UNITED STATES DISTRICT COURT DISTRICT OF MINNESOTA

| Patterson Dental Supply, Inc., | |
|---|-----------------------------------|
| Plaintiff, | |
| v. Daniele Pace and Henry Schein, Inc., Defendants. | Civ. File No.: 19-cv-1940-JNE-JFD |

DECLARATION OF MARK LANTERMAN

1. My name is Mark Lanterman.¹ I am the Chief Technology Officer of Computer Forensic Services ("CFS") located in Minneapolis, Minnesota. CFS and I were retained by counsel for Defendant, Daniele Pace. I offer this declaration to address Plaintiff Patterson Dental Supply's assertions about "created" dates for eight (8) photo files, produced by Ms. Pace in discovery.

I. Background

- 2. CFS specializes in the analysis of digital evidence in civil and criminal litigation. I have over 30 years of experience in computer forensics and cybersecurity. Prior to joining CFS, I was a sworn investigator for the United States Secret Service Electronic Crimes Task Force and acted as its senior computer forensic analyst.
- 3. I am certified by the United States Department of Homeland Security as a "Seized Computer Evidence Recovery Specialist," as well as certified in computer

¹ Exhibit A, attached to this declaration, contains my curriculum vitae, including a list of cases in which I have testified in the last four years, as well as a list of articles I have written for a number of publications throughout the past 10 years. CFS's compensation is not dependent upon the outcome of this case.

forensics by the National White-Collar Crime Center. Both federal and state court judges have appointed me as a neutral computer forensic analyst or special master.

- 4. I graduated from Upsala College with both a Bachelor of Science and a Master's degree in computer science. I completed my post graduate work in cyber security at Harvard University.
- 5. I am currently adjunct faculty of computer science for the University of Minnesota Technological Leadership Institute's Master of Science and Security Technologies program (MSST). I am faculty at Hamline University and a professor of cybersecurity at the University of St. Thomas School of Law. I am also faculty for the National Judicial College in Reno, Nevada and the Federal Judicial Center in Washington, D.C.
- 6. I have previously provided training or delivered keynote addresses for the United States Supreme Court; the Eleventh Circuit Federal Judicial Conference; the Eighth Circuit Federal Judicial Conference; the Southern District of Georgia; the Western District of Tennessee; and several state judicial conferences. I delivered the keynote address at the Chief Justices' Conference in Newport, Rhode Island and at Georgetown Law School's advanced e-discovery conference.
- 7. I was appointed by the Minnesota Supreme Court to serve as a member of Minnesota's Lawyers Professional Responsibility Board ("LPRB"). I currently serve on the LPRB's Rules and Opinion Committee.
- 8. I am a co-author of the Minnesota State Bar's e-Discovery Deskbook, and I also write monthly articles for *Minnesota Bench & Bar* magazine.

9. CFS is the exclusive, contracted computer forensic service provider for the Hennepin County Sheriff's Office (the county that encompasses Minneapolis) and the Metropolitan Airports Commission, also known as the Minneapolis/Saint Paul International Airport. CFS is also partnered with the U.S. Secret Service to assist with its electronic investigations.

II. Materials Reviewed

- 10. I am familiar with the general procedural history of this matter. Counsel for Defendant has provided to me, and I have reviewed, Memorandum of Plaintiff Patterson Dental Supply, Inc. In Opposition to Defendants' Motion for Summary Judgment, dated May 7, 2021.
- III. The created date does not necessarily reflect when the photo files were actually "captured" or taken, nor does it indicate that Defendant Pace interacted with those photos.
- 11. Related to the photo files identified by Plaintiff, Counsel for Plaintiff asserts that, "According to metadata Plaintiff [sic] produced with these screenshots, the images appear to be captured between April 4 and April 7, 2019 [...]" (See Pl.'s Memo. at 27).
- 12. Table 1, below, lists and identifies the photo files and, importantly, the created dates that are ostensibly relied upon by Plaintiff to conclude when the photos were taken or captured.

