MCS Selective
Art and Diagnostic Observation in Medicine

Following the lead of the Icahn School of Medicine's course entitled The Pulse of Art, this selective "harnesses the power of significant works of art to increase the observation skills and empathic responses of medical students." Courses on art, observation, diagnostic accuracy and empathic physician-patient communication are ongoing at many medical schools, including Yale, Harvard, Lerner/Cleveland Clinic, and Mt. Sinai. This selective draws on art-based principles of observation in order to enhance visual diagnostic skills in physicians and medical practitioners. We plan to bring in as speakers the two of the leading figures nationally in this field: Ophthalmologist Vince de Luise MD (Yale SOM) and art historian Bobbi Coller PhD (Icahn SOM).

Instructors

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Syllabus

Detailed Description:
At first glance, there seems to be a chasm between the realms of art and medicine. The polarization of these crafts, though unique in their own right, have deprived physicians of tools that are critical to advancing patient care. However, this divisiveness has not always existed: the great masters of the Renaissance forged intimate relationships between art and science, and accurate depictions of physical space and human anatomy fostered significant breakthroughs in physics, anatomy, and mathematics.

Yet, as the field of medicine grows more streamlined, physicians are spending less time with their patients. Though efficiency in healthcare is paramount, without a corresponding diversification in physician training, patients are suffering harm caused by misdiagnosis. This epidemic is so prevalent in fact, that the World Health Organization (WHO) cites medical error and more specifically diagnostic error, as the #3 cause of death in the country second only to heart failure and cancer.

In order to adapt thoughtfully with the times, it is critical that physicians refine their skills in all areas of medical practice, such that accurate diagnostic proficiency is not inhibited by the mechanistic nature of

modern medicine. One of the most useful tools in the diagnostic arsenal is the power of the gaze. The practice of art observation will help students sharpen their visual acuity as well as visual literacy; in short, we will seek to enhance students' ability to perceive visual information accurately and to subsequently describe what they see.

These fundamental skills have been rather neglected thus far in the medical education system, save for a few pioneering institutions such as Yale, Brown, Harvard and Mt.Sinai. It is an unfortunately common practice that physicians unconsciously project what they believe the patient should look like in order to meet an anticipated diagnosis at the expense of observing what the patient before them actually looks like. This is also a common error of the novice artist, who does not carefully absorb the textures, colors, and shades before him.

Visual learning results from the integration of higher cognitive, perceptive and motor functions and this interdisciplinary course will seek to offer students an encounter with art fundamentals with the aim of training their gaze and enhancing their diagnostic proficiency as this level of observation practice translates to medicine.

Educational Objectives
At the conclusion of this course you will have the ability to:
1   TBA

Topics and Dates
9/24/19 Week One
1:00-3:00, Room TBD
An Introduction to Art Principles and Observation in Medicine
Instructor: Gina M Polizzo

During this session, we will explore basic art elements and principles such as form/shape, line, color theory, and texture in order to equip students with the language necessary to formulate accurate descriptions of the art they observe. We will then work through dissecting and interpreting a number of art pieces, with a focus on human expression. Subsequently, these skills will be translated to a guided interpretation of subtleties of human expression in patients, an exercise which uses these critical art observation skills to build empathy in physicians.

Articles to Read:
1. **Schlegel, A., Prescott, A.A., Fogelseon, S.V., Xueting, L., Zengang, L., Kohler, P.L., Riley, E., Tse, P.U., Meng, M. *"The Artist Emerges: Visual Art Learning Alters Neural Structure and Function."* 2015. Neuroimage vol 105, pp 440-451. http://www.dartmouth.edu/~peter/pdf/62.pdf**
2. **Dolev J.C., Friedlaender L.K., Braverman I.M.. Use of Fine Art to Enhance Visual Diagnostic Skills. *JAMA.*2001;286(9):1020–1021. doi:10.1001/jama.286.9.1019 https://jamanetwork.com/journals/jama/fullarticle/1031468**

Optional Reading:
3. **Graber, M. (2013). The incidence of diagnostic error in medicine. *BMJ Quality & Safety*, *22*(Suppl 2), ii21-ii27. DOI: 10.1136/bmjqs-2012-001615 http://qualitysafety.bmj.com/content/early/2013/06/14/bmjqs-2012-001615#T1**

10/8/19 Week Two
1:00-3:00, Room TBD
Exploring "The Pulse of Art" at Icahn School of Medicine at Mt. Sinai
Guest Instructor: Dr. Bobbi Coller, PhD

In collaboration with Mt. Sinai, Stony Brook Medicine will facilitate a lecture given by Dr. Bobbi Coller, an esteemed art historian and independent curator who teaches "The Pulse of Art" course at The Icahn School of Medicine at Mt. Sinai as part of their mandatory curriculum for their medical students. Dr. Coller will offer insights into the structure and benefits of this course at Mt. Sinai and will generously indulge the audience a glimpse into what one of her lectures in this course looks like.

Articles to Read:
Wolff, B. 2018, January. "Want to Focus Your Attention? Go to a Museum." *Forbes Magazine.*
https://www.forbes.com/sites/benjaminwolff/2018/01/07/want-to-boost-your-career-go-to-a-museum/#2471e19c7d99

Read over the Syllabus for "Pulse of Art" course.

10/22/19 Week Three
1:00-3:00, Room TBD
The Historical Relationship Between Art and Medicine
Guest Instructor: Dr. Vincent deLuise, MD

As one of the most noteworthy champions of the movement which seeks to fuse art and medical practice, Dr. Vincent deLuise, assistant clinical professor of ophthalmology at Yale University, will help us explore the historical relationship between the hemispheres and art and medicine: formidable intrinsic link that has always been present, and which must be restored and emphasized in modern medical education.

Articles to Read:
1. **Gurwin, J., Revere, K.E., Niepold, S., Bassett, B. Mitchell, R., Davidson, S., DeLisser, H., Binenbaum, G. 2018. "A Randomized Controlled Study of Art Observation Training to Improve Medical Student Ophthalmology Skills." American Academy of Ophthalmology Vol 1243. pp. 8-14**
   https://reader.elsevier.com/reader/sd/pii/S0161642017317086?token=01F3B3217AF9123D0017430BB7B919412AE4A2DAFF5B59EAAB6F200C26EDB8448765CC9FC7CA30248B0A919943BBCB6A

Though this is optional, you are strongly encouraged to attend Dr. deLuise' Grand Rounds 10/22/19, 4:15 to 5:30 on *"Slow Looking" at various visual archetypes in the history of art, and then will pivot to a discussion of some of the great paintings in the western Canon that display illnesses and disease, eliciting observations and comments from the medical students as we utilize key principles in "slow looking" at pictorial as well as non-representational art to derive meaning.*

11/19/19 Week Four
1:00-3:00 Room TBD
Student Visual Arts Project

At this session, students will be engaging in a visual arts exercise to enhance observational skills under the guidance of Yr. 2 student Krisha Mehta. Details TBD.

Evaluation

Attendance is required, and each student will make a case presentation of their experience(s) with hope in clinical encounters as a medical student, a patient, or as a friend to someone navigating illness.

Number of Students

Minimum 6
Maximum 12