a sharp end pointing superiorly and towards the right. With the edges of the wound re-approximated, the stab wound measures ³/₄" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the right side of the neck.. The estimated depth of penetration is approximately ³/₄". The direction of this stab wound is from left to right, back to front, and upwards.

Stab wound of the posterior aspect of the lower third of the right side of the neck (labeled "g" in DCME photographs, diagrams, and notes): A stab wound of the posterior aspect of the lower third of the right side of the neck is located 7-7/8" from the top of the head, ¹/₂" right of midline of the body, and 7-3/8" from the glabella. This is a obliquely oriented stab wound with a blunt end pointing inferiorly and towards the left and a sharp end pointing superiorly and towards the right. With the edges of the wound re-approximated, the stab wound measures ³/₄" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the right side of the neck. The estimated depth of penetration is approximately ³/₄". The direction of this stab wound is from back to front and upwards, without significant deviation towards the left or right.

Stab wound of the upper aspect of the right side of the back (labeled "h" in DCME photographs, diagrams, and notes): A stab wound of the upper aspect of the right side of the back is located 8-1/2" from the top of the head and 3" right of midline of the body. This is an obliquely oriented stab wound with a blunt end pointing inferiorly and



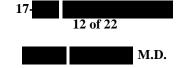
towards the right and a sharp end pointing superiorly and towards the left. There is a $\frac{1}{4}$ "swallowtail" incised wound extending from the inferior surface of the defect. With the edges of the wound re-approximated, the stab wound measures 1-1/8" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the right side of the back, enters the right pleural cavity at the posterior aspect of the 2nd intercostal space, and penetrates into the apical aspect of the upper lobe of the right lung. The right lung is collapsed (right pneumothorax). 30 ml of liquid blood are present in the right pleural cavity (right hemothorax). The estimated depth of penetration is approximately 4-3/4". The direction of this stab wound is from left to right, back to front, and downwards.

Stab wound of the superior aspect of the right shoulder (labeled "i" in DCME photographs, diagrams, and notes): A stab wound of the superior aspect of the right shoulder is located 8-1/4" from the top of the head and 3" right of midline of the body. This is a horizontally oriented stab wound with a blunt end pointing towards the left and a sharp end pointing towards the right. With the edges of the wound re-approximated, the stab wound measures 1/2" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin and subcutaneous soft tissues of the right shoulder only. The estimated depth of penetration is approximately 1/2". The direction of this stab wound is from back to front, without significant deviation upwards, downwards, towards the left, or towards the right.

Stab wound of the superior aspect of the right shoulder (labeled "j" in DCME photographs, diagrams, and notes) : A stab wound of the superior aspect of the right shoulder is located 8-1/4" from the top of the head and 3-3/4" right of midline of the body. This is an obliquely oriented stab wound with a blunt end pointing posteriorly and towards the right and a sharp end pointing anteriorly and towards the left. With the edges of the wound re-approximated, the stab wound measures 5/8" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the right shoulder. The estimated depth of penetration is approximately 5/8". The direction of this stab wound is from back to front, without significant deviation upwards, downwards, towards the left, or towards the right.

Stab wound of the anterior aspect of the left shoulder (labeled "k" in DCME photographs, diagrams, and notes): A stab wound of the anterior aspect of the left shoulder is located 12-1/2" from the top of the head and 6-1/2" left of midline of the body. This is a horizontally oriented stab wound with a blunt end pointing towards the right and a sharp end pointing toward the left. With the edges of the wound re-approximated, the stab wound measures ½" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, musculature, and capsular ligament of the left shoulder. The estimated depth of penetration is approximately 2-1/2". The direction of this stab wound is from front to back and downwards, without significant deviation towards the left or right.

Stab wound of the outer aspect of the proximal left forearm (labeled "I" in DCME photographs, diagrams, and notes): A stab wound of the outer aspect of the proximal left forearm is located 14-1/2" from the top of the shoulder and 1" left of midline of the posterior aspect of the left forearm. This is an obliquely oriented stab wound with a blunt end pointing superiorly and towards the left and a sharp end pointing inferiorly and towards the right. There is a 1" "swallowtail" incised wound extending from the inferior aspect of the defect. With the edges of the wound re-approximated, the stab wound measures ³/₄" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the left forearm. The estimated depth of penetration is approximately 1-3/4". The direction of this stab wound is from left to right, back to front, and slightly downwards..



Stab wound of the outer aspect of the right shoulder (labeled "m" in DCME photographs, diagrams, and notes): A stab wound of the outer aspect of the right shoulder is located 11" from the top of the head and 8-1/2" right of midline of the body. This is a vertically oriented stab wound with a blunt end pointing inferiorly and a sharp end pointing superiorly. With the edges of the wound re-approximated, the stab wound measures 7/8" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the right shoulder The estimated depth of penetration is approximately 2-1/4". The direction of this stab wound is from right to left, front to back, and without significant deviation upwards or downwards.

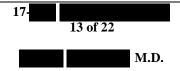
Stab wound of the upper aspect of the left side of the back (labeled "n" in DCME photographs, diagrams, and notes): A stab wound of the upper aspect of the left side of the back is located 9-1/4" from the top of the head and 2-3/4" left of midline of the body. This is an obliquely oriented stab wound with a blunt end pointing superiorly and towards the right and a sharp end pointing inferiorly and towards the left. There is a 1/8" "swallowtail" incised wound extending from the inferior aspect of the defect. With the edges of the wound re-approximated, the stab wound measures 5/8" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin and soft tissues of the left side of the back. The estimated depth of penetration is approximately 3-1/8". The direction of this stab wound is from back to front, right to left, and upwards.

Stab wound of the right subclavian fossa (labeled "o" in DCME photographs, diagrams, and notes): A stab wound of the right subclavian fossa is located 11" from the top of the head and 3-1/2" right of midline of the body. This is an obliquely oriented stab wound with a blunt end pointing inferiorly and anteriorly and a sharp end pointing superiorly and posteriorly. With the edges of the wound re-approximated, the stab wound measures ³/₄" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, musculature of the right subclavian fossa, and right jugular vein. The estimated depth of penetration is approximately 1-3/4". The direction of this stab wound is from right to left, front to back, and downwards..

Stab wound of the superior aspect of the left shoulder (labeled "p" in DCME photographs, diagrams, and notes): A stab wound of the superior aspect of the left shoulder is located 10" from the top of the head and 5" left of midline of the body. This is a horizontally oriented stab wound with a blunt end pointing towards the left and a sharp end pointing towards the right. With the edges of the wound re-approximated, the stab wound measures ¼" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the stab wound sequentially hits the skin, soft tissues, and musculature of the left shoulder before striking the left clavicle. The estimated depth of penetration is approximately ¼". The direction of this stab wound is downwards, without significant deviation towards the front, towards the back, towards the left, or towards the right.

B. INCISED WOUNDS (35):

Incised wound of right temporal scalp, posterior to right ear (labeled "C" in DCME photographs, diagrams, and notes): An incised wound of the right temporal scalp (posterior to the right ear) is located 5" from the top of the head, 3" right of midline of the body, and 6" from the glabella. This is a vertically oriented stab wound with a triangular appearance (Comment: Appearance is



consistent with a stab wound with an extended incised edge), with a blunt end pointing inferiorly and a sharp end pointing superiorly. With the lines of skin tension removed, the stab wound measures 3-1/8" long and the blunt tip is less than 1/16" wide. Exploration of the wound reveals that the incised wound hits the right temporal scalp, the galea aponeurotica, the right temporal muscle, and the outer table of the right temporal bone. The estimated depth of penetration is approximately 1/8".

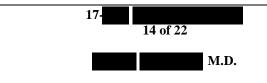
Incised wound of apical aspect of left frontal scalp (labeled "1" in DCME photographs, diagrams, and notes): An incised wound of the apical aspect of the left side of the frontal scalp is located 5/8" from the top of the head, 2" left of midline, and 4" from the glabella. It is a 1-1/4" vertical linear defect with an estimated depth of penetration of 3/16". Subsequent internal examination reveals that this incised wound is associated with an underlying 1-3/4" x 1" subgaleal hemorrhage and incises the outer table of the left side of the frontal bone.

Incised wound of apical aspect of midline of frontal scalp (labeled "2"in DCME photographs, diagrams, and notes): An incised wound of the apical aspect of the midline of the frontal scalp is located ¹/₄" from the top of the head, at midline, and 2-3/4" from the glabella. It is a 3/8" oblique linear defect with an estimated depth of penetration of less than 1/16". Subsequent internal examination reveals that this is a superficial incised wound only, extending only to the level of the dermis. There is no underlying injury to deeper structures.

Incised wound of apical aspect of midline of frontal scalp (labeled "3" in DCME photographs, diagrams, and notes): An incised wound of the apical aspect of the midline of the frontal scalp is located ¹/₄" from the top of the head, at midline, and 3-1/8" from the glabella. It is a 1-3/8" horizontal linear defect with an estimated depth of penetration of 7/8". There is shelving of the scalp at the posterior edge of the defect, consistent with a directionality of applied cutting from front to back. Subsequent internal examination reveals that this incised wound is associated with an underlying 1-3/4" x 1-1/2" subgaleal hemorrhage (*also described also below under incised wound #4*).

Incised wound of apex of the scalp (labeled "4" in DCME photographs, diagrams, and notes): An incised wound of the apex of the scalp is located 0" from the top of the head, at midline, and 4-3/4" from the glabella. It is a 2" oblique linear defect with an estimated depth of penetration of ¹/₄". Subsequent internal examination reveals that his incised wound is also associated with an underlying 1-3/4" x 1-1/2" subgaleal hemorrhage (*also described also above under incised wound #3*) and superficially incises the outer table of bone at the bregma.

Incised wound of apical aspect of right frontal scalp (labeled "5" in DCME photographs, diagrams, and notes): An incised wound of the apical aspect of the right side of the frontal scalp is located 0" from the top of the head, ³/₄" right of midline, and 4-3/8" from the glabella. It is a 3/8" oblique linear defect with an estimated depth of penetration of 3/8". Subsequent internal examination reveals this incised wound is associated with an underlying 1" x ³/₄" subgaleal hemorrhage and incises the outer table of bone at the right side of the coronal suture.



Incised wound of lateral aspect of right frontal scalp (labeled "6" in DCME photographs, diagrams, and notes): An incised wound of the lateral aspect of the right side of the frontal scalp is located 7/8" from the top of the head, 2-1/4" right of midline, and 3-3/4" from the glabella. It is a 5/16" oblique linear defect with an estimated depth of penetration of 3/16". Subsequent internal examination reveals this incised wound incises the scalp and underlying galea aponeurotica, without injury to the underlying bone.

Incised wound of right temporal scalp (labeled "7" in DCME photographs, diagrams, and notes): An incised wound of the right temporal scalp is located 2" from the top of the head, 2-1/2" right of midline, and 5-1/4" from the glabella. It is a 5/8" vertical linear defect with an estimated depth of penetration of 3/8". This incised wound incises the scalp and underlying galea aponeurotica, without injury to the underlying bone.

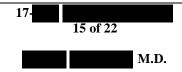
Incised wound of right eyebrow, right temple, and right ear (labeled "8" in DCME photographs, diagrams, and notes): An incised wound extends from the outer aspect of the right eyebrow across the right temple and right ear, roughly centered 3-1/4" from the top of the head, 2-1/4" right of midline, and 3-1/2" from the glabella. It is a 5-1/4" roughly horizontal defect with an estimated depth of penetration of 7/8". This incised wound incises the skin of the outer aspect of the right eyebrow, the skin of the right temple, the right temporal muscle, and transects the helix of the right ear (with near-amputation of the superior aspect of the right ear).

Incised wound of superior aspect of helix of right ear (labeled "9" in DCME photographs, diagrams, and notes): An incised wound of the superior aspect of the helix of the right ear is located 3-1/4" from the top of the head, 2-5/8" right of midline, and 5-1/4" from the glabella. It is a ¼" horizontal linear defect with an estimated depth of penetration of ¼". This incised wound transects the superior aspect of the helix of the right ear.

Incised wound of right eyebrow and right temple (labeled "10" in DCME photographs, diagrams, and notes): An incised wound of the outer aspect of the right eyebrow and the right temple is located 3-5/8" from the top of the head, 2-1/8" right of midline, and 1-1/2" from the glabella. It is a 1-7/8" roughly zshaped defect with an estimated depth of penetration of ³/4". Subsequent internal examination reveals this incised wound incises the right side of the frontalis muscle, the right side of the orbicularis oculi muscle, the right temporalis muscle, and the outer table of the right side of the frontal bone.

Incised wound of lower aspect of right side of forehead (labeled "11" in DCME photographs, diagrams, and notes): An incised wound of the lower aspect of the right side of the forehead is located 3-1/8" from the top of the head, 3/8" right of midline, and 7/8" from the glabella. It is a 3/16" oblique linear defect with an estimated depth of penetration of less than 1/16". Subsequent internal examination reveals that this is a superficial incised wound only, extending only to the level of the dermis. There is no underlying injury to deeper structures.

Incised wound of the lateral aspect of the upper third of the right side of the neck (labeled "12" in DCME photographs, diagrams, and notes): An incised wound of the lateral aspect of the upper third of the right side of the neck is located 6-5/8" from the top of the head, 2-3/4" right of midline, and 6" from the glabella. It is a ¹/₂" oblique linear defect with an estimated depth of



penetration of less than 1/16". Subsequent internal examination reveals that this is a superficial incised wound only, extending only to the level of the dermis. There is no underlying injury to deeper structures.

Incised wound of the anterior and lateral aspects of the middle third of the right side of the neck (labeled "13" in DCME photographs, diagrams, and notes): An incised wound of the anterior and lateral aspects of the middle third of the right side of the neck is roughly centered 9" from the top of the head, 2" right of midline, and 3-1/2" from the glabella. It is a 3" interrupted, oblique linear defect with an estimated depth of penetration of less than 1/16". Subsequent internal examination reveals that this is a superficial incised wound only, extending only to the level of the dermis. There is no underlying injury to deeper structions.

