**FILED** 03-14-2024 **Clerk of Circuit Court Manitowoc County, WI** 

STATE OF WISCONSIN

**CIRCUIT COURT** 

2005CF000381 MANITOWOC COUNTY

State of Wisconsin	)	
	)	
Respondent.	)	
	)	
	)	
V.	) Case No. 05 CF 381	
	)	
STEVEN A. AVERY, SR.,	)	
	)	
Petitioner.	)	

#### SECOND MOTION FOR POST-CONVICTION SCIENTIFIC TESTING

Pursuant to Wisconsin Statutes § 971.23(5) and § 974.07 and State v. O'Brien, 233 Wis.2d 202, 323, 588 N.W.2d 8 (1999), Steven Avery ("Mr. Avery"), through his current postconviction attorneys, Kathleen T. Zellner and Associates, P.C and Steven G. Richards, local Wisconsin counsel, moves for a second order to allow Mr. Avery to conduct post-conviction testing for touch DNA evidence in the vehicle of the victim of the murder for which Mr. Avery was convicted, Teresa Halbach.

Because Mr. Avery's counsel now has the financial resources, donated by Mr. Avery's supporters, to conduct additional testing on items from Ms. Halbach's vehicle that have never been tested previously for touch DNA, Mr. Avery is requesting, pursuant to the 2007 DNA Order entered by Judge Willis, that he be allowed to do such testing. The untested items of evidence that Mr. Avery requests to conduct testing on are as follows: the driver and passenger seats, the dashboard, the gear shift, the steering wheel, the interior and exterior hood latch release, the broken blinker light (Item A15), the hood prop, the battery cable, the battery, the rear cargo area.

the interior and exterior cargo door, the lug wrench (Item A16), and the license plate (Items AJ and AK, Calumet Inventory Nos. 8313 and 8305).

#### PROCEDURAL BACKGROUND

- 1) Mr. Avery was charged on November 15, 2005 with first-degree intentional homicide and mutilation of a corpse. The complaint was later amended to include possession of a firearm by a felon. The case eventually proceeded to trial on February 5, 2007 before the Honorable Patrick L. Willis. A jury convicted Avery of first degree intentional homicide and felon in possession of a firearm. The jury acquitted Avery of mutilating a corpse.
- 2) Mr. Avery has filed three motions for post-conviction relief, which have all been denied by the trial court. Currently, his third motion for post-conviction relief is on appeal. The State is in the process of filing a response to Mr. Avery's brief on appeal.

#### **HISTORY OF RAV-4**

- 3) This case began in early November 2005 with the disappearance of Teresa Halbach, a twenty-five-year-old professional photographer. On November 5, 2005, volunteer searchers found Ms. Halbach's RAV-4 on the southeast corner of the Avery Salvage Yard.
- 4) On November 7, 2005, small drops of blood were discovered in the front of Ms. Halbach's vehicle on the driver and passenger seats, driver's floor and the rear passenger door jam. These blood drops produced a complete DNA profile of Mr. Avery. Suspiciously, there were no bloody fingerprints of Mr. Avery in or on the vehicle despite the fact that he could not have been wearing gloves when the blood was deposited.
- 5) None of the 8 latent fingerprints found in and on the victim's vehicle belonged to Mr. Avery.

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6) Mr. Avery's DNA was discovered on the hood latch on a swab purportedly from

the hood latch of the vehicle. Mr. Avery has disputed in other pleadings that this swab actually

came from the hood latch.

7) Ms. Halbach's blood was found in the cargo area. Suspiciously, there was no

mixture of Ms. Halbach and Mr. Avery's blood despite the fact the State claimed that Mr. Avery

cut his finger during the attack and subsequently placed Ms. Halbach in the rear cargo area of her

vehicle.

- 8) Therefore, Ms. Halbach's RAV-4 contained evidence of the violence inflicted on
- Ms. Halbach, and the RAV-4 is the primary crime scene connected to her murder since it is the

only place where her blood was located.

9) In 2007, this court entered a broad order, permitting ongoing DNA testing at the

request of Mr. Avery's defense counsel. (The 2007 Order is attached and incorporated herein as

"Exhibit 1"). Pursuant to this order, in 2016, Mr. Avery's counsel was allowed to conduct

additional DNA scientific testing without objection by the State. (The 2016 Order is attached and

incorporated herein as "Exhibit 2").

10) Certain forensic items in possession of the State were examined and retested by

Mr. Avery's forensic experts. However, no new testing was done of the RAV-4, particularly touch

DNA testing.

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- 11) Mr. Avery's counsel has obtained the affidavit of Karl Reich, Ph.D. ("Dr. Reich"), who is a DNA analyst and professional molecular biologist with a doctorate in Molecular Biology and the Chief Scientific Officer of Independent Forensics of Illinois, to explain the scientific capability of touch DNA testing on the items that Mr. Avery is requesting testing on. As Dr. Reich explains, 'touch DNA' is evidence with (or the strong likelihood of) only sloughed skin or sebum being present. Almost anything that has been touched, handled, used, grasped, lifted, dropped or brushed against an individual's skin can produce a DNA profile. (See Affidavit of Karl Reich, Ph.D. attached and incorporated herein as "Exhibit 3").
- 12) According to a new witness, Thomas Sowinski, the RAV-4 was pushed onto the Avery property after Ms. Halbach's disappearance. (See Affidavit of Thomas Sowinski describing observing Bobby Dassey pushing Ms. Halbach's vehicle onto the Avery property after her disappearance attached and incorporated herein as "Exhibit 4"). Mr. Sowinski provided an affidavit to Mr. Avery's current postconviction counsel on April 11, 2021, stating the following:

Mr. Sowinski was a motor-route driver for Gannett Newspapers, Inc. and delivered papers to the Avery Salvage Yard in the early morning hours of November 5th of 2005. Prior to delivering the newspapers to the Avery Salvage Yard, he turned onto the Avery property and witnessed two individuals, a shirtless Bobby Dassey ("Bobby") and an unidentified older male suspiciously pushing a dark blue RAV-4 down Avery Road towards the junkyard. The RAV-4 did not have its lights on. Mr. Sowinski drove past the two men and delivered newspapers to the Avery mailbox, and then he turned around and drove back towards the exit. When he reached the RAV-4 still over there, Bobby Dassey attempted to step in front of his car to block him from leaving the property. Mr. Sowinski came within 5 feet of Bobby Dassey and his headlights were on Bobby during this entire time, then Sowinski swerved into a shallow ditch to escape Bobby and exit the property. Mr. Sowinski states in his affidavit that he called out "Paperboy, gotta go" because he was afraid for his safety. He further stated that Bobby Dassey looked him in the eye and did not appear happy to see Mr. Sowinski there. After Mr. Sowinski learned that Teresa Halbach's car was found later in the day on November 5, 2005, he realized the significance of what he had observed and immediately contacted the Manitowoc Sheriff's Office.

- 13) Because of the new evidence, certain items should be tested for the following reasons:
  - a) In order to move the vehicle onto the Avery Property, the vehicle gear shift knob would have been touched, pushed, and pulled to move the transmission from PARK to NEUTRAL and push the vehicle.
  - b) Because the new witness Mr. Sowinski described a shirtless Bobby Dassey in possession of Ms. Halbach's RAV-4, Mr. Dassey would have had to have made contact with the cloth driver's seats, which may contain sloughed skin or sebum that would likely deposit touch DNA and would likely produce a DNA profile.
  - The RAV-4 had to be steered when it was moved onto the Avery Property. Therefore, it is probable that the perpetrator touching the steering wheel would have deposited skin cells or sebum, which would likely deposit touch DNA and likely would produce a DNA profile there.
  - d) The battery cable of the RAV-4 was disconnected, which would require the following actions: (a) unlatch the hood, (b) prop open the hood with the prop rod, (c) handle the cable itself, (d) use a wrench to loosen cable terminal; and (e) pulled away the now loosened cable; all surfaces that would have been in contact with the individual who disconnected the battery. Therefore, it is probable that the perpetrator performing such tasks would have likely deposited skin cells or sebum in the areas listed, which would likely deposit touch DNA and likely produce a DNA profile.

