

HISTORY OF SCIENCE AND MEDICINE

Humanities Quadrangle, 203.432.1365

<http://hshm.yale.edu>

M.A., M.Phil., Ph.D.

Chair

Bill Rankin

Director of Graduate Studies

Joanna Radin

Faculty Sakena Abedin, Paola Bertucci, Deborah Coen, Ivano Dal Prete, Megann Licskai, Ayah Nuriddin, Nana Quarshie, Joanna Radin, Marco Ramos, William Rankin, Carolyn Roberts, Naomi Rogers, John Harley Warner

Affiliated Faculty Rene Almeling (*Sociology*), Alexi Baker (*Collections Manager, HSI*), Melissa Grafe (*Librarian for Medical History*), Greta LaFleur (*American Studies*), Alka Menon (*Sociology*), Lisa Messeri (*Anthropology*), John Durham Peters (*English; Film and Media Studies*), Jason Schwartz (*Public Health*), Kalindi Vora (*Women's, Gender, and Sexuality Studies*)

The Graduate Program in the History of Science and Medicine is a semi-autonomous graduate track within the Department of History. The program's students are awarded degrees in History, with a concentration in the History of Science and Medicine.

FIELDS OF STUDY

All subjects and periods in the history of science and history of medicine, especially the modern era. Special fields represented include American and European science and medicine; disease, therapeutics, psychiatry, drug abuse, and public health; science and national security; science and law, science and religion, life sciences, human genetics, eugenics, biotechnology, gender, race, and science/medicine; bioethics and medical research; environmental sciences; human and social sciences; physical and earth sciences.

SPECIAL REQUIREMENTS FOR THE PH.D. DEGREE

Courses

Students will ordinarily take fourteen courses by the end of the third year. In their first two years, all students will normally take the three core Problems seminars: Problems in the History of Medicine and Public Health (HSHM 701 or HSHM 703), Problems in the History of Science (HSHM 702), and Problems in Science Studies (HSHM 710). These courses are committed to exploring histories of medicine and science alongside the cultural, political, and social forces that shape them. Issues of race, gender, sexuality, disability, class, and religion are integrated into discussions of medical and scientific knowledge production and praxis in Western and non-Western contexts. In addition, students are expected to take the HSHM Program seminar (HSHM 790, a half-credit course that may be repeated for credit) during their third through sixth

semesters. These courses meet every other week and teach skills related to research and professional development relevant to careers in and beyond academia.

Students are also required to take four additional graduate seminars with an HSHM course number. The remaining seven courses can be taken in HSHM, history, or any other field of demonstrated relevance to the student's scholarly objectives. Of the fourteen total courses, at least three must be seminars that result in an original research paper; at least two of these papers must be written in HSHM seminars. Students may ordinarily use up to two independent reading, independent research, or pedagogical seminars toward their course requirements. The use of additional independent credits requires approval.

Graduate school grading at Yale follows a qualitative rubric of Honors, High Pass, or Pass. During the first two years of study, students must achieve Honors in at least two courses in the first year and Honors in at least four courses by the end of the second year, with a High Pass average overall. At the end of each term, the director of graduate studies (DGS) will ask faculty members whether they have serious concerns about the academic progress of any first- or second-year students in the Ph.D. program. Faculty members who have such concerns will provide written feedback to the DGS at the DGS's request. The DGS will use discretion in ensuring that feedback is provided in a clear and effective manner to any students about whom there are concerns.

Students who enter having previously completed graduate work may obtain up to three course credits toward the completion of the total course requirement, the number being contingent on the extent and nature of the previous work and its fit with intended course of study at Yale.

Languages

All students must show proficiency in two languages in addition to English relevant to the student's research interests and approved by the DGS. Over the years, our graduate students have demonstrated proficiency in a wide range of languages, including American Sign Language, Bulgarian, French, German, Hebrew, Hindi, Italian, Japanese, Korean, Latin, Mandarin Chinese, Norwegian, Russian, Spanish, and Swedish. Students may fulfill the requirement in a variety of ways, including demonstrated command of a native language other than English, graduation from an approved foreign university where teaching is conducted in a language other than English, passing an approved language course for credit, or passing a language test administered by the faculty or by one of Yale's language departments. Language tests are administered by their respective departments (such as German, Italian, French, East Asian Languages and Literatures). Students should consult the DGS for additional details and options for uncommon languages.

