

**UNITED STATES DISTRICT COURT
DISTRICT OF MINNESOTA**

MATRIXCARE, INC.,

Plaintiff,

Case No: 19-cv-1684

v.

NETSMART TECHNOLOGIES, INC.,

Defendant.

**AFFIDAVIT OF
MARK LANTERMAN IN SUPPORT
OF PLAINTIFF'S MOTION FOR A
TEMPORARY RESTRAINING
ORDER**

1. My name is Mark Lanterman. I am the Chief Technology Officer of Computer Forensic Services (“CFS”) located in Minnetonka, Minnesota. CFS and I have been retained by counsel for Plaintiff MatrixCare to assist with matters that involve digital evidence.

2. Our firm specializes in the analysis of digital evidence in civil and criminal litigation. I have over 25 years of experience. 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 forensics by the National White-Collar Crime Center. Both federal and state court judges have appointed me as a neutral computer forensic analyst and special master.

4. 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 also faculty at the Mitchell Hamline School of Law and the University of St. Thomas School of Law in Minnesota.

5. I am faculty for the National Judicial College in Reno, Nevada and the Federal Judicial Center in Washington D.C.

6. I have previously provided training for the U.S. Supreme Court, Eleventh Circuit Federal Judicial Conference, the Eighth Circuit Federal Judicial Conference, and several state judicial conferences. I recently delivered the keynote address at the 2018 Chief Justices' Conference in Newport, Rhode Island. In November 2018, I delivered the keynote address at Georgetown Law School's 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 was recently appointed to its 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 expert for the Hennepin County Sheriff's Office, the Washington County Attorney's Office, as well as the Metropolitan Airports Commission, also known as the Minneapolis/Saint Paul International Airport. CFS is partnered with the U.S. Secret Service to assist with its electronic investigations.

10. I am compensated for my services in this litigation at a rate of \$425 per hour.

11. I have attached a copy of current curriculum vitae, a list of cases in which I have previously provided testimony, and a list of publications as Exhibit A.

12. I am familiar with the facts as alleged. In preparing this affidavit, counsel has provided me with the following documents and data for review:

- a. The complaint and relevant exhibits;
- b. Database trace logs;
- c. A temporary restraining order issued from Superior Court in San Diego County, California (“TRO”);
- d. Email from Plum Healthcare Group’s (“Plum”) counsel, dated June 12, 2019 (Ex. 1 to Green Decl.);
- e. The Affidavit of Joseph Weber in Support of Plaintiff’s Motion for a Temporary Restraining Order

13. I offer this affidavit to generally describe Defendants actions as recorded in the database trace log. I reserve the right to amend or supplement this affidavit should additional information be made available to me.

14. I have analyzed the “trace log” provided to me by counsel for Plaintiff. Here, the term “trace log” is used to refer to records of interactions with a database. Database trace logs often record, and are not limited to, the following data about interactions with a database:

- a. The “host name” (name of an individual computer that is used to connect to a database);
- b. The username connecting to the database;
- c. Time and duration of executed database commands;

- d. The content of the commands, including those that that retrieve and display table and column information within the database.

The trace log demonstrates that beginning on June 7, 2019 Defendant manually accessed MatrixCare’s database and ran queries against that database.

15. My analysis of the trace log shows that, using an account designated as “Plum_batchrunner”, Defendant executed several queries against the MatrixCare database.¹ By way of analogy, database query is like a Google search. Just as a Google search returns indexed information from the Internet, a database query returns information about the database or its content.

16. Specifically, on June 7, 2019, the “Plum_batchrunner” account was used to access the MatrixCare database using Microsoft SQL Server Management Studio (“SSMS”). SSMS is a program that allows a user to access, query and manage a Microsoft SQL database. The use of SSMS is not considered “automated” access and represents affirmative “human” access of the database.² (See Figure 1). Figure 1 shows the user interface for SSMS, where users can manually input commands to run against a database.

¹ Plum Healthcare Group’s counsel in an email, dated June 12, 2019, states that “...Chris San Nicholas and Kyle Hansen...used the Plum_batchrunner account to log in on [June 7, 2019]. They...ran one test query (a census) in the production database to confirm that it still worked.” (Ex. 1, Email of 6/12/2019, “Re: MatrixCare/Plum” at 2). My review of the logs show that there was more than one query executed.

² In addition to the program used to access the database, SSMS, “human” access is further supported by the queries that are recorded in the logs. The trace logs demonstrate that the user ran queries that are not typically associated with automated access.