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- e) The RAV-4 blinker light, which was broken, was found in the cargo area of the RAV-4 after Ms. Halbach's disappearance. The light had to have been touched by the individual who put the blinker light in the cargo area. Therefore, it is probable that the perpetrator touching the blinker light would have deposited skin cells or sebum, which would likely deposit touch DNA and likely produce a DNA profile.
- The blood spatter found in the rear cargo area of the RAV-4, which was identified as having belonged to Ms. Halbach, would have been the result of the crimes against Ms. Halbach occurring in the rear cargo area of the vehicle. The RAV-4 model does not have electric door closers and therefore closing the rear hatch requires pressing down on the outside of the cargo door. In order to access this area, the perpetrator would have had to have opened the cargo door and latch, particularly the outside surfaces of the door, and this would likely deposit touch DNA and likely produce a DNA profile.
- g) Ms. Halbach had a head injury that produced blood spatter in the rear cargo area of her vehicle. Ms. Halbach's vehicle had a lug wrench that was found in the rear cargo area that had been removed from its storage place. If the lug wrench was used as a weapon, it is likely that testing for touch DNA would produce a DNA profile.
- 14) The touch DNA testing performed on the items described above has the potential of identifying a third-party who may have committed the murder of Ms. Halbach, or in the alternative, has the potential to further implicate Mr. Avery in her murder.

#### **NEW EVIDENCE**

- 15) In addition to performing the touch DNA testing to identify any third-party to the murder of Ms. Halbach, specific evidence has developed directly connecting Bobby Dassey to being in possession of the RAV-4 and moving it onto the Avery property on November 5, 2005.
- The issues of whether Mr. Sowinski's affidavit satisfies *Edmunds* and whether the *Denny* requirements have been fulfilled are currently being appealed to the appellate court. This goes to it being Dassey and another individual, not Mr. Avery, being in possession of the RAV-4 and pushing it onto the property on November 5, 2005, where it was subsequently discovered on that same day. Therefore, the affidavit of Thomas Sowinski provides an additional basis for this court to grant Mr. Avery's touch DNA motion. However, this issue should not preclude the testing from proceeding because touch testing on the RAV-4 has the potential to reveal a perpetrator other than Bobby Dassey.

#### **ARGUMENT**

Mr. Avery is entitled to mandatory testing of Ms. Halbach's vehicle pursuant to the prior court order entered on April 4, 2007.

On April 4, 2007, this court entered a broad order, which contemplated ongoing DNA testing at the request of Mr. Avery's defense counsel. (*See Ex. 1*). With the development and refinement of touch DNA technology it is now possible to test many areas of the RAV-4 for touch DNA that were not previously tested. Mr. Avery believes his request for new DNA swabbing for touch DNA testing falls within the spirit of Judge Willis's 2007 order.

The evidence requested for DNA testing has not been previously touch DNA tested.

DNA testing. If these items are tested, they could conclusively demonstrate Mr. Avery's innocence. The untested items of evidence such as the driver and passenger seats, the dashboard, the gear shift, steering wheel, the interior and exterior hood latch release, the gear shift, the broken blinker light (Item A15), hood prop, and battery cable, battery, the rear cargo area, the interior and exterior cargo door and license plate (Items AJ and AK, Calumet Inventory Nos. 8313 and 8305), if subjected to touch DNA testing, could with reasonable probability identify the real murderer of Ms. Halbach and lead to the exoneration of Mr. Avery.

# The evidence is in the State's possession.

19) Mr. Avery's counsel has confirmed that all of the forensic evidence in Mr. Avery's case was transferred to the Calumet County Sheriff's Department and is being held there. Specifically, on February 28, 2024, Mr. Avery's investigator confirmed with Brenda Gueling, Administrative Specialist with the Calumet County Sheriff's Department, that the RAV-4 is still in the possession of the Calumet County Sheriff's Department 206 Court Street Chiton WI 53014 under inventory number/property tag 8027. (See Affidavit of James Kirby attached and incorporated herein as "Exhibit 5").

## The evidence has not been tampered with or altered in any material respect.

- 20) There is no indication that the RAV-4 has been altered, tampered with, or otherwise mishandled in any way. It has been kept in storage by the Calumet Sheriff's Department since 2005.
- 21) New testing could conclusively prove Mr. Avery's innocence, and thus he is entitled to it under *State v. O'Brien*, 233 Wis.2d 202, 323, 588 N.W.2d 8 (1999) ("a defendant has a right to post-conviction discovery when the sought-after evidence is relevant to an issue of consequence.")

# PROCEDURE FOR DNA TESTING

- 22) Mr. Avery is requesting that a qualified representative from the laboratory of Independent Forensics of Illinois, 500 Waters Edge, Suite 210 Lombard, IL, is granted access to the RAV-4 located at 206 Court Street Chiton, WI 53014, and that the State be allowed to have representative/s present on a mutually agreeable date.
- 23) The independent forensic representative shall the above-described items and will be responsible for maintaining the chain of custody of the swabs.
- 24) Independent Forensics of Illinois, 500 Waters Edge, Suite 210 Lombard, IL will ship the swabs to Bode Technology Group, Inc. at 10430 Furnace Road Lorton, VA 22079 for touch DNA testing.
- 25) It is the opinion of Dr. Reich that most of the swabs will be consumed by the testing. Body Technology Group, Inc. will advise both sides if the swabs need to be totally consumed, and Mr. Avery's counsel will inform the State and obtain its approval in writing before proceeding with the consumption of the swabs.
- 26) Lastly, there will be simultaneous disclosure in writing to Mr. Avery and the State of the testing results and procedures employed and/or protocols used by Bode Technology Group, Inc.
  - 27) Mr. Avery will bear the cost of the testing.

#### III. CONCLUSION

Mr. Avery's request satisfies all the elements of § 974.07. Because Mr. Avery has met all the requirements of § 974.07, this Court should order all of the above-described testing.

WHEREFORE, Mr. Avery respectfully requests that this Court issue an order directing the following:

- (1)The swabbing of the RAV-4 for touch DNA will occur at 206 Court Street Chiton. WI 53014 at a mutually convenient time for both parties to have representatives present. The swabbing of the RAV-4 will be conducted by a representative from Independent Forensics, which is located at 500 Waters Edge, Suite 210 Lombard, IL.
- (2)The laboratory, Bode Technology Group, Inc., shall conduct the testing of the RAV-4 swabs at 10430 Furnace Road Lorton, VA 22079. Bode Technology Group, Inc. is accredited to ISO/IEC 17025:2017 standards set for Forensic Testing and Calibration Laboratories established by ANSI National Accreditation Board (ANAB).
- (3) Mr. Avery will bear the cost of all testing.

Dated this 14 day of March, 2024

Respectfully submitted,

KATHLEEN T. ZELLNER

Admitted Pro Hac Vice

IL Bar No. 6184574

Kathleen T. Zellner & Associates, P.C.

