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**uncovered**

Citizen Detective

**GUIDE**
ABOUT UNCOVERED
Uncovered is a cold case platform that uses the power of collective impact to bring peace to families of murdered or missing people by combining data, technology, and the wisdom of the community. Learn more at www.uncovered.com.

INTRODUCTION
While the podcast Serial may have ignited new interest in true crime in the last few years, people are switching from entertainment consumption to a passion for activism to help solve cold cases. In addition, a culture has grown, and true crime listeners, podcast junkies, Reddit aficionados and ID superfans are taking on a new moniker: Citizen Detective.

Uncovered is developing a cold case platform to use the power of collective impact to bring peace to families of murdered or missing people by combining data, technology, and the wisdom of the community.

We’ve created a step-by-step guide to develop your unique abilities, test your knowledge, and even discover new talents. We need more Citizen Detectives to polish their skills to join us at Uncovered!

WHAT IS A CITIZEN DETECTIVE ANYWAY?
The ultimate Citizen Detective, Billy Jensen, author of Chase Darkness with Me and host of Murder Squad, sums it up best:

Amateur/Citizen Detective n.
1. An individual who devotes his or her time and expertise to aid in the solving of crime, without compensation or expectation of reward.
2. Fictional Examples: Nancy Drew, Batman, Jessica Fletcher.

Also see: Crowdsolving n.
1. Utilizing the eyes, ears, and expertise of individuals, both locally and across the globe via social media, to aid in the solving of crimes.

WHAT YOU’LL LEARN:
By the end of this guide, you will be able to...

- Understand key terms and phrases
- Assess free tools for data collection
- Spark new insights for how you perceive information
- Understand key components to request public information
- Support further education and skill development
- Evaluate key processes for data collection
- Engage diverse methods in desktop research
- Correlate the relationship among a timeline, evidence, people and locations
REMEMBER THEIR NAMES: ETHICAL PRACTICES FOR RESEARCHING COLD CASES

In 1965, the murder clearance rate was 91%. Since then, it has dropped to 62% as of 2017. These are not just statistics, they are people; people who have families and loved ones for whom the case has never been cold.

A study released by the National Institute of Justice states that:

“... approximately four out of 10 homicides are not solved; four out of 10 murderers do not receive justice and remain free to continue to commit crimes; and four out of 10 homicide victims do not receive any sort of resolution, adding to the ever-growing number of cold cases.”

With forty percent of homicides unsolved, the likelihood that cases will find a resolution as time progresses diminishes, however, that doesn’t mean that all hope should be lost. And these stats should note replace the lives that are lost. Families deserve answers, victims deserve a voice, and no one should be a statistic.

Think about and organize your research in a manner that increases the positive effect and decreases the possible negative impact on the families or potential subjects involved in the case—first, do no harm. The aim is NOT to cause more danger or damage to loved ones or impede progress, but to uncover details that might have gone unnoticed.

Citizen Detectives flourish at the intersection of time, interest and motivation. Let these factors guide your research practices, but never forget that the stories you are consuming, the facts you are uncovering, or the threads you are connecting belong to people and will resolve in some sort of outcome. Let it be ethical and positive and lead to the next connection for a fellow Citizen Detective. Collective impact will move progress further.
NEW EYES AND NEW DEVELOPMENTS: WHEN A COLD CASE REOPENS

With nearly a quarter of a million cold cases still unresolved in the U.S., there are a number of reasons cold cases are reopened by law enforcement. In a study released by the National Institute of Justice, the following reasons are identified as the primary rationales to reopen a cold case:

Advancements in forensic technology
While Citizen Detectives won’t be testing forensic samples directly, creating a digital database of like cases with similar details or examining genealogy connections can have tangible impacts.

EXAMPLE: Bear Brook
A professional researcher named Rebecca Heath, a librarian from Connecticut, followed up on a tip she’d uncovered after listening to the Bear Brook podcast. This tip led to the IDs of the victims.