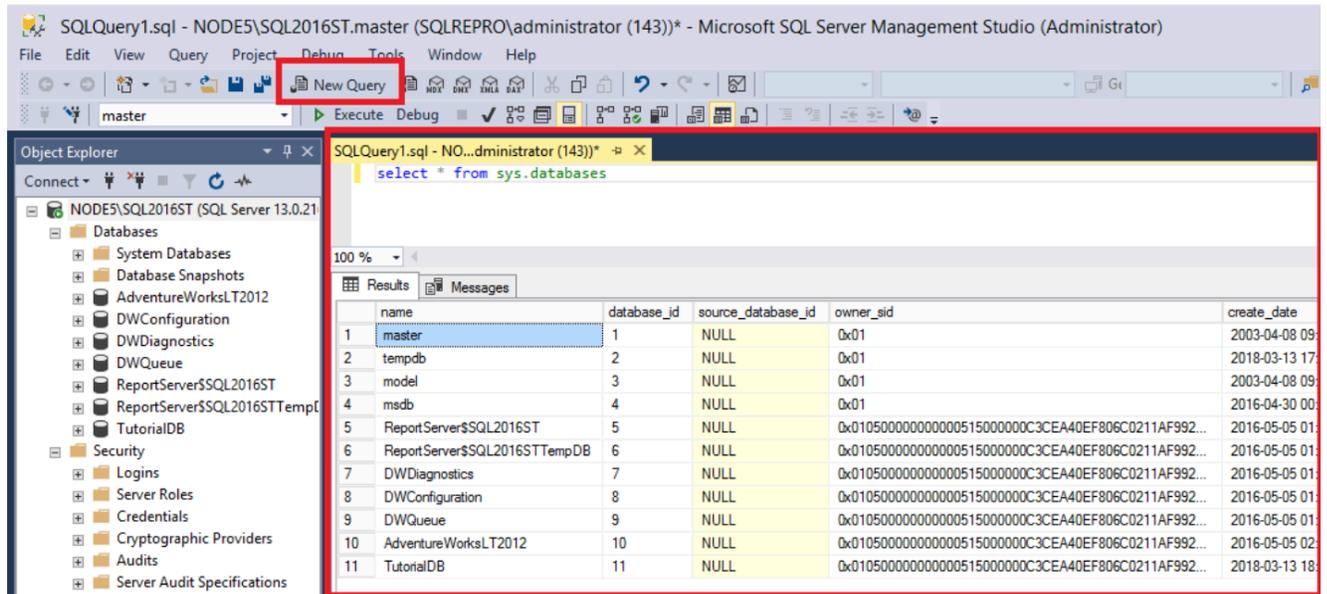


Figure 1: SSMS graphical user interface with manual querying³

17. As shown in Figure 1, a user can input commands/queries in the middle-right area of the window and containing text beginning with “select...”. Results are populated in the bottom-right frame of the window.

18. Among the queries I reviewed, I note that there are entries demonstrating that the database “schema” was queried. A database schema is, simply put, a database’s “roadmap” or blueprint. This roadmap allows programs to interact with and call information from the database. In short, it provides information about the database and its components (e.g. tables). As a potentially helpful illustration, a schema is like a blueprint, a database is a house, and its components (tables) are akin to rooms.

³ Screenshot available at: <https://docs.microsoft.com/en-us/sql/ssms/tutorials/ssms-configuration?view=sql-server-2017>

19. Specifically, using the “Plum_batchrunner” account, Defendant issued a SELECT statement against the database schema. A SELECT statement is used to return specifically defined data from the database (parameters). Here, a SELECT statement was used to call information from the database schema.

20. An example of a query relating to the database schema observed in the log provided to me was, in part, as follows:

```
SELECT SCHEMA NAME(obj.schema_id) AS [Schema], obj.name AS...
```

21. Running a query against the database schema would provide Defendant with information about that schema.

22. My analysis shows that such manual access involving the schema was initiated using at least three different “HostNames” or computers, including LPHG-032939, SQLDB, and SQLDB-DEV.

The trace log demonstrates that Defendant changed database access configuration to maintain the same access Plum had prior to the TRO.

23. Counsel has provided me with a copy of the TRO issued from Superior Court in California. I understand from counsel that that this order forbids Plum from accessing MatrixCare’s database manually (e.g. non-automated access by a human), and that it limited permissible access to only some accounts.

24. Prior to the issuance of the order in California, Plum used an account designated as “Plum_informatica”. The logs demonstrate that the “Plum_informatica” account was used to access the database through April 29, 2019 using a computer designated as “PDH-ETL,” using an account called “guest,” and through an application (recorded as “NULL”). I understand from conversations with

Joe Weber that access initiated from the Informatica program is recorded as “NULL”/empty.

25. After access from the “Plum_informatica” was terminated by MatrixCare, the logs show that Defendant began accessing Informatica using the “Plum_batchrunner” account. By June 11, 2019, the “Plum_batchrunner” account was configured, and based upon the information available to me from the trace logs, the account was used in a similar, if not the same, configuration as the “Plum_informatica” account used previously.

26. The information contained in the trace log is consistent with a user (not an automated process), reconfiguring an application to access the database the same way with “Plum_batchrunner” as it had previously with the “Plum_informatica” account.

27. My review of the trace logs revealed that the “Plum_batchrunner” account was still being used in the same manner as late as June 24, 2019

Additional discovery is warranted.

28. While trace logs are useful for identifying database access, they are limited in the amount of information they capture. For this reason, additional discovery, and specifically forensic preservation and analysis of the systems used to query the database, is warranted. For this reason, I respectfully request access to those devices. If the devices are not properly and timely preserved, there is risk that evidence may be destroyed.

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

Executed this 27th day of June 2019, in Hennepin County, Minnesota.

A handwritten signature in black ink, appearing to read "Mark Lanterman", written in a cursive style.

