

**Ethics and  
Formal Opinion  
2015-193**

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# ABOUT CALIFORENSICS

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*Helping attorneys win cases by finding, interpreting, and explaining digital evidence.*

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Business  
Litigation

Employment  
Law

Criminal Law

Schools &  
Higher Ed

Family Law

Medical  
Malpractice

- Plaintiff, defense, or neutral
- Any data source or data type
- Collection, analysis, expert testimony; e-discovery and hosted review
- 17 years in business
- 1,500 clients served nationwide
- Locations in Northern California, Southern California and Central Texas

## **Cory Hamma, CISSP**

- Director of Forensics
- Electronic Medical Record Forensics
- Incident Response
- Advanced E-Discovery
- Former Application Developer
- Former Internet Engineer
- Former Server and Network Admin
- Former IT Director
- Former Project Manager

# Agenda

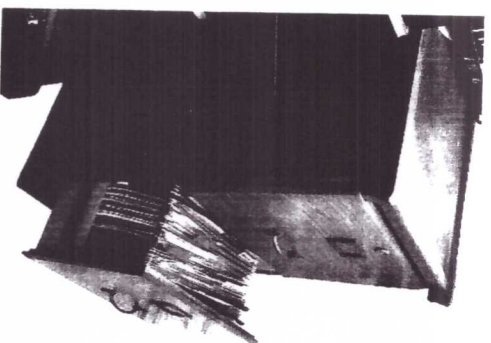
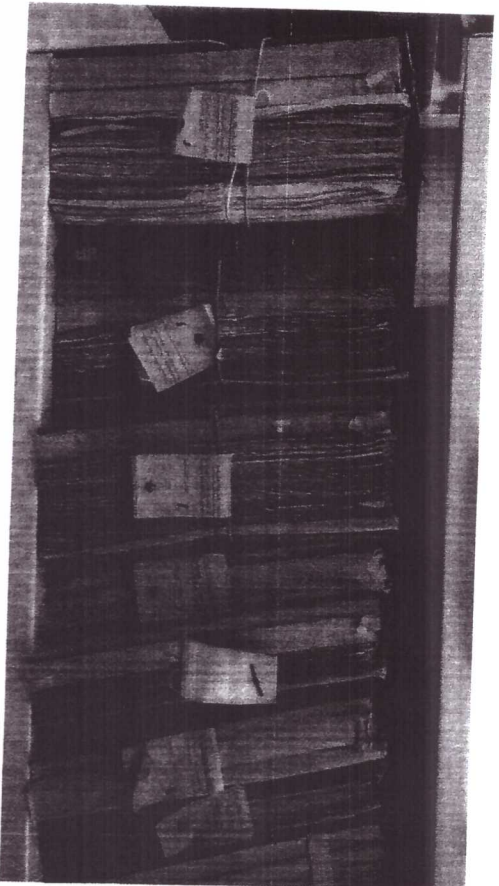
What are an attorney's ethical duties in the handling of discovery of electronically stored information?

- **Key Terms**
- Overview of Formal Opinion 2015-193
- Timeline of a Case
- Example Cases
- Ethical Duties Related to ESI

# Key Terms

## **Electronic Discovery:**

The process of locating, securing, and searching Electronically Stored Information (ESI) to use as evidence in a legal proceeding.



# Key Terms

## Computer Forensics:

Going further than E-Discovery: The use of specialized techniques for recovery, authentication and analysis of Electronically Stored Information (ESI).



# Key Terms

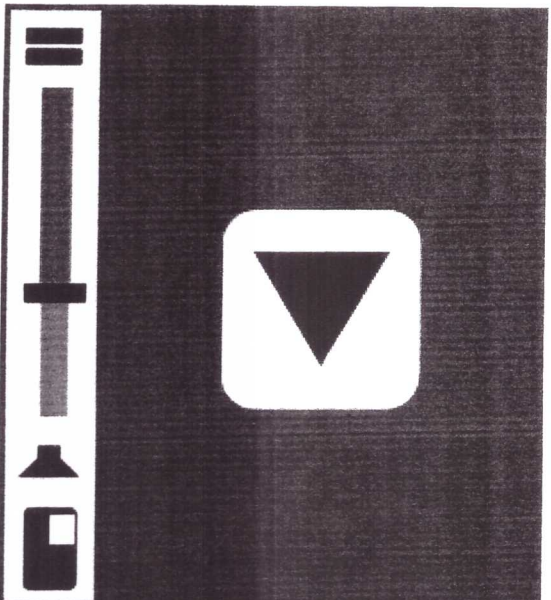
## Metadata:

A set of data that describes and gives information about other data.

