

Mini-zines

BEGINNING AT 9:00 A.M.

MARY IDEMA PEW LIBRARY EXHIBIT SPACE 02

The Tale of the Dueling Neurosurgeons

Presenter: Avery Kibbey

Mentor: Carrie Ann Sharitt

Avery Kibbey

As part of SCI 227, I decided to create a mini-zine after reading “The Tale of the Dueling Neurosurgeons” by Sam Kean. My mini-zine takes the neurosurgeons from the book and shares the main points of their experiments and the parts of the brain they specialized in. With the book being geared towards science, anatomy and brain trauma, I decided to create my mini-zine with an intended audience for a college level student/adult. This topic is important because we are able to further understand the impact that the brain has on the body as a whole. Readers will better understand the connections of neurotransmitters in the brain, the signals the brain sends through the body, and the discoveries made by scientists to better understand the lasting effects of brain trauma on the human body.

MARY IDEMA PEW LIBRARY EXHIBIT SPACE 03

How a Map Changed Medicine

Presenter: Leah Blood

Mentor: Carrie Ann Sharitt

Leah Blood

My mini zine, “How a Map Changed Medicine,” is inspired by the book, *Ghost Map* by Steven Johnson. The focus of my mini-zine is the story of the 1854 Cholera outbreak in London, highlighting the timeline and the people who played a key role in the investigation. The intended audience for my mini-zine includes college students and other adults who are curious about the history of epidemics, as well as the effects of overpopulation within a city. This topic is important because it illustrates how scientific investigation can lead to groundbreaking public health advancements, shaping modern epidemiology and urban planning.

MARY IDEMA PEW LIBRARY EXHIBIT SPACE 04

The Tale of the Dueling Neurosurgeons

Presenter: Allison Plank

Mentor: Carrie Ann Sharitt

Allison Plank

My mini-zine is titled “The Tale of Dueling Neurosurgeons” and is based on the book with the same title by Sam Kean. It is intended for other college students but could also be used in a middle school classroom. The focus of the zine is on the different neurosurgeons that are covered in each chapter of the book and the discoveries they made about different parts of the brain. Through study of brain injuries and different neurological disorders, scientists were able to make major medical discoveries. This is important because these discoveries help diagnose people and treat medical disorders. These discoveries will also help scientists in the future to better understand behaviors and how different parts of the brain work together to control these behaviors.

MARY IDEMA PEW LIBRARY EXHIBIT SPACE 05

Growing Together: Community Gardens in Grand Rapids

Presenter: Rebecca Lubbers
Mentor: Darien Ripple

This zine will present the results of a community garden analysis within the City of Grand Rapids, conducted through the John H. Logie Fellowship in collaboration with the City of Grand Rapids' Sustainability Department. The project will include a literature review to define the characteristics of community gardens. The intent of the research is to identify, compile, and map gardens within Grand Rapids. The project will be using GIS software to provide Grand Rapids' Urban Agriculture Committee a comprehensive overview of the gardens currently available to the public in Grand Rapids. The project will also assess the potential impact of community gardens on the surrounding neighborhoods. The findings will be summarized in a zine that highlights the types of community gardens, their perceived benefits and drawbacks, and their role in fostering local resilience, well-being, and food access.

MARY IDEMA PEW LIBRARY EXHIBIT SPACE 06

Beloved Beasts

Presenter: Emma Shimizu
Mentor: Carrie Ann Sharitt

My mini-zine was inspired by *Beloved Beasts* by Michelle Nijhuis, a book that explores the deep connections between humans, nature, and animals. The focus of my mini-zine is endangered species throughout history, and it highlights a number of important conservationists who have made a difference. My intended audience is younger students, particularly those in elementary school. This topic is important because children need to understand the value of nature and our environment, as well as the importance of working with nature rather than against it.

MARY IDEMA PEW LIBRARY EXHIBIT SPACE 07

The Impact of Phosphorus

Presenter: Garrett Bennema
Mentor: Carrie Ann Sharitt

Garrett Bennema

My zine focuses on the element phosphorus and the dangers as well as the beneficial aspects of this particular element on us and our environment. It was inspired by the book *The Devil's Element* by Dan Egan. My mini-zine includes information about the element itself, the history surrounding this substance and its use from antiquity all the way to agricultural innovations. I made this mini-zine for elementary students between 3rd through 5th grade. I want to give these students as much information as possible, but I want to be careful in how I present and detail the information in the zines, so as not to confuse or disengage students from the content. Like I said earlier, phosphorus is both a beneficial and incredibly dangerous element when in its pure form. It's important for students to understand how such elements were utilized and even abused throughout history and how this particular element still impacts communities today. It's also important for students to understand the beneficial usage and effects of this element within our bodies and our environment. This element has a particularly rich history and I think it's a great and important topic for students to learn about!

MARY IDEMA PEW LIBRARY EXHIBIT SPACE 08

Epidemic Enigma

Presenter: Lauren Uftring
Mentor: Carrie Ann Sharitt

Lauren Uftring

This mini-zine is titled "Epidemic Enigma." It is based on *The Ghost Map*, a nonfiction story about the cholera breakout in 1850s London. Readers will join the character, Dr. John Snow, in an exploration of

different transmission theories to see why this deadly disease traveled so rampantly. The main suspects of the time included physical contact, miasma and ingestion. The zine further explores what these transmission theories mean and how they were perceived at the time. The audience for this zine, in a school setting, includes middle to high school students as an introduction to disease transmission or bacteria. It will also be clear to the audience why proper communication and the testing of hypotheses is vital, as London was largely misinformed during this time. This is an important topic because understanding how infections spread can be used to inform treatments and prevention measures. In the case of cholera, London needed it to stop.