| Bates Number | Original File Name | Created Date |
|---------------|--|--------------|
| PACE-00113352 | 5005_411.jpg | 4/4/2019 |
| PACE-00113395 | 5005_515.JPG | 4/4/2019 |
| PACE-00113554 | A2961433-5A9B-44E9-8A34-DA1840C595AF.JPG | 4/7/2019 |
| PACE-00113559 | A639AD3F-5E57-4AA0-A0C5-B23F470691EF.JPG | 4/7/2019 |
| PACE-00113829 | IMG_0681.PNG | 4/7/2019 |

| Bates Number | Original File Name | Created Date |
|---------------------|--|--------------|
| PACE-00113830 | IMG_0682.PNG | 4/7/2019 |
| PACE-00114012 | IMG_5295.PNG | 4/7/2019 |
| PACE-00114182 | FCCBD156-D6A1-45DE-B759-E750DB84A0B2.JPG | 4/17/2019 |

Table 1

- 13. The created date usually represents when a file first appears on a device. In this instance, Plaintiff's understanding, that the created date discloses the date that a photo was taken, is inaccurate.
- 14. As an analogy, the created date is like the date that a paper document is placed into a filing cabinet (a device). That date is not necessarily the date that the document was printed or otherwise generated.
- 15. Therefore, Plaintiff's assertion that the created date represents Defendant Pace "capturing" the photos on April 4, 2019, April 7, 2019, and April 17, 2019, is inaccurate.
- 16. Plaintiff's claim that the metadata shows that Defendant Pace "must have been accessing this confidential information" is similarly inaccurate. (*Id.* fn. 5).
- 17. The created date is an insufficient basis to infer that, on the dates reflected, Defendant Pace took steps to interact with, view, access, or share the files in question. As just one example, the created dates may disclose the date that the photo files were synchronized from Apple's iCloud services through an automated process.²

² "iCloud helps you keep your most important information—like your photos, files, backups, and more—secure, up to date, and available across all your devices." (*See* https://support.apple.com/guide/machelp/what-is-icloud-mh36832/mac, last accessed September 23, 2022)

18. I respectfully reserve the right to supplement or amend this declaration should additional information be made available, or if additional details are requested.

I declare under penalty of perjury under the law of the United States that the foregoing is true and correct.

Executed on: September 23, 2022 in Hennepin County, Minnesota.

Mark Lanterman

EXHIBIT A



Mark Lanterman Chief Technology Officer

Office 800 Hennepin Avenue 5th Floor Minneapolis, MN 55403

Phone (952) 924-9920

Fax (952)924-9921

Email mlanterman@compforensics.com

www.compforensics.com

Professional Biography

Mark has over 25 years of experience in digital forensics, e-discovery, and has provided education and training to a variety of audiences. Prior to founding Computer Forensic Services in 1998, Mark was a sworn law enforcement investigator with the United States Secret Service Electronic Crimes Task Force. Both federal and state court judges have appointed Mark as a neutral computer forensic analyst.

Mark is a member of the Minnesota Lawyers Professional Responsibility Board and serves as Chairperson of its Opinion Committee.

Mark frequently provides training within the legal community, including presentations for the United States Supreme Court, Georgetown Law School, the 11th Circuit Federal Judicial Conference, the 8th Circuit Federal Judicial Conference, the American Bar Association, the Federal Bar Association, and the Department of Homeland Security, among others.

As a member of its faculty, Mark has presented to the entire Federal Judiciary through the Federal Judicial Center. Mark is faculty at the National Judicial College, Mitchell Hamline School of Law, and is an adjunct instructor in the University of Minnesota's MSci Security Technologies program. Mark is also a professor at the Saint Thomas School of Law.

Mark provides frequent commentary about cyber security issues for national print and broadcast media, including ABC, Bloomberg, BusinessWeek, CBS, Fox News, NBC, *The New York Times*, NPR, and the *Wall Street Journal*.