## Non-Electronic Metadata:

- Located in the basement
- File drawer marked "Clients M-Z"
- File marked "To be destroyed"
- Inside envelope labeled "Important Documents"
- Paper is watermarked with "Gusset Associates"

# Metadata - Videos



## ▼ Stream 0

Type: Video

Codec: H264 - MPEG-4 AVC (part 10) (avc1)

Resolution: 1920x1090

Display resolution: 1920x1080

Frame rate: 59.956043

Decoded format: Planar 4:2:0 YUV

## ▼ Stream 1

Type: Audio

Codec: MPEG AAC Audio (mp4a)

Channels: Stereo

Sample rate: 48000 Hz

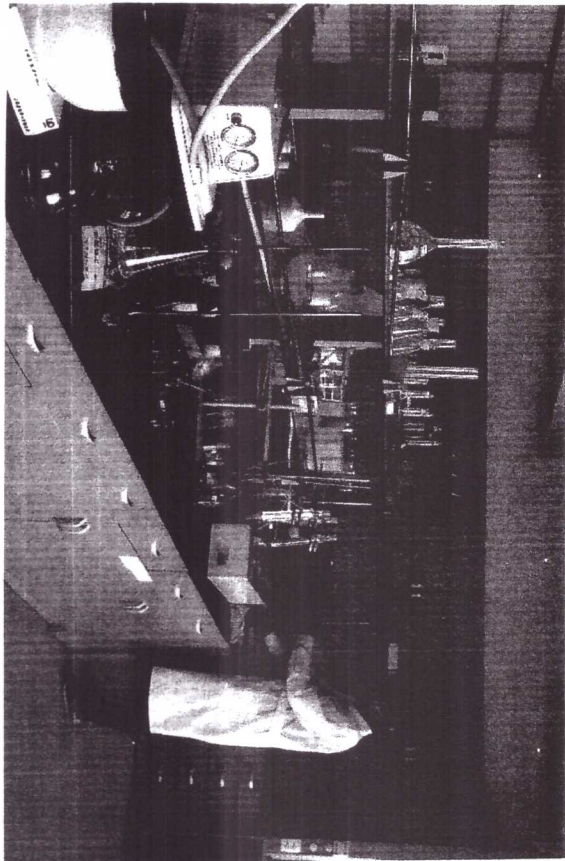
**Reported Camera:**

**GoPro HERO4 Sessions**

**Audio Sample Rate 32 KHz (or 32,000 Hz)**



# Metadata – Camera Images



IMG\_0036.JPG

Filename: IMG\_0036.JPG

Location: Desktop\sdcard\GPS\

Size: 4.2MB

Date: 12/7/2007 10:39:35 PM

Property	Value
Camera make	Canon
Camera model	Canon EOS 30D
Camera Date	2007:12:07 22:39:35
Resolution	3504 x 2336
Orientation	Rotated 270 Degrees
Flash	Not Used
Focal length	175.0mm
35mm equivalent	281mm
CCD width	22.48mm
Exposure time	0.0045 (1/250)
Aperture	f/2.8
ISO	3200
Metering Mode	Matrix
Exposure	Aperture Priority
Thumbnail	160 x 120 pixels
GPS Longitude	85.1213, 4° W
GPS Latitude	39.20132, 5° N

