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Warming Up Cold Cases with Dr. Krystal Hans

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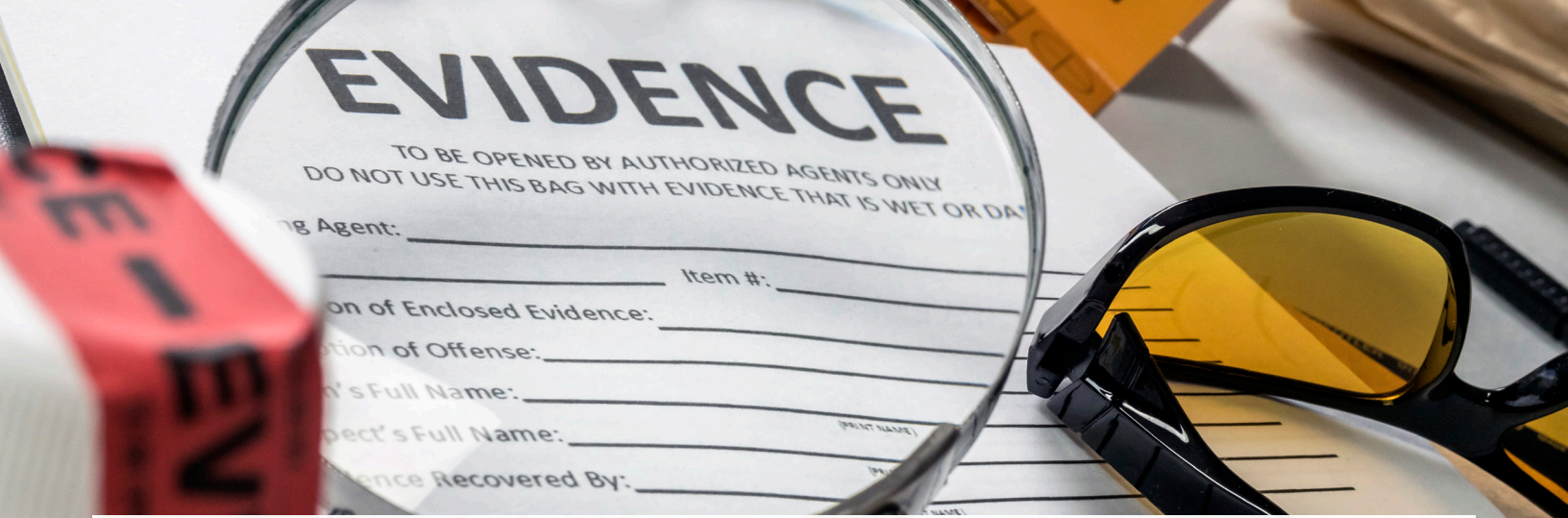
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Warming Up Cold Cases with Dr. Krystal Hans

Cover Page Footnote

To my writing mentor Dr. Krystal Hans and our project partner Mr. Ryan Backmann, Project: Cold Case.



WARMING UP COLD CASES WITH DR. KRYSTAL HANS

Vanessa Cooper

STUDENT AUTHOR BIO SKETCH

Vanessa Cooper is a graduate student at Purdue University pursuing a master's degree in entomology. She obtained her bachelor's degree from Purdue University in insect biology with a concentration in forensic entomology and a minor in forensic sciences. For her master's research, she is studying blow fly egg-laying behavior and student learning in forensic science. Vanessa is passionate about insects, forensic science, and teaching. In the future, she plans to become an instructor and obtain a doctorate degree in entomology.

FACULTY BIOGRAPHY



Figure 1. Dr. Krystal Hans

Dr. Krystal Hans is an assistant professor of forensic entomology in the Department of Entomology. Dr. Hans teaches courses on forensic science and forensic entomology, including the "Forensic Investigation" (ENTM 22810) course, where a major component of the course is a cold case project. The cold case project focuses on accessing information about an unresolved case and trains students to engage with empathy as advocates for victims while developing skills in research, digital and information literacy, submission of a Freedom of Information Act (FOIA) request, designing infographics, and public speaking. Students produce digital case files and infographics to display the information about the case they research, providing a summary presentation at the end of the semester. During the fall 2022 semester, the students focused on unresolved cases in Indiana and attended the Cold Case Symposium that was cohosted by Dr. Hans to learn from families and victim advocates about cases that need support and from organizations dedicated to helping families impacted by the tragic loss of a loved one. Dr. Hans has partnered with Project: Cold Case, a nonprofit

organization that was established to serve families who have lost loved ones to homicide after seeing a need for more support. The organization works closely with surviving family members and law enforcement to educate and assist while also memorializing their loved one. Project: Cold Case presented lectures to the students in the fall of 2022, offered guidance for cold case research, and will have a more active role in future versions of the cold case project. The infographics and materials designed by Purdue students will be on display at the 2023 Cold Case Symposium to raise awareness of the unresolved cases in Indiana, generate public interest, and offer support for local families.