4580 Weaver Parkway, Suite 204

Warrenville, IL 60555

Telephone: (630) 955-1212

Email: attorneys@zellnerlawoffices.com

STEVEN G. RICHARDS

WI Bar No. 1037545

(Local Counsel)

Everson & Richards, LLP

127 Main Street

Casco, Wisconsin 54205

Telephone: (920) 837-2653

Email: sgrlaw@yahoo.com

Attorneys for Petitioner

# CERTIFICATE OF SERVICE

I certify that on March 14<sup>th</sup>, 2024, a true and correct copy of Defendant's Second Motion for Post-Conviction Scientific Testing was furnished via electronic mail and by first-class U.S. Mail, postage prepaid, to:

Lisa E. Kumfer Assistant Attorney General kumferle@doj.state.wi.us

Manitowoc County D.A.'s Office 1010 S. 8<sup>th</sup> Street Room 325 Manitowoc, WI 54220

Kathleen T. Zellner

STATE OF WISCONSIN

CIRCUIT COURT

MANITOWOC COUNTY

STATE OF WISCONSIN,

Plaintiff,

CLERK OF CIRCUIT COURTS No. 2005-CF-381

STEVEN A. AVERY,

Defendant.

# ORDER ON PRESERVATION OF BLOOD EVIDENCE AND INDEPENDENT DEFENSE TESTING

On motion of the defendant, Steven A. Avery, the Court having heard the arguments of defense counsel and considered the statement of special prosecutor Norm Gahn that the State does not oppose the defendant's motion,

# IT IS HEREBY ORDERED

- That the State shall preserve indefinitely, until further order of this 1. Court, all bloodstains that the State believes contain Steven Avery's DNA and that were found in or on Teresa Halbach's vehicle, in a condition suitable for further scientific testing;
- 2. That the State shall preserve indefinitely, until further order of this Court, all swabs or other collected samples of bloodstains that the State contends





contain Steven Avery's DNA and that were collected from areas in or on Teresa Halbach's vehicle, in a condition suitable for further scientific testing;

- 3. That the State shall preserve indefinitely, until further order of this Court, portions of all items submitted by the State to the FBI Laboratory in Quantico, Virginia, for the purpose of testing related to the presence or absence of EDTA. Such portions of these items shall be adequate in size and quality, if possible, to permit independent scientific testing by the defense and shall be maintained by the State in a condition suitable for further scientific testing;
- 4. That the defendant, Steven A. Avery, or any lawyer representing him, may at any time submit the bloodstains, swabs, and items described in paragraphs 1 through 3 above to any laboratory or person the defense may choose for independent scientific testing pursuant to Wis. STAT. § 971.23(5), without further order of this Court. For purposes of illustration, not limitation, this paragraph expressly contemplates independent defense testing before verdict, after verdict, before sentencing, after sentencing, during state or federal post-conviction proceedings (if any), or after any such post-conviction proceedings; and
- 5. For purposes of facilitating the relief allowed in paragraph 4 above and without further order of a judge or court, the State shall transfer without delay to a laboratory or scientist designated by the defense any or all of the materials described

in paragraphs 1 through 3 above as necessary to permit the defense to undertake independent scientific testing. Upon completion of such testing, the defendant or his counsel shall return promptly to the State any remaining materials not consumed in testing, for further safekeeping pursuant to this order. The defendant and his counsel also shall cooperate with the State's reasonable requests in documenting chain of custody of any items released and transferred for independent scientific testing.

SO ORDERED.

MHNIOWC Dated at Chilton, Wisconsin, April 46-2007.

BY THE COURT:

Hon. Patrick L. Willis

Judge,

Manitowoc County Circuit Court

CIRCUIT COURT

MANITOWOC COUNTY

STATE OF WISCONSIN.

Plaintiff,

FILED

V

NOV 23 2016

Case No. 2005 CF 381

STEVEN A. AVERY,

CLERK OF CIRCUIT COURT MANITOWOC COUNTY, WI

Defendant.

#### ORDERS FOR INDEPENDENT SCIENTIFIC TESTING

Based upon the Order On Preservation Of Blood Evidence And Independent Defense Testing, signed by the Honorable Patrick L. Willis on April 4, 2007; and upon the stipulation of the parties the Clerk for the Circuit Court of Manitowoc County is hereby directed to release the exhibits to the state in accordance with the stipulation of the parties to facilitate independent scientific testing. The Courts therefore enters the following orders.

1. Defendant may conduct independent scientific testing of the following exhibits:

•	Item A6	bloodstain cutting from RAV4 Driver seat	Exhibit # 333
٠	Rem A8	swab of ignition area RAV4	Exhibit # 336
•	item A9	bloodstain cutting from passenger seat	Exhibit # 331
•	Item A10	swab of bloodstain from CD case	Exhibit # 332
٠	Item A12	swab of bloodstain rear passenger's door	Exhibit # 334
٠	Item A7	blood flakes on floor by center console	Exhibit # 335

·	item ID	swab from hood latch	Exhibit # 205
•	Item C	Toyota Rav 4 Key	Exhibit# 211
o	Vial of Blood	1996 sample of defendant's blood	Exhibit # 478

- 1. All scientific testing contemplated by this Order will be done at Defendant's expense.
- 2. Custody of these exhibits will be released to Lieut. Mark Wiegert of the Calumet County Sheriff's Department and the Department's Evidence Custodian on a day and time agreed-upon by the Calumet County Sheriff's Department and the Clerk of the Circuit Court for Manitowoc County.
- 3. Immediately upon receipt of these exhibits, Lieut. Wiegert will transport the Exhibits to the Wisconsin State Crime Laboratory in Madison Wisconsin.
- 4. All samples will be split in half. Sherry Culhane, a Forensic Scientist with the DNA Unit in the Wisconsin State Crime Laboratory in consultation with Dr. Karl Reich the forensic scientist designated by the defense will split Exhibits 333, 336, 331, 332, 334 and 205. With respect to Exhibits 335 and 478, the parties will agree on how these samples are to be split and by which scientist after visually inspecting the samples. However, if cutting Exhibit 335 in half will result in an insufficient sample to conduct Radiocarbon testing, the state agrees the entire sample may be consumed to facilitate testing.
- 5. Before participating in the splitting of the samples, Dr. Reich and or any other defense appointed scientist must agree to follow Wisconsin State Crime Lab policy and procedures before being granted admittance to the Lab.

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- 6. In consultation with Dr. Karl Reich the forensic scientist designated by the defense, Ms. Culhane will ready and package the Exhibits for transport to the laboratory designated by the defense for independent scientific testing. All costs associated with the packaging, and transporting/shipping of samples to and from the Wisconsin Crime Laboratory in Madison will be borne by Defendant.
- Additionally, before any sample is consumed by testing, the defendant, by affidavit, 7. must first agree to the consumption and demonstrate a full understanding that the samples provided by the state will be totally consumed and there may not be any future testing of that sample.
- 8. There will be simultaneous disclosure in writing to the defendant and the state of the testing results, bench notes, photographs and procedures employed and or protocols used in any scientific testing of the Exhibits covered by this stipulation, including but not limited to DNA Methylation, DNA Source Testing, EDTA and or Radiocarbon F14 C of the Exhibits covered by this stipulation.
- During the pendency of these postconviction proceedings the state's portion of each exhibit/sample will be maintained and preserved at the Wisconsin State Crime Laboratory

in Madison, Wisconsin. At the end of these proceedings the exhibits will be returned to their respective locations.