OK

**Reported Camera Geolocation:  
37.482735, -121.932397 (UL Labs Fremont)**

# Metadata -- Documents

Name	ELVA A Holzapfel
Title	Reservations Specialist
Organization	Serial Project
Evaluation Position	Team Leader
Evaluation Award Number (or other appropriate instrument number)	KERP 1071 - 350011
005 Project(s) Evaluated (include project name(s), implementer name(s) and award number(s), if applicable)	
I have real or potential conflict of interest to disclose.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes answered above, I disclose the following facts: <small>1. Name of the organization, project, program, or other entity that is the subject of the evaluation and of the program being implemented.          2. Name of the organization, project, program, or other entity that is the subject of the evaluation and of the program being implemented.          3. Name of the organization, project, program, or other entity that is the subject of the evaluation and of the program being implemented.          4. Name of the organization, project, program, or other entity that is the subject of the evaluation and of the program being implemented.          5. Name of the organization, project, program, or other entity that is the subject of the evaluation and of the program being implemented.          6. Name of the organization, project, program, or other entity that is the subject of the evaluation and of the program being implemented.          7. Name of the organization, project, program, or other entity that is the subject of the evaluation and of the program being implemented.          8. Name of the organization, project, program, or other entity that is the subject of the evaluation and of the program being implemented.          9. Name of the organization, project, program, or other entity that is the subject of the evaluation and of the program being implemented.          10. Name of the organization, project, program, or other entity that is the subject of the evaluation and of the program being implemented.</small>	

Created / Modified / Accessed Date  
 Revisions  
 Author(s)  
 Digital Signatures

**Document Properties**

Description | Security | Fonts | Initial View | Custom | Advanced

Description: loan0003.pdf

File: loan0003.pdf

Title: Grant Application

Author: Tony Blue

Subject: Adobe Designer Sample

Keywords: keyword1, keyword2, keyword3, keyword4

Created: 2/13/2008 11:00:18 AM

Modified: 2/13/2008 11:00:18 AM

Application: Adobe LiveCycle Output 8.2

Advanced

PDF Producer: Adobe LiveCycle Output 8.2

PDF Version: 1.7 (Acrobat 8.x)

Location: C:\Adobe\

File Size: 10.39 KB (10,642 Bytes)

Page Size: 8.50 x 11.00 in

Tagged PDF: No

Number of Pages: 1

Fast Web View: No

Additional Metadata...

# Metadata – Email

## Re: Help with features

**From:** Harrison Montrose <harrisonmontrose@gmail.com>  
**To:** Cory Hamma <coryhamma@gmail.com>  
**Date:** Mon, 24 Oct 2016 10:54:04 -0700

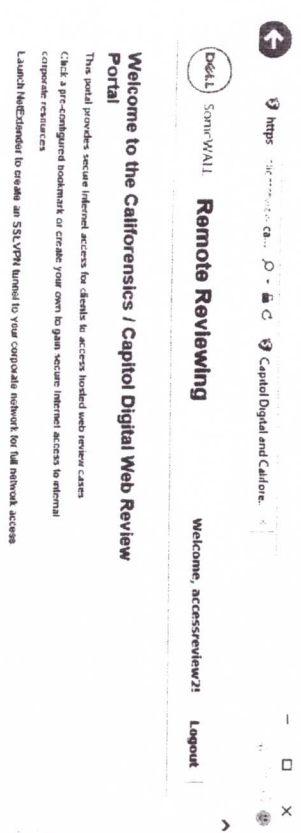
I have contacted the client with all appropriate haste. The canary is in the birdhouse.

Best regards,  
HM

On Mon, Oct 24, 2016 at 10:53 AM, Cory Hamma <coryhamma@gmail.com> wrote:  
Excellent! I appreciate your pic.

This is more great news. Please contact the client.

On Mon, Oct 24, 2016 at 10:52 AM, Harrison Montrose <harrisonmontrose@gmail.com> wrote:



## Date Sent / Date Received

## Message Headers

## Attachments

## Message-ID

**Custodian**  
File Type  
GUID  
Item Date  
MD5 Digest  
Path Name  
Shannon Entropy

**Communication Metadata**  
Communication Date  
From  
To

**Properties**  
Content-Type  
Date  
Delivered-To  
File Offset  
From  
In-Reply-To  
Message-ID  
MIME-Version  
Received  
References  
Subject  
To  
X-Gm-Third  
X-Gmail-Labels

Harrison Montrose  
RFC822 Email Message  
48755087-44fd-4267-a5ca-028a450d2b5f  
Monday, October 24, 2016 at 10:54:04 AM Pacific Daylight Time  
c8-0bb936ad1e4f83915c452fe4495b0  
/HM Gmail Takeout/All mail Including Spam and Trash.mbox  
7.957

