

Questions and Answers – History of Medicine Program at Western U

Visit Website: <http://www.schulich.uwo.ca/historymedicine>

1. How do I choose a history of medicine topic?

What interests you? History of a disease? person? procedure? Start reading about it (in general terms) and then narrow your focus to a specific question that would constitute 'doable' project for a 10-minute presentation of both **CONTENT** (who, what, when, where) and **ANALYSIS** (how and why). Remember that your presentation is not a descriptive narrative but an analytical query (or why is this important?). This is about the delving into the historical aspects of an issue to arrive at a meaning or better understanding of medical knowledge, practice and/or behaviour.

An example: Chantelle was interested in the history of surgery, possibly wound management. After reading round the topic, she became interested in surgical 'super glue' as a biological adhesive. She completed research on the **CONTENT** (who, what, when, where) and then narrowed her **ANALYSIS** (how and why) to the uneven adoption of this practice (this was the 'so what' or 'why is this important' aspect - Chantelle wanted to explore the factors that shaped its adoption and use). For more on this project, see the excellent abstract below entitled: *"Serendipity, Super Glue and Surgery: Cyanoacrylates as Hemostatic Aids in the Vietnam War"* which was accepted for conference presentations.

2. How do I formulate my questions and find readings?

This is an independent research project but it is strongly recommended that you work with a member of the history of medicine office as a preceptor. This faculty member will recommend readings, help you formulate your questions and direction, narrow or widen your focus, help you write an abstract, and generally be a resource for you. You should reach both secondary sources (written by medical historians) and delved into primary sources (typically the medical literature or treatises written by the historical actors or possibly newspaper articles, oral history, or other -- depending on your project). Your preceptor can assist you with this.

3. Where can I present this research?

Most students aim to have their project selected for presentation at the History of Medicine Days in Calgary (annual conference in March). Or you may want to submit a manuscript to the UWOMJ for consideration. Your preceptor can assist you with this.

4. What are the History of Medicine days in Calgary?

It is a History of Medicine Conference which attracts medical students from across North America to present their work on the history of medicine. The conference is multi-day and held at the University of Calgary. Undergraduates and early graduate students from across Canada and the United States are invited to submit an abstract for an oral or a poster presentation on the history of medicine and health care. The presentations will be 10 to 12 minutes for oral or 2 to 3 minutes for a poster (with additional discussion time afterwards). The topics for presentation may cover a wide range and could include areas such as the Classics, the History of Public Health, Nursing, Veterinary Medicine, Human Biology and Neuroscience, and more. Prizes will be awarded in different categories and all active participants are invited to attend the Awards Banquet at the conference. For more information, see the website of the History of Medicine Days (HMD) conference at <https://www.ucalgary.ca/programs/history-medicine/hmd>

5. What is an abstract and how do I write one? (Below is a Sample Abstract)

To be accepted to present at Calgary or other conference venues, you will need to submit a short abstract (not more than 300 words). An abstract is a summary of your research project. You want the reader to be able to grasp the purpose and central ideas of your project. Thus it should include the nature of the research question(s) that motivates the project AND the evidence or source base (what documents or primary sources will you be examining to answer your research question?). Read abstracts that have been accepted for past presentations to see how this has been done successfully.

Why is the history of medicine important in my medical education?

- As a doctor or medical researcher you will need all that science has to offer but a deeper understanding of history will help you preserve your humanity/bed-side manner
 - Understand how the medical humanities illuminate the patient experience of illness
 - Use specific narratives written by a physician, patient, or writer to examine how the process of becoming a doctor transforms one morally, beyond the acquisition of technical skills
 - Explain in what sense biomedicine constitutes a distinct culture of its own
 - Provoke you to think about integrating medical humanities into your ongoing development as a physician
 - You will meet other medical students with similar interests
 - And above all, it's fun
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SAMPLE ABSTRACT:

Serendipity, Super Glue and Surgery: Cyanoacrylates as Hemostatic Aids in the Vietnam War

By: Chantelle Champagne Faculty of Medicine, University of Alberta

Preceptor: Dr. Sasha Mullally, PhD

In 1942, H.W. Coover was working to develop a clear plastic for WWII machine gun sights. The compound he developed, cyanoacrylate, proved to be a complete failure. After setting the formula aside for many years, Coover was inspired to rethink the use of the compound and began to explore its potential as a strong, quick drying glue. In 1951, what we now know as “superglue” was first marketed as “Eastman 910”. It was not long before Coover and his colleagues began exploring its potential as a biological adhesive.

In the early 1960s, Coover, in collaboration with Ethicon Co., applied for FDA approval of cyanoacrylate glues as tissue adhesives. The most dramatic and innovative medical application of cyanoacrylates was as a hemostatic agent during trauma surgery. This presentation will outline the aforementioned use of Coover’s cyanoacrylates, discussing the promising outcomes of superglue in military surgery of the 1960s, and explain why it did not achieve widespread usage outside of the Vietnam conflict.

Using scientific journal articles, medical reviews and case studies of cyanoacrylate use in military casualties, this presentation will focus on the most extensive medico-surgical application of superglue: its use by American forces in Vietnam. Armed with Freon propelled n-butyl cyanoacrylate spray developed by the military, specially trained surgical teams achieved instant hemostasis in about thirty, otherwise fatal, cases of hemorrhage. Although not all patients survived, experts did not attribute the deaths to complications of cyanoacrylate use. Despite the dramatic results observed in Vietnam, further studies required for FDA approval of this “surgical superglue” were not economically feasible for Coover and Ethicon Co. and the project was reluctantly abandoned. It was not until 1998 that the FDA approved cyanoacrylates for medical use; Coover’s dreams of saving countless lives with his tissue adhesive are finally being realized in modern surgery.