Mark Lanterman

EXHIBIT A



Mark Lanterman Chief Technology Officer

Office
601 Carlson Parkway
Suite 1250
Minnetonka, MN 55305

Phone
(952) 924-9220

Fax
(952)924-9921

Email
mlanterman@compforensics.com

Web
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 both state and federal law enforcement agencies including 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 on 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 in Reno, Nevada, Mitchell Hamline School of Law, the Saint Thomas School of Law. Mark is an adjunct instructor in the University of Minnesota's MSci Security Technologies program.

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 Minnesota State Bar *E-Discovery and Forensic Desk Book*

Regular columnist for *Bench & Bar of Minnesota*, *Minnesota Lawyer*, and *Lawyerist*



Previous Testimony List – Mark Lanterman

- Stratasys, Inc. v. Christopher Krampitz, Case No.: 0:17-cv-05524-DSD-HB, (D. Minn.)
- Edgewell Personal Care Company, Plaintiff v. Michael O’Malley, Defendant (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.: 0:15-cv-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 Plaintiff, v. David Rios and United Parcel Service, Inc. Defendants (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)
- Elisabeth Ostendorf, an incapacitated adult by her Guardian and Conservator, Sebastian Kuhlger, Plaintiff, v. Michigan State University and the Board of Trustees of Michigan State University, Defendants. (State of Michigan (In the court of claims) No. 15-47-MZ)
- Elyse Puklich, Petitioner, v. Blayne Puklich, Respondent, and Blayne Puklich, individually and derivatively as a shareholder of Puklich Chevrolet.: and BE Bismark Limited & B+E Reinsurance Limited, Plaintiff, v. Elyse Puklich, ELP Performance Limited, a Nevis Corporation and Puklich Ketterling, Inc., a North Dakota Corporation, Defendants. (Dist. Court (Burleigh Cty) State of North Dakota) No. 08-2014-CV-00029)
- Miles Construction, Inc. Plaintiff and Counterclaim Defendant, v. Andrea Weisberg and Daniel Rutman, Defendants and Counterclaim and Third-Party Plaintiffs, v. David Miles, Third-Party Defendant (MN Dist. CT., 4th Dist. (Hennepin Co.) No. 29-cv-16-14404)

- Jeffrey Ketchum and Anniken Ketchum, Plaintiffs, vs. Home-Owners Insurance; D & L Janitorial Supply, Inc., Defendants. (MI 47th Circuit Court (Delta Co.) No. 15-22960-CB)
- Parsons Electric L.L.C, Plaintiff, vs. Integrated Building Solutions L.L.C., Paul Kelly, Kristopher Kelly, Troy Stanislawski, and Jack Tucker, Defendants. (MN Dist. CT., 10th Dist. (Anoka Co.) No. 02-CV-16-2644)
- State of Minnesota, Plaintiff, vs. Erin Marie Hennessey, Defendant. (MN Dist. CT., 10th Dist. (Washington Co.) No. 82-CR-16-2208)
- The Hays Corporation, Plaintiff, vs. Barry Peters, et al. Defendants. (In The Circuit for Montgomery Cty, Maryland)
- International Chemtex Corporation, Plaintiff, vs. Jennifer Lassiter, John Hofstad, and Sustainable Water Treatment, LLC, Defendant. (United States Dist. Court (Dist. of MN))
- David Rubenzer and La La La, LLC, Plaintiff, vs. City of Burnsville, Defendant. (MN Dist. CT., 1st Dist. (Dakota Co.) No. 19HA-CV-15-3743)
- State of Minnesota, Plaintiff, vs. John Frederick Thorene, IV, Defendant. (MN Dist. Ct., 6th Dist. St. Louis Co.) No. 69DU-CR-15-3038)
- Nu-Look Exteriors, Inc., Plaintiff, 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., Defendants. (MN Dist. CT., 1st Dist. (Dakota Co.) No. 19HA-CV-15-432)
- Brook Mallak, Plaintiff, v. Aitkin County, et al, Defendant (United States District Court of Minnesota (Hennepin Co.) No. 13-CV-02119 DWF/LIB)
- Jonathan Scarborough, Plaintiff, v. Federated Mutual Insurance Company, Defendant. (United States District Court (Dist. of MN) No: 0:15-cv-01633 -DWF/FLN)
- Future Motion, Inc., Plaintiff, vs. Changzhou First International Trade Co., LTD., Defendant. (United States District Court (Dist. of NV) No. 2:16-cv-00013-MMD-CWH)
- In re the Marriage of: Catherine Ann Ivey, Petitioner, v. John Raymond Ivey, Respondent (State of Minnesota (Hennepin Co.) No. 27-FA-15-7650)
- United States of America, Plaintiff, v. Khaalid Adam Abdulkadir, Defendant. (United States District Court (Dist. of MN) No: 15-mj984 KES)
- Kimberly Kay Seidel, Petitioner, and Trevor Carlton Seidel, Respondent. (MN Dist. Ct., 10th Dist. (Anoka Co.) No. 02-FA-15-2022)
- Dexon Computer, Inc., Plaintiff, v. Modern Enterprise Solutions, Inc., Timothy Durant, and Andrew Uzpen, Defendants (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 27-CV-15-17171)