Dated at Sheboygan, Wisconsin, this day of November, 2016

The Honorable Angela W. Sutkiewicz Circuit Court Judge for Manitowoc County by Assignment

STATE OF WISCONSIN	CIRCUIT COURT	MANITOWOC COUNTY
	)	
State of Wisconsin  Respondent	)	
	) Ca	se No.05 CF 381
STEVEN A. AVERY, SR.,	)	
	)	
	)	

I, Dr. Karl Reich, under oath and under the penalty of perjury, state that:

- 1. I am a DNA analyst and professional molecular biologist. I have a doctorate in Molecular Biology and am the Chief Scientific Officer of Independent Forensics of Illinois, 500 Waters Edge, Suite 210, Lombard, IL 60148. I am intimately and professionally familiar with the scientific literature, research efforts, and commercial technologies, instrumentation and software used to process and produce DNA profiles. My curriculum vitae is attached and incorporated as Exhibit A to this affidavit.
- 2. I have been retained by Mr. Avery's post-conviction attorney to provide scientific information regarding the viability of touch DNA testing on certain items of evidence in the above-captioned case.
- 3. Touch DNA is comprised of sloughed skin or sebum and can produce a partial or complete profile of the individual who has come in contact with the object.

- 4. In my opinion based upon a reasonable scientific certainty, as a DNA scientist, the specific evidentiary items that have been requested (the driver and passenger seats, the dashboard, the gear shift, the steering wheel, the interior and exterior hood latch release, the broken blinker light (Item A15), the hood prop, the battery cable, the battery, the rear cargo area, the interior and exterior cargo door, the lug wrench (Item A16), and the license plate (Items AJ and AK, Calumet Inventory Nos. 8313 and 8305) would produce a partial or full DNA profile if they came in contact with an individual's skin cells or sebum.
- I have a qualified representative at my laboratory, Independent Forensics of Illinois, to do the swabbing of the RAV-4. After the swabbing, we shall transmit the swabs to Bode Technology Group, Inc. at 10430 Furnace Road Lorton, VA 22079 for touch DNA testing.

Further the affiant sayeth naught,

Karl Reich, Ph.D.

Subscribed and sworn to before me this 12th day of March, 2024

Notary Public

My commission expires: September 22 2027

OFFICIAL SEAL
JUSTIN DANIEL SOSTRE
Notary Public, State of Illinois
Commission No. 978377
My Commission Expires September 22, 2027

# Karl A. Reich, Ph. D.

INDEPENDENT FORENSICS, 500 WATERS EDGE, SUITE 210 LOMBARD IL 60148 karl@IFI-Test.com; P 708.234.1200; F 708.978.5115

# FORENSIC DNA / MOLECULAR BIOLOGY / MICROBIOLOGY / PROTEIN BIOCHEMISTRY MICROBIAL AND HUMAN FUNCTIONAL GENOMICS / PROTEIN PURIFICATION

Scientist with eight years post-graduate and fifteen years progressive experience in the pharmaceutical and biotechnology industry. Proven track record of initiating, managing and leading product-oriented research in forensic DNA, genomics, infectious diseases, pharmaceutical target identification functional genomics, biotherapeutics, molecular biology, microbiology and strain development for industrial fermentation.

- Court Qualified DNA Expert Witness for Forensic DNA, Forensic Biology and Statistics Testimony and depositions in more than one hundred forty cases in State, Federal, Military and International courts in both criminal and civil litigation.
- Security Clearance details available upon request
- R & D project development and management from conception to market launch for forensic laboratory products.
- Developed, championed and implemented market-driven strategies for functional genomics biotech startup.
- R & D management experience in market-driven pharmaceutical, biotech and forensic DNA companies.
- R & D project development experience, including market analysis, target identification and validation, HTS, lead evaluation and animal efficacy trials.
- Led, built and managed research teams to implement strategic alliances, contract research and 'in-house' R & D in molecular biology, anti-infectives and strain development.

### PROFESSIONAL EXPERIENCE

#### INDEPENDENT FORENSICS, Lombard IL

8/2002 - Present

Chief Scientific Officer/Laboratory Director/Managing Partner for DNA Forensics, Paternity, and Molecular Biology laboratory.

- Responsibility for development, validation, commercialization, production and manufacturing of new forensic-DNA based tests.
- Supervisory responsibility for all laboratory operations, including validation, documentation, Q/A, Q/C, DNA testing, DNA analysis for forensics and paternity.
- Responsibility for lab design, lab set-up, IT, molecular biology, software and system design and implementation.
- PI on R & D contracts from federal law enforcement agency, PI on CDC SBIR grant, PI on DHS SBIR award.

#### ORCHID BIOSCIENCES, Long Island NY

4/2001 - 6/2002

Pharmaceutical Development for 'virtual' pharmaceutical company.

- Responsibility for outsourcing of GMP synthesis of small molecule therapeutic compound.
- Initiated, negotiated and supervised CRO managed ongoing Phase II clinical trial.
- Supervised and outsourced FDA and EMEA fillings for Orphan Drug Status in Europe and U.S.A.
- Project fully acquired (and terminated) by strategic partner, 6/2002.

#### INTEGRATED GENOMICS, Chicago, IL

4/2001 - 2/2002

#### Director of Pharmaceutical Development - Executive Management Team

Integrated Genomics is a startup functional genomics company focusing on a bioinformatic approach to solving industrial biotechnology problems.

- Responsibility for developing and implementing small molecule-based R & D for 'niche' anti-infectives markets.
- Developed research programs for strategic partners in anti-infective biology, industrial strain improvement, flavors and fragrance industries and genomic databases.
- Experience in, and responsible for, presenting research programs to pharmaceutical partners, venture capital funds and institutional investors.

Karl A. Reich Page 2

# DNA & IMMUNOGENETICS INSTITUTE, Chicago IL

6/2001 - 8/2002

#### Co-Director, Laboratory Services

DNA & Immunogentics Institute was the first independent DNA testing laboratory in Illinois and performed testing for paternity determination, transplant matching and blood banks.

- Paternity & Forensic DNA Testing
- Blood Antigen Testing

#### ABBOTT LABORATORIES, Abbott Park IL

10/1996 - 4/2001

Abbott Laboratories is a mid-tier pharmaceutical company with a strong focus on small molecule therapeutics.

- Directed, managed and led research group charged with cloning, expressing and purifying protein targets for pharmaceutical discovery and biotherapeutics using bacterial, insect and mammalian expression systems.
- Led effort to identify alternative expression systems/hosts for 'difficult' protein classes.
- Co-developed semi-automated cloning and expression system for HTS of protein targets.

#### Group Leader, Genomics and Molecular Biology.

- Devised, championed and directed all phases of genomics-based research program for the identification of novel anti-bacterial targets, including microbiology, mol bio, HTS cloning and expression, and database management.
- Identified and validated dozens of novel anti-bacterial targets.
- Conceived and managed small molecule discovery projects; including HTS assay development, hit characterization, animal efficacy models, SAR determination and toxicity profiles.
- Initiated proteomics program in Haemophilus influenzae.
- Developed and fabricated *H. influenzae* micro-array for inhibitor mode of action studies.
- Initiated and directed numerous external scientific collaborations.
- Developed broad knowledge base of genomic techniques, applications and technologies including SNPs, pharmacogenomics, proteomics, HTS sequencing, public and proprietary genomic databases.

# STANFORD UNIVERSITY SCHOOL OF MEDICINE, Stanford CA

10/1990 - 10/1996

# Howard Hughes Research Fellow, Laboratory of Dr. Gary Schoolnik

- Developed research program on luminescent bacterial symbiont, Vibrio. fischeri.
- Discovered novel ADP-ribosyltransferase in culture supernatants of *V. fischeri*.
- Purified and cloned (using reverse genetics) novel ADP-ribosyltransferase from *V. fischeri*.
- Developed genetic system for V. fischeri, targeted knock-outs for gene function identification.
- Initiated collaborative research with USC marine biology laboratory on symbiont/host interactions.

