In 2000, the Arts and Humanities Medical Scholars Program at Stanford University School of Medicine issued its first grants to medical students interested in researching an area of the medical arts or humanities in depth. To date, 34 projects have been funded, including renewals. The projects encompass a range of genres and topics, from a website on Asian American health and culture to an ethnographic study of women physicians in training in Spain. Two projects are highlighted here: an online history of medicine course and a poetry project. Students are mentored by faculty from a wide array of university departments and centres and submit completion documents to the committee overseeing the programme. Students are encouraged to present their work at conferences, such as the programme’s annual symposium, as well as in publication or other appropriate formats. Future directions include integration with the scholarly concentrations initiative at the medical school.

Involvement in the scientific process is an intensive experience, and a highly creative one, albeit stylised to test hypotheses using reproducible methods. Research experience during medical education provides training for physician-scientists, stimulates self learning, enhances skills such as reading research literature, and promotes interest in fields providing research opportunities. Indeed, in an attempt to counteract the decreasing numbers of physician investigators in the United States, research programmes have been widely promoted.

In 1980, Stanford University School of Medicine, long known as a research centred institution, initiated a Medical Scholars Program to encourage and enable Stanford medical student participation in the creation of new scientific knowledge. This programme, which provides grant and academic credit for students to perform hypothesis driven projects in bench and clinical research, is taken advantage of by the majority of Stanford students.

In January 2000 the first of a series of ongoing planning committee meetings took place. The committee comprises one medical student and eleven faculty members. Six faculty members are from various departments and centres of the medical school (anaesthesia, biomedical ethics, medicine, ophthalmology, psychiatry) and five are university affiliated (Asian languages and comparative literature, Cantor Center for the Visual Arts, history, human biology, music).

Proposal submission process, evaluation, and funding

Proposals are evaluated on five criteria: clarity of proposal, relationship of the project to the arts/humanities and medicine, feasibility, originality, and educational value to the student. The $12,000 grant received by successful applicants to the AHMS programme is substantial, and accompanies 18 units of academic credit. The student can elect to perform the project in the space of one quarter, or to divide the time, money, and credit among multiple quarters. In the case of a project with an ambitious scope—for example, a book, the student must identify which part of the project will be accomplished during the grant interval. Even with projects of narrower
scope, the grant is frequently seed money, as many students continue work on their project well beyond funded periods. In addition, the student can request travel funds if the project necessitates travel for completion. For detailed information about submission, evaluation, and funding see our website. This provides information on application procedures, deadlines, and evaluation process; committee members; approved student projects, as well as relevant events, web links, courses; and degree programmes. Forms for the application cover sheet and completion documents can be accessed; future plans include online application.

Student projects and outcomes
As of the middle of 2003, 34 projects have been approved and funded, including six renewal requests. One funded project was submitted by a group of three students—each was given a full award. The projects are diverse, both in genre and topic. Project genres include: film; writing (scholarly academic, fiction, poetry, journalism, and other non-fiction); website design; visual arts (illustration, cartoon, photography), and curriculum development. Subject matter includes: consciousness and the mind, physician activism, effects of learning anatomy, community clinic artwork, narratives of Delhi women in medicine, empathy, immunology education for children, Haitian Vodun healers, and Native American health beliefs.

Examples of departments and programmes providing faculty mentorship are: anaesthesia, biomedical ethics, Cantor Arts Center, Dean’s office, education, English, family and community medicine, history, medicine, music, paediatrics, philosophy, psychology, radiation oncology, and surgery.

DISSEMINATING AHMS RESEARCH RESULTS
The AHMS Program sponsors an annual spring event, entitled Medicine and the Muse: An Arts, Humanities, and Medicine Symposium, at the Cantor Center for Visual Arts. This evening event, which is organised by a student committee, showcases not only AHMS projects, but also features a keynote speaker, and music, art, and literature by medical students. Apart from this symposium, students have also presented their work at local, national, and international meetings. For example, Shafer A, Meites E, Moffett S. 14 Project outcomes also include publications, online resources, and curriculum development. For examples of publication see the box below.

TWO STUDENT PROJECTS: A CLOSER LOOK
The following accounts of successfully completed AHMS projects are described by the students who undertook them. Further information on these and other student projects is available at the AHMS website.

