

HONORS ECCLES FELLOW PROGRAM APPLICATION

Course proposal for HNRS 3900: Diagnosing Disease in the Past and Present

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1. The proposed class including a detailed course syllabus

“Diagnosing Disease in the Past and Present” will take a medical humanities interdisciplinary approach to the study of nine specific diseases. Drawing on the expertise of a historian and a pathologist, we have a unique opportunity to attract students from across the disciplines. This potential course has been discussed with many interested students, and we anticipate this course will “sell out” quickly. Diagnosing Disease in the Past and Present, will likely attract a new group of students to the Honors program. We will present historical and social science methodologies with modern medical diagnostic approaches in order to provide the students with sufficient training to apply these skills to case studies both drawn from history as well as diseases that continue to plague the modern era. The World Health Organization has the goal to improve equity in health, reduce health risks, promote healthy lifestyles and settings, and respond to the underlying determinants of health. We will discuss perspectives on each of these factors in global health, and upon conclusion of this course, students will have demonstrated their ability to converse on these topics. By introducing students to a broad variety of approaches and ideas, we expect our students to apply these skills to the task.

2. How the class related to your research, including copies of or references to any of your publications in this area

This course relates to both of our research agendas. It builds directly on our past works and will contribute to our future projects.

Pathology and medical education isn't just a hobby for Scott, they are some of his passions. Scott has been actively involved in medical student education since 2013 with Scholar-Rx, the foremost leader in test preparation for Medical Licensing Exams around the world. He has authored nine chapters in First Aid for the USMLE Step 1, which sells over 100,000 copies per year worldwide, and has been the senior editor of four other textbooks helping students prepare for the US Medical Licensing Exam Step 1. Scott has also studied numerous pedagogical approaches in medical education with other professionals around the nation by participating in discussions with members of the International Association for Medical Science Educators and online in Scholar-Rx's journal club, the New Educator Scholarship Training series. As the amount of medical information continues to balloon out of control, Scott's goal is to make the acquisition of medical knowledge, manageable. Most recently, Scott has been studying the effects of his home-grown objective-based learning modules, called Brief Intentional Teachings

to Encourage Success (BITES). Last year, he demonstrated, in an unpublished study, that his BITES, when given in combination with lecture, have a positive effect on knowledge retention and student acceptance of his teaching methods. These results were very promising. This year, Scott is attempting to evaluate whether or not BITES increase student engagement.

Matt has been researching and writing on the understanding of disease in eighteenth-century Russia. The eighteenth century was a pivotal era when medical knowledge transitioned from the classical theories of Hippocrates and Galen, still in use in Europe during this era, to the advent of “germ theory” that posited a new idea of disease and its effect on the body. The majority of Russia’s physicians during that century were trained primarily in Western Europe, and several of these figures used the opportunity of working in Russia to study diseases in foreign contexts. Their work contributed toward some major breakthroughs in the history of medicine, among them James Lind’s famous *Treatise of Scurvy*, which became the basis for medical treatment of the nutritional disease implemented throughout European navies. He has recently published two articles from this research (in *The Journal of Global History* and in the edited volume *Russian History through the Senses*), as well as presented his research in progress that has discussed venereal diseases, smallpox, scurvy and rickets and national and international conferences, including the American Association for the History of Medicine and the British equivalent organization, the *Social History of Medicine* conference.

References:

Matthew P. Romaniello, “True Rhubarb? Trading Eurasian Botanical and Medical Knowledge in the Eighteenth Century,” *The Journal of Global History* 11:1 (2016): 3-23

Romaniello, “Humoral Bodies in Cold Climates,” in *Russian History through the Senses: From 1700 to the Present*, eds. Matthew P. Romaniello and Tricia Starks (London: Bloomsbury Academic, 2016), 23-43

Romaniello, “‘For the good of mankind in General’: Inoculation and the Practice of Medicine in Eighteenth-Century Russia,” paper presented at the *American Association for the History of Medicine*, Los Angeles (2018)

Romaniello, “Disseminating Knowledge of Venereal Disease: Body Politics in Eighteenth-Century Russia,” paper presented at the Centre for European, Russian, and Eurasian Studies, University of Toronto (2018)