- Golden Supply, Inc., a Minnesota Corporation, Plaintiff, v. Jeffrey Hunt and Ken Aronckes, Defendants (MN Dist. Ct. 4th Dist. (Hennepin Co.) No. 27-CV-15-1625)
- Jerry Wilkinson and Karen Wilkinson, Plaintiffs, v. State Farm Fire and Casualty Company, Defendant. (United States Dist. Court (Eastern District of Wisconsin) Case No. 14 CV 1187)
- Greiner Construction, Inc., Plaintiff, vs. Bert Westerman and Gardner LLC d/b/a Gardner Brothers, Defendants. (MN Dist. Ct., 4th Dist. (Hennepin Co.)
- Samantha Orduno, Individually and On Behalf of all Others Similarly Situated, Plaintiff v. Richard Pietrzak, in his individual capacity as the Chief of Police of the City of Dayton; City of Dayton; John and Jane Does (1 – 120) acting in their individual capacity as supervisors in the City of Dayton; Michael Campion, in his individual capacity as Commissioner of the Minnesota Department of Public Safety; Mona Dohman, in her individual capacity as Commissioner of the Minnesota Department of Public Safety, John and Jane Doe Employees of the Minnesota Department of Public Safety in their individual capacities as officers, supervisors, staff, employees, independent contractors or agents of the Minnesota Department of Public Safety, Defendants. (United States District Court (Dist. of MN) No. 0:14-cv-01393-ADM-JSM)
- Zimmer, Inc., Plaintiff, v. Stryker Corporation; Howmedica Osteonics Corp. d/b/a Stryker Orthopedics; and Cody Stovall, Defendants. (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., a Delaware corporation, Plaintiff, v. Donna Farrugia, an individual; Brian Gabrielson, an individual; Abraham Klatt, an individual; Gary D. Nelson Associates, Inc., d/b/a Nelson Family of Companies, a California corporation; and Does 1-20, Defendants. (Superior court of State of California (San Francisco Co.) No. CGC-14-539338)
- In the matter of: Jeff Hiser and the Shenandoah Community School District. (Shenandoah Community School District Board of Directors (Hennepin Co.) DIA Docket NO. 14SCD001)
- Emergent Systems Exchange, L.L.C. Plaintiff, vs. Daniel Ray McGinnis, individually, and Boardroom Technologies, L.L.C., Defendants (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 27-CV-147338)

- Tristan Connor Damron, by and through his father and next friend, Christopher Scott Damron, Plaintiff v. John E. Norris, individually, et. al., Defendants (AL Circuit Court (Elmore Co.) No. CV11-900259.00)
- Curtis Trude, an individual, and J.B.I., LLC, a/k/a JBI, LLC, a Minnesota limited liability company, Plaintiffs, v. Glenwood State Bank, a Minnesota banking corporation, Defendant, Counterclaimant, and Third Party Plaintiff, v. Peterson Earth Movers, Inc., a Minnesota corporation, Lavern D. Peterson a/k/a Bud Peterson, an individual, Golden West LLC, a Minnesota limited liability company, LaDon Peterson, an individual, and Charles D. Peterson, an individual, Third-Party Defendants. (MN Dist. Ct., 8th Dist. (Meeker Co.) No. 47-CV-12-176)
- Pioneer Home, Inc. aka, Pioneer Homes aka, Pioneercare aka, Pioneer Cottages, Plaintiff, v. American Federal Bank, Defendant. (MN Dist. Ct., 7th Dist. (Hennepin Co.) No. 56-CV-13-3353)
- Prosthetic Laboratories of Rochester, Inc., Plaintiff, v. Brandon Sampson, Daniel Tellijohn, Brian Green, John Doe, Jane Doe and XYZ Corporation, Defendants. (MN Dist. Ct. 3rd Dist. (Hennepin Co.) No. 55-CV-133625)
- Jenine Ellison, as the Personal Representative of the Estate of Lee Carter, deceased, Plaintiff v. Advanced Surgery Center of Palm Beach Count, LLC, a Florida Limited Liability Corporation, Defendant. (15th Circuit Court (Palm Beach County), Florida. No: 502011CA020861XXXXMB.)
- JIT Companies, Inc., Plaintiff, v. Erik Edwin Swanson, Defendant. (MN Dist. Ct., 3rd Dist. (Hennepin Co.) No. 66-CV-132532)
- Brian Hamernick, Plaintiff, v. Bruce Carson and Blue Rock Refinishing Solutions, LLC, Defendants/Blue Rock Refinishing Solutions, LLC, Third Party Plaintiff, v. Pro Paint, Inc. and Pro Paint Metro, Inc., Third Party Defendants (MN Dist. Ct., 2nd Dist. (Ramsey Co.) No. 62-CV-136579)
- Asset Marketing Services, Inc. and New York Mint, LLC, Plaintiffs, v. Manifest Marketing, LLC d/b/a Western Mint, Steven Von Schmidt, and John and/or Jane Doe(s) Defendants. (MN Dist. Ct., 1st Dist. (Dakota Co.) No. 19HA-CV-13-1186)
- Crown Bank, Plaintiff, v. Landmark Community Bank, N.A., Puckmaster, LLC, Charles Arnold, Synergy Resource Group, Inc., John Does 1-10, and ABC Entities 1-10, Defendants. (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 27-CV-13-2022)
- Michael David Jerome Schooler, Petitioner, v. Norah Claire Wallace, Respondent. (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 27-PA-FA-13120)
- Jeanette Wallis. Plaintiff v. BNSF Railway Company, Defendant (United States District Court Western District of Washington at Seattle (Hennepin Co.) No. 2:13-CV-0040-TSZ)