In the world of forensic science, Dr. Krystal Hans (Figure 1) embraces an interdisciplinary approach to working on investigations. She works in the field of forensic entomology, which uses insects as evidence in criminal and civil investigations, and uses her expertise to assist in cases across the Midwest. Dr. Hans is passionate about helping others, whether it's students in her courses, mentoring graduate and undergraduate researchers, or assisting law enforcement on cases. She stated, "I want to use my expertise to help the families of the victim; they lost their loved one, and if there is any information that my forensic work can provide, I want the families to have that information." Dr. Hans believes that service-learning is a way to teach students about the impact they can have on forensic science and the families impacted by crime.

Dr. Hans attributes this passion for service-learning to her education, training, and experiences with law enforcement. She received her undergraduate degree at Hobart & William Smith Colleges and her master's degree in biology from Cleveland State University. In Cleveland, she started working with law enforcement on forensic entomology cases. This experience as a master's student, in which she was working directly with law enforcement and contributing information for investigations, prompted her passion for helping victims and their families, which she has carried with her throughout her career. She went on to complete her PhD at the University of Windsor, training with one of the few forensic entomologists in North America. Dr. Hans was the director of forensic biology at Delaware State University from 2016 to 2018 and took a position at Purdue University in the Department of Entomology in 2019. She is an assistant professor of forensic entomology in the Department of Entomology. Dr. Hans teaches courses on forensic science and forensic entomology, including the "Forensic Investigation (ENTM 22810)," in which a major component of the course is a cold case project. She has designed and instructed nine different courses in forensic science and forensic entomology and has taught more than 1,800 students in her time at Purdue. Dr. Hans has written numerous articles and book chapters about student learning (Hans & Parrotta 2019; Hans & Parrotta, 2021; Hans & Rosselet, 2022; Parrotta et al., 2021) and research in forensic entomology. In addition to her teaching and research, she actively engages in service to her field and is currently the president-elect of the North American Forensic Entomology Association and works with faculty and students across the country.

The passion for service and for incorporating service-learning into her courses is evident in Dr. Hans's

continued effort to give her students real-world experiences and understand the importance of collaboration and collective impact. She encourages her students to learn forensic techniques but also see beyond the classroom and understand how they can play a role in cold case investigations, and she has developed a network of organizations that support families of cold case victims, which is a primary component in her "Forensic Investigation" course.

Dr. Hans teaches the "Forensic Investigation" course, which includes crime scene techniques, observation, and collection of different kinds of physical evidence and incorporates new trends in forensic investigations. A major component of the course is the cold case project, during which students in the course (approximately 170 students each fall) work in small groups to gather information about an unresolved case. The project focuses on accessing information about an unresolved case and developing skills in research, digital and information literacy, submitting FOIA requests, designing infographics, and public speaking while advocating for victims of homicide. Students are introduced to the project at the beginning of the semester, and they spend their semester working as a group to find information about a cold case, which they will present to the class in the form of an infographic.

Dr. Hans chose to incorporate service-learning in her course to facilitate student learning and the course objective of appreciating the scope of forensic science and investigation. The service-learning project allows for students to understand how a cold case investigation works in conjunction with forensic science and physical evidence. Dr. Hans ensures that students make connections between the cold case project and the coursework by designing assignments that assist with completing the final infographic project and lecturing on topics that correspond to the project.

Students are prepared for working on the cold case project by attending Dr. Hans's lectures on cold case investigations and by hearing from several guest speakers who are actively working in this area. Students hear from experts in cold cases at the Cold Case Symposium and in guest lectures in the classroom, which include former students who have worked with Dr. Hans on cold cases, victims advocates, and nonprofit organizations that support families of the missing and murdered. The speakers have included victims advocate Sarah Turney; family members of lost loved ones (David Robinson II, Ethan A. Ristow, Kelsi German); David Cuillier, president of the National Freedom of Information Coalition;



Figure 2. Speakers and Organizers at the 2022 Cold Case Symposium, from Left to Right Kelsi German, Sarah Turney, Krystal Hans, Ethan A. Ristow, Lauren Weidner, Ashlee Fujawa, and David Robinson II

and Ryan Backmann, the founder of Project: Cold Case (Figure 2).