Yale offers classes in a variety of languages, from introductory to advanced levels, as well as special summer courses for targeted reading proficiency. There are also opportunities to study languages outside of Yale's curriculum, including funding for summer language study, and Directed Independent Language Study (DILS) for individuals who wish to study a language not offered by Yale. For more information on these programs and foreign language tutoring at Yale, please visit the Center for Language Study's website at <http://cls.yale.edu>.

Students may petition to substitute a specific skill for one of their languages. Proposals require discussion of how the skill will be used in the student's research and a plan for positive demonstration of proficiency.

Second-Year Review

At the end of the academic year, the HSHM faculty will hold a special meeting to review each first- and second-year student in the program. The purpose of the meeting is to assess students' academic progress. In order for second-year students to proceed to the third year, they must demonstrate through written work, classroom performance, and participation in departmental activities that they have the ability to: (a) speak and write clearly; (b) conduct independent research at a high level; and (c) develop coherent scholarly arguments. A faculty vote will be taken at the conclusion of the review meeting to decide whether each second-year student may continue in the program. If a majority of faculty present and voting determine that a student may not continue, the student will be informed in writing and withdrawn from the program. The review meeting must be a full faculty meeting, but faculty members with no knowledge of the students under review may abstain from the vote, and their abstentions will not count in the total. Those members of the faculty who have worked with or know the students being evaluated are required to attend. In the event that any necessary faculty members absolutely cannot be present, they may send their views in writing to the DGS, who will read them at the meeting.

Qualifying Examination

Prior to beginning work on the dissertation, all students are expected to develop a broad general knowledge of the discipline. This knowledge will be acquired through a combination of course work, regular participation in HSHM colloquia and workshops, and dedicated preparation for the qualifying oral examination.

The qualifying examination has two main goals. First, it is a preparatory step toward the dissertation. Students will master the analytical vocabulary of the discipline and engage critically with key historiographic and theoretical questions. This will prepare them to select a research topic of scholarly significance and to articulate its import effectively. Second, the qualifying examination will prepare students for teaching. Students will learn to communicate a set of historical themes and narratives confidently and fluently.

Students will normally spend the summer following their second year preparing for the oral qualifying examination, which will be taken in the third year, preferably during the first half.

The qualifying examination will normally consist of four fields, each of which will be examined by a different faculty member: two fields in the history of science and/or history of medicine; one field in an area of history outside of medicine and/or science; and one field of special interest, the content and boundaries of which will be established in consultation with the student's adviser.

Possibilities for the field of special interest include a second field in history outside of history of science or medicine, a field with a scientific or medical focus (such as bioethics, health policy, public health, medical anthropology, or medical sociology), or a field at the intersection of science, medicine, and other subjects (such as law, national

security, religion, culture, biotechnology, gender, race, literature, the environment, and so on).

The examination itself will be an oral exam, with each field examined for thirty minutes. Ahead of the exam students will also submit, for each field, a written syllabus for an undergraduate course. With approval, students may submit other written materials instead of a syllabus; examples could include a teaching statement, the text of a fifty-minute undergraduate lecture, a review essay, or an exhibit proposal. In rare cases students may also propose alternatives to the oral component, given sufficiently compelling intellectual or career factors.

In preparation for the qualifying examination, the program's faculty work closely with students to facilitate the successful passage of the exam. A student who does fail the qualifying examination will be permitted to retake it. A student who fails a second time will be asked to withdraw from the program.

Advising

During their first term in the program, all students will be advised by the DGS. During the second term and thereafter, each student will be advised by a faculty member of the student's choosing. The adviser will provide guidance in selecting courses and preparing for the qualifying examination. The adviser may also offer help with the development of ideas for the dissertation, but students are free to choose someone else as the dissertation adviser when the time comes to do so. Students are encouraged to discuss their interests and program of study with other members of the faculty.