- Keeley and Grabanski Land Partnership Debtor(s) (U.S. Bankruptcy Court (ND District) Bky. Case No. 1031482-Chapter 11)
- Inter Faculty Organization (on behalf of Todd Hoffner) Union, And Minnesota State Colleges and Universities (on behalf of Minnesota State University Mankato) Employer. Before Arbitrator Gerald Wallin (IFO Case No. 13MK09/MnSCU Case Nos. 13-0075)
- Fasteners for Retail, Inc., Plaintiffs, v. Michael A. DeJohn, et al., Defendants. (In the Court of Common Pleas, Ohio (Hennepin Co.) No. CV-12-786894)
- Jason Ripley and Garage Floor Coating of MN, LLC, Plaintiffs, v. Steve Niebeling and Joseph Ciccarelli, also know as Joseph Franke, Defendants. (Dist. Ct., 2nd Judicial District (Ramsey Co.) No. 62-CV-13-489)
- Push Pedal Pull, Inc., formerly known as The R.D. Rogers Company, Plaintiff vs. Kent Casperson, individually, and 2nd Wind Exercise Equipment, Inc., Defendants. (SD Circuit Court-2nd Judicial Court (Minnehaha Co.) No. 49 CIV13-001299)
- State Farm Mutual Automobile Insurance Company and State Farm Fire and Casualty Company, Plaintiffs, v. Metro Injury, LLC, Lisa K. Huseboe, D.C., Sergio M. Triana, D.C., Mark Cereceda, D.C., and Robert Lewin, D.C., Defendants. (United States District Court of Minnesota (Hennepin Co.) No. 12-CV-01087 DSD/SER)
- Lifetouch Church Directories & Portraits, Inc., Plaintiff, v. Colleen Ingalsbe, MyChurch Family Album, and Mark Erwin, Defendants. (Jefferson County District Court (Jefferson Co.) No. 2012CV2304)
- Federated Mutual Insurance Company vs. Chad Patzke, an individual (Dist. Ct. State of Oklahoma (Oklahoma Co.) No. CJ-2011-2507)
- Voces De La Frontera, Inc., Ramiro Vara, Olga Wara, Jose Perez, and Erica Ramirez, Plaintiffs v. Members of the Wisconsin Government Accountability Board, each only in his official capacity: Michael Brennan, David Deininger, Gerald Nichol, Thomas Cane, Thomas Barland, and Timothy Vocke, and Kevin Kennedy, Director and General Counsel for the Wisconsin Government Accountability Board, Defendants. . (US District Court-Eastern District of Wisconsin. No. 11-CV-1011 JPS-DPW-RMD)
- Brian Honn and H. Design Salon, Inc., Plaintiffs, v. Best Buy Co., Inc., Best Buy Stores, LP, BBY Solutions, Inc., d/b/a Geek Squad, and SupportSpace, Inc., Defendants. (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 27-CV-11-24099)
- John Diekman vs. Hotel Connections LTD. and Kenneth Shanley (Superior Court. New Jersey (Hudson Co.) No. HUD-L-5230-12)

- State of Minnesota vs. Alexander Steven Pipp (Dist. Ct. 2nd Judicial District (Ramsey Co.) D.C. No. 62-CR-127607/C.A. No. 2115339)
- State of Minnesota, Plaintiff, vs. Gohar Yesayan, Defendant, 6927 Hazelton Ave D, Van Nuys, CA 91405 (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 27-CR-12-20406)
- State of Minnesota, Plaintiff, vs. Sarkis Mkhsyan, Defendant, 6927 Hazelton Ave D, Van Nuys, CA 91405 (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 27-CR-12-20406)
- Multifeeder Technology, Inc. vs. British Confectionery Company Limited (Civil No. 09-1090)
- Dr. Sining Mao, Western Digital Corporation, and Western Digital Technologies, Inc., vs. Seagate Technology LLC (No. 65 160 00129 07)
- Boston Scientific Corporation vs. Edwards Lifesciences LLC and Kristen M. Skelton, and Louise Duckworth (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 27-CV-11-5878)
- Boston Scientific Corporation vs. Carolyn Giles and Edwards Lifesciences LLC (Ct. of Common Pleas- South Carolina-Richland Co.)
- Boston Scientific Corporation vs. Edwards Lifesciences LLC and Vincent Barrese (Supreme Ct. State of New York-Saratoga Co.)
- Boston Scientific Corporation vs. Patrick Brady and Edwards Lifesciences LLC (Dist. Ct. Michigan-Kent Co.)
- Boston Scientific Corporation vs. Roger Riggs and Edwards Lifesciences LLC (Dist. Ct. Colorado-Douglas Co.)
- Boston Scientific Corporation vs. Richard Carey and Edwards Lifesciences LLC (Commonwealth of Massachusetts-Superior Ct. Depart. of Trial Court)
- SEC vs. Trevor G. Cook, Patrick J. Kiley, ET AL (Case No. 09 CV 3333-D. Minn., Filed November 23, 2009)
- Leticia Zuniga Escamilla vs. SMS Holdings Corporation, et al. (U.S. Dist. Ct. File 09-CV-2120)
- Bradley Richard Malmgren vs. Commissioner of Public Safety (MN Dist. Ct., 1st Dist. (Dakota Co.), 19-HA-CV-09-2371).
- State of Minnesota vs. Chris Boudreau (MN Dist. Ct., 3rd Dist. (Steele Co.), 74-CR-08-2538).
- Mayer Hoffman McCann P.C. vs. Thomas L. Barton, et al. (US Dist. Ct., MO, 08-CV-00574).
- CBIZ, Inc. and CBIZ BVKT, LLC vs. Thomas L. Barton, et al. (OH, Court of Common Pleas, Cuyahoga Co., CV-08-667264).