Education and Certifications

Upsala College - B.S. Computer Science; M.S. Computer Science

Harvard University - Cybersecurity

Department of Homeland Security - Federal Law Enforcement Training Center Seized Computer Evidence Recovery Specialist

National White-Collar Crime Center - Advanced Computer Forensics

Publications

Co-author of the E-Discovery and Forensic Desk Book

Regular columnist for Bench & Bar magazine



Previous Testimony List – Mark Lanterman

- Tumey LLP, et al. v. Mycroft, Inc., et al., 4:21-CV-00113 (W.D. Mo.)
- Warren, et al. v. ACOVA, Inc., et al., 27-CV-18-3944, (Henn. Co. Minn.)
- Hagen v. Your Home Improvement, LLC, et al., 73-cv-21-2067, (Sterns Co. Minn.)
- Jane Doe, et al. v. Independent School District 31, 20-CV-00226, (U.S. Dist. Ct. Minn.)
- Galan v. Munoz, et al., 2019-CI-19143, (Dist Ct. Bexar Co., Texas)
- Vision Industries Group, Inc. v. ACU Plasmold, Inc., et al., 2:18-CV-6296, (U.S. Dist. Ct. New Jersey)
- Troutman v. Great American Hospitality, LLC, 19-CV-878, Stanley Co., N. Carolina)
- Baxter Insurance Group of Agents, et al. v. Woitalla et al., 27-CV-20-16685, (Henn. Co. Minn.)
- Sweigart v. Patten, et al., 5:21-cv-00922, (U.S. Dist Ct. E.D. Penn.)
- *Sarah Hoops v. Solution Design Group, Inc.,* 27-CV-20-11207, (Henn. Co. Minn.)
- Stephanie Ramos v. Lazy J Transport, et al., 2018CI21594, (Dist Ct. Bexar Co., Texas)
- Schwan's Company, et al. v. Rongxuan Cai, et al., 0:20-SC-2157, (U.S. Dist. Ct. Minn.)
- Michael D. Tewksbury, as Guardian ad Litem for Miles Chacha and Lulu Kerubo Simba v. PODS Enterprises, LLC, et al., 62-CV-20-4209, (Ramsey Co., Minn.)
- RG Golf v. The Golf Warehouse, 19-CV-00585 (U.S. Dist. Ct. Minn.)
- Dunn v. PSD LLC, et al., 02-CV-20-4504, (Anoka Co., Minn.)
- Chambers, et al. v. B&T Express, et al., 19-CI-00790, (Franklin Cir. Ct. Ky. 2d Div.)
- *Natco Pharma Ltd. V. John Doe,* 21-cv-00396-ECT-BRT, (U.S. Dist. Ct. Minn.)
- Kimberly Clark, et al. v. Extrusion Group, et al., 1:18-cv-04754-SDG, (U.S. Dist. Ct. N.D. Ga.)
- PalatiumCare Inc. v. Notify, LLC, et al., 2021-cv-000120, (Sheboygan Co., Wis.)

- State of Nebraska v. Jeffrey Nelson, CR21-19, (Saunders Co., Nebraska)
- Lutzke v. Met Council, 27-CV-19-14453, (Henn. Co. Minn.)
- Rivera et al., v. Hydroline, et al., DC-19-143, (Dist. Ct. Duval Co, Texas).
- Coleman & Hartman, et al. v. iAMg, et al., 16CV317, (Cir. Ct. Polk Co Wis.)
- Mixon v. UPS, et al., 2019-CI-13752, (Dist Ct. Bexar Co., Texas)
- Goodman v. Goodman, 27-DA-FA-21-672, (Henn. Co. Minn.)
- Shaka v. Solar Partnership, 27-CV-20-12474, (Henn. Co. Minn.)
- Patel Engineering Ltd. V. The Republic of Mozambique, UNCITRAL PCA: 2020-21.
- Estate of Rima Abbas v. ABDCO, (19-CI-1315), (Fayerette Cir. Ct. Ky. 4th Div.)
- State of Nebraska v. Jeffrey Nelson, CR21-19, (Saunders Co., Nebraska)
- Riccy Mabel Enriquez-Perdomo v. Richard A. Newman, et al., 3:18-CV-549, (U.S. W.D. Kentucky)
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- In re: Estate of Anthony Mesiti, 318-2017-ET-00340, N.H. 6th Cir. Probate Division.
- Ernie's Empire, LLC, et al. v. Burrito & Burger, Inc., et al., 82-CV-20-28, (Wash. Co., Minn.)
- Sol Brandys v. Wildamere Capital Management LLC, Case No.: 27-CV-18-10822, (Henn. Co., Minn.)
- State of Minnesota v. Yildirim, Case No. 27-CR-19-7125, (Henn. Co., Minn.)
- Jabil v. Essentium, et al., Case No. 8:19-cv-1567-T-23SPF, (U.S. M.D. Fla.)
- Lifetouch National School Studios Inc. v. Walsworth Publishing Company, et al., (U.S. Dist. Conn.)
- Motion Tech Automation, LLC v. Frank Pinex, Case No.: 82-CV-18-5202, (Wash. Co., Minn.)
- Lundin v. Castillo, et al., Case No.: 2019-CV-000452, (Walworth Co., Wis.)
- Yun v. Szarejko-Gnoinska, et al., Case No.: 27-PA-FA-13-967, (Henn. Co., Minn.)