Dissertation Prospectus

Students are encouraged to begin thinking about their dissertation topics during the second year. This is an opportune time, since they will be expected to submit a dissertation prospectus as soon as possible following the qualifying examination and to defend the prospectus orally before being admitted to full candidacy for the doctoral degree. The prospectus colloquium is typically held in the second term of the third year, with advancement to candidacy before the start of the fourth year.

For more information, please see the program's Guide to Prospectus and Prospectus Colloquium at https://hshm.yale.edu/sites/default/files/files/prospectus_guide.pdf.

Committee Constitution Requirement

Each Ph.D. student must have a dissertation committee and a dissertation adviser, satisfactory to the student's department and in accordance with graduate school requirements, in order to register for the fourth year of study. Students without an approved committee and dissertation adviser will normally be withdrawn from their program.

Teaching

Teaching is an important part of the professional preparation of graduate students in History of Science and Medicine. Students are encouraged to participate in programs to develop their teaching skills, including the Certificate for College Teaching Preparation,

which is a comprehensive training program designed to enhance proficiency in classroom instruction.

Typically, during the third and fourth years of study, students will serve as teaching fellows, which usually means that they will lead small-group discussion sections for undergraduate courses and grade their students' exams and papers. On occasion, however, students may work as teaching fellows in the second term of the second year, particularly if they have received course credit for previous graduate studies, or if they choose to defer the completion of their required course work for the first term of the third year. Students usually work as teaching fellows for courses in the History of Science and Medicine, but they may also have the opportunity to be teaching fellows in History or other departments.

At least two terms of teaching are required for doctoral students to graduate from the Program in the History of Science and Medicine; four terms are required for students on Yale-supported fellowships, although students may elect to substitute one or two of these terms with research assistantships at the Yale Center for British Art, the Yale University Art Gallery, or other sites across campus. For more information, please contact the Office of Financial Aid.

Chapter Conference and Dissertation Completion

In the fourth or fifth year, and preferably no later than the fall term of the fifth year, students are required to submit one chapter of the dissertation (not necessarily the first chapter) to the dissertation committee. The committee will then meet as a group with the student to discuss the chapter and the student's progress on the dissertation more generally. This conference is meant to be an extension of the conversation begun in the prospectus defense, with the aim of providing feedback on the student's research, argument, and style at this early stage of the dissertation writing process. No less than one month before students plan to submit their dissertations, a relatively polished full draft of the dissertation should be discussed with the student by the dissertation committee in a dissertation defense of one to two hours. This will give the students additional advice and counsel on completing the dissertation or on turning it into a book, as appropriate. Students are required to submit the draft to their committee in sufficient time for the committee to be able to read it. This defense is designed to give students advice on the overall arguments and the final shape of the dissertation or book and to leave time for adjustments coming out of the discussion.

M.D.-PH.D. AND J.D./PH.D. JOINT-DEGREE PROGRAMS

Students may pursue a doctorate in History of Science and Medicine jointly with a degree in Medicine or Law. Standard graduate financial support is provided for the doctoral phase of work toward such a joint degree. Candidates for the joint degree in Law must apply for admission to both the Law School and the graduate school. Information about the joint-degree program with Medicine can be obtained from the website of the Yale School of Medicine (<http://medicine.yale.edu/mdphd>) and from the website of the Section of the History of Medicine (<http://medicine.yale.edu/histmed>).

MASTER'S DEGREES

M.Phil. and M.A. (en route to the Ph.D.) See Degree Requirements under Policies and Regulations.

Terminal Master's Degree Program For the terminal master's degree students must pass seven term courses, four of which must be in HSHM. Course work will normally include at least two Problems graduate seminars and two additional graduate seminars in HSHM. The remaining courses are to be chosen in consultation with the DGS or a faculty adviser. Honors grades are required in two courses, with a High Pass average overall. Financial aid is not available for this M.A. program.

More information is available on the program's website, <http://hshm.yale.edu>.