A challenge that students are presented with while working on this project is the lack of accessible information on some of the cold cases. This occurs when there is little known information about a case or when the public information is not online for public access. Students also are encouraged to reach out to the law enforcement agency that is in charge of the cold case, and many students visit the agency in person or communicate through phone and email. Students are often told that the case they are inquiring about is open and that no information can be provided.

One student reflected, “Communication with the police department was a challenge because the case was recently reopened, so information was not going to be released or communicated to me.” The persistent nature of law enforcement excluding civilians from accessing information is particularly frustrating in cold cases, where little progress has been made in these cases for long periods of time, sometimes 10–20 years. During the course, students are taught about FOIA and how to submit a request to retrieve public information as one approach to accessing information about a cold case.

The assignments associated with the cold case are implemented to guide students through the process of finding reliable sources of information, gaining access to public information, and effectively communicating information to others. Examples of assignments that assist with finding reliable information include a database search assignment and an evaluation of their top sources of information. Students complete a FOIA request, which is necessary for gaining access to information. In addition, students give a brief presentation of their theories about the case to a small group of students and complete an infographic that illustrates the physical evidence associated with the case, which mirrors the final infographic presentation that students complete as a group.

The students are also surveyed using pre- and post project assessments. The students are asked about their interest in cold case investigations, previous experience, and anticipated challenges before starting the cold case project. At the end of the semester, students reflect on their experience after completing the project. They are asked questions such as how and where they found the most useful information, how valuable they found the project, and what challenges they encountered. The majority of students indicated that they were able to apply prior skills to a new circumstance and are confident that they put their

technical skills to use during the cold case project. When asked how valuable the cold case project was to their undergraduate academic experience, one student said, “The cold case project was valuable to my undergraduate experience because it gave me a sense of purpose to research a case that was personal to me.”

COMMUNITY PARTNERS

Dr. Hans has partnered with Project: Cold Case, a nonprofit organization that was established to serve families who have lost loved ones to homicide. The founder and executive director of Project: Cold Case, Ryan Backmann, provides guest lectures to students in the Forensic Investigation course and is a co-organizer of the Cold Case Symposium. Ryan found his passion for helping others as a victims advocate after his father, Cliff Backmann, was killed during a robbery, which remains as one of Jacksonville’s unsolved murders (personal communication, February 23, 2023). While working as a victims advocate, he discovered that there was a void in services for families members of victims of unresolved cases, which inspired him to start Project: Cold Case.

Project: Cold Case is based out of Jacksonville, Florida, but assists families across the United States. Families and law enforcement have submitted over 1,000 cases to be included on the Project: Cold Case website (Project: Cold Case, 2023). The organization works to keep these cases in the public eye by publishing a weekly article showcasing a victim and connecting with media outlets to publish stories on the cases. Project: Cold Case also supports local families by hosting biweekly support groups for survivors (Figure 3).

Cases that have been ruled as a homicide or a missing person with foul play suspected by law enforcement at least one year after the incident date are eligible for submission to Project: Cold Case. For cases to be showcased on its website, they must be submitted by family members or law enforcement, as the organization’s specialized services are designed for helping grieving family members (Project: Cold Case, 2023). Oftentimes there is an initial misunderstanding about the role of Project: Cold Case among both law enforcement and family members. The organization does not further investigate cases (Ryan Backmann, personal communication, February 23, 2023) but does provide additional support to the families so that law enforcement can focus its efforts on solving the case. The staff at Project: Cold Case pride themselves on meeting the family wherever their needs are. In Ryan’s opinion, the lack of resources and support impedes the family’s grieving process.