Monday, October 24, 2016 at 10:54:04 AM Pacific Daylight Time  
Harrison Montrose <harrisonmontrose@gmail.com>  
Cory Hamma <coryhamma@gmail.com>

multipart/related; boundary="001a114088a2db97d8053fa01344"  
Monday, October 24, 2016 at 10:54:04 AM Pacific Daylight Time  
harrisonmontrose@gmail.com  
192.321

Harrison Montrose <harrisonmontrose@gmail.com>  
<CALh\_Pdrhya=M-SNkMqj67apewzZ96d44u3uWg44pQmQTW@mail.gmail.com>  
<CAC2mDbwvsDgW+\_5A5jMWRjYtE=ur2=sdey3mww8VRj3Q@mail.gmail.com>  
1.0  
by 10.107.184.9 with HTTP; Mon, 24 Oct 2016 10:54:04 -0700 (PDT)  
<CALh\_Pds+HsocGpPvWzF7jYD08jeJuz923QAVRLx8ksOWbA@mail.gmail.com> <CAC  
Re: Help with features  
Cory Hamma <coryhamma@gmail.com>  
1549094340530391782  
Sent: Important

# Metadata – Online Review System

CD001 17-0139 Capitol Digital – Sandbox

Documents Summary Reports Review Batches Administration Case Management User Status Indexing & Analytics OCR Imaging Work Product Favorites | Hi, admin01

Filter

CD001 17-0139 Capitol Digital – Sandbox

Elijah Admin

Saved Search 1

#	Doc ID	Email . From	Email . To	Email . Subject	Email . Date Sent
1	HM000255	Andy from Google <andy-noreply@google.com>	harrisonmontrose@gmail	Harrison, welcome to your new Google Account	10/21/2016 10:25
2	HM000256				

Items 1 - 2 (of 2) in sets of 25 per page

No Dashboard Selected

Export

- Search through documents / emails.
- Display metadata in search results.
- Export metadata as a spreadsheet
- Create PDFs from emails and documents

# Metadata – Online Review System

✉ HM000256

• Viewer Native Extracted Text

Native Default

Image

Edit Metadata

Document 2 of 2

**From:** Andy from Google <andy-noreply@google.com> **Sent:** Fri, 21 Oct 2016 17:25:46 +0000  
**To:** harrisonmontrose@gmail.com  
**Subject:** Harrison, welcome to your new Google Account

Hi Harrison,

I'm so glad you decided to try out Gmail. Here are some tips to get you up and running fast.

Gmail on the go

With Gmail for [Android](#) and [iOS](#), you get notifications so you don't miss important

## Document Identifiers

**Doc ID:** HM000256  
**Family ID:** HM000256

## Number of Attachments:

**Custodian:**  
**Family Date:**  
**Record Type:**

## File Properties

**Application:**  
**File Description:**

**Original Folder Path:** /All mail including Spam and Trash mbox:entry#0390855.eml

**ED Folder:**

**File Name:** entry#0390855.eml

**File Extension:**

**MD5 Hash:** 579a1dc0b8f188baa35e03787b911441

**Time Zone Field:**

## Email Info

**Email . Date Sent:** 10/21/2016 10:25 AM

**Email . Date Received:**

**Email . Subject:** Harrison, welcome to your new Google Account

**Email . Attachment Name:**

**Email . From:** Andy from Google <andy-noreply@google.com>

**Email . To:** harrisonmontrose@gmail.com

**Email . CC:**

**Email . BCC:**

Edit



# Agenda

What are an attorney's ethical duties in the handling of discovery of electronically stored information?

- Key Terms
- **Overview of Formal Opinion 2015-193 (9 Points)**
- Timeline of a Case
- Example Cases
- Ethical Duties Related to ESI

# Guidance From The State Bar

## Overview of Formal Opinion 2015-193

***What are an attorney's ethical duties in the handling of discovery of electronically stored information?***

- Basic understanding of, and faculty with, issues related to e-discovery and ESI.
- Duty of competence may vary case-by-case, requiring a higher level of technical knowledge.