#### Post-doctoral fellow, Laboratory of Dr. Gary Schoolnik

- Developed research program on structure/function relationship of trans-membrane transcriptional activator, ToxR, in *V. cholerae*.
- Analyzed distribution of ToxR genes in environmental Vibrio isolates.
- Cloned, sequenced and characterized ToxR gene from luminescent marine bacterium, V. fischeri.

#### INSTITUT PASTEUR, Paris, France

10/1988 - 10/1990

#### Fogarty Post-Doctoral Research Fellow

- Developed mono-clonal antibodies against membrane active toxin of *Listeria monocytogenes*.
- Developed novel, large scale purification protocol for listeriolysin.
- Participated in *in vivo* tests of single amino acid substituted *L. monocytogenes* isogenic strains.

Karl A. Reich Page 3

#### PRIOR RELATED EMPLOYMENT

UCLA, Los Angeles CA

Dept of Biological Chemistry, Laboratory of Dr. D. Sigman

1979-1982

Research Assistant

- Analysis of non-enzymatic cleavage of DNA by 1,10-orthophenanthroline Copper.
- Synthesized chemical derivatives of 1,10-orthophenanthroline.
- Recombinant over-expression and purification of *E. coli* DNA Polymerase.

HARVARD MEDICAL SCHOOL, Boston MA

Dept. of Neurobiology, Laboratory of Dr. T. Wiesel

1977-1979

Research Assistant

- Developed micro-bore HPLC for amino acid analysis of retinal homogenates.
- General laboratory duties, including ordering, organization and solution preparation for histology and EM.

CORNELL UNIVERSITY, Ithaca, NY

summer 1976

Laboratory of Dr. E. Ellson

Summer intern Low angle light scattering analysis of liposome preparations.

ROCKEFELLER UNIVERSITY, New York NY

summer 1975

Laboratory of Dr. N. Zinder

Summer intern Production, purification and use of mini-cells as 'cell free' protein translation system.

#### **EDUCATION**

#### UCLA / HARVARD MEDICAL SCHOOL

1982-1988

Ph.D. Molecular Biology

• Thesis: Enzymic Studies on Diphtheria Toxin Fragment A

**CORNELL UNIVERSITY** 

1973-1977

**B.A.** Chemistry

#### **LANGUAGES**

• ENGLISH, FRENCH

#### **PUBLICATIONS:**

- D.R. Graham, L.E. Marshall, K.A. Reich and D.S. Sigman, "Cleavage of DNA by Coordination Complexes. Superoxide Formation in the Oxidation of 1,10- Phenanthroline-Cuprous Complexes by Oxygen. Relevance to DNA-Cleavage Reaction," *J. Amer. Chem. Soc.*, 102, 5419 (1980).
- 2. L.E. Marshall, D.R. Graham, **K.A. Reich** and D.S. Sigman, "Cleavage of DNA by the 1,10-Phenanthroline-Cuprous Complex. Hydrogen Peroxide Requirement and Primary and Secondary Structure Specificity," *Biochemistry*, **20**, 244 (1981).

Karl A. Reich Page 4

3. **K.A. Reich**, L.E. Marshall, D.R. Graham and D.S. Sigman, "Cleavage of DNA by the 1,10-Phenanthroline-Cuprous Complex. Superoxide Mediates the Reaction Dependent on NADH and Hydrogen Peroxide," *J. Amer. Chem. Soc.*, **103**, 3582 (1982).

- 4. L.M. Pope, **K.A. Reich**, D.R. Graham and D.S. Sigman, "Products of DNA Cleavage by the 1,10-Phenanthroline-Cuprous Complex. Product Analysis," *J. Biol. Chem.*, **257**, (20) 12121 (1982).
- 5. J.D.L. Harpe, K.A. Reich, E. Reich and E.B. Dowdle, "Diamphotoxin: The Arrow Poison of the !Kung Bushmen," *J. Biol. Chem.*, **258**, (19) 11924 (1983).
- 6. B.L. Kagan, K.A. Reich and R.J. Collier, "Orientation of the Diphtheria Toxin Channel in Lipid Bilayers," *Biophys. J.*, **45**, 102 (1984).
- 7. P. Berche, K.A. Reich, M. Bonnichon, J.L. Beretti, C. Geoffroy, J. Raveneau, P.Cossart, J.L. Gaillard, P. Geslin, H. Kreis and M. Veron, "Detection of Anti-Listeriolysin O for Serodiagnosis of Human Listeriosis," *Lancet*, 335, 624-627 (1990).
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- 9. E. Michel, **K.A. Reich**, R. Favier, P. Berche and P. Cossart, "Attenuated Mutants of the Intracellular Bacterium *Listeria monocytogenes* obtained by Single Amino-Acid Substitutions in Listeriolysin O," *Molecular Microbiology*, **4** (12), 2167-2178 (1990).
- 10. F. Nato, **K.A. Reich**, S.Hopital, S. Rouyre, C. Geoffroy, J.C. Mazie and P. Cossart, "Production and Characterization of Monoclonal Antibodies against Listeriolysin O (LLO), the Thiol Activated Hemolysin of *Listeria monocytogenes*: Neutralizing Antibodies are Specific for LLO," *Infection and Immunity*, **59**(12), 4641-4646 (1991).
- 11. **K.A. Reich** and G. K. Schoolnik, "The Light Organ Symbiont *Vibrio fischeri* Possesses a Homologue of the *Vibrio cholerae* Transmembrane Transcriptional Activator ToxR", *J. Bacteriology*, **176**(10), 3085-3088 (1994).
- 12. B. Wilson, S.R. Blanke, K.A. Reich and R. John Collier, "Active-Site Mutations of Diphtheria Toxin. Tryptophan 50 is a Major Determinant of NAD Affinity. *J. Biol. Chem.*, **269**(37), 23296-23301, (1994)
- 13. **K.A. Reich** and G.K. Schoolnik, "Halovibrin, Secreted from the Light Organ Symbiont, *Vibrio fischeri*, Is a Member of a New Class of ADP-ribosyltransferases," *J. Bacteriology*, **178** (1), 209-215 (1996).
- 14. **K.A. Reich**, T. Biegel and G.K. Schoolnik, "The Light Organ Symbiont *Vibrio fischeri* Possesses Two Distinct Secreted ADP-ribosyltransferases," *J. Bacteriology*, **179**(5), 1591-1597 (1997).
- 15. E. P. Rock, K. A. Reich, D. M. Lyu, M. Hovi, J. Hardy, G. K. Schoonik, B. A. D. Stocker and V. Stevens. "Immunogenicity of LTB-hCG Fusion Protein," *Vaccine*, **14**(16), 1560-1568 (1996).
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Karl A. Reich Page 5

17. P. Zhong, Z. Cao, R. Hammond, Y. Chen, J. Beyer V.D. Shortridge, L. Phan, S. Pratt, J. Capobianco, K. A. Reich, B. Flamm, Y. S. Or and L. Katz. "Induction Ribosome Methylation in MLS-resistant *Streptococcus pneumoniae* by macrolides and ketolides", *Microb Drug Resist*; 5(3), 183-188, (1999).