Incised wound of the left side of the occipital scalp (labeled "14" in DCME photographs, diagrams, and notes): An incised wound of the left side of the occipital scalp is located 4-1/2" from the top of the head, ³/₄" left of midline, and 7" from the glabella. It is a ³/₄" oblique linear defect with an estimated depth of penetration of ¹/₄". Subsequent internal examination reveals this incised wound incises the scalp and underlying galea aponeurotica, without injury to the underlying bone.

Incised wound of the right side of the occipital scalp (labeled "15" in DCME photographs, diagrams, and notes): An incised wound of the right side of the occipital scalp is located 3-1/2" from the top of the head, ¹/₂" right of midline, and 7" from the glabella. It is a 5/16" horizontal linear defect with an estimated depth of penetration of ¹/₄". Subsequent internal examination reveals this incised wound incises the scalp and underlying galea aponeurotica, without injury to the underlying bone.

Incised wound of the posterior aspect of the lower third of the right side of the neck (labeled "16" in DCME photographs, diagrams, and notes): An incised wound of the posterior aspect of the lower third of the right side of the neck is located 7-3/8" from the top of the head and ³/4" right of midline. It is a 5/8" angular defect with an estimated depth of penetration of 5/16". Subsequent internal examination reveals this incised wound incises the posterior skin of the neck and the underlying soft tissues only, without injury to deeper structures.

Incised wounds (3) of the outer aspect of the left shoulder (labeled "17" in DCME photographs, diagrams, and notes): A cluster of 3 incised wounds of the outer aspect of the left shoulder are roughly centered 12-1/2" from the top of the head and 9-1/2" left of midline. These incised wounds consist of two, 2-3/8" horizontal linear defects and one 1" vertical linear defect. All three wounds have an estimated depth of penetration of less than 1/16". Subsequent internal examination reveals that these are superficial incised wounds only, extending only to the level of the dermis. There is no underlying injury to deeper structures.

Incised wound of the palmar aspect of the left hand (labeled "18" in DCME photographs, diagrams, and notes): An incised wound of the palmar aspect of the left hand is located proximal to the base of the left middle finger, 18" from the top of the shoulder at the midline of the hand. It is a ¾" oblique linear defect with an estimated depth of penetration of less than 1/16". Subsequent internal examination reveals that this is a superficial incised wound only, extending only to the level of the dermis. There is no underlying injury to deeper structures.



Incised wounds (5) of the midline of the chest, overlying the sternum (**labeled "19" in DCME photographs, diagrams, and notes):** A cluster of 5 incised wounds are present on the midline of the chest, overlying the sternum, 19" from the top of the head and at the midline of the body. These vertical linear incised wounds range in length from 5/8" to 4-1/2", with an estimated depth of penetration of less than 1/16". Subsequent internal examination reveals that these are superficial incised wounds only, extending only to the level of the dermis. There is no underlying injury to deeper structures.

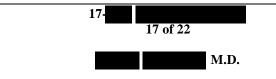
Incised wound of the upper aspect of the left side of the back (labeled "20" in DCME photographs, diagrams, and notes): An incised wound of the upper aspect of the left side of the back is located 11-1/2" from the top of the head and 1" left of midline. It is a 3" oblique linear defect with an estimated depth of penetration of less than 1/16". Subsequent internal examination reveals that this is a superficial incised wound only, extending only to the level of the dermis. There is no underlying injury to deeper structures.

Incised wound of the anterior aspect of the right shoulder (labeled "21" in DCME photographs, diagrams, and notes): An incised wound of the anterior aspect of the right shoulder is located 13" from the top of the head and 8-1/8" right of midline. It is a 1" upside-down "u"-shaped defect, with an estimated depth of penetration of ¼". There is shelving of the skin at the distal edge of the defect, consistent with a directionality of applied cutting from proximal to distal. Subsequent internal examination reveals that this incised wound incises the skin of the shoulder and the underlying soft tissues only, without injury to deeper structures.

Incised wound of the anterior aspect of the proximal right arm (labeled "22" in DCME photographs, diagrams, and notes): An incised wound of the anterior aspect of the proximal right arm is located 16" from the top of the head and 8-1/8" right of midline. It is a 7/8" oblique linear defect with an estimated depth of penetration of less than 1/16". Subsequent internal examination reveals that this is a superficial incised wound only, extending only to the level of the dermis. There is no underlying injury to deeper structures.

Incised wound of the palmar aspect of the middle phalange of the right middle finger (labeled "23" in DCME photographs, diagrams, and notes): An incised wound of the palmar aspect of the middle phalange of the right middle finger is located 30" from the top of the shoulder, at the midline of the hand. It is a 3/8" angular defect with an estimated depth of penetration of 1/8". There is shelving of the skin at the lateral edge of the defect, consistent with a directionality of applied cutting from medial to lateral. Subsequent internal examination reveals that this incised wound incises the skin of the hand and underlying soft tissues only, without injury to deeper structures.

Incised wound of the palmar aspect of the distal phalange of the right middle finger (labeled "24" in DCME photographs, diagrams, and notes): An incised wound of the palmar aspect of the distal phalange of the right middle finger is located 30-3/4" from the top of the shoulder, at the midline of the hand. It is a 1" curvilinear defect with an estimated depth of penetration of ¹/₂". Subsequent internal examination reveals that this incised wound incises the outer table of the distal phalangeal bone of the middle finger.



Incised wound of the right temple, anterior to the right ear (labeled "25" in DCME photographs, diagrams, and notes): An incised wound of the right temple, anterior to the right ear, is located 4-3/8" from the top of the head, 2-5/8" right of midline, and 3-1/2" from the glabella. It is a 3/8" oblique linear defect with an estimated depth of penetration of less than 1/16". Subsequent internal examination reveals that this is a superficial incised wound only, extending only to the level of the dermis. There is no underlying injury to deeper structures.

Incised wound of the anterior aspect of the right ear (labeled "26" in DCME photographs, diagrams, and notes): An incised wound of the preauricular skin of the right ear is located 4-1/2" from the top of the head, 2-3/4" right of midline, and 4" from the glabella. It is a 5/8" vertical linear defect with an estimated depth of penetration of 5/8". Subsequent internal examination reveals that this incised wound transects the right pre-auricular skin, the right temporal muscle, and incises the outer table of the right temporal bone.

Incised wound of the upper aspect of the right side of the chest, overlying the medial aspect of the right clavicle (labeled "27" in DCME photographs, diagrams, and notes): An incised wound of the upper aspect of the right side of the chest, overlying the medial aspect of the right clavicle, is located 13-1/8" from the top of the head and 2-1/2" right of midline. It is a 1-1/8" oblique linear defect with an estimated depth of penetration of less than 1/16". Subsequent internal examination reveals that this is a superficial incised wound only, extending only to the level of the dermis. There is no underlying injury to deeper structures.

Incised wound of the lateral aspect of the upper third of the left side of the neck (labeled "28" in DCME photographs, diagrams, and notes): An incised wound of the lateral aspect of the upper third of the left side of the neck is located 8-1/4" from the top of the head, 2-3/4" left of midline, and 6" from the glabella. It is a ¹/4" angular defect with an estimate depth of penetration of ¹/4". There is shelving of the anterior edge of the defect, consistent with a directionality of applied cutting from posterior to anterior. Subsequent internal examination reveals that this incised wound incises the skin of the neck and underlying soft tissues only, without injury to deeper structures.

II. BLUNT FORCE INJURIES:

HEAD:

Laceration: There is a 3/16" superficial, vertical linear laceration of the inner mucosa of the lower lip, at midline.

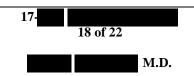
Subsequent internal examination reveals a 5/8" x 3/16" x 1/8" remote, cavitating contusion of the inferior surface of the left temporal gyrus.

TORSO:

Contusion: There is a 1-1/2" x 5/8" contusion of the posterior aspect of the right shoulder.

LEFT UPPER EXTREMITY:

Abrasion: There is a 5/16" irregular abrasion on the outer aspect of the left shoulder.



RIGHT UPPER EXTREMITY:

Abrasion: There is a 3/8" x 3/16" irregular abrasion on the outer aspect of the right elbow.

Contusion: There is a 5/16" circular brown contusion on the inner aspect of the middle of the right forearm.

The proximal interphalangeal joint of the right little finger is dislocated.

LEFT LOWER EXTREMITY:

Abrasions: The following abrasions are present:

- 1. A 3/16" x 1/8" oval abrasion on the anterior aspect of the middle of the left leg.
- 2. A $\frac{1}{2}$ " x $\frac{1}{8}$ " oblique linear abrasion on the inner aspect of the middle of the left leg.
- 3. A 5/8" x 1/8" triangular abrasion on the dorsal aspect of the left foot.
- 4. Two, 1/16" and 1/8" irregular abrasions on the dorsal aspect of the left foot.

Contusion: There is a 1-1/8" x 7/8" irregular purple contusion on the lateral aspect of the left knee.

RIGHT LOWER EXTREMITY:

Abrasions: There are three irregular abrasions on the anterior aspect of the middle of the right leg, ranging in size from 1/16" to 3/8" x ¹/4". These abrasions are roughly arranged in a collinear oblique linear distribution.

These injuries, having been described, will not be repeated.

INTERNAL EXAMINATION:

HEAD:

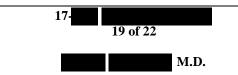
The scalp is without additional injury. The skull is otherwise intact. There is no epidural or subdural hemorrhage. The brain weighs 1380 grams and has normal distributions of unremarkable cranial nerves and cerebral vessels. Except where previously described (see "Injuries" above), the leptomeninges are thin, clear, and delicate. The brain is symmetrical with normal distributions of white and grey matter, deep nuclei, and ventricles.

NECK:

The cervical vertebrae, hyoid bone, tracheal and laryngeal cartilages, and paratracheal soft tissues are without trauma. The strap muscles of the neck (bilateral sternocleidomastoids, bilateral sternohyoids, right omohyoid muscle) and peritracheal/perilaryngeal soft tissues are markedly hemorrhagic, in association with sharp force injuries described above (see "Injuries"). The upper airway is not obstructed. The tongue is otherwise unremarkable.

BODY CAVITIES:

30 ml of liquid blood are present in the left pleural cavity. No fluid is present in the right pleural cavity. 10 ml of clear, straw-colored fluid are present in the pericardial sac. The organs are in their normal situs, without fibrous adhesions. The abdominal pannus is 5/8 " thick.



CARDIOVASCULAR SYSTEM:

The heart weighs 330 grams. It has a normal distribution of left predominant, widely patent coronary arteries.

The myocardium is uniformly dark red-brown without gross pallor, hemorrhage, or fibrosis. The left ventricle and interventricular septum are each 1.2 cm thick. The right ventricle is 0.4 cm thick.

The endocardial surfaces and four cardiac valves are unremarkable.

The aorta is without significant atherosclerosis (only few intimal atheromatous streaks).

The venae cavae and pulmonary arteries are without thromboemboli or thrombi.

RESPIRATORY SYSTEM:

The right lung weighs 270 grams and the left lung weighs 330 grams. The pink-purple parenchyma is soft. There is moderate subpleural and interstitial anthracotic pigment deposition. There are bilateral rare apical emphysematous blebs, measuring up to $2.5 \times 2.5 \times 1.5$ cm. There are no focal areas of consolidation or masses. The bronchial distribution and vasculature are unremarkable. The larynx, trachea, and bronchi contain blood. Sectioning through the lung parenchyma reveals slight hemoaspiration in the tissues.

LIVER, GALLBLADDER, AND PANCREAS:

The liver weighs 1420 grams and has an intact, smooth capsule with soft, pale brown parenchyma without slippery or nodular texture or masses.

The gallbladder contains approximately 5 ml of amber-colored bile without stones or sludge. The extrahepatic biliary system is unremarkable.

The pancreas is without hemorrhage or mineralization.

HEMIC AND LYMPHATIC SYSTEM:

The spleen weighs 110 grams, is firm, and has a grey-purple, intact capsule and pale purple parenchyma with moderately prominent white pulp. There are no major lymph node enlargements.

GENITOURINARY SYSTEM:

The right kidney weighs 120 grams and the left weighs 140 grams. Each kidney has a smooth, pale brown surface. The right kidney has a 0.8 cm smooth walled, uniloculated cortical cyst filled with clear fluid on the anterior surface. Otherwise, both kidneys have unremarkable architecture and vasculature.

The ureters maintain uniform caliber into an unremarkable bladder with 300 ml of clear, yellow urine.

The prostate is not enlarged. The testes are unremarkable.

ENDOCRINE SYSTEM:



The pituitary, thyroid, and adrenal glands are normal color, size, and consistency.

DIGESTIVE SYSTEM:

The esophagus and gastroesophageal junction are unremarkable.

The stomach contains approximately 700 ml of thick, beige fluid with recognizable fragments of soft food (including fragments of soft yellow and white food (possibly egg), potato skin, mushroom, and green and red peppers). There are no recognizable pills or tablets.

The stomach, small intestine, and large intestine are unremarkable. The decedent is status-post remote appendectomy, with surgical staples present.

MUSCULOSKELETAL SYSTEM:

The sternum, remainder of the vertebrae, clavicles, ribs, and pelvis are without fracture.

Except where previously described (see "Injuries" above), the musculature is normally distributed and unremarkable.

HISTOLOGY:

BRAIN (x 2, 1A): Cerebellum with acute subarachnoid hemorrhage.

HEART (x 1, 1B): No significant histologic abnormality.

<u>LUNG (x 1, 1C)</u>: Congestion. Scattered, intra-alveolar aggregates of macrophages. Sloughed respiratory epithelium in bronchioles. Few, scattered aggregates of anthracotic pigment-laden macrophages (predominantly perivascular).

LIVER (x 1, 1D): No significant histologic abnormality.