Figure 3. The Project: Cold Case Team, from Left to Right Freda Washington-Perez, Ryan Backmann, Julianna James, and Sarah Mitchell



Figure 4. Ryan Backmann Speaking at the 2022 National Organization for Victim Assistance Annual Conference in Denver, Colorado

Many family members reach out to Project: Cold Case to spread awareness on their loved one’s case, vent about their experiences, or learn about counseling resources (Figure 4). Another service that the organization can provide is creating a digital footprint for older unresolved cases. There are many cases that only exist in an old stack of newspapers and have not been in the public eye for decades, so Project: Cold Case works with its media partners to allow these cases to gain new attention. In addition, some families have contacted the organization because their loved one has been unfairly stigmatized in the media. Project: Cold Case is able to create a new digital footprint about the victim’s life and the value the person had. The organization is also able

to guide family members in communicating with law enforcement by suggesting who they should reach out to and what specific questions they should be asking.

STUDENT AND COMMUNITY IMPACT

Dr. Hans measures student success on the cold case project through the final infographic assignment and peer evaluations. The students make an infographic for their case that includes background information, a timeline of events, evidence and people associated with the case, and potential theories (Figures 5 and 6). The students are assigned to make an infographic so that the case can be easily shared and are encouraged to post it on social media. This infographic is presented to the class at the end of the semester to further spread information on these cases. The inclusion of a service-learning element in the course allows for students to feel more connected to the advocacy component and embeds them in a real-world application of forensic science.

Students who take the class in later semesters should keep in mind that this is a semester-long project, so they should pace themselves. Due to the nature of cold cases, it is common for progress to come to a standstill, and this could be difficult to overcome close to the deadline. This is a group project in a course with a large number of students, so collaboration with group members is essential for completing the project. It is important to stay in communication with your group members and to resolve any issues early in the semester.

REFLECTION AND CONCLUSION

Service-learning projects in a course are a commitment for the students and the faculty members. The faculty member must be willing to modify assessments, provide guidance to the students and the community partners, and continually reflect on the experiences for everyone involved. Dr. Hans collects student feedback at multiple times during the semester to ensure the student perspective is accounted for in the service-learning component. She plans to modify her course for 2023 and will collaborate with Project: Cold Case to intentionally take feedback into account when establishing the parameters of future cold case investigations. The cold case project continues to evolve every year by implementing student feedback and collaborating with community partners to ensure that students are gaining valuable technical skills and compassion for others.