- Jonas Hans v. Belen Fleming, Case No.: 27-PA-FA-13-967, (Henn. Co., Minn.)
- Daniel Hall, et al. v. Harry Sargeant III, Case No.: 18-cv-80748, (U.S. Dist. Ct. S.D. Fl.)
- Miller v. Holbert, et al., Case No.: 48-CV-15-2178, (Mille Lacs Co., Minn.)
- Strohn, et al. v. Northern States Power Company, et al., Case No.: 18-cv-1826-DSD-KMM, (U.S. Dist. Ct. Minn.)
- Stamper, et al. v. Highlands Regional Medical Center, Case Nos.: 11-Cl-1134 & 12-Cl-00468, (Commonwealth of Kentucky, Floyd Cir. Co., Div. I).
- Patterson Dental Supply, Inc. v. Daniele Pace, Case No.: 19-cv-01940-JNE-LIB, (U.S. Dist. Ct. Minn.)
- Ryan Rock v. Jonathan Sargent and The Sargent Group, Inc. d/b/a Todd & Sargent, Inc., Case No. LACV050708, Dist. Ct. Story Co., Iowa.
- Oscar Alpizar v. Eazy Trans, LLC, et al., Case No.: 2018Cl00878, (Dist Ct. Bexar Co., Texas)
- MatrixCare v. Netsmart, Case No.: 19-cv-1684, (D. Minn.)
- State of Minnesota v. Nathan Roth, Case No.: 80-CR-18-1007, (Wadena Co., Minn.)
- Parisi v. Wright, Case No.: 27-CV-18-5381, (Henn. Co., Minn.).
- Lloyd C. Peeoples, III v. Carolina Container, LLC, U.S. N. Dist. Geor., Case No.: 4:19-cv-00021
- Sandra Wolford, et al. v. Bayer Corp., et al., Action No. 16-CI-907, 17-CI-2299, Commonwealth of Kentucky, Pike Cir. Ct. Div. I. (2019)
- BuildingReports.com, Inc. v. Honeywell International, Inc., Case No.: 1:17-cv-03140-SCJ, (U.S. Dist. Ct. N.D. Ga.)
- Evan D. Robert and Dr. Kerry B. Ace v. Lake Street Cafeteria, LLC, et al., Case No: 27-CV-17-18040, (Henn. Co., Minn.)
- State of Minnesota v. Andrew Seeley, Case No.: 14-CR-17-4658, (Clay Co., Minn)
- McNutt & Company v. Focus Engineering, et al., Case No.: CV-2018-900432.00, Cir. Ct. Lee County, Alabama.
- In re: City of Eden Prairie and Law Enforcement Labor Services Inc., BMS Case #19-PA-0530 (2019).
- State of Minnesota v. Stephen Allwine, Case No.: 82-CR-17-242, (Wash. Co., Minn.)
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 (D. Minn.)