KIDNEY (x 1, 1E): Rare sclerotic cortical glomeruli. Rare calcified intra-tubular concretion.

Representative sections of major organs are retained in formalin.

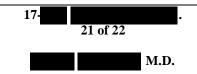
TOXICOLOGY:

Submitted for toxicologic analysis at AXIS Toxicology Laboratories were samples of femoral blood, vitreous fluid, and urine; a separate report was received and reviewed. Significant findings are included on the front page of this autopsy report under "Final Diagnoses".

Samples of femoral blood, heart blood, hemothorax blood, scalp hair, brain tissue, liver, gastric contents, bile, and vitreous fluid are retained.

X-RAYS:

Postmortem radiographs are made and retained.



EVIDENCE:

Submitted as Evidence are the following:

- 1. The decedent's clothing ("jock strap" style underwear).
- 2. The decedent's jewelry:
 - a. Dark grey metal watch.
 - b. Dark grey metal ring.
 - c. Grey metal earrings with one black stone each (two earrings total).
- 3. Bags previously taped around the decedent's hands and feet (four total).
- 4. Evidence collection sheet.
- 5. Swabs as follows:
 - a. Left and right sides of the forehead.
 - b. Left and right cheeks.
 - c. Left and right sides of the chin.
 - d. Left and right sides of the neck.
 - e. Left and right sides of the chest.
 - f. Left and right nipples.
 - g. Left and right arm.
 - h. Left and right wrists.
 - i. Palmar surfaces of the left and right hands.
 - j. Dorsal (knuckle) surfaces of the left and right hands.
 - k. Penis.

1.

- Scrotum.
- 6. Left and right fingernail clippings.
- 7. A completed sexual assault evidence collection kit.

At the completion of the autopsy, the body was subsequently re-sealed in its original body bag with security seal "SEALED **Control** at **Control** pm.

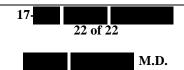
SUMMARY COMMENT

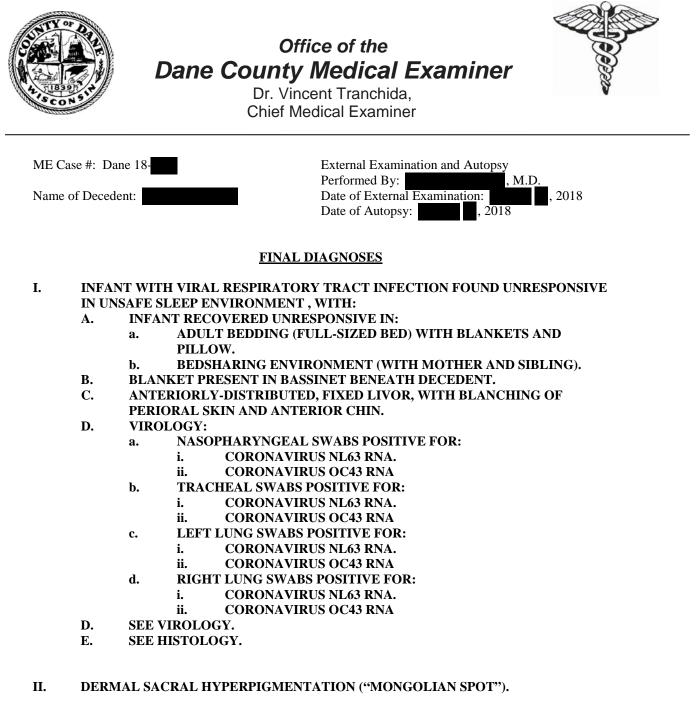
It is my medical opinion that **and the second secon**

These multiple sharp force injuries resulted in significant blood loss, as well as injuries of the right jugular vein, spinal cord at the level of C2 and C6, pharynx, larynx, and upper lobe of the right lung.

The manner of death will be certified as Homicide.





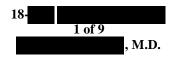


III. STATUS-POST RESUSCITATIVE EFFORT.

IV. STATUS-POST POSTMORTEM RECOVERY OF PERICARDIAL SAC AND HEART FOR HEART VALVE DONATION.

CAUSE OF DEATH: Undetermined (Infant with viral respiratory tract infection found unresponsive in unsafe sleep environment).

MANNER OF DEATH: Undetermined (Infant with viral respiratory tract infection found unresponsive after bedsharing with parent and sibling in adult bedding).



I hereby certify that I,	, M.D.,	Examiner of Dane,
, Wisconsin, hav	ve performed an external ex	, 2018 and autopsy on
2018 on the body of	the D	Dane County Mortuary of Wisconsin.

The body is received in an intact, sealed, labeled white body bag.

 $\frac{1}{18}$ hrs " is written in black marker on the outside of the bag.

The red security seal ("**Constant**") was cut at 16:05 pm on **Constant**", **Constant** to perform an external examination of the decedent to allow for tissue recovery for donation.

The external examination was performed in the presence of Dane County Medical Examiner's Office Morgue Technician

EXTERNAL EXAM:

The body is of a well-developed, well-nourished, well-hydrated, well-groomed, 4.88 kg (approximately the 5^{th} percentile for age), Black female infant whose appearance is consistent with the given age of 4 months. The crown-heel height is 62 cm (approximately the 50^{th} percentile for age), the head circumference is 38.5 cm (less than the 5th percentile for age), the chest circumference is 37.0 cm, the crown-rump length is 40.0 cm, and the foot length is 8 cm. The weight for height is below the 5^{th} percentile for age.

All growth percentiles are developed by the National Center for Health Statistics in collaboration with the National Center for Chronic Disease Prevention and Health Promotion (2000). <u>http://www.cdc.gov/growthcharts.</u>

The fine, straight, dark brown scalp hair measures up to 1-3/4".

The nose and facial bones are palpably intact.

The ears are normally formed and atraumatic. Each earlobe is pierced once.

The eyes have brown irides and the conjunctivae are without hemorrhage, petechiae, edema, or jaundice.

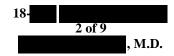
The gingivae are edentulous. The lips, gums, and upper and lower labial frenulae are atraumatic. The lingual frenulum is intact. The oral mucosa is pink and moist.

The anterior fontanelle is open and not bulging (flat). The posterior fontanelle is closed.

Two areas of white, plaster-like residue are present on the anterior torso, measuring 1-1/8" x $\frac{1}{2}$ " on the lower aspect of the right side of the chest (below the right breast) and $\frac{3}{4}$ " x $\frac{3}{8}$ " on the midline of the upper aspect of the abdomen, just above the umbilicus.

There is a 2-1/2" x 2" poorly circumscribed area of purple-brown discoloration of the skin of the sacrum and the inner aspects of both buttocks (gluteal cleft), consistent with "Mongolian Spot". Subsequent internal examination reveals no underlying subcutaneous soft tissue hemorrhage.

Otherwise, the torso is unremarkable. There is no dimpling of the spine. The external genitalia are atraumatic and those of a normal infant girl (Tanner stage 1). The anus is atraumatic. No diaper rash is present.



There are normal numbers and configurations of fingers and toes, without abnormal palmar creases. The fingernails extend to the tips of the fingers and are intact, clean, and unpolished. The toenails are short, intact, and unpolished.

SCARS:

There are no scars.

TATTOOS:

There are no tattoos.

POSTMORTEM CHANGES:

There is slight, bilateral, horizontal linear brown-red corneal drying artifact (*Comment: "Tache noire"*). There is moderate, symmetrical rigor mortis of the upper and lower extremities, neck, and jaw. Lividity is fixed, purple-pink and anteriorly distributed, with blanching of the perioral skin and anterior chin present. The body is cold (refrigerated).

CLOTHING/PERSONAL PROPERTY:

The body is received clad in a light blue and white paper disposable diaper with a Sesame Street "Elmo" character design and Velcro-like fasteners at the sides ("Pampers", size 1). The absorbent pad of the diaper is saturated with urine and soft, light brown-green stool is present in the seat of the diaper. The diaper weighs 55 grams.

Received wrapped around the body are the following:

- 1. A yellow knitted baby blanket ("Project Linus' made by ", WI").
- 2. A white pediatric hospital blanket with a design of bunnies and beach balls ("Hospital Property").

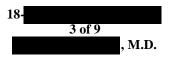
Received separately with the body is a white pediatric hospital blanket with a design of bunnies and beach balls ("Hospital Property").

THERAPEUTIC PROCEDURES:

The following therapeutic procedures are present:

- 1. An endotracheal tube is taped in place. Subsequent internal examination reveals the tip of the tube in present in the proximal esophagus (*Comment: Esophageal intubation*).
- 2. An intraosseous catheter with attached IV tubing in the anterior aspect of the proximal left leg, just distal to the left knee
- 3. A white hospital identification band on the right ankle, reading "MR#: 3157003 01/01/17 XXBERMUDA, UNIDENTIFIED52".
- 4. Recent punctures are present as follows:
 - a. Left antecutbital fossa (x 1).
 - b. Right antecubital fossa (x 1).
 - c. Dorsal aspect of the right hand (x 1).
 - d. Anterior aspect of proximal right leg, just distal to right knee (x 1).
 - e. Anterior aspect of right ankle (x 1).
 - f. Heel of the right foot (x 1).

Two adhesive pediatric defibrillation pads are received separately with the body.



INJURIES (EXTERNAL AND INTERNAL):

There are no internal or external injuries.

Following external examination, the body was re-sealed in its original body bag with security seal "0017839" at 17:00 pm on January 5th, 2018.

The decedent was received following tissue recovery for donation in its original body bag sealed with security seal "0009472". This security seal was cut at 08:53 am on January 6th, 2018 to begin the autopsy examination.

This autopsy was performed in the	presence of	Police Department Detective
Police Department		, Fire Department
Firefighter/Paramedic	, Dane Count	y Medical Examiner's Office Medicolegal
Investigator , and	Dane County Medic	cal Examiner's Office Morgue Technician

INTERNAL EXAMINATION:

Average organ weighs for age are modified from Coppoletta, J.M., and Wolbach, S.B: Body lengths and normal weights of more important vital organs between birth and twelve years of age. Am. J. Path., 9:55-70, 1933. In Saphir, O: Autopsy Diagnosis and Techniques, 2nd Edition. Paul B. Hoeber, Inc., New York, 1946

HEAD:

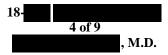
The scalp has no contusion. The skull has no fracture. There is no epidural, subdural, or subarachnoid hemorrhage. The brain weighs 544 grams (*average weight for age: 540 grams*) and has a normal distribution of unremarkable cranial nerves and cerebral vessels. The cerebral hemispheres are symmetrical with the usual pattern of sulci and gyri. The leptomeninges are clear, smooth, and glistening. The cerebral vessels are without aneurysms. The cranial nerves are normally distributed. The optic nerves are without hemorrhages. The white and grey matter, deep nuclei, and ventricles are unremarkable. There are no focal lesions. The brainstem, cerebellum, and spinal cord have the usual patterns on cut surfaces. There is no fluid in the inner ears.

NECK:

The cervical vertebrae, hyoid bone, tracheal and laryngeal cartilages, and paratracheal soft tissues are without trauma. The upper airway is without obstruction. The tongue is unremarkable. The posterior neck is negative for trauma.

BODY CAVITIES:

The pleural cavities have been previously opened for recovery of the pericardial sac and heart for heart valve donation (see "Cardiovascular System" below). 4 ml of serosanguinous fluid are present in the



combined pleural cavities. No fluid is present in the peritoneal cavity. Except for the pericardial sac and heart, the organs are in their normal situs. No fibrous adhesions are present. The diaphragm is intact. The abdominal pannus is 3/8" thick.

A posterior soft tissue dissection is negative for trauma.

CARDIOVASCULAR SYSTEM:

Received subsequent to the autopsy were the following:

- The formalin-fixed residual heart tissue for a (CryoLife Donor #:).
 A Cardiac Pathology report generated by Medical Director M.D. and
- M.D. for (dated 2/2018).
 Cardiac histology slides (6) labeled Donor Level 1" and "A-F". (*Comment: See "Histology" below*).

The post-dissection heart tissue weighs 26 grams heart weighs 44 grams (average weight for age: 27 grams).

The myocardium is homogeneous, brown, and firm without pallor, hemorrhage, softening, or fibrosis.

The coronary arteries arise and branch normally from the appropriate sinuses below the sinotubular junction, with a right dominant distribution.

The left ventricle wall is 0.6 cm thick (*average thickness for age: 0.65 cm*). The interventricular septum is 0.7 thick. The right ventricle is 0.3 cm thick (*average thickness for age: 0.24 cm*).

The left majority of the left atrium and the interatrial septum has been previously dissected and is not available for evaluation. The pulmonary valves are absent. The remaining endocardial surfaces and cardiac valves are unremarkable. The ductus arteriosus is closed. There is no aortic coarctation.

The superior and inferior venae cavae drain normally into the right atrium. The inferior left and right pulmonary veins are appropriately located. No thrombi or thromboemboli are present. The atrial appendages are free of mural thrombi.

RESPIRATORY SYSTEM:

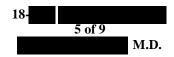
The right lung weighs 53 grams (*average weight for age: 37 grams*) and the left weighs 48 grams (*average weight for age: 33 grams*). The pink-red parenchyma is soft and slightly congested. There is no focal consolidation, hemorrhage, obstruction, or cavitary lesion. Scattered petechiae are present on the pleural surfaces of all lobes. The bronchial distribution and vasculature are unremarkable. The bronchi are unremarkable. There is no tracheo-esophageal fistula.

LIVER, GALL BLADDER, AND PANCREAS:

The liver weighs 160 grams (average weight for age: 160 grams) and has an intact, smooth capsule with soft, brown parenchyma without slippery or nodular texture or masses.

The gallbladder contains less than 5 ml of amber-colored bile without stones or sludge. The extrahepatic biliary system is unremarkable.

The pancreas is without hemorrhage or mineralization.