Rewriting medical history by Elissa Meites
During my first year in medical school, I told our medical history professor I was interested in learning more about the women and people of colour who had contributed to the development of our profession, and he challenged me to research the subject. My curiosity was piqued, and I checked out a few books from the library, intending to present my findings to my professor for possible incorporation into his course.

At the same time I heard about Stanford’s new arts and humanities medical scholars programme from a friend, and wondered if I might shape my presentation into a more substantive research project. With these parameters in mind, I wrote a proposal to develop my own class as an alternative to the traditional lecture elective, and I suggested using my computer skills to create a self sustaining online resource. Rather than focusing strictly on women in medicine, I proposed to create an inclusive course that integrated diverse contributions to the field with traditional material. I was delighted when I received a grant to work on this project, and set to work.

My first task was to gather materials. I upgraded my computer, readied my digital camera, and purchased web page writing software and image editing programs. I collected texts, images, photographs, sound clips, and hypertext links, finding that the subject of medical history lent itself easily to a multimedia online format.

I also interviewed professors and videotaped lectures about the history of medicine on campus. Materials were abundant, and I had to sort through a vast array of sources to find those I felt were most appropriate for a useful and entertaining medical student resource.

My references included texts on medical history and the history of women in science, as well as ethics, public health, anthropology, and art history. From these, I made deliberate attempts to extract histories of healers from

Examples of publication

- Poetry: Bein S. Dreaming Vietnam. JAMA 2003; 289:1080 also, see below.

Other projects are web based. These outcomes include:
- Online course: Meites E. HIPPOCRATES: online history of medicine course, see below).

Curriculum centred projects are also funded. Outcomes include:
differing socio-economic strata, as well as descriptions of classically famous physicians and cases. These efforts extended to my selection of media as well, as I sought out pictures and sound clips that included people of varying genders, colours, and classes.

The enormous scope of my project led to a quick reality check: I had to set some limits on my vision, or I would never be able to complete it. I decided to focus on creating a fully online course that students could complete for one unit of elective credit. Setting this concrete and achievable goal certainly motivated my work to complete the project.

I also faced a challenge in framing the entire history of Western medicine in an easily navigable format. I settled on a structure of eight chapters, each based on a distinct geohistorical period: ancient medicine; Egypt and Babylonia; Greek medicine; Roman medicine; European medicine in the Middle Ages; Renaissance medicine; 18th century schools of thought, and technological medicine. I still, however needed a consistent framework within each chapter. For this I turned to another discipline, anthropology, and the five “core clinical functions” described by Arthur Kleinman,15 to analyse medical systems across cultures separated by geographical boundaries. I suspected these functions might also help compare healing systems from differing historical cultures as well.

I created a consistent navigation bar to allow students to peruse the course based on each of Kleinman’s clinical functions in every chapter. These included: the illness experience; seeking care; particular conditions; healing activities; and therapeutic outcomes, to which I also added an introductory section on historical background, and a closing section on influence on modern practices.

A final challenge was, of course, finding time to work on my project. Key developments might have to be postponed for final exams or patient interviews. I tended to get the most work done early in the academic quarter or on holidays from classes and clinics.

To make the course fully sustainable online, I created a computer graded quiz for the end of each chapter. Students completing all eight quizzes online would receive one unit of academic credit for the course. Because students would have ready access to the informational content of the course as they completed the quizzes, I decided to ask contextual rather than fact based questions, requiring students to place themselves within a particular historical context to answer the question. Multiple choice answers might all be historically correct, though anachronistic in the context of the chapter.

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The Arts and Humanities Medical Scholars Program provides medical students with an opportunity for medical students to intensively explore an area of study which encompass in-depth, coordinated experiences for students. Each scholar concentration offers coursework, advising, mentoring and opportunities for scholarly work. Students will be encouraged to spend a year equivalent of time in a research endeavour, and the AHMS Program will be folded into the scholarly concentrations initiative.

SUMMARY

The interdisciplinary field of medical humanities seeks to complement traditional medical education by addressing these complexities, and, indeed, celebrating them. In general, however, intensive experiences in developing creativity skills (as opposed to “finding the answer”, also known as convergent thinking skills), are absent from traditional medical education.