MARY IDEMA PEW LIBRARY EXHIBIT SPACE 10

Devils Hole Pupfish

Presenter: Vanessa Rook

Mentor: Carrie Ann Sharitt

Vanessa Rook

The title of my mini zine is "Devils Hole Pupfish." This zine helps readers learn a little bit more about the rarest fish in the world, the Devils Hole Pupfish. This mini zine was inspired by the book "Under A White Sky": author Elizabeth Kolbert describes her encounter with scientists who are trying to help this species of fish continue to survive and flourish. The focus of my zine is to bring attention to this incredible fish and describe what makes it special. I also described the ways in which scientists are helping this fish increase in population, and how we can help these pupfish. This zine shares a simple description, so this is intended for younger students, maybe 3rd–5th graders, but is a good way to begin conversation on endangered species and conservation. This topic is important to talk about because students need to learn about the causes and effects of extinction and how we can work to prevent it.

BEGINNING AT 9:30 A.M.

MARY IDEMA PEW LIBRARY EXHIBIT SPACE 02

Coral

Presenter: Madeline Salzman

Mentor: Carrie Ann Sharitt

Madeline Salzman

The book *Under A White Sky* by Elizabeth Kolbert inspired my mini-zine. In chapter 2, she talks about coral and how engineers are trying to save coral. This inspired me to make a mini-zine about coral and how the environment is impacting them and what we can do to save them. It starts with general information about coral and then talks about the challenges they are facing. I introduce solutions and engineers' ideas to help. The intended audience is elementary students: teaching them about how nature is impacted by humans. This is important because coral reefs are in danger from the impacts of ocean acidification and bleaching, and students need to be aware of this. By learning how we as humans are impacting nature students can also learn ways to save it.

MARY IDEMA PEW LIBRARY EXHIBIT SPACE 03

Phosphorus and the Effects it Has on Us

Presenter: Lauren Lipka

Mentor: Carrie Ann Sharitt

My mini-zine is titled "Phosphorus and the effects it has on us" and is inspired by the book *The Devil's Element* by Dan Egan. My mini-zine aims to explain what phosphorus is and the different uses it has in our lives. The book highlights many ways phosphorus has been used historically, including the positives and negatives of using it. My intended audience for this zine is upper-elementary school students. This topic is important to talk about because phosphorus is used for many things we need for our everyday

lives. Students should understand its uses and effects in our world as it is widely used but can also have negative effects if used improperly.

MARY IDEMA PEW LIBRARY EXHIBIT SPACE 04

Cane Toads Down Under

Presenter: Grace Fein

Mentor: Carrie Ann Sharitt

Grace Fein

My mini-zine is titled "Cane Toads Down Under" and it is inspired by the book *Under A White Sky* by Elizabeth Kolbert. Originally, the cane toad was introduced to Australia in hopes that they would eat the beetles that were destroying the sugar cane crops in the region. Not only did the Cane Toads not fix the original issue, they created a whole new one as they became an invasive species. In response to the new issue, scientists have been working on altering the DNA of the cane toads in an effort to minimize their impact on the ecosystem. The audience for my mini-zine would be elementary students, around 3rd-5th grade. This topic is important as it informs students of the effects we can have on environments, specifically when it comes to invasive species that are introduced with little consideration of the already established ecosystems. It is also important for students to discuss possible solutions that humans can use to help fix the problems that we have created.

MARY IDEMA PEW LIBRARY EXHIBIT SPACE 05

Beloved Beasts

Presenter: Katie O'Connell

Mentor: Carrie Ann Sharitt

This digital zine is based on the book *Beloved Beasts* and highlights various animals that have come close to extinction, as well as the key efforts made by scientists and conservationists to protect them. It is intended for anyone interested in wildlife conservation and the major movements that have shaped it over time. Understanding these issues is crucial, as many conservation challenges persist today. While extinction threats may never fully disappear, educating ourselves about past efforts can help us make informed decisions and contribute to a better future for endangered species.

BEGINNING AT 2:00 P.M.

MARY IDEMA PEW LIBRARY EXHIBIT SPACE 08

The Other Half of Alchemy: On the History of Magick in Science and the Role of Spirits in Alchemy

Presenter: Locke Afton

Mentor: Carolyn Shapiro-Shapin

I explore alchemy and early science through the lens of their magickal practices, particularly those involving spirits, focusing on 14th-17th century northern Europe. A brief historiography defines and explores the context of spirits' roles in a continuum of practices ranging from science, chymistry, and alchemy through sorcery, necromancy, and witchcraft. The most influential and widely-banned grimoires during this time period are then consulted as 'textbooks of alchemy' to discover precisely how spirits were worked with, what they did, and why they were important. These descriptions are then corroborated with the private manuscripts, works, and confessions of renowned alchemists and early-modern scientists to understand what resulted from such experiments through first-hand accounts. This historical research unveils spirits as a sacred, inseparable part of alchemy, which function as the thread that ties together magick with science. That unshakable bond between alchemist and spirit was so great that it has woven its way into the foundations of modern science, traces of which can still be found to this day.