HEMIC AND LYMPHATIC SYSTEM:

The spleen weighs 24 grams (*average weight for age: 16 grams*), is firm, and has a dark purple intact capsule and dark parenchyma with moderately prominent white pulp. There are no major lymph node enlargements. The thymus weighs 41 grams and has few pleural and parenchymal petechiae.

GENITOURINARY SYSTEM:

The right kidney weighs 18 grams (*average weight for age: 22 grams*) and the left kidney weighs 17 grams (*average weight for age: 21 grams*). Each kidney has a smooth, red-brown surface.

The ureters maintain uniform caliber into an unremarkable bladder with less than 5 ml of urine.

The ovaries, fallopian tubes, and uterus are unremarkable. The endometrium is thin and tan. The cervix is unremarkable and has a round os. The vaginal vault is atraumatic.

ENDOCRINE SYSTEM:

The pituitary, thyroid, and adrenal glands are normal color, size, and consistency. Each adrenal gland weighs 2 grams.

DIGESTIVE SYSTEM:

The esophagus and gastroesophageal junction are unremarkable.

The stomach contains approximately 5 ml of mucoid, tan fluid without recognizable fragments of pills, tablets, or solid food.

The gastric mucosa, small intestine, appendix, and large intestine are unremarkable. There are no areas of volvulus, dilatation, or intussusception.

The small intestine contains abundant tan, soft chyme throughout; the large intestine contains abundant soft, light green stool content throughout. The intestinal contents weigh 18 gm.

MUSCULOSKELETAL SYSTEM:

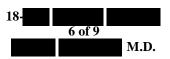
The vertebrae, clavicles, sternum, ribs, and pelvis are without fracture.

The musculature is normally distributed and unremarkable.

VIROLOGY:

Swabs of the meninges, nasopharynx, trachea, left lung, and right lung are submitted for virology testing at the Wisconsin State Laboratory of Hygiene; separate reports were received and reviewed. They revealed the following:

- 1. Nasopharyngeal swabs are positive for:
 - a. Coronavirus NL63 RNA.
 - b. Coronavirus OC43 RNA.
- 2. Tracheal swabs are positive for:
 - a. Coronavirus NL63 RNA.
 - b. Coronavirus OC43 RNA.



- 3. Left lungs swabs are positive for:
 - a. Coronavirus NL63 RNA.
 - Coronavirus OC43 RNA.
- 4. Right lung swabs are positive for:
 - a. Coronavirus NL63 RNA.
 - b. Coronavirus OC43 RNA.

Additional testing of respiratory swabs was negative for Influenza A, Influenza B, RSV A, RSV B, Parainfluenza 2-4, Coronavirus 229E, Coronavirus HKU1, Adenovirus, C. Pneumoniae, M. Pneumoniae, and L. Pneumophilia. Swabs of the meninges were negative for enterovirus.

Please also refer to separate reports.

MICROBIOLOGY:

b.

Cultures of subclavian blood, cerebrospinal fluid, and swabs of meninges, left lung and right lung are submitted for microbiology testing at Hospital Microbiology Laboratory; separate reports were received and reviewed. They revealed the following:

- 1. Subclavian blood cultures revealed mixed organisms including enteric gram negative rods, mixed gram positive organisms (cocci), and light yeast, likely postmortem contaminants.
- 2. Cerebrospinal fluid cultures revealed no growth.
- 3. Meningeal cultures revealed no growth.
- 4. Right lung cultures revealed heavy mixed organisms including enteric gram negative rods and light yeast, likely postmortem contaminants.
- 5. Left lung cultures revealed heavy mixed organisms including enteric gram negative rods and light yeast, likely postmortem contaminants.

Please also refer to separate reports.

HISTOPATHOLOGY:

<u>BRAIN (x 1, 1M)</u>: Slight enlargement of perivascular and perineuronal spaces and slight vacuolization of the neuropil, suggestive of early cerebral edema.

<u>HEART (x 12, "CryoLife</u> <u>Donor</u> <u>Level 1 A-F"):</u> Congestion. Otherwise, no significant histologic abnormality. Please also refer to separate cardiac pathology report from

<u>LUNGS (x 7, 1H-I, 1K-L)</u>: Scattered foci of mixed acute and chronic interstitial inflammation (predominantly neutrophils and lymphocytes), consistent with interstitial pneumonitis. Rare megakaryocytes. Congestion with extravasation of erythrocytes into alveolar air spaces. Scattered intraalveolar macrophages. Rare intra-alveolar non-polarizable foreign material without associated vital reaction, suggestive of aspirated material.

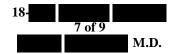
SPINAL CORD (x 3, 1P): No significant histologic abnormality.

SPLEEN (x 1, 1C): Congestion. Otherwise, no significant histologic abnormality.

<u>THYMUS (x 1, 1A)</u>: Congestion with rare intraparenchymal hemorrhages (consistent with gross appearance of petechiae). Adequate lymphocyte population for age. Hassall's corpuscles present.

PANCREAS (x 1, 1F): No significant histologic abnormality. Islets of Langerhans present.

KIDNEYS (x 2, 1D-E): Congestion. Otherwise, no significant histologic abnormality.



<u>ADRENAL GLANDS (x 2, 1D-E)</u>: Congestion. Residual periadrenal multivacuolated, eosinophilic fat ("brown fat"). Otherwise, no significant histologic abnormality.

TRACHEA (x 2, 1N): No significant histologic abnormality. Congested peritracheal lymph node present.

<u>BRONCHI (x 2, 1G, 1J)</u>: No significant histologic abnormality. Congested peribronchial lymph node present.

LIVER (x 1, 1B): No significant histologic abnormality.

LARYNX (x 1, 10): Slight to moderate mixed acute and chronic submucosal inflammatory infiltrates.

Representative sections of major organs are retained in formalin.

TOXICOLOGY:

Submitted for toxicologic analysis at **toxicology**. Toxicology Laboratories are samples of subclavian blood, urine, and vitreous fluid; a separate report was received and reviewed. Toxicology was found to be noncontributory to the decedent's cause nor manner of death.

Samples of subclavian blood, brain tissue, liver tissue, bile, gastric contents, and scalp hair are retained.

X-RAY:

Post-mortem radiographs of the entire body are made at the University of Wisconsin Health Center, Department of Radiology and reveal no axial or appendicular fractures. The X-rays are retained as evidence.

METABOLIC SCREEN:

Samples of postmortem blood and bile are retained. Frozen heart, liver and splenic tissue is retained.

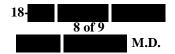
At the conclusion of the autopsy, the body was subsequently re-sealed in its original body bag with security seal "**Concernent** at **Concernent** pm.

SUMMARY COMMENT:

It is the opinion of the undersigned that **and the second** cause of death best be certified as Undetermined (Infant with viral respiratory tract infection found unresponsive in unsafe sleep environment).

A largely negative autopsy gross examination subsequently revealed the presence of a viral infection in postmortem virology studies and laryngeal submucosal inflammation. Nasopharyngeal, trachea, and bilateral lung swabs were positive for Coronavirus NL63 (alpha coronavirus) and Coronavirus OC43 (beta coronavirus).

Coronavirus NL63 and OC43 usually cause mild to moderate upper respiratory tract illnesses, like the common cold. Sometimes they can also cause lower respiratory tract illnesses, such as pneumonia or bronchitis. People with weakened immune systems (such as infants) are particularly vulnerable.



While the presence of positive viral cultures of the upper and lower respiratory tract and histologic finding of interstitial lung inflammation are concerning for infection, the decedent was recovered from markedly unsafe sleep conditions (co-sleeping with an adult parent (mother) and toddler sibling in adult bedding (including full-sized bed with pillows and blankets)). The position of the decedent when found was also reported by the mother and grandmother to be prone, and this is consistent with the presence of fixed, anterior livor mortis with blanching of the perioral skin and anterior chin; this is markedly concerning for airway obstruction. While asphyxia due to unsafe sleep conditions often does not present gross findings at autopsy, it represents a grave and life-threatening risk to an infant.

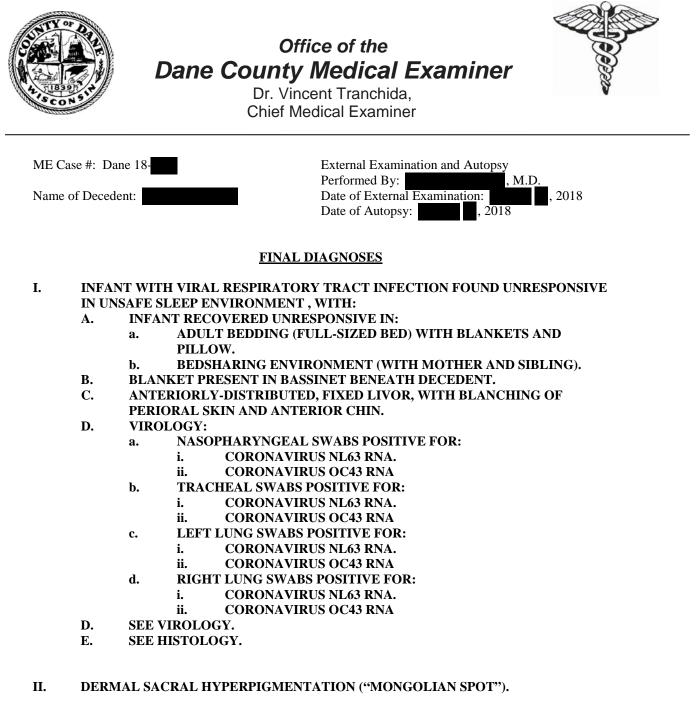
As such, while the undersigned has a potential infectious natural cause of death, the concomitant presence of a dangerous sleep environment and potential for airway obstruction renders the undersigned also unable to rule out that the decedent's death may have been accidental (due to asphyxia). Indeed, a combination of both is possible (e.g., partial or near-complete obstruction of the airway in an infant who has underlying elements of respiratory compromise due to a viral infection).

As such, the undersigned believes that Zipporah Johnson's death certificate be certified as "Undetermined" with the above-noted observations.

Safe sleep recommendations are available at the following links: http://pediatrics.aappublications.org/content/early/2011/10/12/peds.2011-2284.full.pdf+html https://www.nichd.nih.gov/sts/Pages/default.aspx https://www.cdc.gov/sids/



18-		
	9 of 9	
		M.D.

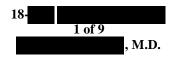


III. STATUS-POST RESUSCITATIVE EFFORT.

IV. STATUS-POST POSTMORTEM RECOVERY OF PERICARDIAL SAC AND HEART FOR HEART VALVE DONATION.

CAUSE OF DEATH: Undetermined (Infant with viral respiratory tract infection found unresponsive in unsafe sleep environment).

MANNER OF DEATH: Undetermined (Infant with viral respiratory tract infection found unresponsive after bedsharing with parent and sibling in adult bedding).



I hereby certify that I,	, M.D.,	Examiner of Dane,
, Wisconsin, hav	ve performed an external ex	, 2018 and autopsy on
2018 on the body of	the D	Dane County Mortuary of Wisconsin.

The body is received in an intact, sealed, labeled white body bag.

 $\frac{1}{18}$ hrs " is written in black marker on the outside of the bag.

The red security seal ("**Constant**") was cut at 16:05 pm on **Constant**", **Constant** to perform an external examination of the decedent to allow for tissue recovery for donation.

The external examination was performed in the presence of Dane County Medical Examiner's Office Morgue Technician

EXTERNAL EXAM:

The body is of a well-developed, well-nourished, well-hydrated, well-groomed, 4.88 kg (approximately the 5^{th} percentile for age), Black female infant whose appearance is consistent with the given age of 4 months. The crown-heel height is 62 cm (approximately the 50^{th} percentile for age), the head circumference is 38.5 cm (less than the 5th percentile for age), the chest circumference is 37.0 cm, the crown-rump length is 40.0 cm, and the foot length is 8 cm. The weight for height is below the 5^{th} percentile for age.

All growth percentiles are developed by the National Center for Health Statistics in collaboration with the National Center for Chronic Disease Prevention and Health Promotion (2000). <u>http://www.cdc.gov/growthcharts.</u>

The fine, straight, dark brown scalp hair measures up to 1-3/4".

The nose and facial bones are palpably intact.

The ears are normally formed and atraumatic. Each earlobe is pierced once.

The eyes have brown irides and the conjunctivae are without hemorrhage, petechiae, edema, or jaundice.

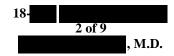
The gingivae are edentulous. The lips, gums, and upper and lower labial frenulae are atraumatic. The lingual frenulum is intact. The oral mucosa is pink and moist.

The anterior fontanelle is open and not bulging (flat). The posterior fontanelle is closed.

Two areas of white, plaster-like residue are present on the anterior torso, measuring 1-1/8" x $\frac{1}{2}$ " on the lower aspect of the right side of the chest (below the right breast) and $\frac{3}{4}$ " x $\frac{3}{8}$ " on the midline of the upper aspect of the abdomen, just above the umbilicus.

There is a 2-1/2" x 2" poorly circumscribed area of purple-brown discoloration of the skin of the sacrum and the inner aspects of both buttocks (gluteal cleft), consistent with "Mongolian Spot". Subsequent internal examination reveals no underlying subcutaneous soft tissue hemorrhage.

Otherwise, the torso is unremarkable. There is no dimpling of the spine. The external genitalia are atraumatic and those of a normal infant girl (Tanner stage 1). The anus is atraumatic. No diaper rash is present.



There are normal numbers and configurations of fingers and toes, without abnormal palmar creases. The fingernails extend to the tips of the fingers and are intact, clean, and unpolished. The toenails are short, intact, and unpolished.

SCARS:

There are no scars.

TATTOOS:

There are no tattoos.

POSTMORTEM CHANGES:

There is slight, bilateral, horizontal linear brown-red corneal drying artifact (*Comment: "Tache noire"*). There is moderate, symmetrical rigor mortis of the upper and lower extremities, neck, and jaw. Lividity is fixed, purple-pink and anteriorly distributed, with blanching of the perioral skin and anterior chin present. The body is cold (refrigerated).