COURSES

HSHM 525a or b / HIST 525a or b, Field Studies Staff

This course does not count toward the coursework requirements for the Ph.D. or M.A.
½ Course cr

HSHM 691a and HSHM 692b / ANTH 963a and ANTH 964b / HIST 963a and HIST 964b / HSAR 841a and HSAR 842b, Topics in the Environmental Humanities Staff

This is the required workshop for the Graduate Certificate in Environmental Humanities. The workshop meets six times per term to explore concepts, methods, and pedagogy in the environmental humanities, and to share student and faculty research. Each student pursuing the Graduate Certificate in Environmental Humanities must complete both a fall term and a spring term of the workshop, but the two terms of student participation need not be consecutive. The fall term each year emphasizes key concepts and major intellectual currents. The spring term each year emphasizes pedagogy, methods, and public practice. Specific topics vary each year. Students who have previously enrolled in the course may audit the course in a subsequent year. This course does not count toward the coursework requirement in history. Open only to students pursuing the Graduate Certificate in Environmental Humanities. ½ Course cr per term

HSHM 702b / HIST 931b, Problems in the History of Science Deborah Coen
Surveys current methodologies through key theoretical and critical works. Students encounter major twentieth-century methodological moments that have left lasting imprints on the field: positivism and anti-positivism, the sociology of knowledge, actor-network theory, and historical epistemology, as well as newer approaches focusing on space, infrastructure, translation, and exchange. We also consider central conceptual problems for the field, such as the demarcation of science from pseudoscience; the definition of modernity and the narrative of the Scientific Revolution; vernacular science, the colonial archive, and non-textual sources.

HSHM 703a / AMST 877a / HIST 926a, Problems in the History of Medicine and Public Health John Warner

An examination of the variety of approaches to the social, cultural, and intellectual history of medicine, focusing on the United States. Reading and discussion of the recent scholarly literature on medical cultures, public health, and illness experiences from the early national period through the present. Topics include the role of gender, class, ethnicity, race, religion, and region in the experience of health care and sickness

and in the construction of medical knowledge; the interplay between vernacular and professional understandings of the body; the role of the marketplace in shaping professional identities and patient expectations; health activism and social justice; citizenship, nationalism, and imperialism; and the visual cultures of medicine.

HSHM 744a / AMST 839a / HIST 743a, Readings in Environmental History Sunil Amrith

Readings and discussion of key works in environmental history. The course explores major forces shaping human-environment relationships, such as markets, politics, and ecological dynamics, and compares different approaches to writing about social and environmental change.

HSHM 755b / ANTH 615b, Anthropological Perspectives on Science and Technology Lisa Messeri

The course focuses on ethnographic work on scientific and technical topics, ranging from laboratory studies to everyday technologies. Selected texts include canonical books as well as newer work from early scholars and the most recent work of established scholars. Divided into four units, this seminar explores the theme of “boundaries,” a perennial topic in anthropology of science that deals with the possibility and limits of demarcation. Each week, different kinds of boundaries are examined, and students learn to see their social constructedness as well as the power they carry. We begin by exploring where science is and isn’t, followed by the boundary between ourselves and technology, which is a specific example of the third boundary we examine: the one artificially drawn between nature and culture. We end with readings on geopolitics and the technologies of delineating nation from nation as well as thinking about postnational scientific states. Class discussion guides each session. One or two students each week are responsible for precirculating a book review on the week’s reading, and a third student begins class by reacting to both the texts and the review. The final assignment is a research paper or a review essay.

HSHM 757b / AMST 520b / ER&M 520b / WGSS 520b, Applied Research in Feminist Science and Technology Studies Kalindi Vora

In this seminar, participants conduct applied research on projects with the primary investigator/instructor. Structured as a lab, we learn research methods, design research activities including building bibliographies for scholarly review, and collecting data through surveys and interviews. Topics vary but are linked to active research by instructor in feminist science and technology studies. Permission of instructor is required. Undergraduates may enroll by permission of instructor.

HSHM 758a / CLSS 811a / HIST 523a, Graeco-Roman Medicine Jessica Lamont and Malina Buturovic

This course offers a graduate-level introduction to the history and study of ancient Greek and Graeco-Roman medicine, beginning with the development of “Hippocratic” medical texts in Classical Greece; these writings are set in dialogue with earlier Babylonian and Egyptian medical traditions. In addition to Hellenistic Alexandria, where anatomical research on the human body flourished, the seminar examines the works of the doctor and philosopher Galen of Pergamon. We conclude in Late Antique Alexandria, where traditions of Graeco-Roman medicine, repackaged as “Galenism,” begin a multi-century, cross-cultural journey into the medieval world. Throughout the course we consider: medical theories of human difference, regimen, gynecology and reproductive labor, pulse science, temple medicine and healing cults,

anatomy and dissection, zoology, theories of contagion and epidemic, and natural philosophy. Classics students enrolled in the course are asked to read some texts in ancient Greek. However, knowledge of ancient Greek is *not* required for enrollment, and we welcome and encourage students with interests in the history of medicine and science beyond the Graeco-Roman world.