# Guidance From The State Bar

## Overview of Formal Opinion 2015-193

1. **Initially assess e-discovery needs and issues, if any.**
  - **What information could I possibly be looking for?**
    - New data formats – cloud hosted – client may not be aware
  - **Where could that information be located?**
    - My client's possession
    - Opposing client's possession
    - 3<sup>rd</sup> party possession



# Guidance From The State Bar

## Overview of Formal Opinion 2015-193

2. Implement/cause to implement appropriate ESL preservation procedures.
  - **Time Sensitive**
    - What information could be deleted or wiped?
      - Phone company and Internet Service Provider (ISP) records
      - Backups
      - Text Messages / Emails
  - **Appropriate Forensic Preservation**
    - Using digital forensics preservation tools.
    - Chain of Custody

# Guidance From The State Bar

## Overview of Formal Opinion 2015-193

3. Analyze and understand a client's ESI systems and storage.
  - Computer, Server, Backups, External Drives
  - Smartphone / Cell Phone
  - Cloud Storage/Backup (Google Drive, DropBox, OneDrive, CrashPlan)
  - Cameras / Video Surveillance
  - New Types of ESI

# Guidance From The State Bar

## Overview of Formal Opinion 2015-193

4. Advise the client on available options for collection and preservation of ESL.
  - **Digital Forensics / E-Discovery Expert**
    - Forensic Collection / Preservation to meet court requirements
    - Organizational integrity
  - **Attorney retains evidence**
  - **Vendor or another attorney supervise collection**
  - **Having IT staff perform collection is usually insufficient**

# Guidance From The State Bar

## Overview of Formal Opinion 2015-193

### 5. Identify custodians of potentially relevant ESI.

- Your client / opposing party
- Other employees at the firm
- IT Employees
- Telephone / Cell Phone Companies
- Internet Service Providers
- Hosted Application Providers (Salesforce, Online Time Card, Facebook, DropBox, etc)
- Email / Text Message CC Recipients

# Guidance From The State Bar

## Overview of Formal Opinion 2015-193

6. Engage in competent and meaningful meet and confer with opposing counsel concerning an e-discovery plan.
  - Work with your client to determine clear search terms.
  - Consult with e-discovery or forensics expert regarding potential search terms and also potential overbroad search terms.
  - Review data obtained from your clients before it is released to opposing counsel.
    - Do not rely on claw back method.

# Guidance From The State Bar

## Overview of Formal Opinion 2015-193

### 7. Perform data searches

- Search both searchable and non-searchable data
  - Some files may require OCR or manual review
- Cascading searches
- Alternate spellings / misspellings

# Guidance From The State Bar

## Overview of Formal Opinion 2015-193

8. Collect responsive ESI in a manner that preserves the integrity of that ESI
  - Preserving the Integrity
    - Chain of Custody
    - Limiting Access to Data
      - Write Blocking / Working Copies
  - Proving Preservation of Integrity
    - Checksum – output of cryptographic algorithm. Digital Fingerprint
    - Digital Forensic Containers

# Guidance From The State Bar

## Overview of Formal Opinion 2015-193

9. Produce responsive non-privileged ESI in a recognized and appropriate manner.
  - Formal Opinion refers to attorneys ethical obligations relating to his own client's ESI, and does not address the scope of an attorney's duty of competence relating to obtaining an opposing party's ESI.
  - Native Formats
  - PDF Formats
  - Common Metadata
    - Created/Modified/Accessed Dates, Location, Custodian, Checksum,



# Guidance From The State Bar

## Overview of Formal Opinion 2015-193

### ***What are an attorney's ethical duties in the handling of discovery of electronically stored information?***

- Attorneys lacking the required skills must either:
  - Acquire/maintain the skills necessary
    - Skills may change on a month-by-month basis – classes cannot keep up.
  - Consult with an e-discovery expert
  - Bring on another attorney with the appropriate experience
  - Decline the case
- Lack of competence may lead to an ethical violation of the duty of confidentiality

# Agenda

What are an attorney's ethical duties in the handling of discovery of electronically stored information?

- Key Terms
- Overview of Formal Opinion 2015-193
- **Timeline of a Case**
- Example Cases
- Ethical Duties Related to ESI

# Ethical Duties & ESI

## Timeline of a Case

### Case Filed / Request for Preservation

- Attorneys may not ignore the requirements of electronic discovery.
- Attorneys have an obligation for the early assessment of electronic discovery.
- If necessary to achieve competence, **experts should be engaged as part of duty to preserve.**
- Preservation issues are more critical in electronic discovery cases because some data is ephemeral.
  - Ephemeral data: Log Files, Recently Deleted Files, Email with strict retention policies

# Ethical Duties & ESI

## Timeline of a Case

### Case Filed / Request for Preservation

- The standard of competence changes with technology.
- E-discovery expertise helps protect client confidentiality and privilege.
- Opposing counsel may not know what they should be preserving – best to describe locations where data may be kept.
- Opposing counsel may not know that they may need an E-Discovery or Digital Forensics expert to properly preserve their evidence.