Changes in relationships over time
Time will impact leads, particularly as relationships among key persons evolve. Perhaps a divorce creates an opportunity to corroborate an alibi or a secret among friends that is brought to light over time.

New leads through fresh case and evidence review
A different perspective can open many doors when examining data and case information collected in previous years. Not only a unique way of connecting dots, but reexamining evidence with updated technology can also lead to new avenues.

Increased public support and interest in cold case investigations
Media attention, anniversaries or collective curiosity can rouse public interest and connect others searching for answers.

EXAMPLE: Golden State Killer
Michelle McNamara’s book I’ll Be Gone in the Dark was the impetus for unique data collection and the subsequent capture of GSK. Increased media attention helped to connect the dots.

Improvements in information management
Simply digitizing evidence usually collected in boxes or mapping data once reserved for pen and paper can provide new leads.
DATA IS THE NEW MAGNIFYING GLASS: THE POWER OF THE INTERNET TO UNCOVER INFO

By far, the best tool a Citizen Detective has is the internet and all of the publicly available data at your fingertips. From social media platforms to message boards to public archives, so much information exists that can be used to connect dots.

The best place to start your detective work is to examine the most complete data on U.S. homicides available, The Murder Accountability Project. Here you can navigate to see trends in the types of murders, location of murders, and demographic information on victims.

This site is valuable to test hypotheses about murder suspects that could have been killing for a long time in one jurisdiction or in a variety of locations.

Using an algorithm, The Murder Accountability Project has also developed Murder Clusters. These datasets are capable of identifying serial killers murdering multiple victims with identical killing techniques within a particular geographic region. This method can be helpful to spot difficult-to-see trends over a span of several years or longer.

While not every case is the result of a serial murderer, identifying patterns and providing a new perspectives are some of the key benefits of Citizen Detective work. Here are other databases that are helpful bookmarks to uncover patterned information:

| The Murder Accountability Project | This site combines public stats and data from the FBI: Uniform Crime Report with the Supplementary Homicide Report. murderdata.org |
| Project Coldcase | A database currently consisting of unsolved homicides from 50 Florida counties, 46 U.S. states, and 3 international countries. database.projectcoldcase.org |
| Doe Network | A volunteer organization devoted to assisting law enforcement in solving cold cases concerning unexplained disappearances and unidentified victims from the U.S. and Canada. www.doenetwork.org |
**WHERE TO START WHEN A PERSON GOES MISSING:**

**MISSING PERSON DATABASES**

Every year, more than 600,000 people go missing in the United States, ranging from young children to older individuals. Not only that, but it is currently estimated that nearly 4,400 unidentified bodies are recovered each year. Roughly 25% remain unidentified after one year.

These databases are great to begin your research for information that currently exists or to explore movement made on a case.

<table>
<thead>
<tr>
<th><strong>The Charley Project</strong></th>
<th>Profiles over 9,000 cold cases of missing children and adults from the United States.</th>
<th><a href="http://www.charleyproject.org">www.charleyproject.org</a></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NamUs</strong></td>
<td>NamUs (National Missing and Unidentified Persons System) is a national information clearinghouse and resource center for missing, unidentified, and unclaimed person cases across the United States.</td>
<td><a href="http://www.namus.gov">www.namus.gov</a></td>
</tr>
<tr>
<td><strong>Black and Missing Foundation, Inc (BAMFI)</strong></td>
<td>Awareness of missing persons of color; provides vital resources and tools to missing persons’ families and friends and educates the minority community on personal safety.</td>
<td><a href="http://www.blackandmissinginc.com">www.blackandmissinginc.com</a></td>
</tr>
<tr>
<td><strong>DNA Doe Project</strong></td>
<td>The DNA Doe Project is an exciting new initiative that uses genetic genealogy to identify John and Jane Does.</td>
<td>dnaadoeproject.org</td>
</tr>
<tr>
<td><strong>National Center for Missing and Exploited Children</strong></td>
<td>The clearinghouse reporting center for all issues related to the prevention of and recovery from child victimization.</td>
<td><a href="http://www.missingkids.org">www.missingkids.org</a></td>
</tr>
<tr>
<td><strong>Missing and Murdered Indigenous Women Database</strong></td>
<td>A working database that logs cases of missing and murdered indigenous women, girls, and two spirit people, from 1900 to the present.</td>
<td><a href="http://www.sovereign-bodies.org/mmiw-database">www.sovereign-bodies.org/mmiw-database</a></td>
</tr>
<tr>
<td><strong>Trans Doe Task Force</strong></td>
<td>A collective database of cold cases in which the subject may have been transgender or gender-variant.</td>
<td><a href="http://www.transdoetaskforce.org">www.transdoetaskforce.org</a></td>
</tr>
</tbody>
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A CRITICAL EYE: THE KEY TO CASE DEVELOPMENT