CLOTHING/PERSONAL PROPERTY:

The body is received clad in a light blue and white paper disposable diaper with a Sesame Street "Elmo" character design and Velcro-like fasteners at the sides ("Pampers", size 1). The absorbent pad of the diaper is saturated with urine and soft, light brown-green stool is present in the seat of the diaper. The diaper weighs 55 grams.

Received wrapped around the body are the following:

- 1. A yellow knitted baby blanket ("Project Linus' made by ", WI").
- 2. A white pediatric hospital blanket with a design of bunnies and beach balls ("Hospital Property").

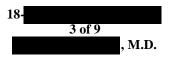
Received separately with the body is a white pediatric hospital blanket with a design of bunnies and beach balls ("Hospital Property").

THERAPEUTIC PROCEDURES:

The following therapeutic procedures are present:

- 1. An endotracheal tube is taped in place. Subsequent internal examination reveals the tip of the tube in present in the proximal esophagus (*Comment: Esophageal intubation*).
- 2. An intraosseous catheter with attached IV tubing in the anterior aspect of the proximal left leg, just distal to the left knee
- 3. A white hospital identification band on the right ankle, reading "MR#: 3157003 01/01/17 XXBERMUDA, UNIDENTIFIED52".
- 4. Recent punctures are present as follows:
 - a. Left antecutbital fossa (x 1).
 - b. Right antecubital fossa (x 1).
 - c. Dorsal aspect of the right hand (x 1).
 - d. Anterior aspect of proximal right leg, just distal to right knee (x 1).
 - e. Anterior aspect of right ankle (x 1).
 - f. Heel of the right foot (x 1).

Two adhesive pediatric defibrillation pads are received separately with the body.



INJURIES (EXTERNAL AND INTERNAL):

There are no internal or external injuries.

Following external examination, the body was re-sealed in its original body bag with security seal "at 17:00 pm on 2018.

The decedent was received following tissue recovery for donation in its original body bag sealed with security seal "**General**" This security seal was cut at 08:53 am on **General** 2018 to begin the autopsy examination.

This autopsy was performed in the pre	sence of Police Department Detective ,
Police Department	, Fire Department
Firefighter/Paramedic	, Dane County Medical Examiner's Office Medicolegal
Investigator , and Dan	e County Medical Examiner's Office Morgue Technician

INTERNAL EXAMINATION:

Average organ weighs for age are modified from Coppoletta, J.M., and Wolbach, S.B: Body lengths and normal weights of more important vital organs between birth and twelve years of age. Am. J. Path., 9:55-70, 1933. In Saphir, O: Autopsy Diagnosis and Techniques, 2nd Edition. Paul B. Hoeber, Inc., New York, 1946

HEAD:

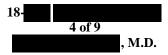
The scalp has no contusion. The skull has no fracture. There is no epidural, subdural, or subarachnoid hemorrhage. The brain weighs 544 grams (*average weight for age: 540 grams*) and has a normal distribution of unremarkable cranial nerves and cerebral vessels. The cerebral hemispheres are symmetrical with the usual pattern of sulci and gyri. The leptomeninges are clear, smooth, and glistening. The cerebral vessels are without aneurysms. The cranial nerves are normally distributed. The optic nerves are without hemorrhages. The white and grey matter, deep nuclei, and ventricles are unremarkable. There are no focal lesions. The brainstem, cerebellum, and spinal cord have the usual patterns on cut surfaces. There is no fluid in the inner ears.

NECK:

The cervical vertebrae, hyoid bone, tracheal and laryngeal cartilages, and paratracheal soft tissues are without trauma. The upper airway is without obstruction. The tongue is unremarkable. The posterior neck is negative for trauma.

BODY CAVITIES:

The pleural cavities have been previously opened for recovery of the pericardial sac and heart for heart valve donation (see "Cardiovascular System" below). 4 ml of serosanguinous fluid are present in the



combined pleural cavities. No fluid is present in the peritoneal cavity. Except for the pericardial sac and heart, the organs are in their normal situs. No fibrous adhesions are present. The diaphragm is intact. The abdominal pannus is 3/8" thick.

A posterior soft tissue dissection is negative for trauma.

CARDIOVASCULAR SYSTEM:

Received subsequent to the autopsy were the following:

- The formalin-fixed residual heart tissue for a (CryoLife Donor #:).
 A Cardiac Pathology report generated by Medical Director M.D. and
- M.D. for (dated 2/2018).
 Cardiac histology slides (6) labeled Donor Level 1" and "A-F". (*Comment: See "Histology" below*).

The post-dissection heart tissue weighs 26 grams heart weighs 44 grams (average weight for age: 27 grams).

The myocardium is homogeneous, brown, and firm without pallor, hemorrhage, softening, or fibrosis.

The coronary arteries arise and branch normally from the appropriate sinuses below the sinotubular junction, with a right dominant distribution.

The left ventricle wall is 0.6 cm thick (*average thickness for age: 0.65 cm*). The interventricular septum is 0.7 thick. The right ventricle is 0.3 cm thick (*average thickness for age: 0.24 cm*).

The left majority of the left atrium and the interatrial septum has been previously dissected and is not available for evaluation. The pulmonary valves are absent. The remaining endocardial surfaces and cardiac valves are unremarkable. The ductus arteriosus is closed. There is no aortic coarctation.

The superior and inferior venae cavae drain normally into the right atrium. The inferior left and right pulmonary veins are appropriately located. No thrombi or thromboemboli are present. The atrial appendages are free of mural thrombi.

RESPIRATORY SYSTEM:

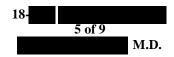
The right lung weighs 53 grams (*average weight for age: 37 grams*) and the left weighs 48 grams (*average weight for age: 33 grams*). The pink-red parenchyma is soft and slightly congested. There is no focal consolidation, hemorrhage, obstruction, or cavitary lesion. Scattered petechiae are present on the pleural surfaces of all lobes. The bronchial distribution and vasculature are unremarkable. The bronchi are unremarkable. There is no tracheo-esophageal fistula.

LIVER, GALL BLADDER, AND PANCREAS:

The liver weighs 160 grams (average weight for age: 160 grams) and has an intact, smooth capsule with soft, brown parenchyma without slippery or nodular texture or masses.

The gallbladder contains less than 5 ml of amber-colored bile without stones or sludge. The extrahepatic biliary system is unremarkable.

The pancreas is without hemorrhage or mineralization.



HEMIC AND LYMPHATIC SYSTEM:

The spleen weighs 24 grams (*average weight for age: 16 grams*), is firm, and has a dark purple intact capsule and dark parenchyma with moderately prominent white pulp. There are no major lymph node enlargements. The thymus weighs 41 grams and has few pleural and parenchymal petechiae.

GENITOURINARY SYSTEM:

The right kidney weighs 18 grams (*average weight for age: 22 grams*) and the left kidney weighs 17 grams (*average weight for age: 21 grams*). Each kidney has a smooth, red-brown surface.

The ureters maintain uniform caliber into an unremarkable bladder with less than 5 ml of urine.

The ovaries, fallopian tubes, and uterus are unremarkable. The endometrium is thin and tan. The cervix is unremarkable and has a round os. The vaginal vault is atraumatic.

ENDOCRINE SYSTEM:

The pituitary, thyroid, and adrenal glands are normal color, size, and consistency. Each adrenal gland weighs 2 grams.

DIGESTIVE SYSTEM:

The esophagus and gastroesophageal junction are unremarkable.

The stomach contains approximately 5 ml of mucoid, tan fluid without recognizable fragments of pills, tablets, or solid food.

The gastric mucosa, small intestine, appendix, and large intestine are unremarkable. There are no areas of volvulus, dilatation, or intussusception.

The small intestine contains abundant tan, soft chyme throughout; the large intestine contains abundant soft, light green stool content throughout. The intestinal contents weigh 18 gm.

MUSCULOSKELETAL SYSTEM:

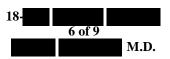
The vertebrae, clavicles, sternum, ribs, and pelvis are without fracture.

The musculature is normally distributed and unremarkable.

VIROLOGY:

Swabs of the meninges, nasopharynx, trachea, left lung, and right lung are submitted for virology testing at the Wisconsin State Laboratory of Hygiene; separate reports were received and reviewed. They revealed the following:

- 1. Nasopharyngeal swabs are positive for:
 - a. Coronavirus NL63 RNA.
 - b. Coronavirus OC43 RNA.
- 2. Tracheal swabs are positive for:
 - a. Coronavirus NL63 RNA.
 - b. Coronavirus OC43 RNA.



- 3. Left lungs swabs are positive for:
 - a. Coronavirus NL63 RNA.
 - Coronavirus OC43 RNA.
- 4. Right lung swabs are positive for:
 - a. Coronavirus NL63 RNA.
 - b. Coronavirus OC43 RNA.

Additional testing of respiratory swabs was negative for Influenza A, Influenza B, RSV A, RSV B, Parainfluenza 2-4, Coronavirus 229E, Coronavirus HKU1, Adenovirus, C. Pneumoniae, M. Pneumoniae, and L. Pneumophilia. Swabs of the meninges were negative for enterovirus.

Please also refer to separate reports.

MICROBIOLOGY:

b.

Cultures of subclavian blood, cerebrospinal fluid, and swabs of meninges, left lung and right lung are submitted for microbiology testing at Hospital Microbiology Laboratory; separate reports were received and reviewed. They revealed the following:

- 1. Subclavian blood cultures revealed mixed organisms including enteric gram negative rods, mixed gram positive organisms (cocci), and light yeast, likely postmortem contaminants.
- 2. Cerebrospinal fluid cultures revealed no growth.
- 3. Meningeal cultures revealed no growth.
- 4. Right lung cultures revealed heavy mixed organisms including enteric gram negative rods and light yeast, likely postmortem contaminants.
- 5. Left lung cultures revealed heavy mixed organisms including enteric gram negative rods and light yeast, likely postmortem contaminants.

Please also refer to separate reports.

HISTOPATHOLOGY:

<u>BRAIN (x 1, 1M)</u>: Slight enlargement of perivascular and perineuronal spaces and slight vacuolization of the neuropil, suggestive of early cerebral edema.

<u>HEART (x 12, "CryoLife</u> <u>Donor</u> <u>Level 1 A-F"):</u> Congestion. Otherwise, no significant histologic abnormality. Please also refer to separate cardiac pathology report from

<u>LUNGS (x 7, 1H-I, 1K-L)</u>: Scattered foci of mixed acute and chronic interstitial inflammation (predominantly neutrophils and lymphocytes), consistent with interstitial pneumonitis. Rare megakaryocytes. Congestion with extravasation of erythrocytes into alveolar air spaces. Scattered intraalveolar macrophages. Rare intra-alveolar non-polarizable foreign material without associated vital reaction, suggestive of aspirated material.

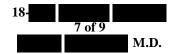
SPINAL CORD (x 3, 1P): No significant histologic abnormality.

SPLEEN (x 1, 1C): Congestion. Otherwise, no significant histologic abnormality.

<u>THYMUS (x 1, 1A)</u>: Congestion with rare intraparenchymal hemorrhages (consistent with gross appearance of petechiae). Adequate lymphocyte population for age. Hassall's corpuscles present.

PANCREAS (x 1, 1F): No significant histologic abnormality. Islets of Langerhans present.

KIDNEYS (x 2, 1D-E): Congestion. Otherwise, no significant histologic abnormality.



<u>ADRENAL GLANDS (x 2, 1D-E)</u>: Congestion. Residual periadrenal multivacuolated, eosinophilic fat ("brown fat"). Otherwise, no significant histologic abnormality.

TRACHEA (x 2, 1N): No significant histologic abnormality. Congested peritracheal lymph node present.

<u>BRONCHI (x 2, 1G, 1J)</u>: No significant histologic abnormality. Congested peribronchial lymph node present.

LIVER (x 1, 1B): No significant histologic abnormality.

LARYNX (x 1, 10): Slight to moderate mixed acute and chronic submucosal inflammatory infiltrates.

Representative sections of major organs are retained in formalin.

TOXICOLOGY:

Submitted for toxicologic analysis at **toxicology**. Toxicology Laboratories are samples of subclavian blood, urine, and vitreous fluid; a separate report was received and reviewed. Toxicology was found to be noncontributory to the decedent's cause nor manner of death.

Samples of subclavian blood, brain tissue, liver tissue, bile, gastric contents, and scalp hair are retained.

X-RAY:

Post-mortem radiographs of the entire body are made at the University of Wisconsin Health Center, Department of Radiology and reveal no axial or appendicular fractures. The X-rays are retained as evidence.

METABOLIC SCREEN:

Samples of postmortem blood and bile are retained. Frozen heart, liver and splenic tissue is retained.

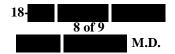
At the conclusion of the autopsy, the body was subsequently re-sealed in its original body bag with security seal "**Concernent** at **Concernent** pm.

SUMMARY COMMENT:

It is the opinion of the undersigned that **and the second** cause of death best be certified as Undetermined (Infant with viral respiratory tract infection found unresponsive in unsafe sleep environment).

A largely negative autopsy gross examination subsequently revealed the presence of a viral infection in postmortem virology studies and laryngeal submucosal inflammation. Nasopharyngeal, trachea, and bilateral lung swabs were positive for Coronavirus NL63 (alpha coronavirus) and Coronavirus OC43 (beta coronavirus).

Coronavirus NL63 and OC43 usually cause mild to moderate upper respiratory tract illnesses, like the common cold. Sometimes they can also cause lower respiratory tract illnesses, such as pneumonia or bronchitis. People with weakened immune systems (such as infants) are particularly vulnerable.