- 18. **K. A. Reich**, P. Hessler, L. Chovan, "Genome Scanning in *Haemophilus influenzae: in vitro* transposition and PCR analysis for the identification of 'essential genes', *J. Bacteriology*, **181**(16), 4961-4968, (1999).
- 19. **K. A. Reich**, "The search for essential genes", *Res Microbiol* **151**(5), 319-324, (2000)
- 20. Stabb E. V., **K. A. Reich**, E. G. Ruby, "*Vibrio fischeri* genes hvnA and hvnB encode secreted NAD(+)-glycohydrolases", *J. Bacteriol.*, **183**(1), 309-317(2001).
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- 23. Brett Schweers, Jennifer Old, P.W. Boonlayangoor and **Karl Reich**, Developmental Validation of a Novel Lateral Flow Strip Test for Rapid Identification of Human Blood (Rapid Stain Identification<sup>TM</sup>-Blood), Forensic Science International, 2, 243-247, 2008.
- 24. Jennifer Old, Brett Schweers, Jennifer Old, P.W. Boonlayangoor and **Karl Reich**, Developmental Validation of RSID<sup>TM</sup>-Saliva; A Lateral Flow Immunochromatographic Strip Test for the Forensic Detection of Saliva, J Forensic Sci..54 (4), 866-873, 2009.
- 25. Kevin W.P. Miller, Ph.D., Jennifer Old, Ph.D., Brian R. Fischer, B.S., Brett Schweers, Ph.D., Simona Stipinaite, B.S., and **Karl Reich**, Ph.D. Developmental validation of the SPERM HY-LITER™ kit for the identification of human spermatozoa in forensic samples. J. Forensic Sci., 56 (4); 853-865, 2011.
- 26. Jennifer Old, Ph.D., Brett A. Schweers, Ph.D., P.W. Boonlayangoor, Ph.D.¹, Brian Fischer, B.S., Kevin W.P. Miller, Ph.D., and **Karl Reich**, Ph.D. Developmental Validation of RSID™ -Semen: A Lateral Flow Immunochromatographic Strip Test for the Forensic Detection of Human Semen. J. Forensic Sci., 57(2); 489-499, 2012.
- 27. Alexander Sinelnikov, Anna Kalinina, Jennifer B. Old, Pravatchai W. Boonlayangoor and **Karl A. Reich** Evaluation of Rapid Stain IDentification (RSID<sup>TM</sup>) Reader System for Analysis and Documentation of RSID<sup>TM</sup> Tests, *Appl. Sci.* **2013**, *3*(3), 624; Published online: 5 August 2013
- 28. Alexander Sinelnikov, K.A. Reich, Amplicon Rx<sup>TM</sup>, Post-PCR Clean-up and Concentration Specifically for Forensic DNA Multiplex STR PCR Reactions, , *Eur J Forensic Sci* Vol 3 Issue 1: 15-21, 2016

#### **ABSTRACTS**

New Approach to Statistical Reporting for Forensic DNA Analysis: Boonlayangoor, A. W., Reich, K.A., and Boonlayangoor, P.W. Published at the 14th International Symposium on Human Identification, Promega Corporation, Phoenix Arizona. September 29-October 2, 2003.

Utilizing Proficiency Testing Survey Results in Forensic DNA Laboratories. Karl A. Reich, Liz A. Graffy and P.W. Boonlayangoor. Published at the 15th International Symposium on Human Identification, Promega Corporation, Phoenix Arizona. October 4-7, 2004.

A Novel Lateral Flow Strip Test for Rapid Identification of Human Semen (Rapid Stain Identification-Semen), 17<sup>th</sup> International Symposium on Human Identification, Jennifer Old, Brett A. Schweers, P.W. Boonlayangoor & Karl Reich, Nashville Tennessee October 8-12, 2006.

A Novel Lateral Flow Strip Test for Rapid Identification of Human Saliva (<u>Rapid Stain Identification-Saliva</u>), 17<sup>th</sup> International Symposium on Human Identification, Jennifer Old, Brett A. Schweers, P.W. Boonlayangoor & Karl Reich, Nashville Tennessee October 8-12, 2006.

A Novel Lateral Flow Strip Test for Rapid Identification of Human Blood (<u>Rapid Stain Identification-Blood</u>), 17<sup>th</sup> International Symposium on Human Identification, Jennifer Old, Brett A. Schweers, P.W. Boonlayangoor & Karl Reich, Nashville Tennessee October 8-12, 2006.

Developmental Validation of SPERM HY-LITER™: A Specific, Sensitive, and Confirmatory Screening Method for Human Sperm from Sexual Assault Evidence Jennifer Old, Brett A. Schweers, P.W. Boonlayangoor & Karl A. Reich 19<sup>th</sup> International Symposium on Forensic Sciences, ANZFSS Melbourne meeting – October 2008

Developmental Validation of SPERM HY-LITER<sup>TM</sup>: A Specific, Sensitive and Confirmatory Screening Method for Human Sperm Detection from Sexual Assault Evidence. 19<sup>th</sup> International Symposium on Human Identification. Jennifer Old\*, Brett A. Schweers\*, P.W. Boonlayangoor & Karl Reich - Promega HID meeting - October 2008

Case Study: Analysis of an anorectal swab alleged to contain canine sperm using a fluorescently labeled human sperm head specific antibody. 19<sup>th</sup> International Symposium on Human Identification. Marisa Farhner, Brett A. Schweers & Karl Reich – Promega HID meeting - October 2008

Summary Results of a Blinded Study on the Effectiveness and Efficiency of using SPERM HY-LITER™ to Screen Sexual Assault Evidence for Sperm. 20<sup>th</sup> International Symposium on Human Identification. Jennifer Old Ph.D., Marisa Fahrner MS, Jie Wu Ph.D., Christian G. Westring Ph.D., P.W. Boonlayangoor Ph.D. and Karl Reich Ph.D.

Mapping Duct Tape for the Presence of Saliva Using Phadebas® Press Sheets, 23<sup>rd</sup> International Symposium on Human Identification, Lynette Johns B.S., Pravat Boonlayangoor Ph.D. and Karl A. Reich Ph.D.

Substrate Controls – A Simple Story  $24^{rd}$  International Symposium on Human Identification, Lynette Johns B.S., P.W. Boonlayangoor Ph.D. & Karl A. Reich Ph.D.

Solution For Partial Profiles:  $Amplicon Rx^{TM}$  Post-PCR Clean-up Kit,  $24^{rd}$  International Symposium on Human Identification Alex Sinelnikov and Karl A. Reich

A bridge between two previously separate forensic disciplines: latent examination and DNA profiling. Development of new materials, methods and procedures for the collection of enhanced latent friction ridge impressions (fingerprints) <u>and DNA</u> profiling from the same evidence. 101<sup>St</sup> International Association of Identification, Alex Sinelnikov, Ph.D., Dyer Bennet, Karl Reich, Ph.D.

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An Efficient and Effective Protocol for Identifying Sperm from Anal Swabs Using SPERM HY-LITER EXPRESS, 27<sup>th</sup> International Symposium on Human Identification, Jennifer B Old; Anna K Trobe, Karl A. Reich and P.W. Boonlayangoor

A New Tool to Assist Criminal Investigators: DNA-STR Profiles from "Skin and Oil" Fingerprints, 27<sup>th</sup> International Symposium on Human Identification, Alexander Sinelnikov, P.W. Boonlayangoor and Karl A. Reich

PCR-Based tests for the Forensic Detection of Feces: Use of Bacteroides species indicators of Fecal Contamination, 27<sup>th</sup> International Society for Forensic Genetics, A. Sinelnikov, E. Kopitke, K. Reich

Material and Methods that Allow Fingerprint Analysis and DNA Profiling from the Same Latent Evidence. 27th International Society for Forensic Genetics, A. Sinelnikov and K. Reich

#### TRAINING CLASSES

Illinois Institute for Continuing Legal Education (IICLE) – Chicago IL September 2006
Faculty for IICLE DNA Evidence Course. Introduction to DNA and DNA Evidence for legal Professionals.
Evidence, DNA Matching, Statistics, Defense and Prosecution Strategies, Case Review

Illinois Institute for Continuing Legal Education (IICLE) – Bloomington IL September 2006 Faculty for IICLE DNA Evidence Course. Introduction to DNA and DNA Evidence for legal Professionals. Evidence, DNA Matching, Statistics, Defense and Prosecution Strategies, Case Review

Illinois Institute for Continuing Legal Education (IICLE) – Chicago IL March 2007 Faculty for IICLE Defending Illinois Death Penalty Case – Cold Hits and Cold Cases: DNA Databases and New Technologies in Forensic DNA.