Forensic photography uses images to document crime scenes and support facts in a court proceeding. These photos are critical for cold cases, as many are the only evidence to survive years of dormant attention.

Evidence can be categorized into the following broad groups based on its origin, composition, or method of creation:

**Biological evidence**
Any evidence derived from a living item. Includes physiological fluids, plants, and some biological pathogens.

**Chemical evidence**
Any evidence with identifiable chemicals present.

**Patterned evidence**
Any evidence with a pattern (predictable pattern) of appearance.

**Trace evidence**
Any evidence of such a small size so as to be overlooked, not easily seen or not easily recognized.

(Wikipedia)

A critical eye and keen judgment are needed to assess images; and each image should include a subject matter, indication for size and scale, and a point of reference. Even if you don’t have a degree in forensic photography a trained eye can spot details that are also important for uncovering information. Here are three examples demonstrating how important it is for a discerning eye to capture details not all might catch at first glance.

**Subject Matter**
A photo from the trial evidence of Michael Skakel vs. the State of CT. Skakel was on trial accused of the October 1975 murder of then neighbor Martha Moxley, both of whom were 15 at the time.

(Pool Photo/Getty Images)

**Indication of Size and Scale**
Document found taped to the back of Rey Rivera’s computer. Rivera’s body was found in the Belvedere Hotel, where the body clearly entered from force through the roof.

**Point of Reference**
Glasses found at a cave near the Tulsa Oklahoma Girl Scout Camp where Michele Guse, Lori Farmer, and Denise Milner, were all brutally murdered in 1977. The case remains unsolved.
FOUR TERMS THAT DESIGNATE A CASE’S CHRONOLOGY:
WORDS YOU SHOULD ADD TO YOUR VOCAB ASAP

Knowing the lingo is part of the process for finding overlooked details that are paramount in cold cases—a crime that has gone unsolved, due to lack of evidence, not being pursued actively for prosecution, or actively investigated. Many factors determine a timeline in a case, here are a few key terms that will be fundamental in indicating time of death.

The **Glaister Equation** is a formula used to approximate the time since death. The calculation approximates that the body loses 1.5 degrees Fahrenheit every hour, and can be determined by:

\[
\text{HOURS SINCE DEATH} = \frac{98.4^\circ F - \text{THE BODY TEMPERATURE}}{1.5^\circ}
\]

Measuring four pillar factors—pallor mortis, algor mortis, rigor mortis, and livor mortis—can help determine the time of death.

**Pallor mortis**
Pallor mortis is the paleness that occurs shortly after death (15-20 minutes), suggesting that death occurred less than 30 minutes earlier—most effective if the body was discovered immediately after death.

**Algor mortis**
Algor mortis literally translates to "the coldness of death." It is the change in post-death body temperature and monitored before the ambient temperature matches.

**Rigor mortis**
Rigor mortis occurs as a result of calcium build-up in joints and muscles, as a body stiffens up a few hours after death. This will last a couple of days and is one of the clues used by crime scene detectives to determine when a murder happened.