While the presence of positive viral cultures of the upper and lower respiratory tract and histologic finding of interstitial lung inflammation are concerning for infection, the decedent was recovered from markedly unsafe sleep conditions (co-sleeping with an adult parent (mother) and toddler sibling in adult bedding (including full-sized bed with pillows and blankets)). The position of the decedent when found was also reported by the mother and grandmother to be prone, and this is consistent with the presence of fixed, anterior livor mortis with blanching of the perioral skin and anterior chin; this is markedly concerning for airway obstruction. While asphyxia due to unsafe sleep conditions often does not present gross findings at autopsy, it represents a grave and life-threatening risk to an infant.

As such, while the undersigned has a potential infectious natural cause of death, the concomitant presence of a dangerous sleep environment and potential for airway obstruction renders the undersigned also unable to rule out that the decedent's death may have been accidental (due to asphyxia). Indeed, a combination of both is possible (e.g., partial or near-complete obstruction of the airway in an infant who has underlying elements of respiratory compromise due to a viral infection).

As such, the undersigned believes that Zipporah Johnson's death certificate be certified as "Undetermined" with the above-noted observations.

Safe sleep recommendations are available at the following links: http://pediatrics.aappublications.org/content/early/2011/10/12/peds.2011-2284.full.pdf+html https://www.nichd.nih.gov/sts/Pages/default.aspx https://www.cdc.gov/sids/



18-		
	9 of 9	
		M.D.



Office of the **Dane County Medical Examiner**



Dr. Vincent Tranchida, MD Chief Medical Examiner

ME Case #: Dane 18-	Autopsy Performed By:	M.D.
Name of Decedent:	Date of Autopsy: 2018	

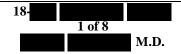
FINAL DIAGNOSES

- I. BLUNT FORCE TRAUMA OF HEAD, NECK, AND TORSO, WITH:
 - a. DERMAL ABRASIONS AND CONTUSIONS.
 - b. ORAL MUCOSAL LACERATION.
 - c. SUBGALEAL HEMORRHAGE.
 - d. FRACTURES OF:
 - i. BILATERAL TEMPORAL BONES.
 - ii. LEFT PARIETAL BONE.
 - iii. OCCIPITAL BONE.
 - iv. SPHENOID BONE (INCLUDING TYPE I HINGE FRACTURE).
 - v. RIGHT CLAVICLE.
 - vi. MULTIPLE RIBS.
 - vii. THORACIC VERTEBRAL COLUMN AT T11.
 - viii. PELVIS, INCLUDING:
 - 1. BILATERAL GREATER AND LESSER PUBIC RAMI.
 - 2. RIGHT SACROILIAC JOINT.
 - e. SUBDURAL HEMORRHAGE, SLIGHT (5 ML).
 - f. SUBARACHNOID HEMORRHAGE.
 - g. COMPLETE ATLANTO-OCCIPITAL DISLOCATION, WITH:
 - i. EPIDURAL HEMORRHAGE.
 - ii. NEAR-COMPLETE PONTO-MEDULLARY AVULSION OF BRAINSTEM.
 - h. HEMOASPIRATION.
 - i. BILATERAL PULMONARY CONTUSIONS AND LACERATIONS.
 - j. HEPATIC CONTUSIONS AND LACERATIONS.
 - k. BLATERAL HEMOTHORACES.
- **II. BLUNT FORCE TRAUMA OF EXTREMITIES, WITH DERMAL ABRASIONS AND CONTUSIONS.**

III. SIMPLE OVARIAN CYSTS.

CAUSE OF DEATH: Blunt force trauma of head, neck, and torso, with fractures and visceral injuries.

MANNER OF DEATH: Accident (Passenger of compact car struck by pickup truck and then delivery truck).



I hereby certify that I, M.D., M.D., of Dane, Counties, Wisconsin, have performed an autopsy on the body of on 2018, in the Dane County Mortuary.			
This autopsy was performed in the presence of Dane County Medical Examiner's Office Morgue Technician			
The body was received in an intact, sealed, labeled white body bag.			

"Sealed 1/18 # is written in black marker on the outside of the bag.

The red security seal was cut at p.m. to begin the examination.

EXTERNAL EXAM:

The body is of a well-developed, well-nourished, average-framed, 5 foot, 9 inch, 143 pound (Body Mass Index [BMI] = 21.1) White woman whose appearance is consistent with the given age of 20 years.

The straight, brown scalp hair is arranged in a loose occipital ponytail by a clear plastic spiral hair band *(Comment: Style of hair band is suggestive of an "Invisibobble")* and measures up to 18 inches.

The nose and facial bones are palpably intact.

The ears are normally formed. The left earlobe is pierced three times and the right earlobe is pierced twice. The right tragus is pierced once. Liquid blood is present in the right external ear canal.

The corneas are clear. The irides are green and the conjunctivae are pale, without jaundice, hemorrhage, petechiae, or edema.

The oral cavity has natural teeth in good repair. The oral mucosa is pale.

Except where described below (Comment: see "Injuries"), the torso is unremarkable. The external genitalia are atraumatic and of a normal adult female. The anus is atraumatic.

The extremities show no needle tracks. The fingernails are short, intact, and polished with chipped, grey nail polish. The toenails are short, intact and unpolished.

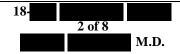
SCARS:

There are no major surgical scars.

TATTOOS:

The following tattoos are present:

- 1. A 2-1/4 inch, monochromatic, professional tattoo on the lower aspect of the right side of the chest, below the right breast (a design of a heart and an open hand)
- 2. A 1-1/4 inch x 3/8 inch, monochromatic, professional tattoo on the volar aspect of the left wrist (a design of the words ("He > I")
- 3. A 6 x 2-1/2 inch, monochromatic, professional tattoo on the volar aspect of the right forearm (a design of the continents of the world)



POSTMORTEM CHANGES:

There is slight, symmetrical rigor mortis of the upper and lower extremities, neck, and jaw is present. Lividity is unfixed, purple, and posteriorly distributed. The body is cold (refrigerated).

CLOTHING/PERSONAL PROPERTY:

The body is received clad in the following items:

- 1. A red long-sleeved T-shirt with a stylized bull/steer design on the front ("Gildan", size M)
- 2. A teal sports brassiere ("Underarmour", size label faded and illegible)
- 3. A pair of black briefs ("LA Senza", size Medium)
- 4. A pair of grey athletic shorts ("Nike Dri-Fit", size medium)

A grey metal tragus piercing is present in the tragus of the right ear. This is removed and submitted as Personal Property.

THERAPEUTIC PROCEDURES:

Adhesive electrocardiograph leads are present on both sides of the upper chest and the anterior aspect of each proximal thigh (four total)

INJURIES (EXTERNAL AND INTERNAL):

There are blunt trauma injuries of the head, torso and extremities. These injuries are described with reference to the standard anatomical planes with the body examined in the horizontal position. No order or sequence is implied.

HEAD:

Abrasions: The following abrasions are present:

- 1. A 3-3/4 x 1 inch array of irregular abrasions on the anterior aspect of the left temple and the anterior aspect of the left ear. These abrasions range in size from 1/16 inch to ³/₄ x ¹/₄ inch (*Comment: Appearance of the abrasions is suggestive of "dicing" style abrasions*).
- 2. A 7/8 x 1/4 inch, teardrop-shaped abrasion at the corner of the right eye
- 3. A $1-1/2 \ge 1$ inch, patchy, irregular abrasion on the underside of the chin, at midline

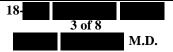
Contusions: The following contusions are present:

- 1. A 2 x 2 inch contusion of the left temporal scalp and underlying left temporal muscle.
- 2. A 6 x 3 inch area of scalp and subgaleal hemorrhage involving the right temporal scalp, posterior right parietal scalp and right occipital bone
- 3. A 3/8 inch, irregular, brown-purple contusion involving the outer aspect of the left upper eyelid and left corner of the eye

Laceration: There is a 1/8 inch, curvilinear superficial mucosal laceration on the inner mucosa of the lower lip at midline.

Subsequent internal examination reveals:

- 1. A 3-5/8 inch x 3 inch area of fragmentation of the left front-temporal-parietal skull, with radiating fractures from this impact site through the left anterior cerebral fossa, left middle cerebral fossa, sella turcica and right middle cerebral fossa (including a complete Type 1 hinge fracture), as well as a radiating fractures into the right parietal and right sided occipital bones.
- 2. Scant (less than 5 ml of subdural hemorrhage over both cerebral convexities.



3. Patchy, thin-layered subarachnoid hemorrhage over both cerebral convexities (left greater than right), the base of the cerebrum, and both cerebellar lobes.

NECK:

There are no external injuries of the neck

Subsequent internal examination reveals complete atlanto-occipital dislocation, with near-complete pontomedullary avulsion at the level of the brainstem. Epidural hemorrhage is present in the spinal canal.

TORSO:

Abrasions: The following abrasions are present:

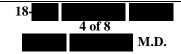
- 1. A 2-3/4 x 3 inch, angular abrasion on the lower aspect of the left side of the chest, below the left breast
- 2. A 4 x 1 inch, oblique linear abrasion on the anterior aspect of the left hip
- 3. A $1-1/2 \ge 3/4$ inch, curvilinear abrasion on the upper aspect of the right side of the back

Contusions: The following contusions are present:

- 1. A 4-1/2 x 4-1/2 inch, patchy, irregular, blue contusion (with associated overlying abrasions ranging in size from 1/4 inch to 1-1/2 inch x 1/2 inch) on the midline of the upper aspect of the chest,.
- 2. A 1/2 inch, faint, irregular, purple contusion on the lower outer quadrant of the right breast
- 3. A 3/8 inch, faint, irregular, purple contusion on the right upper quadrant of the abdomen
- 4. A 10 x 8 inch, patchy, purple-brown contusion (with overlying scattered abrasions ranging in size from 3/16 inch to 2 x 1/2 inch), on the anterior aspect of the right hip
- 5. An 8 x 4 inch, irregular, pink-purple contusion (with overlying abrasions ranging in size from 5/8 inch to 1 x 3/4 inch) on the upper aspect of the left side of the back
- 6. Two, 2 x 1/8 inch, ecchymotic, purple, oblique linear contusions on the upper aspect of the right side of the back. These contusions are spaced 1/8 inch apart

Subsequent internal examination reveals:

- 1. Hemorrhagic fractures as follows:
 - a. The lateral aspect of the right clavicle
 - b. The anterior aspects of left ribs 1 through 2 and posterior aspect of left ribs 2 through 9 (*Comment: Posterior rib fractures are arranged in a vertical linear distribution*)
 - c. The anterior aspects of right ribs 2 through 5 and lateral aspects of right ribs 2 through 5
 - d. The pelvis, including:
 - a. The right sacroiliac joint
 - b. Bilateral greater and lesser pubic rami
 - e. The thoracic vertebral column at the level of T11, with underlying blood in the spinal canal. The underlying cord itself is intact
- 2. Bilateral pulmonary contusions, ranging in size up to $3 \times 3 \times 1-1/2$ inches on the left, and $2-5/8 \times 2-1//4 \times 1$ inch on the right
- 3. Bilateral pulmonary lacerations as follows:
 - a. 7/8 inch laceration of the upper lobe of the right lung
 - b. 1-5/8 inch laceration of the upper lobe of the left lung
 - c. A 7/8 inch laceration of the lower lobe of the left lung
- 4. Diffuse hepatic contusions of the anterior aspect of the right lobe
- 5. Three hepatic lacerations, ranging in size from 1-1/4 to 2 inches
- 6. Bilateral hemothoraces (350 ml on the left and 50 ml on the right)



LEFT UPPER EXTREMITY:

Contusions: The following contusions are present:

- 1. A 1-1/2 x 5/8 inch, irregular, purple-blue contusion on the dorsal aspect of the middle of the left forearm
- 2. A 4 x 2 inch array of punctate purple-red, ecchymotic contusions on the dorsal aspect of the left hand, ranging in size from less than 1/16 inch to 1/16 inch

RIGHT UPPER EXTREMITY:

Abrasion: There is a $1 \times 1/4$ inch, irregular abrasion on the inner aspect of the middle of the right forearm.

Contusion: There is a 1/4 inch, circular contusion on the anterior aspect of the right shoulder.

LEFT LOWER EXTREMITY:

Abrasion: There is a 2 inch, horizontal, linear abrasion on the outer aspect of the proximal left thigh.

Contusions: The following contusions are present:

- 1. Two, 1/2 inch and 1-1/4 inch x 7/8 inch, irregular, purple-brown contusions on the anterior aspect of the proximal left thigh
- 2. A 1 x 1/2 inch, faint, irregular, blue contusion on the outer aspect of the proximal left leg
- 3. A $2 \times 1-1/4$ inch, irregular, blue contusion on the anterior aspect of the proximal left leg

RIGHT LOWER EXTREMITY:

Abrasions: There is a $1-1/4 \times 1/2$ inch, irregular, abrasion on the anterior aspect of the right ankle.

There is a 4 x 2-1/2 inch sparse array of punctate and oblique linear abrasions on the inner aspect of the right knee, ranging in size from less than 1/16 inch to 3/16 inch.

Contusions: The following contusions are present:

- 1. A 3 x 3 inch, irregular, blue contusion with associated punctate abrasions measuring less than 1/16 inch on the outer aspect of the middle of the right thigh
- 2. A $1-1/2 \ge 1$ inch, irregular, pink abraded contusion on the outer aspect of the distal right leg

These injuries, having been described, will not be repeated.

INTERNAL EXAMINATION:

HEAD:

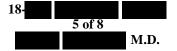
The brain weighs 1,420 grams and except where previously described, it has normal distributions of unremarkable cranial nerves and cerebral vessels, and thin, clear, and delicate leptomeninges. Sectioning through the brain matter reveals normal distributions of white and grey matter, deep nuclei, and ventricles.

NECK:

The remainder of the cervical vertebrae, hyoid bone, tracheal and laryngeal cartilages, and paratracheal soft tissues are without trauma. The upper airway is not obstructed. The tongue is unremarkable.