Romaniello, “Curing Rickets with Manna Grass? The History of a Forgotten Russian Commodity,” paper presented at the *Association for Slavic, Eurasian, and East European Studies*, Philadelphia, PA (2015)

Romaniello, “‘I took a vomit’: Experiencing Humoral Imbalance in Eighteenth-Century Russia,” paper presented at the Society for the Social History of Medicine, Oxford, United Kingdom (2014)

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Ramos, J. E., Moore, M. S., et al. (2012). The soy isoflavone genistein inhibits the reduction in Achilles tendon collagen content induced by ovariectomy in rats. *Scandinavian Journal of Medicine & Science in Sports*, 22(5), 108-14.

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Moore, M. S. (2016). Musculoskeletal, Skin, and Connective Tissue. In T. Le, V. Bhushan, M. Sochat, et al. (Eds.), *First Aid for the USMLE Step 1 2017*. New York, NY: McGraw-Hill.

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Moore, M. S., et al. (2014). Respiratory. In T. Le, V. Bhushan, M. Sochat, et al. (Eds.), *First Aid for the USMLE Step 1 2015*. (pp. 599-622). New York, NY: McGraw-Hill.

Moore, M. S., et al. (2013). Renal. In T. Le, V. Bhushan, M. Sochat, et al. (Eds.), *First Aid for the USMLE Step 1 2014*. (pp. 521-550). New York, NY: McGraw-Hill.

Le, T., Moore, M. S., Chavda, Y. (Eds.). (2017). *Rx-OMM*. Louisville, KY: USMLE-Rx.com.

Le, T., Moore, M. S., et al. (Eds.). (2016). *First Aid for the Basic Sciences: Organ Systems (3rd ed.)*. New York, NY: McGraw-Hill Medical.

Le, T., Moore, M. S., et al. (Eds.). (2016). *First Aid for the Basic Sciences: General Principles (3rd ed.)*. New York, NY: McGraw-Hill Medical.

Le, T., Moore, M. S., et al. (Eds.). (2017). *Rx Basic Sciences; Cardiology Curriculum*. Louisville, KY: USMLE-Rx.com.

3. How the course contributes to the Honors Program and the Weber State University community

The goal of the course is to train students in a wide variety of skills and methods so that they will learn to approach contemporary problems from a broad view. Whether the students are in the humanities, social sciences, or the medical sciences, they can apply these ideas to the study of some of the most fundamental issues facing society today. After practicing these skills on case studies drawn from past and present disease outbreaks, the final project for the class will be to conduct research on a contemporary disease, and then present their findings on this disease in the public forum. We anticipate having a public event at the end of the semester where the students present their research to the campus community. Furthermore, they will have the experience to propose solutions for modern challenges facing the local community.

By exposing students in health sciences to techniques and strategies drawn from historical research and social science methodologies, and students from the humanities and social sciences to modern diagnostic techniques and research, we will produce a group of well-rounded students who ultimately will have new insights to any field or endeavor. This rigorous course is designed to nurture excellence in our students, and created that students from any educational background can participate. We will have students express themselves in a clear and compelling manner in their first paper, as they compare and contrast humoral medicine with modern medical practices. The second paper will allow them to clearly and concisely analyze historical versus modern approaches to the study of either Malaria, Syphilis, HIV, nutritional diseases, or the Plague. The summative project will be a paper on the analysis of contemporary disease, with an oral, public presentation to the Weber State community which encourages far-reaching conversations about significant issues relevant to contemporary society. These papers will encourage critical thinking, in an open-minded manner. As historical medicine doesn't always make sense through the eyes of a modern American, one must figuratively leave their preconceptions at the door, and step into the mind of an individual from the past. Exploring the problems of the past can lead our students to avoid previously-encountered issues, engage in more diversity of thought, and approach future problems in a more open-minded manner.

This course aligns very well with the mission statement of the Honors Program and is directed at achieving all of the learning outcomes.