- Federated Mutual Ins. Co. vs. Chris Boudreau (MN Dist. Ct., 3rd Dist. (Steele Co.), 74-CV-08-2234).
- State of Minnesota, by Michael Campion, its Commissioner of Public Safety, vs. CMI of Kentucky, Inc., (US Dist. Ct., MN, 08-CV-603).
- GJ&M Development, Inc. vs. City of Afton (MN Dist. Ct., 10th Dist. (Washington Co.), 82-C1-07-2637).
- Go Radio Broadcasting, LLC, et al. vs. Nancy Odney (ND Dist. Ct., Cass Co., 09-07-C-00312).
- Ryan C. Henry, et al. vs. Quicken Loans, Inc., et al. (US Dist. Ct., MI, 04-CV-40346).
- Three Angels Broadcasting Network, Inc., et al. vs. Gailon Arthur Joy and Robert Pickle (US Dist. Ct., Mass., 4:2008mc40019).
- ReliaStar Life Insurance Company and ReliaStar Life Insurance Company vs. KMG America Corporation, Kanawha Insurance Company (MN Dist. Ct., 4th Dist. (Hennepin Co.), 27-CV-05-002563).
- Eaton Corporation, et al. vs. Jeffrey D. Frisby, et al. (MS, Hinds County, 254-04-642 CIV).
- Claudia Roberts vs. Canadian Pacific Railway, et al. (US Dist. Ct., MN, 06-CV-1960).
- Northwest publications, LLC d/b/a St Paul Pioneer Press vs. The Star Tribune Company, et al. (MN Dist. Ct., 2nd Dist. (Ramsey Co.), 62-C6-07-003489).
- Kevin Bores et al. vs. Domino's Pizza, LLC (US Dist. Ct., MN, 05-CV-2498).
- Bic Corporation and Sheaffer Manufacturing Co., LLC vs. Ted B. Sharpe (US Dist. Ct., IA).
- Steven B Schwartz, MD vs. Larry Teuber, MD and The Black Hiss Surgery Center (SD 7th Cir., CIV 02-986) – Court appointed neutral expert.
- Eaton Electrical Inc. vs. J.T. Packard & Associates (US District Court, Northern District of Illinois-Eastern Division No. 05 C 3545).
- Francisca Sandoval, et al vs. American Building Maintenance Industries, Inc. (US Dist. Ct., MN, 06-CV-01772).
- Energy and Moisture Control Company, LLC vs. Anne Erickson, Richard Buendorf, John Doe, Jane Doe, and Companies X, Y, and Z (MN Dist. Ct., 4th Dist. (Hennepin Co.), 27-CV-06-16626).
- Lindquist & Venum, P.L.L.P. vs. Tamie P. Speciale and Dispute Resolution Management, Inc. (US Dist. Ct., MN, 05-CV-597).
- Tiffany Bentford vs. Eagle Employment Agency and The National Marrow Donor Program (US Dist. Ct., MN, CV-05-2542).