# Ethical Duties & ESI

## Timeline of a Case

### Discovery Process

- What can I expect to receive in terms of ESI?
- How should I ask for the ESI? (Native Documents – with Metadata!)
  - What Metadata should be provided with each item?
- How should the data integrity be preserved?

# Ethical Duties & ESI

## Timeline of a Case

### Discovery Process

- How do I protect my client from unreasonable ESI requests?
- How to identify information that is privileged?
- How to identify information that is irrelevant?
- Dependence on claw-back is not advised.

# Ethical Duties & ESI

## Timeline of a Case

### Discovery Process

- How is data stored?
- How do I ask for information that may require an ESI expert to retrieve?
- How do I effectively limit or cull through information captured or received?
- How do I write search terms?

# Ethical Duties & ESI

## Timeline of a Case

### Discovery/Production Process

- How do I turn this data into a format that the court will accept?
- How do I make a compelling visual, using the data?
- How do I know when something is missing or tampered with?



# Agenda

What are an attorney's ethical duties in the handling of discovery of electronically stored information?

- Key Terms
- Overview of Formal Opinion 2015-193
- **Example Cases**
- Skills Required to Establish Competence
- Ethical Duties Related to ESI

# Ethical Violations

## Illustrative Example from Formal Opinion

### *Distributor sues Manufacturer*

- Attorney in question defends Client in litigation brought by Client's Chief Competitor
- Opposing counsel demands E-Discovery
  - Defense attorney refuses. Judge insists.
  - Attorneys agree upon joint search with clawback agreement
- Client IT department says that they provided everything responsive
- Search conducted by opposing counsel's e-discovery vendor
  - Broad search terms capture confidential documents valuable to competitor.
  - Cannot claw back non-privileged documents.
- Spoliation accusations; seeking sanctions

# Ethical Violations

## NuVasive, Inc. v Madsen Medical, Inc.

### ***Did attorney violate the duty of competence through his acts/omissions?***

- Employees from NuVasive and Madsen Medical Inc (MMI) were communicating.
- Both NuVasive and MMI failed to properly preserve evidence of text messages on smartphones, despite being informed of litigation hold.
- Both companies' employees disposed of and/or wiped cell phones after being informed of litigation hold.
- NuVasive was at fault for not enforcing compliance with the litigation hold.
- MMI should have taken steps to preserve evidence while employees still worked there.

*NuVasive, Inc. v. Madsen Medical, Inc. 2015 WL 4479147 (S.D. Cal July 22, 2015)*  
Defendant sought sanctions for Plaintiff's failure to prevent the destruction of relevant evidence for Defendant's use in litigation and failure to preserve evidence, resulting from Plaintiff's failure to perform its discovery obligation and non compliance with the litigation hold.

# Ethical Violations

## Proccaps S.A. v. Paththeon Inc.

### ***Did attorney violate the duty of competence by failing to supervise?***

- Plaintiff's counsel did not travel to company HQ in Colombia to meet with IT personnel to discuss locations of discoverable ESL.
- Plaintiff's counsel failed to retain consultant to assist with preservation of ESL, including identification of relevant search terms.
- Court compelled plaintiff to propose adequate search terms (only provided 8 English terms when company HQ is in Spanish speaking country.)
- Did not ensure client's compliance with litigation hold; counsel also has an obligation to supervise the client

*Proccaps S.A. v. Paththeon Inc., No. 12-24356-CIV, 2014 WL 800468 (S.D. Fla. Feb. 28, 2014)*

Defendant sought to compel forensic examination of Plaintiff's electronic media based on the inadequacies of Plaintiff's preservation and collection efforts, including: Plaintiff's failure to issue a litigation hold, Counsel's failure to meet with e-discovery experts to discuss how discoverable ESL would be located, failure to assist custodians in collection of potentially relevant info, and failure to provide relevant document requests or search terms.