- State of North Dakota v. Connor Brennan, (Court File No.: 17300214), (Grand Forks Co., ND)
- U.S. v. Farber, Case No.: 1:2017-cr-00188-320735, (E.D. Cal.)
- In re: the Marriage of: Amanda Jo Briggs and Kent Stewart Mitchell Briggs, Case No.: 27-FA-17-3414, (Henn. Co., Minn.)
- Edgewell Personal Care Company v. Michael O'Malley, (Superior Court (Judicial District of Ansonia at Milford) No. AAN-CV-176025160-S)
- East Coast Test Prep, L.L.C. d/b/a Achieve Test Prep and Mark Olynyk, v. Allnurses.com, Inc., and David R. Smits, as Administrator of the Estate of Brian Short, ABC Companies 1-10 and John Does 1-10, Case No.: 0:15cv-03705-JRT-SER (D. Minn.)
- DTN, LLC, v. Matthew Walsh, Case No. 0:17-cv-5206(SRN)(HB) (D. Minn.)
- In Re the Matter of: Wainaina Kamau and Ruth Marionya Kamau, Court File No: 27-DA-FA-18-5521 (Dist. Ct. Hennepin County, Minn.).
- Nagios Enterprises, LLC, vs. Mary Starr, et al. Court File No: 62-CV-16-3280, (Dist. Ct. Ramsey County, Minn.)
- Larry Novack v. David Rios and United Parcel Service, Inc. (TX Dist. CT., 57th Dist. (Bexar County, Texas) No. 2016-CI-12388)
- Mylan Pharmaceuticals Inc., Petitioner v. Sanofi-Aventis Deutschland GMBH Patent Owner (United States Patent and Trademark Office) U.S. Patent Nos. 7,476,652 and 7,713,930-IPR2017-01526/IPR2017-01528)
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- Jeffrey Ketchum and Anniken Ketchum vs. Home-Owners Insurance; D & L Janitorial Supply, Inc. (MI 47th Circuit Court (Delta Co.) No. 15-22960-CB)
- Parsons Electric L.L.C vs. Integrated Building Solutions L.L.C., Paul Kelly, Kristopher Kelly, Troy Stanislawski, and Jack Tucker (MN Dist. CT., 10th Dist. (Anoka Co.) No. 02-CV-16-2644)
- State of Minnesota vs. Erin Marie Hennessey, (MN Dist. CT., 10th Dist. (Washington Co.) No. 82-CR-16-2208)
- The Hays Corporation vs. Barry Peters, et al. (In The Circuit for Montgomery Co., Maryland)
- International Chemtex Corporation vs. Jennifer Lassiter, John Hofstad, and Sustainable Water Treatment, LLC (United States Dist. Court (Dist. of MN)

- David Rubenzer and La La La, LLC vs. City of Burnsville (MN Dist. CT., 1st Dist. (Dakota Co.) No. 19HA-CV-15-3743)
- State of Minnesota vs. John Frederick Thorene, IV (MN Dist. Ct., 6th Dist. St. Louis Co.) No. 69DU-CR-15-3038)
- Nu-Look Exteriors, Inc. vs. Brett A. Looney, Mark A. Peare, Julie A. Young, f/k/a Julie A. Strot, Stephen B. Martin, and 4 Corner Architectural Sheet Medal, Inc. (MN Dist. CT., 1st Dist. (Dakota Co.) No. 19HA-CV-15-432)
- Brook Mallak v. Aitkin County, et al., (United States District Court of Minnesota, No. 13-CV-02119 DWF/LIB)
- Jonathan Scarborough v. Federated Mutual Insurance Company, (United States District Court (Dist. of MN) No: 0:15-cv-01633 -DWF/FLN)
- Future Motion, Inc. vs. Changzhou First International Trade Co., LTD, (United States District Court (Dist. of NV) No. 2:16-cv-00013-MMD-CWH)
- In re the Marriage of: Catherine Ann Ivey and John Raymond Ivey, (State of Minnesota (Hennepin Co.) No. 27-FA-15-7650)
- Bay Side Recycling Co., et al. v. SKB Environmental, Inc., Case No.: 14-CV-4550 (SRN/LIB), (U.S. Dist. Ct. Minn.).
- United States of America v. Khaalid Adam Abdulkadir, (United States District Court (Dist. of MN) No: 15-mj984 KES)
- Kimberly Kay Seidel and Trevor Carlton Seidel, (MN Dist. Ct., 10th Dist. (Anoka Co.) No. 02-FA-15-2022)
- Dexon Computer, Inc. v. Modern Enterprise Solutions, Inc., Timothy Durant, and Andrew Uzpen, (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 27-CV-15-17171)
- Golden Supply, Inc., a Minnesota Corporation v. Jeffrey Hunt and Ken Aronckes, (MN Dist. Ct. 4th Dist. (Hennepin Co.) No. 27-CV-15-1625)
- Jerry Wilkinson and Karen Wilkinson v. State Farm Fire and Casualty Company, (U.S. Dist. Ct. E.D. Wis.) Case No. 14 CV 1187)
- Greiner Construction, Inc. vs. Bert Westerman et al., (MN Dist. Ct., 4th Dist. (Hennepin Co.)
- Samantha Orduno, et. al. v. Richard Pietrzak, et al. (United States District Court (Dist. of MN) No. 0:14-cv-01393-ADM-JSM)
- Zimmer, Inc. v. Stryker Corporation; Howmedica Osteonics Corp. d/b/a Stryker Orthopedics; and Cody Stovall. (United States District Court (Northern District of Indiana of Indiana South Bend Division) Case No. 3:14-cv-00152-JD-Can)
- Robert Half International Inc., v. Donna Farrugia, et al. (Superior court of State of California (San Francisco Co.) No. CGC-14-539338)