Illinois Institute for Continuing Legal Education (IICLE) – Fairview Heights IL November 2007 Faculty for IICLE Defending Illinois Death Penalty Case – Cold Hits and Cold Cases: DNA Databases and New Technologies in Forensic DNA.

Southwest Association of Forensic Sciences (SWAFS) – Austin TX October 10, 2007. Training workshop: Next Generation Sperm and Body Fluid Identification Tests: SPERM HY-LITER<sup>TM</sup> and RSID<sup>TM</sup>-Saliva, Blood and Semen. Instructors: Karl Reich and Nadine Mattes.

Louisiana Association of Forensic Sciences (LAFS) – Baton Rouge LA, October 24, 2007. Training Workshop: Fluorescent Detection of Sperm from Sexual Assault Evidence. Instructors: Karl Reich and Nadine Mattes.

Northwestern Association of Forensic Scientists (NWAFS) – Salt Lake City UT –November 5, 2007. Training Workshop: Sensitive and Specific Fluorescent Detection of Human Sperm. Instructor: Karl Reich

McCrone College of Microscopy, COM700: Body Fluid Identification and Microscopic Methods of Sperm Detection for Forensic DNA/Serology/Biology. Instructor for Training class on human body fluid identification. December 11-13, 2007.

McCrone College of Microscopy, COM700: Body Fluid Identification and Microscopic Methods of Sperm Detection for Forensic DNA/Serology/Biology. Instructor for Training class on human body fluid identification. April 22-24th, 2008.

Mid-Atlantic Association of Forensic Scientists (MAAFS) - Huntington WV - April 30th, 2008. Training Workshop: Body Fluid Identification from Sexual Assault Evidence. Instructor for Training class on human body fluid identification.

McCrone College of Microscopy, COM700: Body Fluid Identification and Microscopic Methods of Sperm Detection for Forensic DNA/Serology/Biology. Instructor for Training class on human body fluid identification. August 19-21th, 2008.

Southwest Association of Forensic Sciences (SWAFS) - Little Rock AK September 25th, 2008 Training workshop: Next Generation Sperm and Body Fluid Identification Tests: SPERM HY-LITER™ and RSID™-Saliva, Blood and Semen. Instructors: Karl Reich and Ruben Nieblas.

Midwest Association of Forensic Scientists (MAFS) – Des Moines IA – September 30th, 2008. Training Workshop: Body Fluid Identification from Sexual Assault Evidence. Instructors for Training class on human body fluid identification Ruben Nieblas and Karl Reich.

McCrone College of Microscopy, COM700: Body Fluid Identification and Microscopic Methods of Sperm Detection for Forensic DNA/Serology/Biology. Instructor for Training class on human body fluid identification. December 2-4th, 2008.

SAFS/SWAFS/MAFS Combined Meeting Workshop: Current Topics and Development in Body Fluid Identification and Source Attribution. Instructor for Training Class on human body fluid identification for forensic DNA analysts. October 20th, 2009

SWAFS Workshop on Identification and Isolation of sperm from sexual assault evidence. Instructor for hands-on training class, LCM and SPERM HY-LITER™. September 23, 2010.

NEAFS/NEDIAI Combined Meeting Workshop: Forensic Body Fluid Identification Techniques - Hands-on Short Course for Saliva, Blood, Urine, Semen and Sperm. November 8th 2010.

CAC Workshop on Body Fluid Identification: Blood, Saliva Semen, Urine and Sperm. Hands-on training class, Instructors Karl Reich and Dina Mattes, Bakersfield CA, May 8<sup>th</sup>, 2012.

Primer Seminario Taller Iberoamericano de Nuevas Technologia en Analisis de Fluidos Biologicos Y Nueva Generacion de Secuenciacon, Instructors Karl Reich and Helga Langthon, Panama October 19th, 2015

SWAFS Workshop on Body Fluid Identification and New Technologies and Trends in Forensic DNA, Instructors Karl Reich and Dina Mattes, Oklahoma City, October 21, 2015.

MAFS/SAFS Workshop: Rescue DNA - LCM, Post-PCR, Touch DNA, Instructors Karl Reich, Jennifer Old and Dina Mattes, Cincinnati, OH, September 20th, 2017

Karl A. Reich Page 9

# **CONTINUING EDUCATION**

American Academy of Forensic Sciences 67th Annual Meeting	Feb 2015
Southwestern Association of Forensic Scientists,	Oct 2015
26th International Symposium on Human Identification	Sep 2015
American Academy of Forensic Sciences 68th Annual Meeting	Feb 2016
27 <sup>th</sup> International Symposium on Human Identification	Sep 2016
interForensics, Conferencia Internacional de Ciencias Forenses	May 2017
28 <sup>th</sup> International Symposium on Human Identification	Oct 2017
ASCLD Symposium	May 2017
9 <sup>th</sup> Asian Forensic Sciences Network	Sep 2017
27 <sup>th</sup> Congress of the International Society for Forensic Genetics	Sep 2017
29 <sup>th</sup> International Symposium on Human Identification	Sep 2018
28th Congress of the International Society for Forensic Genetics	Sep 2019
11th Annual Meeting & Symposium Asian Forensic Science Network,	Sep 2019
American Academy of Forensic Sciences 72 <sup>nd</sup> Annual Meeting	Feb 2020
American Academy of Forensic Sciences 74th Annual Meeting	Feb 2022
29th Congress of the International Society for Forensic Genetics	Sep 2022
American Academy of Forensic Sciences 75th Annual Meeting	Feb 2023
Thedford Garber Law, Third Annual Criminal Defense and Civil Rights CLE Conference	Mar 2023
34th International Symposium on Human Identification	Sep 2023
American Academy of Forensic Sciences 76th Annual Meeting	Feb 2024

#### **COURT & DEPOSITION EXPERIENCE:**

Dr. Reich has been court qualified as an Expert in Forensic DNA, Forensic Biology and the interpretation of Forensic DNA Statistics in the following jurisdictions (in alphabetical order):

Alaska	Missouri
California	Montana
Dublin (Ireland)	Nebraska
Florida	New Jersey
Illinois	New Mexico
Indiana	New York
Iowa	Ohio
Kentucky	South Dakota
Maryland	Virginia
Massachusetts	Washington D.C.
Michigan	Wisconsin
Minnesota	

This includes cases in State and Federal courts on both criminal and civil matters. Additional details available upon request.

#### Note:

Forensic DNA is defined as the methods, procedures, protocols, regulations, standards, and underlying science used to process samples, both evidentiary and reference, for obtaining genetic identity information. The collection, storage, processing, analysis of forensic evidence and the interpretation of such data are included in this definition.

Forensic Biology is defined as the methods, procedures, protocols, regulations, standards, and underlying science used to identify body fluids (blood, saliva, semen, urine and feces) and to identify spermatozoa from forensic evidence. The collection, storage, processing, analysis of forensic evidence and interpretation of such data are included in this definition.