# Ethical Violations

Rajala v. McGuire Woods

## *Can you disprove prior art through digital forensics?*

- Plaintiff developed and maintained web site [www.InternMatch.com](http://www.InternMatch.com) in 2009
- Defendant registered trademark INTERNMATCH in 2013.
- Defendant claimed to have documents defending prior use of trademark.
- Defendant claims they discarded the original computer allegedly used to create documents related to INTERNMATCH.
- Court finds that defendants willfully failed to preserve evidence.

*Intermatch v. Nxtbigthing No. 3:2014cv05438 – Document 162 (N.D. Cal. 2016)*

Plaintiff sought copies, including electronic copies, of documents that would support Defendant's assertions. Plaintiff also filed a motion for terminating sanctions, accusing Defendants of intentionally destroying the electronic versions of the evidence of use documents. Court found Defendants willfully failed to preserve relevant evidence of use documents that they had a duty to preserve.

# Electronic Discovery and ESI

- FRE 502(b) provides that inadvertent disclosure may not result in waiver of the privilege where “(1) the disclosure is inadvertent; (2) the holder of the privilege or protection took reasonable steps to prevent disclosure; and (3) the holder promptly took reasonable steps to rectify the error...”
- FRE 502(d) provides: “A federal court may order that the privilege or protection is not waived by disclosure connected with the litigation pending before the court – in which event the disclosure is also not a waiver in any other federal or state proceeding”
- FRE 502(e) further provides: “[a]n agreement on the effect of disclosure in a Federal proceeding is binding only on the parties to the agreement, unless it is incorporated into a court order”

# Electronic Discovery and ESI

- California Code of Civil Procedure:  
[http://www.courts.ca.gov/documents/title\\_3.pdf](http://www.courts.ca.gov/documents/title_3.pdf)
- The State Bar of California E-Discovery Pocket Guide:  
<http://litigation.calbar.ca.gov/Publications/EDiscoveryPocketGuide.aspx>
- 2009 Electronic Discovery Act:  
[http://www.leginfo.ca.gov/pub/09-10/bill/asm/ab\\_0001-0050/ab\\_5\\_bill\\_20090629\\_chaptered.pdf](http://www.leginfo.ca.gov/pub/09-10/bill/asm/ab_0001-0050/ab_5_bill_20090629_chaptered.pdf)
- The State Bar of California: Standing committee on Professional Responsibility and Conduct Formal Opinion No. 2015-193  
[https://www.calbar.ca.gov/Portals/0/documents/ethics/Opinions/CAL%202015-193%20%5B11-0004%5D%20\(06-30-15\)%20-%20FINAL.pdf](https://www.calbar.ca.gov/Portals/0/documents/ethics/Opinions/CAL%202015-193%20%5B11-0004%5D%20(06-30-15)%20-%20FINAL.pdf)

# Electronic Discovery and ESI

## *Applicable FRCP Sections*

- Rule 16(b): Pretrial Conferences; Scheduling; Management
- Rule 26(b): Discovery Scope and Limits
- Rule 26(d): Timing and Sequence of Discovery
- Rule 26(f): Discovery Planning Conference, Disclosure & Form of Production
- Rule 33: Interrogatories to Parties
- Rule 34: Form of Production for ESI
- Rule 37(a): Motion for an Order compelling Disclosure or Discovery
- Rule 37(e): Failure to Preserve ESI; “Safe harbor” from Sanctions



# Relevant E-Discovery Cases

*Rajala v. McGuire Woods No. 08-2638 (D. Kan. July 22, 2010)*

Where the parties are unable to reach an agreement, some courts have determined that the court has the authority to impose a “clawback agreement” to protect privileged materials under FRE 502(d).

*Eshelman v. Puma Biotechnology, Inc., No. 7:16-CV-18-D (E.D.N.C. June 7, 2017)*

North Carolina Magistrate Judge Robert B. Jones, Jr., among other rulings, denied the Plaintiff’s motion for an order permitting a jury instruction in response to the defendant’s failure to preserve certain internet web browser and search histories, concluding that the Plaintiff “is not entitled to a sanction pursuant to Rule 37(e)(1)” and that the Plaintiff “is not entitled to an adverse jury instruction as a sanction pursuant to Rule 37(e)(2).”

# Califorensics

a division of Capitol Digital