HSHM 761b / AFAM 752b / AMST 937b / HIST 937b, Researching and Writing Medicine, Health, and Empire Carolyn Roberts

This graduate research course is limited to a small number of graduate students who are currently involved in research projects that touch on any issues related to health, medicine, and the body in the context of slavery, colonialism, or neocolonialism. The course includes visits to diverse archives on campus, discussions of archival best practices, and digital organizational tools. The course provides graduate students with a balance of support and independence as they carry out their research. Graduate students in any discipline are warmly welcomed to participate in a compassion-based research community that prioritizes values of deep listening, presence, and care.

HSHM 763a / AFAM 709a / HIST 709a, Readings in Race and Racism in Medicine, Science, and Healthcare Carolyn Roberts

This graduate reading seminar invites students to study historical and contemporary texts related to race and racism in medicine, science, and healthcare. Our primary focus is anti-Black racism, and we study connections between the period of slavery and present-day issues in healthcare, biomedical research, reproductive justice, and medical and nursing education and practice. Students from any department and discipline are welcome to join this small seminar, which privileges deep listening, close reading, community, and care.

HSHM 770b / HIST 940b / WGSS 782b, Disability Histories: Research Seminar Naomi Rogers

This course introduces students to the major issues in current disability history as well as theoretical debates in disability studies. We discuss cultural, social, and political meanings of citizenship; efforts to define and classify disabled bodies; contested notions of bodily difference; and the ways disability has and continues to be used as a metaphor for socially defined inferiority like gender, race, or sexuality. By the fourth week students have identified the topic for their research papers and discussed them in class. The next month is devoted to research and writing. We then start meeting again to read and discuss a draft of each paper.

HSHM 771a / AFAM 719a / HIST 945a, Researching and Writing Histories of Health, Medicine, and Science Carolyn Roberts

This small graduate seminar is for students currently researching and writing histories of health, science, and medicine. Students learn about slow scholarship, the politics of the archive, and research organization and management and explore the craft of writing. Preference is given to graduate students in history, the history of science and medicine, and African American studies.

HSHM 782a / AMST 696a / ENGL 906a / ER&M 696a / RLST 630a / WGSS 696a, Michel Foucault I: The Works, The Interlocutors, The Critics Greta LaFleur

This graduate-level course presents students with the opportunity to develop a thorough, extensive, and deep (though still not exhaustive!) understanding of the oeuvre of Michel Foucault, and his impact on late-twentieth-century criticism and

intellectual history in the United States. Non-francophone and/or U.S. American scholars, as Lynne Huffer has argued, have engaged Foucault's work unevenly and frequently in a piecemeal way, due to a combination of the overemphasis on *The History of Sexuality, Vol 1* (to the exclusion of most of his other major works), and the lack of availability of English translations of most of his writings until the early twenty-first century. This course seeks to correct that trend and to re-introduce Foucault's works to a generation of graduate students who, on the whole, do not have extensive experience with his oeuvre. In this course, we read almost all of Foucault's published writings that have been translated into English (which is almost all of them, at this point). We read all of the monographs, and all of the Collège de France lectures, in chronological order. This lightens the reading load; we read a book per week, but the lectures are shorter and generally less dense than the monographs. [The benefit of a single author course is that the more time one spends reading Foucault's work, the easier reading his work becomes.] We read as many of the essays he published in popular and more widely-circulated media as we can. The goal of the course is to give students both breadth and depth in their understanding of Foucault and his works, and to be able to situate his thinking in relation to the intellectual, social, and political histories of the twentieth and twenty-first centuries. Alongside Foucault himself, we read Foucault's mentors, interlocutors, and inheritors (Heidegger, Marx, Blanchot, Canguilhem, Derrida, Barthes, Althusser, Bersani, Hartman, Angela Davis, etc); his critics (Mbembe, Weheliye, Butler, Said, etc.), and scholarship that situates his thought alongside contemporary social movements, including student, Black liberation, prison abolitionist, and anti-psychiatry movements. Instructor permission required.