The AHMS Program provides medical students with a chance to enlarge their understanding and experience of medicine while honing valuable, translatable skills, such as writing a fundable proposal, garnering mentorship, finding creative solutions to unforeseen problems, and completing and presenting a project. The arts and humanities facilitate both a broader and more critical view of medicine in the context of society’s cultures, histories, and vagaries. An opportunity for medical students to intensively explore an intersection between the arts, humanities, and medicine can open the doors of creativity, innovation, and reflection which otherwise can feel so oppressively closed during medical education.

Authors’ affiliations
E Meites, S Bein, Stanford University School of Medicine, Stanford, California, USA
A Shafer, Department of Anesthesia, Stanford University School of Medicine, and Anesthesia Service, Veterans Affairs Palo Alto Health Care System, Palo Alto, California, USA

Student support from the Stanford Arts and Humanities Medical Scholars Program

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BOOK REVIEW

Medicine and Art


Alan and Marcia Emery have compiled a captivating collection of 53 colour plates of health care practitioners and their patients, from the third century BC to the beginning of the current millennium. Each plate is reproduced to a high standard with a facing page of text. There is also an appendix detailing “a selection of medical conditions depicted in paintings”. The editors have been imaginative in their choice of images. Of course, old favourites—like The Doctor (c 1891) by Sir Luke Fildes and The Mission of Mercy: Florence Nightingale Receiving the Wounded at Scutari (1857) by J J Bartlett—are included. But examples of Eastern art temper the Western dominance, and although most of the illustrations are of paintings, early medicine is represented in sculpture, pottery, and coins. The textual entries that accompany the plates are of variable length and quality. Some offer an interpretation of the visual effects. So with Sentence of Death (1908) by John Collier we are told that the patient receiving bad news “sits uncomfortably, staring ahead, isolated in his grief. He sees no future. His facial pallor and demeanour contrast starkly with those of the doctor” (p 76). On other occasions, there are references to the artistic background. Francisco Oller y Cestero’s painting of The Student (c 1860s), for instance, is described as “interesting” because of the influence of both the “French realists” and the “emerging Impressionists” (p 56), and Ernest Board’s study of Laënnec’s study of (1857) by Jerry Barrett

The ideal that emerges from this critique of modern medicine is essentially a pastoralistic one. Pictures of patients are thin on the ground and when they do appear it is often as passive objects of the medical gaze. Therefore, no comment is made about the plight of the patient put on public display in paintings such as Doctor Teaching a Student (1850) by Antonie Théodore van Dobben-Hooijsten or the Audience of Doctors and Students, New York Polyclinic School of Medicine (1891) by Irving R Willes. Health care practitioners other than doctors are also neglected. Their subordination is evident in Science and Charity (1897) by Pablo Picasso where the doctor’s “skill and knowledge” (p 72) is exhibited in taking the pulse, whilst the nurse’s caring role is manifest in attending to the patient’s material needs. In The Compassion of the Intensive Care Sister (1989) by Roy Calne, on the other hand, the obtrusiveness of the medical technology accentuates the responsibilities of the nurse.

The field of medicine and art has recently seen the publication of several scholarly studies, among them Fiona Haslam’s From Haygarth to Rowlandson: Medicine in Art in Eighteenth-Century Britain (1998) (Liverpool: Liverpool University Press, 1996) and Ludmilla Jordano’s Defining Features: Scientific and Medical Portraits, 1660–2000 (London: Reaktion in association with the National Portrait Gallery, 2000). The contents of the Clement C Fry Collection at the Yale University Medical Library have also been listed by Susan Wheeler in Five Hundred Years of Medicine in Art. An Illustrated Catalogue of Prints and Drawings (Aldershot: Ashgate, 2001), and the visual resources of the National Library of Medicine in the USA are available online (www.nlm.nih.gov). Medicine in Art cannot match the range or weight of these projects. In particular, the short introduction of just one page means that the plates lack being placed in a proper context in the history and theory of art, which would acknowledge the ability to form as well as “reflect ... the role of the physician in society” (p ix). Nevertheless, as a popular, accessible introduction, the book is a treasure trove for health care practitioners and the general public alike.

A Borsay

www.medicalhumanities.com