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#### STATE OF WISCONSIN: CIRCUIT COURT: MANITOWOC COUNTY

STATE OF WISCONSIN,	)	
Plaintiff.	)	
	, )	Case No. 05-CF-381
V.	)	
	)	Honorable Judge Angela Sutkiewicz
STEVEN A. AVERY,	)	Judge Presiding
	)	
Defendant.	)	

# AFFIDAVIT OF THOMAS SOWINSKI

#### Now comes your affiant, Thomas Sowinski, and under oath hereby states as follows:

- 1. I am of legal majority and can truthfully and competently testify to the matters contained herein based upon my personal knowledge. The factual statements herein are true and correct to the best of my knowledge, information, and belief. I am of sound mind and I am not taking any medication nor have I ingested any alcohol that would impair my memory of the facts stated in this affidavit.
- 2. I resided in Manitowoc, Wisconsin for over 20 years.
- 3. I mistakenly stated in ¶ 7 of my prior affidavit filed with the appellate court that I contacted "Avery's trial attorneys to inform them of what I saw." My prior affidavit is attached and incorporated herein as "Exhibit A."
- 4. After reviewing materials, my recollection was refreshed that I did not actually contact Mr. Avery's trial defense counsel, Mr. Buting and Mr. Strang. I realized after looking though my emails that rather than contacting Mr. Avery's trial attorneys, I had contacted the Innocence Project in New York and I never heard back. My email to Innocence Project is attached herein as "Exhibit B."

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- 5. I met with Investigator Steven Kirby for Mr. Avery's postconviction counsel on August 6, 2022. He played a phone call recording to me (Attached and incorporated herein as "Exhibit C" is the transcript and recording). I recognize my voice on the phone call made to the Manitowoc Sheriff's Office, which I described in my prior affidavit (Ex. A).
- 6. After listening to the first part of my call to the MSO, I refreshed my recollection that a woman answered the phone, and that she transferred me to a male officer. I then provided the information stated in my prior affidavit. I mistakenly recalled in my prior affidavit (¶ 6) that I had only spoken to a female officer, but after my recollection was refreshed by listening to a recording of the first part of my call, I realized that I also spoke to a male officer.
- 7. Nothing has been promised or given to me in exchange for this affidavit.

# FURTHER AFFIANT SAYETH NAUGHT

State of Wisconsin County of MANITA

Subscribed and swom before me this 6 day of Act 1

BERNARD R STANGEL Notary Public

My Commission Expires:

Case 2005CF000381

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Filad 08-15-2022

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# EXHIBIT A

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Case 2017AP002288

Motion for Remand and Stay of Appeal

Filed 04-12-2021

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STATE OF WISCONSIN,	)
Plaintiff,	)
	) Case No. 05-CF-381
V.	)
STEVEN A. AVERY,	) Honorable Judge Angela Sutkiewicz, ) Judge Presiding
Defendant.	)

- 1. I am of legal majority and can truthfully and competently testify to the matters contained herein based upon my personal knowledge. The factual statements herein are true and correct to the best of my knowledge, information, and belief. I am of sound mind and I am not taking any medication nor have I ingested any alcohol that would impair my memory of the facts stated in this affidavit.
- 2. I resided in Manitowoc, Wisconsin for over 20 years.
- 3. In 2005, I was employed as a motor route driver at Gannett Newspapers, Inc. and delivered papers in and around the Avery Salvage Yard. While delivering papers, I drove my personal car, which was a tannish-gold 4-door sedan. I cannot recall the make and model of the car at this time.
- 4. On Saturday, November 5, 2005, I was delivering papers on the Avery Salvage Yard in the early morning hours before sunrise. I drove down Highway 147 and turned left onto Avery Road. Soon after I turned onto Avery Road, I witnessed an individual who Hater realized was Bobby Dassey and another unidentified older male pushing a dark blue RAV-4 down Avery Road on the right side towards the junkyard. Bobby Dassev was

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Filed 04-12-2021

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shirtless, even though it was early November. The second man appeared to be in his 50's or early 60's, had a long grey beard, was wearing a worn puffy jacket, had a larger frame, and was around 6 feet in height. The RAV-4 did not have its lights on. Attached and incorporated herein as Exhibit A are photographs marked where I saw the RAV-4.

- 5. I drove down Avery Road towards the mailboxes, left the Herald Times in the mailbox, and turned back around. I felt very afraid as I approached the two individuals because Bobby Dassey attempted to step in front of my car, blocking my exit. I was within 5 feet of Bobby Dassey and my headlights were on the entire time. The older man ducked down behind the open passenger door. I swerved to the right and drove in the shallow ditch to avoid hitting Bobby Dassey. I called out, "Paperboy. Gotta go" because I was afraid for my safety. Bobby Dassey looked me in the eye, and I could tell with the look in his eyes that he was not happy to see me there. I knew that Bobby Dassey and the older individual were doing something creepy.
- 6. After I learned that Teresa Halbach's car was found on November 5, 2005, I contacted the Manitowoo Sheriff's Office and spoke to a female officer. I reported everything I have stated in this affidavit to the officer. The officer said, "We already know who did it." I provided my phone number and they said they would contact me soon. I never heard back from the police.
- After watching Season 1 of Making a Murderer, I contacted Avery's trial attorneys to inform them of what I saw. I never heard back.
- 8. Nothing has been promised or given to me in exchange for this affidavit.

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Filed 98-16-2022

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Case 2017AP002288

Motion for Remand and Stay of Appeal

Filed 04-12-2021

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# FURTHER AFFIANT SAYETH NAUGHT

Thomas Sowinski

State of Wisconsin County of MANITUWOR

Subscribed and sworn before me this 10 day of April 2021.

Novary Public

My Commission Expires: 7 29 2022

JAMES R KIRBY Notary Public State of Wisconstn

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Filed 08-16-2022

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Case 2017AP002288

Motion for Remand and Stay of Appeal

Filed 04-12-2021

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### STATE OF WISCONSIN: CIRCUIT COURT: MANITOWOC COUNTY

Document 1152

STATE OF WISCONSIN,	)	
Plaintiff,	)	
	)	Case No. 05-CF-381
V.	)	
	)	Honorable Judge Angela Sutkiewicz,
STEVEN A. AVERY,		Judge Presiding
	)	
Defendant.	)	

#### AFFIDAVIT OF JAMES R. KIRBY

# Now comes your affiant, James R. Kirby, and under oath hereby states as follows:

- 1. Your affiant is of legal majority and can truthfully and competently testify to the matters contained herein based upon my personal knowledge. The factual statements herein are true and correct to the best of my knowledge, information, and belief. Your affiant is of sound mind and is not taking any medication nor has your affiant ingested any alcohol that would impair your affiant's memory of the facts stated in this affidavit.
- Your affiant is the president of Edward R. Kirby & Associates, Inc., a professional investigations firm located in Elmhurst, Illinois. Your affiant is a licensed private investigator and have been licensed since 1988. Your affiant is currently licensed in Illinois, Indiana, and Wisconsin.
- 3. On February 28, 2024, I spoke to Brenda Gueling, Administrative Specialist with the Calumet County Sheriff's Department.
- 4. Ms. Gueling told me that the RAV-4 that was taken into custody in relation to the abovementioned case is still in the possession of the Calumet County Sheriff's Department at 206 Court Street Chiton, WI 53014, under inventory number/property tag 8027.



She further told me that any inspection would need to take place at 206 Court Street Chiton,
 WI 53014.

# FURTHER AFFIANT SAYETH NAUGHT

James R. Kirby

Subscribed and sworn before me

this 11 day of March, 2024.

Notary Public

OFFICIAL SEAL
SCOTT T PANEK
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES: 5/21/2025