HSHM 783b / AMST 697b / ENGL 5197b / ER&M 697b, Michel Foucault II: The Works, the Interlocutors, The Critics Greta LaFleur

Continuing graduate-level course presents students with the opportunity to develop a thorough, extensive, and deep (though still not exhaustive!) understanding of the oeuvre of Michel Foucault, and his impact on late-twentieth-century criticism and intellectual history in the United States. Non-francophone and/or U.S. American scholars, as Lynne Huffer has argued, have engaged Foucault's work unevenly and frequently in a piecemeal way, due to a combination of the overemphasis on *The History of Sexuality, Vol 1* (to the exclusion of most of his other major works), and the lack of availability of English translations of most of his writings until the early twenty-first century. This course seeks to correct that trend and to re-introduce Foucault's works to a generation of graduate students who, on the whole, do not have extensive experience with his oeuvre. In this course, we read almost all of Foucault's published writings that have been translated into English (which is almost all of them, at this point). We read all of the monographs, and all of the Collège de France lectures, in chronological order. This lightens the reading load; we read a book per week, but the lectures are shorter and generally less dense than the monographs. [The benefit of a single author course is that the more time one spends reading Foucault's work, the easier reading his work becomes.] We read as many of the essays he published in popular and more widely-circulated media as we can. The goal of the course is to give students both breadth and depth in their understanding of Foucault and his works, and to be able to situate his thinking in relation to the intellectual, social, and political histories of the twentieth and twenty-first centuries. Alongside Foucault himself, we read Foucault's mentors, interlocutors, and inheritors (Heidegger, Marx, Blanchot, Canguilhem, Derrida, Barthes, Althusser, Bersani, Hartman, Angela Davis, etc); his

critics (Mbembe, Weheliye, Butler, Said, etc.), and scholarship that situates his thought alongside contemporary social movements, including student, Black liberation, prison abolitionist, and anti-psychiatry movements. Previously ENGL 907.

HSHM 790a or b, HSHM Program Seminar Joanna Radin

The HSHM Program Seminar helps students navigate the requirements of the Ph.D. program in HSHM, including but not limited to the prospectus, teaching, conference presentations, the "hidden curriculum," research and publication strategies, career planning, and other topics. Along with discussion of skills specific to HSHM, the course provides opportunities for students to practice these skills in a workshop format. Some sessions will include guest speakers on topics such as non-academic careers and the publishing world. The seminar is a requirement for students in their second and third years of the Ph.D. in HSHM and is an elective for students in other years.

½ Course cr

HSHM 792a / AMST 619a / ER&M 620a / WGSS 620a, Enduring Conditions:

Chronic Illness, Disability, Care, and Access Kalindi Vora

This interdisciplinary course brings together scholarship on access and care that bridges concerns in the fields of disability studies and humanistic approaches to chronic illness. Scholarly texts are drawn from the fields of critical race and ethnic studies, gender and sexuality studies, anthropology and sociology of medicine, history, and feminist science and technology studies (fSTS). Seminar participants also engage with the arts and media as critical sites for understanding culture work bringing together knowledge in disability and chronic illness spaces. To embrace community-based research and knowledge sharing, the course features regular guest lectures from grassroots disability justice organizers and culture workers. The course is offered in a hybrid format. To consider what disability studies and work on chronic illness can build together, we explore the work of Moya Bailey, Aimi Hamraie, Jina B. Kim, Sami Schalk, Akemi Nishida, Ryan Cartwright, and Arthur Kleinman, among others. Permission of instructor is required. Undergraduates may also enroll with permission of instructor.

HSHM 920a or b, Independent Reading Staff

By arrangement with faculty.

HSHM 930a or b, Independent Research Staff

By arrangement with faculty.

HSHM 997a / HIST 997a, Pedagogy Seminar Daniel Botsman

Faculty members instruct their Teaching Fellows on the pedagogical methods for teaching specific subject matter. o Course cr