- Emergent Systems Exchange, LLC, vs. Daniel Ray McGinnis, et al., (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 27-CV-147338)
- Tristan Connor Damron v. John E. Norris, et. al., (Ala. Circuit Court (Elmore Co.) No. CV11-900259.00)
- Curtis Trude, et al. v. Glenwood State Bank, et al. (MN Dist. Ct., 8th Dist. (Meeker Co.) No. 47-CV-12-176)
- Pioneer Home, Inc. v. American Federal Bank, (MN Dist. Ct., 7th Dist. (Hennepin Co.) No. 56-CV-13-3353)
- Prosthetic Laboratories of Rochester, Inc., v. Brandon Sampson, et al., (MN Dist. Ct. 3rd Dist. (Hennepin Co.) No. 55-CV-133625)
- Jenine Ellison v. Advanced Surgery Center of Palm Beach Count, LLC, (15th Circuit Court (Palm Beach County), Florida. No: 502011CA020861XXXXMB.)
- JIT Companies, Inc. v. Erik Edwin Swanson, (MN Dist. Ct., 3rd Dist. (Hennepin Co.) No. 66-CV-132532)



Publications List – Mark Lanterman

Bench & Bar of Minnesota

The Cyber Safety Review Board's first report and the impact of Log4j, September 2022

What critical infrastructure efforts can teach us about cyber resilience, August 2022

How the American Choice and Innovation Online Act may affect cybersecurity, July 2022

Smishing attacks and the human element, May/June 2022

Still on the defensive, More on the Missouri website vulnerability investigation, April 2022

What we can already learn from the Cyber Safety Review Board, March 2022

The Log4j vulnerability is rocking the cybersecurity world. Here's why., January/February 2022