**Livor mortis**
Livor mortis, aka hypostasis, happens when blood pools in the body due to lack of circulation, gravity, and as a result of no cardiac activity. This makes the body appear red or purplish in color.
RESOURCES FOR FINDING AND USING SATELLITE IMAGES

Satellite imagery has never been as prevalent or accessible. Not only can it be extremely helpful in gaining a better understanding of the location of a cold case, but, satellite tools can help identify past environments, changes in the landscape, or variations over time. Examining these images can complement other research, possibly providing corroborating evidence.

Google Earth Outreach hosts several easy trainings to gain greater knowledge related to topics ranging from creating image overlays to how to save unique camera angles to placemark locations. Another great Google project—Google Earth Timelapse—lets you see how the world has changed over the decades. This is great for looking at locations for a case over the years to see how the surroundings have changed.

Consider these options for downloadable imagery:
- Bing Maps Aerial
- Mapbox Satellite Live
- HERE WeGo Satellite
- Zoom.Earth

Satellite imagery can also serve as a great reference item to corroborate videos or other images especially if they contain wide shots that might include landmarks, monuments, or distinguishable natural (or man-made) features such as bodies of water, tree formations, or even streets and vacant lots.

Featured satellite imagery resources:
- **OpenRailwayMap**: An OpenStreetMap-based project for creating a map of the world’s railway infrastructure.
- **Mapillary**: The street-level imagery platform that scales and automates mapping using collaboration, cameras, and computer vision.
- **Satellites Pro**: A satellite-mapped view of the world featuring ruler for distance measuring, an easy way to find your location, and even weather.
- **ShadowCalculator**: You can identify the sun’s position on Google Maps. This desktop app can predict the size of shadows at different times of the day for Google Maps location to assist in time-stamping events captured in images.

**BONUS**: World Imagery Wayback App lets you browse past archived versions of the World Imagery basemaps. That means you can compare features that might have changed over time, identify patterns, or even confirm other features that will validate a location.
IT DOESN’T LAST FOREVER:
TOOLS FOR ARCHIVING AND DOWNLOADING RESOURCES

Sometimes you’ll stumble across information that you know is fleeting, a news article, a website that might update, or you may simply need to archive other data in your search for uncovering answers.

Bellingcat, an investigative journalism site that specializes in fact-checking and open-source intelligence has done a ton of legwork to assemble the following list of sources for archiving and downloading research. These resources may be helpful as you uncover information related to cold cases and find yourself needing to archive older data or sift through public records and other open-source data available online and in public databases.

<table>
<thead>
<tr>
<th><strong>Archive.today</strong></th>
<th>Archive any webpage, including social media sites. It also has a Chrome extension for ease of use.</th>
</tr>
</thead>
<tbody>
<tr>
<td>archive.fo</td>
<td></td>
</tr>
<tr>
<td><strong>Lumen</strong></td>
<td>A research project from Harvard University, this site lets you search cease-and-desist letters concerning online content and takedown notices.</td>
</tr>
<tr>
<td>lumendatabase.org</td>
<td></td>
</tr>
<tr>
<td><strong>Wayback Machine</strong></td>
<td>Allows users to see older version of websites and even archive pages and entire sites.</td>
</tr>
<tr>
<td>web.archive.org</td>
<td></td>
</tr>
<tr>
<td><strong>Witness</strong></td>
<td>An activists’ guide to archiving videos. This site also has tons of blog content and a helpful toolkit for download.</td>
</tr>
<tr>
<td>archiving.witness.org</td>
<td></td>
</tr>
<tr>
<td><strong>Perma</strong></td>
<td>Archiving site meant for serious, academic research to preserve citations. The site creates permanent records of the web sources.</td>
</tr>
<tr>
<td>perma.cc</td>
<td></td>
</tr>
</tbody>
</table>

**BONUS:** For more seasoned searchers, those with advanced tech skills, or just the curious, Github offers additional free and open-source resources for downloading and archiving.
INTERNET ACRONYMS LIST
As a Citizen Detective, your work will be online, and chatrooms, message boards, and Reddit threads are the perfect place to find leads and meet others working on the same case—or others who may be connected. Here is a list of acronyms that you may find helpful:

- **AFAIK** | “As far as I know”
- **AMA** | “Ask me anything”
- **CMV** | “Change my view”
- **DAE** | “Does anybody else” or “Does anyone else”
- **ELI5** | “Explain like I’m 5 (years old)”
- **FTFY** | “Fixed that for you”
- **IAMA** | “I am a”
- **IANAD** | “I am not a doctor”
- **IANAL** | “I am not a lawyer”
- **ICYMI** | “In case you missed it”
- **IIRC** | “If I recall correctly”
- **IKR** | “I know, right?”
- **IMMD** | “It made my day”
- **IMO/IMHO** | “In my opinion” and “In my humble/honest opinion”
- **ITT** | “In this thread”
- **IRL** | “In real life”
- **MRW/MFW** | “My reaction when” and “My face when”, respectively
- **NSFL** | “Not safe for life” (gory or gross content)
- **NSFW** | “Not safe for work” (sexual content)
- **OP** | “Original poster” (the person who started the thread)
- **[Serious]** | “Serious responses only” (commonly used in /r/askreddit and other subreddits now)
- **PSA** | “Public service announcement”
- **TIL** | “Today I learned”
- **TL;DR** | “Too long; didn’t read”
- **YSK** | “You should know”
While some of these recommendations may seem basic, Google is the best search tool to start with for online research. Utilizing this step-by-step overview of how to master searching will help you better identify topics and terms for looking for more information.

Boolean searching is the best and most accurate search process; it enables the use of stringing together words and phrases using the following:

- **AND**: Searches for two terms
  - **EXAMPLE**: murder AND 1990, missing child, missing AND child
  - **NOTE**: If you enter two terms and don’t use AND it will assume that there is an AND between them. The ‘+’ sign and an ampersand ‘&’ can also be used to replace AND when searching.

- **NOT**: Search results will exclude findings containing a term that is accompanied by NOT
  - **EXAMPLE**: (Facebook OR Twitter) NOT Pinterest, “reported missing” NOT missing NOT found NOT “presumed dead”
  - **NOTE**: The ‘!’ sign and ‘^’ can also be used to replace NOT when searching.

YOUR VIRTUAL TOOLBOX: FOUR UNIQUE APPS FOR DATA COLLECTION

There are numerous resources for online sleuthing, but before you get sucked into an internet rabbit hole consider these other resources to conduct your own research or validate leads sourced during crowdsolving, and add to your virtual toolbox:

Measure
This handy app is already loaded onto your iPhone or iPad, and enables you to quickly gauge the size of real objects, a person’s height, etc. Basically a digital tape measure on steroids.

WHY IT’S GOOD: The Swiss Army Knife app, you don’t need to collect numerous tools for your measuring needs. Perfect when in the field or behind the screen.

Wayback Machine
Explore 468 billion+ web pages saved over time. Perfect for confirming facts in the pursuit of a cold case. Going back as far as 1996, this resource is the best website for internet archiving.

WHY IT’S GOOD: Millions of people use this site each day for different purposes. You never know when you’ll need to authenticate employment via an old staff page or verify an address from the mid-nineties.

Google Translate
Google’s free service instantly translates words, phrases, and web pages between English and over 100 other languages. With is super-easy scan function, let your phone do the hard part; simply aim and snap to covert signage, text, etc. into English or 99 other languages.

WHY IT’S GOOD: You never know when you might come across evidence in another language, and who has time to conjugate verbs when you’re solving cold cases?

Old Maps Online
OldMapsOnline.org indexes over 400,000 maps thanks to archives and libraries. This open-source resource also allows you to submit your own maps.

WHY IT’S GOOD: You can go back in topographic history to see where homes once stood, businesses existed, or parks and greenspace existed in relation to crime scenes or other key locations.

BONUS: Easily convert scanned handwritten notes and turn them into digital text available for edits with Pen to Print—perfect for digitizing your old-school notebook!
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