BODY CAVITIES:

350 ml of liquid blood are present in the left pleural cavity and 50 ml are present in the right (Comment:



Bilateral hemothoraces). 10 ml of clear, straw-colored fluid are present in the pericardial sac. No fluid is present in the peritoneal cavity. The organs are in their normal situs without fibrous adhesions. The abdominal pannus is 1-1/4 inches thick.

CARDIOVASCULAR SYSTEM:

The heart weighs 260 grams and has a normal distribution of left predominant, widely patent coronary arteries.

The myocardium is uniformly dark red without pallor, hemorrhage, or fibrosis. The left ventricle and interventricular septum are each 1.2 cm thick. The right ventricle is 0.3 cm thick.

The endocardial surfaces and four cardiac valves are unremarkable.

The aorta is with slight atherosclerosis (few intimal atheromatous streaks).

The venae cavae and pulmonary arteries are without thromboemboli or thrombi.

RESPIRATORY SYSTEM:

The right lung weighs 430 grams and the left lung weighs 380 grams. The pink parenchyma is soft. Sectioning through the lung parenchyma reveals diffuse hemoaspiration. Frothy, serosanguinous fluid is expressed from cut surfaces. There are no masses. The bronchial distribution and vasculature are unremarkable. The bronchi contain liquid blood.

LIVER, GALL BLADDER, AND PANCREAS:

The liver weighs 1,490 grams and has a smooth capsule with soft, dark brown parenchyma without slippery or nodular texture or masses.

The gallbladder contains approximately 6 ml of amber-colored bile without stones or sludge. The extrahepatic biliary system is unremarkable.

The pancreas is without hemorrhage or mineralization.

HEMIC AND LYMPHATIC SYSTEM:

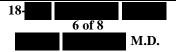
The spleen weighs 150 grams, is firm, and has a dark purple, intact capsule and dark parenchyma with moderately prominent white pulp. There are no major lymph node enlargements.

GENITOURINARY SYSTEM:

The right kidney weighs 110 grams and the left weighs 100 grams. Each kidney has a smooth, red-brown surface and an unremarkable architecture and vasculature.

The ureters maintain uniform caliber into an unremarkable bladder with 1 ml of slightly cloudy, pale yellow urine.

The left ovary has a 1.1 cm simple, uniloculated, smooth-walled cyst filled with clear fluid; the right ovary has a 1 cm simple, uniloculated, smooth-walled cyst filled with clear fluid. The fallopian tubes and uterus are unremarkable. The endometrium is thin and tan. The cervix is unremarkable and has a slitlike os. The



vaginal vault is atraumatic.

ENDOCRINE SYSTEM:

The pituitary, thyroid, and adrenal glands are normal color, size, and consistency.

DIGESTIVE SYSTEM:

The esophagus and gastroesophageal junction are unremarkable.

The stomach contains approximately 50 ml of thick, beige-grey fluid with recognizable fragments of soft, partially digested food. There are no recognizable fragments of food or pills or tablets.

The stomach, small intestine, appendix, and large intestine are unremarkable.

MUSCULOSKELETAL SYSTEM:

The sternum, left clavicle, remainder of the vertebrae, remainder of the ribs, and remainder of the pelvis are without fracture.

The musculature is normally distributed and unremarkable.

HISTOLOGY:

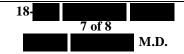
Representative sections of major organs are retained in formalin.

TOXICOLOGY:

Submitted for toxicologic analysis at The Wisconsin State Laboratory of Hygiene were samples of postmortem hemothorax blood, urine, and vitreous fluid; a separate report was received and reviewed. Toxicology was found to be noncontributory to the decedent's cause nor manner of death.

Samples of postmortem femoral blood, hemothorax blood, scalp hair, gastric contents, bile and vitreous fluid are retained.

At the completion of the autopsy, the body was subsequently resealed in its original body bag with security seal "**Constant**" at **Constant**, p.m.

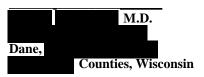


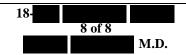
SUMMARY COMMENT

It is my medical opinion that determined died following blunt force trauma injuries of her head, neck, and torso, with ensuing fractures and visceral injuries. These included (but were not limited to) skull fractures (including a complete hinge fracture of the base of the skull), subdural hemorrhage, subarachnoid hemorrhage, atlanto-occipital dislocation with devastating brainstem injury, right clavicle fracture, multiple rib fractures, pulmonary contusions and lacerations, vertebral and pelvic fractures, and internal hemorrhagic.

The severity and distribution of injuries are consistent with the reported mechanism of occurrence (passenger of compact car struck by pickup truck and then delivery truck).

The manner of death will be certified as Accidental.







Office of the Dane County Medical Examiner



Dr. Vincent Tranchida, MD Chief Medical Examiner

ME Case #: Rock Name of Decedent: Autopsy Performed By: Vincent Tranchida, M.D. Date of Autopsy:

FINAL DIAGNOSES

- I. ACUTE INTOXICATION DUE TO THE COMBINED EFFECTS OF ALPRAZOLAM, DULOXETINE, DIPHENHYDRAMINE, CETIRIZINE, HYDROXYZINE, AND ALCOHOL, WITH:
 - a. PLETHORY OF HEAD, NECK, AND UPPER CHEST.
 - b. FROTHY, WHITE FOAM IN AIRWAYS.
 - c. PULMONARY CONGESTION AND EDEMA.
 - d. POSTMORTEM FEMORAL BLOOD ALPRAZOLAM CONCENTRATION OF 5.9 NG/ML.
 - e. POSTMORTEM URINE POSITIVE FOR ALPRAZOLAM.
 - f. POSTMORTEM URINE POSITIVE FOR ALPRAZOLAM METABOLITE (ALPHA-HYDROXY-ALPRAZOLAM).
 - g. POSTMORTEM FEMORAL BLOOD DULOXETINE CONCENTRATION OF 72.4 NG/ML.
 - h. POSTMORTEM FEMORAL BLOOD DIPHENHYDRAMINE CONCENTRATION OF 88.6 NG/ML.
 - i. POSTMORTEM FEMORAL BLOOD CETIRIZINE CONCENTRATION OF 0.1 MCG/ML.
 - j. POSTMORTEM FEMORAL BLOOD HYDROXYZINE CONCENTRATION OF 73.2 NG/ML.
 - k. POSTMORTEM FEMORAL BLOOD ETHANOL CONCENTRATION OF 0.095% (W/V).
 - 1. POSTMORTEM VITREOUS FLUID ETHANOL CONCENTRATION OF 0.120% (W/V).
 - m. SEE TOXICOLOGY REPORT.

II. RECENT OXYCODONE ABUSE, WITH:

- a. POSTMORTEM URINE POSITIVE FOR OXYCODONE.
- b. POSTMORTEM URINE POSITIVE FOR OXYCODONE METABOLITE (OXYMORPHONE).
- c. SEE TOXICOLOGY REPORT.

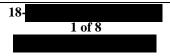
III. CHRONIC SUBSTANCE ABUSE (ANAMNESTIC).

IV. MORBID OBESITY (5'9", 334 LBS), WITH:

- a. BODY MASS INDEX (BMI) OF 49.3.
- b. 7" ABDOMINAL PANNUS.
- c. HEPATOSTEATOSIS.

V. HYPERTENSIVE CARDIOVASCULAR DISEASE, WITH:

- a. CARDIAC HYPERTROPHY (520 GRAMS).
- b. LEFT VENTRICULAR CONCENTRIC HYPERTROPHY (1.8 CM).
- c. SLIGHT NEPHROARTERIOLAR SCLEROSIS.



VI. DIABETES MELLITUS, ANAMNESTIC.

VII.MINOR BLUNT FORCE TRAUMA INJURIES OF HEAD, TORSO, AND EXTREMITIES, WITH DERMAL ABRASIONS AND CONTUSIONS.

- VIII. SUPERFICIAL INCISED WOUND OF LEFT UPPER EXTREMITY (MIDDLE FINGER).
- IX. "BUTTON" OSTEOMA OF OCCIPITAL SKULL.
- X. HYPEROSTOSIS FRONTALIS.
- XI. NODULAR THYROID GLAND.

CAUSE OF DEATH: Acute intoxication due to the combined effects of alprazolam, duloxetine, diphenhydramine, cetirizine, hydroxyzine, and alcohol.

MANNER OF DEATH: Accident (Substance abuse).

I hereby certify that I,	, M.D.,	of	
	ave performed an autopsy on	the body of	on
in the Dane County M	Iortuary.		

This autopsy was performed in the presence of Dane County Medical Examiner's Office Morgue Technician

The body was received in a sealed, labeled white body bag. The seam at the head of the bag is received previously ripped and re-sealed with red evidence tape that is labeled, **18** @ **18** @ **18** @ **18** was ripped" in black marker.

"O.P. # @ 0047 /18 " is written in silver marker on the outside of the bag.

The red security seal () was cut at 13:25 p.m. to begin the examination.

EXTERNAL EXAM:

The body is of a well-developed, well-nourished, large-framed (morbidly obese), 5 foot, 9 inch, 334 pound (Body Mass Index [BMI] = 49.3) White woman whose appearance is consistent with the given age of 47 years.

The straight, brown-grey scalp hair is dyed burgundy and measures up to 14-1/2 inches. (*Comment: Of note, the hair dye appears to be non-permanent and partially washes out during rinsing of the body.*)

The nose and facial bones are palpably intact.

The ears are normally formed and atraumatic. Each earlobe is pierced four times.

There is trace residual black mascara on the eyelashes. There is residual yellow-orange metallic eye shadow on each upper eyelid. The corneas are clear. The irides are blue and the conjunctivae are congested, without jaundice, hemorrhage, petechiae, or edema. There is trace foundation makeup on both cheeks.

The oral cavity has few natural upper and lower teeth in good repair. The oral mucosa is atraumatic.

The skin of the head, neck and upper aspect of the chest is plethoric.

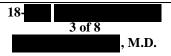
Except where described below (Comment: see "Injuries"), the torso is unremarkable. The axillary hair is shaved. The external genitalia are atraumatic and of a normal adult female. The anus is atraumatic. There are collapsed perianal hemorrhoids ranging in size up to 1.3 cm.

The fingernails and toenails are short, intact, and polished pink.

SCARS:

The following well-healed scars are present:

- 1. A 1-3/4 inch, horizontal, linear scar on the anterior aspect of the chin
- 2. Two, 3/8 inch, circular scars on the superior aspect of the left shoulder
- 3. A 6 inch, horizontal, linear scar on the midline of the lower aspect of the abdomen, just above the pubic symphysis
- 4. A $5/16 \times 3/16$ inch, depressed, oval scar in the right antecubital fossa
- 5. A $3/8 \ge 1/4$ inch, oval scar on the outer aspect of the right elbow
- 6. A 1 x 3/4 inch, irregular scar on the outer aspect of the left knee
- 7. A 1-1/8 x 3/16 inch, oblique linear scar on the anterior aspect of the left knee
- 8. A 2 inch, vertical linear scar on the inner aspect of the right ankle



9. A 6 inch, vertical linear scar on the outer aspect of the right ankle

TATTOOS:

There are no tattoos.

POSTMORTEM CHANGES:

There is slight (passing) rigor mortis of the upper and lower extremities, neck and jaw. Lividity is unfixed, purple, and posteriorly distributed. The body is cold (refrigerated).

CLOTHING/PERSONAL PROPERTY:

The body is received clad in the following items:

- 1. A black halter top ("Terra & Sky", size 4X (28W-38W))
- 2. A beige brassiere with the first and third of three sets of posterior hooks fastened and in place ("Bali", size 40D)
- 3. A pair of pink briefs ("Fit for Me, Fruit of the Loom", size 11)
- 4. A pair of grey yoga pants ("George", size 3X/3XG 22W-24W)

THERAPEUTIC PROCEDURES:

None present.

INJURIES (EXTERNAL AND INTERNAL):

There are minor blunt trauma injuries of the head, torso, and extremities. These injuries are described with reference to the standard anatomical planes with the body examined in the horizontal position. No order or sequence is implied.

HEAD:

Abrasions: The following abrasions are present:

- 1. Six punctate abrasions on the upper aspect of the left side and midline of the forehead. Individual abrasions range in size up to 1/16 inch
- 2. A 1/4 x 1/16 inch, crusted, rectangular abrasion on the upper aspect of the right side of the forehead
- 3. Two, 1/16 inch, circular abrasions on the anterior aspect of the chin

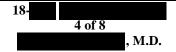
TORSO:

Abrasions: There is a 28 x 17 inch array of scattered, interrupted, oblique linear abrasions on the right flank and both sides of the abdomen. Individual abrasions range in size from 1/8 inch to 5-1/2 inches

LEFT UPPER EXTREMITY:

Abrasions: The following abrasions are present:

- 1. A 5/16 inch array of punctate abrasions (measuring less than 1/16 inch) on the dorsal aspect of the distal phalange of the left thumb, just proximal to the cuticle
- 2. A 1/8 inch, crusted, vertical linear abrasion on the dorsal aspect of the proximal phalange of the left middle finger



Contusion: There is a $1/4 \ge 1/8$ inch, rectangular, purple contusion on the volar aspect of the distal left forearm

Incised Wound: There is a 3/8 inch, crusted, horizontal, superficial incised wound on the dorsal aspect of the proximal interphalangeal joint of the left middle finger

RIGHT UPPER EXTREMITY:

Abrasion: There is a 1/16 inch, punctate abrasion on the dorsal aspect of the proximal interphalangeal joint of the right thumb.

Contusions: There are three, irregular, brown contusions on the inner aspect of the proximal right forearm, ranging in size from $3/8 \ge 1/4$ inch to $5/8 \ge 1/2$ inch.