- Sarah Tooker Htoutou and Mohamed Htoutou vs. Shiba Investments Inc., d/b/a Radisson Hotel et al (US Dist. Ct., SD, CV-06-5019).
- State of Minnesota vs. Eric Wayne Roggenkamp (MN Dist. Ct., 7th Dist., K0-06-192).
- JoAnn Shimota vs. Michael Joseph Smith (MN Dist. Ct., 2nd Dist. (Ramsey Co.), 62-C8-06-4794).
- ACIST Medical Systems, Inc. vs. Sergio Bulask (MN Dist. Ct., 10th Dist. (Wright Co.), 86-CV-07-001545).
- Michael Afremov vs. Kurt Amplatz, M.D., Franck Gougeon and AGA Medical Corporation (MN Dist. Ct., 4th Dist. (Hennepin Co.), 27-CV-02-017734) - Court appointed neutral expert.
- State vs. Brent Peterson (MN Dist. Ct., 4th Dist. (Hennepin Co.), 05-044-702).
- State vs. William Liebesny (MN Dist. Ct., 4th Dist. (Hennepin Co.), 05-044-699).
- Minntech Corporation vs. Serguei Usmanov (MN Dist. Ct., 4th Dist. (Hennepin Co.), 27-CV-06-005883).
- GCM, Inc. vs. CDR Global and Justin Goduto (MN Dist. Ct., 1st Dist. (Dakota Co.), 19-C2-05-006785).
- In re Nortel Networks Corp. Securities Litigation (US Dist. Ct., NY, (Consolidated) 01-CV-1855).
- Lake Shore Radiator, INC vs. Radiator Express Warehouse (US Dist. Ct., FL, 3:05-CV1232-J-12).
- HSBC-Finance Corporation and HSBC Card Services Inc., vs. Peter C Constant (US Dist. Ct., MN, 06-1529).
- International Shield, Inc. vs. Joseph M. Kuderko, et al. (MN Dist. Ct., 4th Dist. (Hennepin Co.), 27-CV-04-01497).
- St. Paul Travelers Companies, Inc. vs. T. Michael Miller and OneBeacon Insurance Group (MN Dist. Ct., 2nd Dist. (Ramsey Co.), 62-C6-05-007618).
- PFK-MARK III, Inc., vs. South Eastern Pennsylvania Transportation Authority (PA Ct. of Com. Pls., Philadelphia Co., Civil Action – Law: May Term, 2005).
- Health Billing Systems, Inc. vs. Julie Embry and David Embry (MN Dist. Ct., 4th Dist. (Hennepin Co.), 27-CV-06-006643).
- Jeffrey L. Foust vs. John R. McFarland (MN Dist. Ct., 4th Dist. (Hennepin Co.), 27-CV-01-009914).
- David B. Peterson vs. Monticello Ford-Mercury, Inc. and Dennis E. Hecker (MN Dist. Ct., 10th Dist. (Wright Co.), 86-C9-05-001735).

- MSI Preferred Services, Inc. vs. Clements Agency, et al. (WI Cir. Ct. Branch 2, 04-CV-265).
- In the matter of Christopher Douglas Dorpat (State of MN, Department of Commerce Administrative Hearings (OAH Docket No. 3-1005-16498-2)).
- In Re Marriage of Lynn Louise Davis vs. Bradley Duane Davis (MN Dist. Ct., 9th Dist. (Crow Wing Co.) 18-FO-05-000099).
- In Re Marriage of Lois K. Bullock vs. Robert W. Bullock Jr. (MN Dist. Ct., 1st Dist. (Dakota Co.), 19-F6-05-015750).
- US vs. Falodun (US Dist. Ct., MN).
- US vs. Denise Marie Henderson (US Dist. Ct., MN).
- Precision of new Hampton, Inc., vs. Sonnax Industries, Inc., (IA. Dist. CT.-Chickasaw Cty –Law No. LACV002194)
- Allstate Insurance Company, Farmers Insurance Exchange vs. Linea Latina De Accidentes, Inc., Cristina Suarez, Mobile Care Chiropractic, PLLC, Kristi Lea Zimmerman, D.C., Advanced Injury Specialists, LLC, Renewal Bodyworks, LLC, Scot A. Allan, D.C., Alex Prigoda, and Morningstar Home Care (US. Dist. CT of MN-093681)
- OneSource Inc., f/k/a/ Artful Dragon Productions, Inc., and f/k/a Prestige Argri-Group, Inc., John Arleth and Joan Arleth -Individually vs. I See Me! and Maria B. Haag-Peronally (First Judicial District-No # 25-CV10-2669)
- Dental Health Products, Inc. vs. Darby Dental Supply, LLC, et.al (No:11 CV 2821)
- Uline, Inc., vs. Wes Buckley (Superior CT. of California/Orange Cty- No: 30-2011-00462940-CU-BT-CJC)
- Spanlink Communications, Inc., vs. eLoyalty Corporation, Martin Hameline, and Jeffry Parshall (Fourth Judicial District–No. 27-CV-1023591)
- University of Wisconsin Medical Foundation, Inc. vs. Meriter Hospital, Inc., et al. (Dane Cty Cir. Ct.-No. 11CV5005)
- Genesis Attachments, LLC vs. Bruce E. Bacon and Exodus Machines, Incorporated (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 27-CV-11-3438)
- Birchwood Laboratories, Inc., vs. Battenfeld Technologies, Inc. (US Dist. Ct./Dist. of MN-Civil File No: 09-cv-3555-MJD-JJK)
- Goodsell POFM Arbitration (MN-Hennepin County)
- CBIZ Benefits & Insurance Services, Inc., a Missouri Corporation vs. William Flaherty, an individual; Bonnie Flaherty, an individual; and One Benefit Source, a California Corporation; and DOES 1-10 (US Dist. Ct of California) No. CV11-8670 JHN (JCGx)