4. How the Honors Eccles Fellowship can contribute to your research

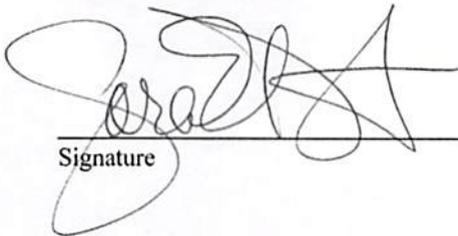
Many teachers rise to the challenge as they find the optimal way to convey their knowledge to the classroom. Last year, Scott focused his research on student acceptance of and the retention of knowledge after completing the BITES. This year, Scott is focusing his research on student engagement with his BITES, and he is leading three other disciplines within Medical Laboratory Sciences as they participate in the research as well. If awarded this fellowship, it will allow Scott to focus on his goal of creating optimal learning modules that resonate with virtually anyone; whether they be an honors student, premedical student, medical student, or resident physician. An experiment with these BITES on lecture-naïve honors students after studying the pertinent

disease states in this course, would be quite insightful and likely lead to better outcomes; better BITES, better student knowledge retention, and better passing rates for Weber State students on the National Registry Examination for Medical Laboratory Scientists.

Matt is currently writing a monograph on history of classifying and treating epidemic diseases in eighteenth-century Russia. This study is grounded in the work of Enlightenment-era doctors, ethnographers, and scientists and their role in idealizing physical distinctions among the people of the empire. European and Asian scholars traveled through Russia, describing the people, landscape, and customs of the empire, but the differences they catalogued were inscribed on the bodies of Russian subjects. Studying their views on the most problematic diseases of the eighteenth-century (scurvy, smallpox, venereal disease, and alcoholism) connects their observations on the physical bodies and cultural characteristics of imperial subjects to the development of public health strategies to stimulate population growth. With its focus on the eighteenth century as a critical period in the formation of Russian imperial strategies, both for governance and health, this project will make a significant contribution to the most understudied era of Russian history, as well as engage the broader, global debates on the changing nature of disease and medical science.

I, Matthew Nicholaou, support this application for an Honors Eccles Fellowship. I agree to reimbursement from the Honors Program for the Fellowship, and will not assign overload classes to this faculty member when s/he takes the related release time.

I, Sara Dant, support this application for an Honors Eccles Fellowship. I agree to reimbursement from the Honors Program for the Fellowship, and will not assign overload classes to this faculty member when s/he takes the related release time.



Signature

See Addendum

Signature

ADDENDUM: HONORS ECCLES FELLOW PRORAM APPLICATION

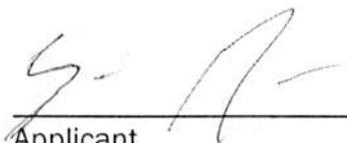
Course proposal for HNRS 3900: Diagnosing Disease in the Past and Present

Purpose: This addendum is intended to modify the agreement between the Honors Program and the Department of Medical Laboratory Sciences (MLS) contingent on the successful application of Dr. Scott Moore to the Honors Eccles Fellowship. The specific modification is to the expected release time that is given to successful Eccles Fellows.

Justification: The Faculty load in MLS is heavy and very discipline specific. It is difficult for the MLS Department to support the six-hours of release time that is typically awarded to the Eccles Fellowship for teaching and scholarship. However, the Department wishes to encourage collaboration between Faculty members and the participation of our Faculty in the Honors program. After discussion between the MLS Department and Honors Program, the below modifications to the release time have been agreed upon.

Modifications:

- Dr. Moore will have one lab section in MLS 2211 in the Fall Semester of 2019 covered by a laboratory manager. This lab section is held twice-a-week for two- and one-half hours. This will count as the approximate three hours of release required to teach the course.
- The three hours of release related to scholarship will be spread-out across the Fall 2019 and Spring 2019 semesters in place of the Department release currently awarded for being the College pre-medical student advisor.
- If this class is taught in the Honors Program during future semesters, beyond Fall 2019, and coverage for the laboratory section of MLS 2211 is not obtained, Dr. Moore will not be permitted to teach this course.
- Dr. Moore will continue to teach the online version of MLS 4409 during these semesters mention above as one credit hour of overload.



Applicant



Dept. Chair

Honors Program Director