LEFT LOWER EXTREMITY:

Abrasions: The following abrasions are present:

- 1. 5 x 5 inch array of scattered, interrupted, oblique linear abrasions on the inner aspect of the left thigh. Individual abrasions range in size from 3/8 inch to 3-1/4 inches
- 2. A 1/8 inch, vertical linear abrasion on the outer aspect of the left ankle

Contusions: There is a 1/4 inch, circular, purple contusion on the inner aspect of the left knee

RIGHT LOWER EXTREMITY:

Abrasions: The following abrasions are present:

- 1. A 32 x 8 inch array of scattered, interrupted, vertical linear and oblique linear abrasions on the outer aspect of the right hip, right thigh, lateral and posterior aspects of the right knee, and lateral and posterior aspects of the right leg. Individual abrasions range in size from 1/8 inch to 7-1/2 inches
- 2. A 12 x 6 inch array of scattered, interrupted, oblique linear abrasions on the inner aspect of the right knee and proximal right leg. Individual abrasions range in size from 1/8 inch to 4 inches

These injuries, having been described, will not be repeated.

INTERNAL EXAMINATION:

HEAD:

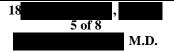
The scalp has no contusion. The skull has no fracture. There is a 2.5×1.5 cm button osteoma on the outer table of the left occipital skull. There is hyperostosis frontalis of the inner table of the frontal skull. The brain weighs 1,530 grams and has normal distributions of unremarkable cranial nerves and cerebral vessels. The leptomeninges are thin, clear, and delicate. The brain is symmetrical with normal distributions of white and grey matter, deep nuclei, and ventricles. There are no focal lesions.

NECK:

The cervical vertebrae, hyoid bone, tracheal and laryngeal cartilages, and paratracheal soft tissues are without trauma. The upper airway contains frothy, white foam. The tongue is unremarkable.

BODY CAVITIES:

No fluid is present in the pleural or peritoneal cavities. 10 ml of clear, straw-colored fluid are present in the



pericardial sac. The organs are in their normal situs without fibrous adhesions. The abdominal pannus is 7 inches thick.

CARDIOVASCULAR SYSTEM:

The heart weighs 520 grams and is firm. It has a normal distribution of right predominant, widely patent coronary arteries.

The myocardium is uniformly dark red without pallor, hemorrhage, or fibrosis. There is left ventricular concentric hypertrophy, with a 1.8 cm left ventricle and interventricular septum. The right ventricle is 0.4 cm thick.

The endocardial surfaces and four cardiac valves are unremarkable.

The aorta is with slight atherosclerosis (scattered intimal atheromatous streaks and plaques).

The venae cavae and pulmonary arteries are without thromboemboli or thrombi.

RESPIRATORY SYSTEM:

The right lung weighs 730 grams and the left lung weighs 490 grams. The pink-purple parenchyma is soft, congested and markedly edematous. White, frothy, serosanguinous fluid is expressed from cut surfaces. There is moderate subpleural and interstitial anthracotic pigment deposition. There are no focal areas of consolidation or masses. The bronchial distribution and vasculature are unremarkable. The bronchi contain white, frothy foam.

LIVER, GALL BLADDER, AND PANCREAS:

The liver weighs 3,080 grams and has an intact, smooth capsule with soft, slippery, light brown (steatotic) parenchyma without nodular texture or masses.

The gallbladder contains approximately 40 ml of dark-green bile without stones or sludge. The extrahepatic biliary system is unremarkable.

The pancreas is without hemorrhage or mineralization.

HEMIC AND LYMPHATIC SYSTEM:

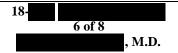
The spleen weighs 230 grams, is firm, and has a dark purple, intact capsule and dark parenchyma with moderately prominent white pulp. There are no major lymph node enlargements.

GENITOURINARY SYSTEM:

The right kidney weighs 170 grams and the left weighs 190 grams. Each kidney has a smooth, red-brown surface with scattered cortical pits.

The ureters maintain uniform caliber into an unremarkable bladder with 130 ml of clear, yellow urine.

The ovaries, fallopian tubes, and uterus are unremarkable. The endometrium is thin and red-tan. The cervix is unremarkable and has a round os. The vaginal vault is atraumatic.



ENDOCRINE SYSTEM:

The pituitary and adrenal glands are normal color, size, and consistency. The left lobe of the thyroid gland is nodular, with colloid nodules ranging in size up to $3.5 \times 3 \times 2.5$ cm.

DIGESTIVE SYSTEM:

The esophagus and gastroesophageal junction are unremarkable.

The stomach contains approximately 32 ml of grey-brown, watery fluid. There are no recognizable fragments of food or pills or tablets. No "coffee ground" gastric contents are present.

The stomach, small intestine, appendix, and large intestine are unremarkable. The large intestine contains soft, brown stool and is without constipation or melena.

MUSCULOSKELETAL SYSTEM:

The sternum, vertebrae, clavicles, ribs, and pelvis are without fracture.

The musculature is normally distributed and unremarkable.

HISTOLOGY:

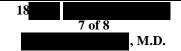
Representative sections of major organs are retained in formalin.

TOXICOLOGY:

Submitted for toxicologic analysis at Axis Forensic Toxicology Laboratories were samples of femoral blood, urine, and vitreous fluid; a separate report was received and reviewed. Significant findings are summarized on the front page of this autopsy report under "Final Diagnoses".

Samples of femoral blood, scalp hair, brain tissue, liver tissue, gastric contents, bile and vitreous fluid are retained.

At the completion of the autopsy, the body was subsequently resealed in its original body bag with security seal "0009784" at 15:26 p.m.



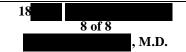
SUMMARY COMMENT

It is my medical opinion that **determine** died from an acute intoxication due to the combined effects of alprazolam, duloxetine, diphenhydramine, cetirizine, hydroxyzine, and alcohol, with ensuing sedation, loss of consciousness, respiratory depression, apnea, coma, anoxic brain injury, and ultimately death.

Of note, the evidence has evidence of recent nonprescribed oxycodone/oxymorphone misuse as well, with oxycodone (and its metabolite, oxymorphone) detected in the decedent's urine.

The manner of death will be certified as Accidental, occurring in the setting of substance abuse (misuse of prescription medications with alcohol).







Office of the **Dane County Medical Examiner**



Dr. Vincent Tranchida, MD Chief Medical Examiner

ME Case #: Name of Decedent: Autopsy Performed By: Agnieszka Rogalska, M.D. Date of Autopsy: , 2019

FINAL DIAGNOSES

I.

CAUSE OF DEATH:

CONTRIBUTING CAUSES OF DEATH:

MANNER OF DEATH:

I hereby certify that I, Agnieszka Rogalska, M.D., Deputy Chief Medical Examiner of Dane, Rock, Brown, Door, and Oconto Counties of Wisconsin, have performed an autopsy on the body of on in the Dane County Mortuary of the city of Madison, Wisconsin.

This autopsy was performed in the presence of Dane County Medical Examiner's Office Morgue Technician Amy Brinkman.

The body was received in a sealed, labeled white body bag. The blue security seal "" was cut at to begin the examination.

The body bag was subsequently sealed with blue security seal "" at, upon completion of the autopsy.

EXTERNAL EXAM:

The body is of a well-developed, well-nourished, -framed, inch long, pound (Body Mass Index [BMI] =), White man whose appearance is consistent with the given age of years.

Injuries are described in section "Injuries" below.

The scalp hair is present in a normal distribution. The hair on the upper lip, cheeks and chin comprise a mustache and beard.

The nose and facial bones are palpably intact.

The ears are normally formed and atraumatic.

The irides are and the conjunctivae are without jaundice, hemorrhage, petechiae, or edema.

The oral cavity has natural teeth in good repair. The oral mucosa is atraumatic.

The chest is symmetric. The breasts are free of palpable masses. The abdomen is flat. Pubic hair is present in a normal distribution. The external genitalia are atraumatic and of a normal circumcised adult male. Both testes are descended. The anus is atraumatic.

The upper and lower extremities are symmetric without clubbing or edema. There are no needle tracks. The fingernails and toenails are short, intact, and unpolished.

SCARS:

The following well-healed scars are present:

TATTOOS:

The following tattoos are present:

POSTMORTEM CHANGES:

The corneas are cloudy. Moderate, symmetrical rigor mortis of the upper and lower extremities, neck, and jaw is present. Lividity is unfixed, purple, and posteriorly distributed. The body is cold (refrigerated).

CLOTHING/PERSONAL PROPERTY:

The body is received clad in the following items:

THERAPEUTIC PROCEDURES:

The following therapeutic procedures are present:

INJURIES (EXTERNAL AND INTERNAL):

The following injuries are described by body region, with the body examined in the horizontal standard anatomic position. No order or sequence is implied.

HEAD: Abrasions:

Contusions:

Lacerations:

Subsequent internal examination reveals:

TORSO: Abrasions:

Contusions:

Lacerations:

Subsequent internal examination reveals:

LEFT UPPER EXTREMITY: Abrasions:

Contusions:

Lacerations:

Subsequent internal examination reveals:

RIGHT UPPER EXTREMITY: Abrasions:

Contusions:

Lacerations:

Subsequent internal examination reveals:

LEFT LOWER EXTREMITY: Abrasions:

Contusions:

Lacerations:

Subsequent internal examination reveals:

RIGHT LOWER EXTREMITY: Abrasions:

Contusions:

Lacerations:

Subsequent internal examination reveals:

These injuries, having been described, will not be repeated.

INTERNAL EXAMINATION:

HEAD:

The scalp has no contusion. The skull has no fracture. There is no epidural, subdural, or subarachnoid hemorrhage. The brain weighs grams and has normal distributions of unremarkable cranial nerves and

cerebral vessels. The leptomeninges are thin, clear, and delicate. The brain is symmetrical with normal distributions of white and grey matter, deep nuclei, and ventricles. There are no focal lesions.

NECK:

The cervical vertebrae, hyoid bone, tracheal and laryngeal cartilages, and paratracheal soft tissues are without trauma. The upper airway is not obstructed. The tongue is unremarkable. The atlanto-occipital joint is stable.

BODY CAVITIES:

No fluid is present in the pleural or peritoneal cavities. There are 10 ml of clear, straw-colored fluid in the pericardial sac. The organs are in their normal situs without fibrous adhesions. The abdominal pannus is inches thick.

CARDIOVASCULAR SYSTEM:

The heart weighs grams and has a normal distribution of right-dominant coronary arteries. Cross sections of the coronary arteries reveal eccentric, yellow, atheromatous plaques narrowing vessel lumina as follows:

- I. Left main coronary artery: widely patent
- II. Left anterior descending coronary artery:
 - a. Proximal segment:
 - b. Mid segment:
 - c. Distal segment:
- III. Left circumflex coronary artery
 - a. Proximal segment:
 - b. Mid segment:
 - c. Distal segment:
- IV. Right coronary artery:
 - a. Proximal segment:
 - b. Mid segment:
 - c. Distal segment:

The myocardium is uniformly dark red without pallor, hemorrhage, or fibrosis. The left and right ventricle walls, and interventricular septum measure -, -, and - cm thick, respectively, as measured 1 cm below the respective valve annuli.

The endocardial surfaces and four cardiac valves are unremarkable.

The aorta is with slight atherosclerosis (rare intimal atheromatous streaks and plaques).

The venae cavae and pulmonary arteries are without thromboemboli or thrombi.

RESPIRATORY SYSTEM:

The right lung weighs grams and the left lung weighs grams. The pink-purple parenchyma is. Frothy, serosanguinous fluid is expressed from cut surfaces. There is no focal consolidation, obstruction, or cavitary lesion. The bronchial distribution and vasculature are unremarkable. The bronchi are unremarkable.

LIVER, GALLBLADDER, AND PANCREAS:

The liver weighs grams and has an intact, smooth capsule with soft, dark brown parenchyma without slippery or nodular texture or masses.

The gallbladder contains approximately ml of dark-green bile without stones or sludge. The extrahepatic biliary system is unremarkable.

The pancreas is without hemorrhage or mineralization.

HEMIC AND LYMPHATIC SYSTEM:

The spleen weighs grams, is firm, and has a dark purple, intact capsule and dark parenchyma with moderately prominent white pulp. There are no major lymph node enlargements.

GENITOURINARY SYSTEM:

The right kidney weighs grams and the left weighs grams. Each kidney has a smooth, red-brown surface and an unremarkable architecture and vasculature.

The ureters maintain uniform caliber into an unremarkable bladder with ml of yellow urine.

The prostate is not enlarged. The testes are unremarkable.

The ovaries, fallopian tubes, and uterus are unremarkable. The endometrium is thin and tan. The cervix is unremarkable and has a round/slitlike os. The vaginal vault is atraumatic.

ENDOCRINE SYSTEM:

The pituitary, thyroid, and adrenal glands are normal color, size, and consistency.

DIGESTIVE SYSTEM:

The esophagus and gastroesophageal junction are unremarkable.

The stomach contains approximately ml of thick/watery fluid. There are no recognizable fragments of food or pills or tablets.

The stomach, small intestine, appendix, and large intestine are unremarkable.

MUSCULOS KELETAL SYSTEM:

The sternum, vertebrae, clavicles, ribs, and pelvis are without fracture.

The musculature is normally distributed and unremarkable.

HISTOLOGY:

(x 1, 1A):

<u>(x 1, 1B):</u>

(x 1, 1C):

(x 1, 1D):

<u>(x 1, 1E):</u>

<u>(x 1, 1):</u>

<u>(x 1, 1):</u>

Representative sections of major organs are retained in formalin.

RADIOLOGY:

Postmortem radiographs of the reveal radiopaque projectiles in the areas of the

EVIDENCE:

Released to are the following: 1.

TOXICOLOGY:

Submitted for toxicologic analysis at AXIS Forensic Toxicology Laboratories were samples of femoral blood, urine, and vitreous fluid; a separate report was received and reviewed. Significant findings are summarized on the front page of this autopsy report under "Final Diagnoses".

Samples of femoral blood, scalp hair, brain tissue, liver, gastric contents, bile and vitreous fluid are retained.

SUMMARY COMMENT

It is my medical opinion that

Agnieszka Rogalska, M.D. Deputy Chief Medical Examiner Dane, Rock, Brown, Door, and Oconto Counties, Wisconsin