On the defensive: Responding to security suggestions, December 2021

Go fish? Proportionality revisited, November 2021

Mailbag: Cybersecurity Q+A, October 2021

The NSA advisory on brute force attacks, September 2021

Security is a team game, August 2021

Improving national cybersecurity, July 2021

Apple's new iOS strikes a blow for data privacy, May/June 2021

Geofence warrants, The battle is just beginning, April 2021

Ransomware and federal sanctions, March 2021

The SolarWinds breach and third-party vendor security, February 2021

Considerations in cloud security, January 2021

Deciding when to use technology-assisted review, December 2020

How to avoid an old scam with a new twist, November 2020

Your back-to-school tech brush-up, October 2020

The Twitter breach and the dangers of social engineering, September 2020

Cyber risk: Is your data retention policy helping or hurting?, August 2020

Cyber riots and hacktivism, July 2020

Working from home and protecting client data, May/June 2020

Cybersecurity in pandemic times, April 2020

Business continuity and coronavirus planning, March 2020

Doxxing made easy: social media, March 2020

Taking responsibility for your cybersecurity, February 2020

Beyond compliance: Effective security training, January 2020

Doxxing redux: The trouble with opting out, December 2019

Proportionality and digital evidence, November 2019

Al and its impact on law firm cybersecurity, October 2019

Too secure? Encryption and law enforcement, September 2019

Security, convenience and medical devices, August 2019

Physical security should be part of your incident response plan, July 2019

"Papers and effects" in a digital age, pt II, May/June 2019

Security considerations for law firm data governance, April 2019

Third-party vendors and risk management, March 2019

The Marriott breach: four years?, February 2019

"Papers and effects" in a digital age, co-authored with Judge (Ret.) Rosenbaum, January 2019 (Republished in The Computer & Internet Lawyer)

The Chinese spy chip scandal and supply chain security, December 2018 (Republished in The Computer & Internet Lawyer)

Don't forget the inside threat, November 2018

Cyberattacks and the costs of reputational harm, October 2018

Fair elections and cybersecurity, September 2018

E-discovery vs. forensics: Analyzing digital evidence, August 2018

Social media and managing reputational risk, July 2018

Managing Cyber Risk: Is cyber liability insurance important for law firms?, May/June 2018 (Republished in The Computer & Internet Lawyer)

Social engineering: How cybercriminals capitalize on urgency, April 2018

Stephen Allwine: When crime tries to cover its digital tracks, March 2018

Is the Internet of Things spying on you?, February 2018

#UberFail, January 2018

Ransomware: To pay or not to pay?, December 2017

How digital evidence supported gerrymandering claims, November 2017

Facial recognition technology brings security & privacy concerns, October 2017

Putting communication and clients first in digital forensic analysis, September 2017

Digital evidence: New authentication standards coming, August 2017

Your Personal Data – Or is it? Doxxing and online information resellers pose threats to the legal community, May/June 2017

What You Don't Know Can Hurt You: Computer Security for Lawyers, March 2014

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Phishing, vishing and smishing – oh, my!, January 2018

Equifax was unprepared for a data breach, September 2017

Cybersecurity and forensic application in cars, July 2017

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Opting out when private information goes public, March 2017

Are fingerprints keys or combinations?, February 2017

Digital Forensics and its role in data protection, February 2017

Acknowledge the security issues, December 2016

Modern life is driven by the internet of things, November 2016

Are medical devices vulnerable to hackers?, October 2016

Digital evidence as today's DNA, September 2016

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Is Emailing Confidential Information a Safe Practice for Attorneys?, July 2018 (Republished in The Journals & Law Reviews database on WESTLAW)

International Risk Management Institute, Inc. (IRMI)

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Cyber Security and the Russian Invasion of Ukraine, April 2022

Thoughts on the FBI Email Compromise—and Lessons Learned, January 2022

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The Importance of (Remote) Security Culture in Mitigating Risks, December 2020

Security from Home: Continuing to Work and Learn Amid COVID-19, September 2020

Operational Risk Revisited in the Wake of COVID-19, June 2020

Cyber Threats and Accounting for Operational Risk, March 2020

Human Aspect of Incident Response Investigations, January 2020

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Understand the Layers of Cyber-Security and What Data Needs Protecting, March 2017

Learn about the Internet of Things: Connectivity, Data, and Privacy, January 2017

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The Components of Strong Cybersecurity Plans: Parts 1-5, 2017

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Lawyerist

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Don't Be Too Hasty! What to Do When an Email Prompts You to Act Quickly, February 2017

How to Avoid Spoofing, Spear Phishing, and Social Engineering Attacks, October 2016

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The Dark Web, Cybersecurity and the Legal Community, July/August 2020

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COVID-19 and the importance of the cyber captive, April 2020

Attorney at Law Magazine

The Digital Challenges of COVID-19, June 2020

E-Discovery Deskbook

Chapter Thirteen "Forensic Experts—When and How to Leverage the Talent" co-authored with John M. Degan Briggs and Morgan, P.A.

The Complete Compliance and Ethics Manual 2022

Cybervigilance in Establishing Security Cultures