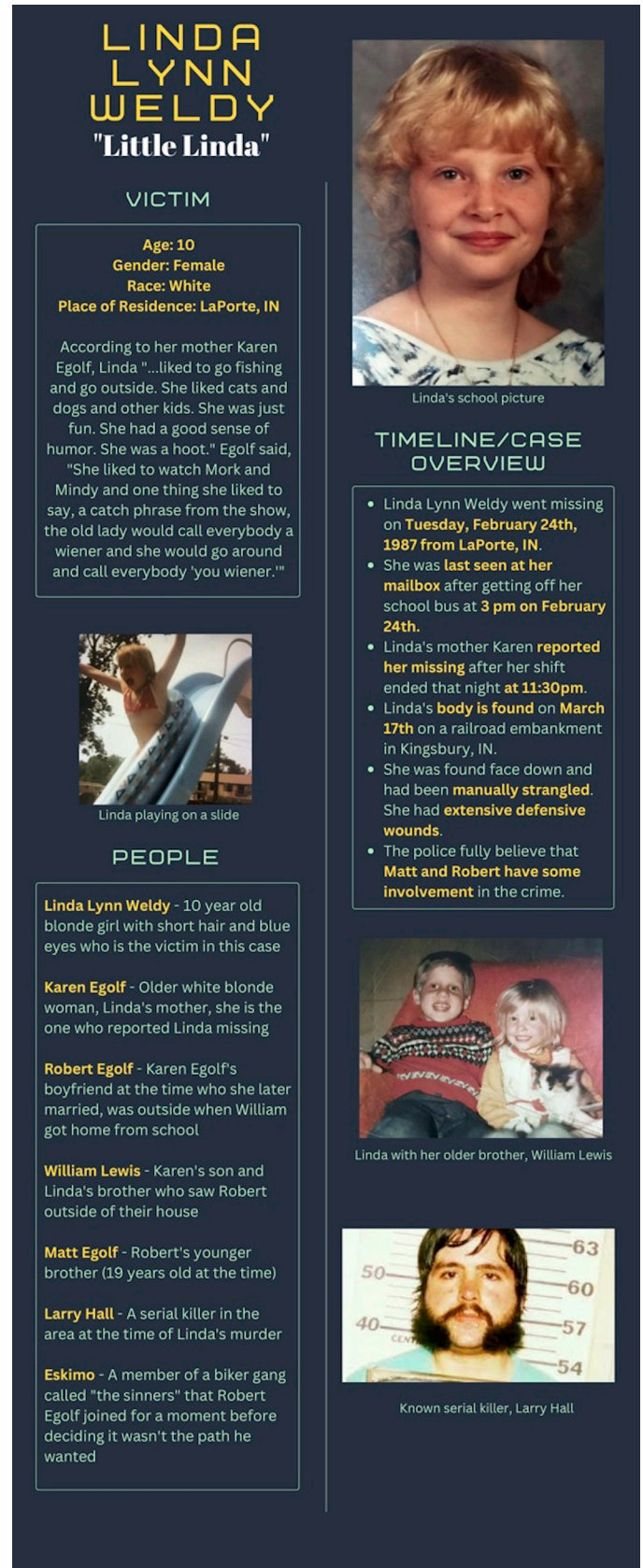
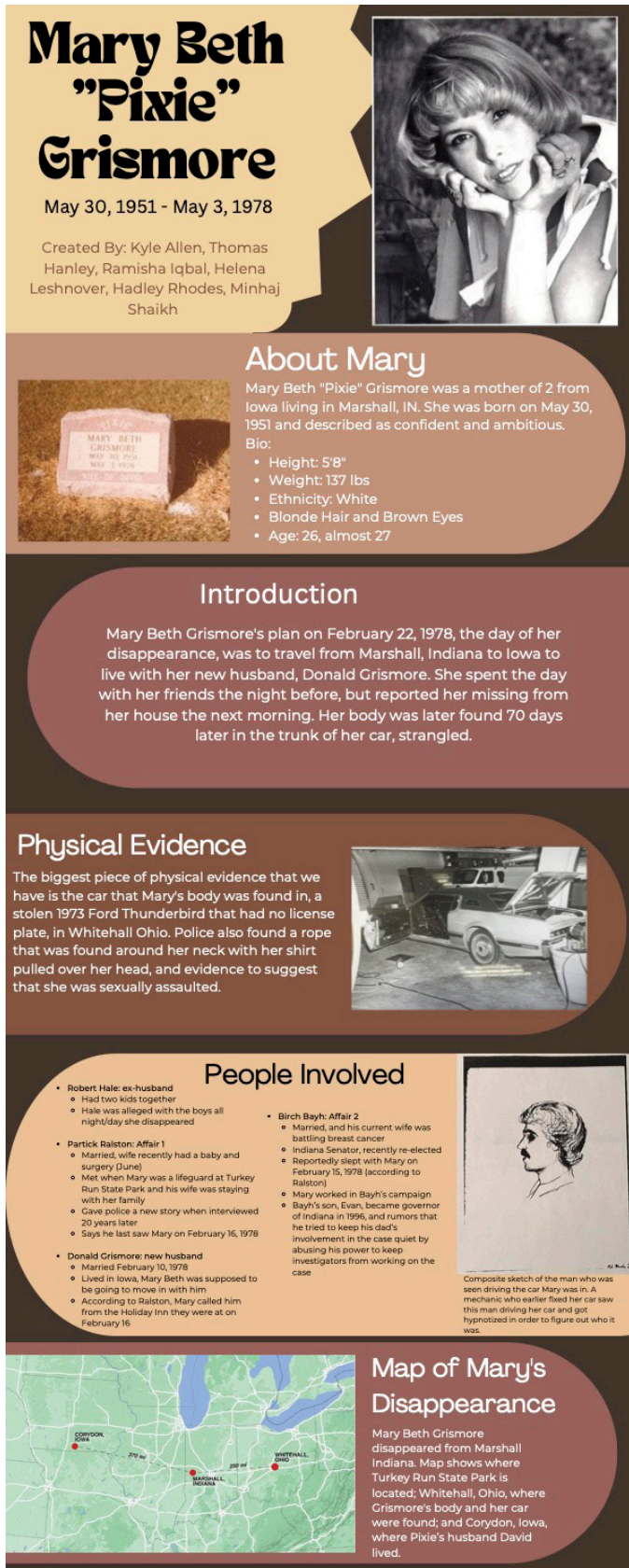


Figure 5. Infographic of Linda Lynn Weldy's Case Made by Students in the Fall of 2022



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Figure 6. Infographic of Mary Beth Grismore's Case Made by Students in the Fall of 2022