- Bagelmann vs. IBMC (Dist., Ct., 4th Dist. -Hennepin Co.)
- James E. Fields, an individual, and Ed Fields and Sons, Inc., a Minnesota Corporation vs. Anthony Emmerich, an individual, Roger Okerman, an individual, Round Lake, LLC, a Minnesota Limited Liability Corporation, and 1st Regents Bank, a Minnesota Corporation (Dist., Ct. 10th Dist. (Anoka C.) No. 02-CV-11-5482)
- Relco, LLC vs. A Kent Keller, Keller Technologies, Inc., Roger Oshsner, Cheese Systems, Inc., Custom Fabricating and Repair, Inc., and Troy Cascoigne (MN Dist. Ct. 8th Dist. (Kandiyohi Co.) No. 34-CV-11-396)
- Dawn Laurie-Johnson vs. Kathryn E. Meyer, Fiduciary of the John Meyer Estate, and Andrew Meyer (IA Dist. Ct. (Fayette Co.) No. LACV053026)
- Palm Beach Finance Partners, L.P. and Palm Beach Finance II, L.P. Debtors./Barry E. Mukamal, in capacity as Liquidation Trustee vs. Greater Minneapolis Daycare Association (US Dist. of Florida Palm Beach Division-No. 09-36379-BKC-PGH/Adv. Case No. 11-02963-PGH)
- In Re the Marriage of: Krista Susan Bauer and Blaine Courtney Bauer (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 27-FA-10-6650)
- In Re the Marriage of: Llainia Joy Lewandowski, Petitioner and Richard Joel Lewandowski, Respondent (Dist., Ct. 10th Dist. (Anoka C.) No. 02-FA-09-1823)
- United Natural Foods, Inc., a Delaware Corporation vs. James Hagen, an individual, Barclay Hope, an individual, Freshpack Produce, Inc., a Colorado corporation, Freshpack Acquisition Corp., a Colorado corporation, Freshpack Holdings, LLC, a Delaware limited liability company, Tonka Bay Equity Partners, LLC, a Minnesota limited liability company, and Silver Peak Partners, LLC, a Delaware limited liability company. (Dist. Ct. Denver, Colorado (Denver Co.) No. 2010CV4220)
- TruStone Financial Federal Credit Union vs. Michael Lott (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 27-CV-10-7511)
- State of Minnesota vs. Bradley Allen Carney Blount (MN Dist. Ct., 3rd Dist. (Waseca Co.) No. 81-CR-09-1180)
- Mesabi Natural Stone, LLC vs. Angel Snidarich and Up North Stone, Inc. (Dist. Ct., 6th Dist. (St. Louis Co.) No. 69VI-CV-09-506)
- Cindy Hunter, as Personal Representative of the Estate of Viola Huckabay, Deceased vs. Phoenix Healthcare, L.L.C. and Larry Cain as Court-Appointed receiver of The Lakes Nursing Home (Dist. Ct. of Oklahoma Co. State of Oklahoma-No. CJ-2009-402)
- Larry E. Smith as trustee for the Heirs and Next to Kin of David Cornelius Smith vs. Timothy Gorman and Timothy Callahan, acting in their

individual capacities as Minneapolis Police Officers, and The City of Minneapolis (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 11-cv-03071)

- State of Minnesota vs. Michael David Brown (Dist. Ct., 10th Dist. (Wright Co.) No. 86-CR-11-1558)
- State of Minnesota vs. David Allen Wentworth (Dist. Ct., 1st Dist. (Scott Co.) No. 70-CR-11-7099)
- State of Minnesota vs. Roger Keith Gould (Dist. Ct. 5th Dist. (Blue Earth Co.) No. 07-CR-11-1199)
- Stacey Buzay vs. Edward Jones Mortgage, LLC, Wells Fargo Bank, N.A., and Doherty Employment Group, Inc. (Dist. Ct. of MN (Hennepin Co) No. 11-cv-01315 (DSD/JSM)
- State of Minnesota vs. Cade Cole Duroe (Dist. Ct. 5th Dist. (Cottonwood Co.) No. 17-CR-11-192)
- WuXI ApptTec, Inc. vs. Gabrielle J. Van't Hul Zaeska and American Preclinical Services, LLC. (Dist. Ct. 4th Dist.(Hennepin Co.) No. 27-CV-12-8285



Representative List of Publications

Bench & Bar of Minnesota

- *The Marriott breach: four years?* February 2019
- *"Papers and effects" in a digital age* co-authored with Judge (Ret.) Rosenbaum January 2019
- *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?* 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 track* 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* July 2017
- *Your Personal Data – Or is it? Doxxing and online information resellers pose threats to the legal community* June 2017
- *What You Don't Know Can Hurt You: Computer Security for Lawyers* March 2014

Minnesota Lawyer

- *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
- *Preventing ‘spear-phishing’ cyber attacks* May 2017
- *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

Colorado Lawyer

- *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)

- *Cyber Security and Resilience* January 2019
- *Leadership in Developing Cultures of Security* September 2018
- *Real-Life Consequences in a Digital World: The Role of Social Media* July 2018
- *Some Thoughts on the Dark Web—and How it Affects You* March 2018
- *Personal Information and Social Media: What Now to Post* September 2017
- *Managing Doxxing-Related Cyber Threats* July 2017
- *Understand the Layers of Cyber-Security and What Data Needs Protecting* March 2017
- *Learn about the Internet of Things: Connectivity, Data, and Privacy*
- *Assessing Risk and Cyber-Security* September 2016

SCCE The Compliance & Ethics Blog

- *The Components of Strong Cybersecurity Plans: Parts 1-5* 2017
- *Prevention Is the Best Medicine* August 2016

Lawyerist

- *Detection: The Middle Layer of Cybersecurity* April 2017
- *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

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.