The number and variety of collaborative art museum and medical education programs are expanding. Participants in the *Art of Examination: Art Museum and Medical School Partnerships* Forum, held in June 2016, contributed to this bibliography of journal articles, books and reports to advance the field by creating opportunities to exchange teaching methodologies and establish networks for research and evaluation. The Edith O'Donnell Institute for Art History, The University of Texas at Dallas compiled these sources.

This version, updated in May 2017, is based on the recommendation from the network of museum and medical professionals who attended the Forum to continue to update resources.
The Bibliography is organized into 4 sections

1. Program Overviews
2. Medical Humanities
3. Research and Evaluation
4. Books and Reports

Program Overviews

Frick Collection program in which medical students examine painted portraits, then apply the same skills to examine photographs of patients’ faces.

RISD program with Alpert Medical School.

Student perception using an “Art in Medicine” 8-week course for first-year medical students at the Brighton and Sussex Medical School as a sample study.

Overview of Boston programs in art of observation.

Studying works by classic and contemporary artists to increase awareness of the complex nature of human beings and their conditions.


Four guiding principles to pedagogy eight core principles of clinical observation.


History and importance of Yale’s observational skills program.


Ten strategies to enhance clinician’s ability to see and increase perceptiveness.


Describes a reflective writing exercise conducted in a second-year medical student humanities seminar.


Yale Center for British Art study that measured students’ observational abilities by analyzing their descriptions of representational paintings in pretests and posttests.


Cincinnati Art Museum program.
Arts in Nursing Education." Journal of Nursing Education 49.12 (2010): 672-676.
Retrieved from
Qualitative evaluation on Art Institute of Chicago’s “The Discerning Eye” program.

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3676632/
Introduction to the methodology of the Yale Center for British Art observational program including visual analysis exercises.

Study on improvement of PA visual skills from workshop at Yale Center for British Art.

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3244323/
Study on the Personal Responses Tour at Harvard Art Museums; its effectiveness led to it being a required exercise for first-year medical students.

Gooding Holly C., Mariah Quinn, Barbara Martin, Alexandria Charrow, and Joel T. Katz. “Fostering humanism in medicine through art and reflection.” Journal of Museum Education (2016); 41:2, 123-130. Retrieved from:
http://www.tandfonline.com/doi/full/10.1080/10598650.2016.1169732
The Brigham and Women’s Hospital Department of Medicine and the Boston Museum of Fine Arts program combats physician burnout and empathy erosion.

Indiana University School of Nursing use of VTS.

https://www.amsrj.org/index.php?journal=amsrj&page=article&op=download&path%5B%5D=57&path%5B%5D=4
Weill Cornell Medical College art elective at the Metropolitan Museum of Art.


Commentary in which a fourth-year medical student argues for the relevance of the arts and humanities and the need to sustain medical students' exposure to these through the medical curriculum.

Measured results showing an interdisciplinary course improved participants' capacity to make accurate observations of art and physical findings.

Exploration of doctors and "objectivity".

Study in which half of a class of non-nurse college graduates entering a master’s degree program was assigned to a museum experience, whereas the other half received traditional teaching methods.

First- and second-year medical students at Southampton University took part in 3-hour life drawing classes with a life drawing tutor and an anatomist.

Visual Thinking Strategies methodology and benefits.

Columbia University medical students attended a single 90-minute museum-based art-centered program designed to engage patients with dementia and caregivers at three New York Museums.

*The Keck School of Medicine of the University of Southern California partnered with Los Angeles’ Museum of Contemporary Art to design an educational experience to observe, describe, and interpret complex information.*


*Outlines benefits of close looking exercises.*


*Resources to enhance scientific observation including a proposed curriculum for an eight-week arts observation seminar.*


*Describes an approach to gallery teaching that honors the memories, associations, and emotions that visitors bring to their encounters with works of art.*


*Health Sciences students were assigned to two learning groups that participated in a visual literacy program at the McMaster Museum of Art in Ontario.*
Medical Humanities

Expanding the traditional role of doctor as science-using, evidence-based practitioner to include that of doctor as a "maker" (creator) and artist.

Report on the importance of narrative.

Observations on practicing medicine in a modern world.

Call to adopt the model of narrative medicine.

The benefits of the arts in healthcare from the director of the mental health clinic at the University of Minnesota’s Boynton Health Service and president of the Society for the Arts in Healthcare.

Analysis of student material about Performing Medicine, a collaborative program between a theatre company and The London School of Medicine and Dentistry.


Horowitz, MD, MPH, Carol R.; Anthony L. Suchman, MD; William T. Branch, MD; Richard M. Frankel, PhD. "What Do Doctors Find Meaningful about Their Work?” Ann Intern Med. 2003;138(9):772-775. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4303370/pdf/nihms655234.pdf Stories and examples on what is meaningful about doctors’ practice and to remoralize doctors and help them advocate for their needs more clearly.
*How medical humanities can improve physician skills.*

Kinsella EA & Bidinosti S. (2015). “‘I now have a visual image in my mind and it is something I will never forget’: An analysis of an arts-informed approach to health professions ethics education.” Advances in Health Sciences Education, Early On-line: 1-18
*This paper reports on a study of an arts informed approach to ethics education in a health professions education context.*

*Overview of the UK Centre for Medical Humanities programs and goals for the field.*

*How "enstrangement" and "alienation effect" techniques can disrupt be used in order to discover new ways of perceiving and being in the world.*

*Article on the Met’s program with police officers and art of observation.*

*New methods for enhancing science students’ innovative thinking, in a pilot program developed to teach innovative thinking.*

The MEDLINE, Google Scholar and ISI Web of Knowledge databases were searched for published articles on studies that have attempted to evaluate the efficacy of an arts-based approach in undergraduate medical education; one mixed, 10 qualitative and four quantitative studies were reviewed.


Explores the complexities and difficulties for medical education to promote and medical students to internalize empathy.


Addresses concerns for residents’ potential negativity on humanities-based education.


Good patient care is found in being truly present with patients.


Theater techniques in medical skill teaching.
Research and Evaluation


Review and analysis of 62 studies using quantitative evaluation methods.


Qualitative Results of Art elective in collaboration between Sapienza University and Art specialist group (Intro English, article Italian)


Case study on a pre- and post-test and evaluation survey developed for a three-hour exercise presented to medical students just before starting clerkships.


Controlled trial involving 42 general practitioners and 26 primary care nurses in 12 primary care practices in London.


Evaluating the success of Art Rounds for nursing students.
Research study sought to answer the questions: What meaning does VTS have for nursing students? How do nursing students use it in caring for patients?

Clinical qualitative study in which students appeared to hone observation skills and improve pattern recognition.

**Books and Reports**

2016 Journal of Museum Education Reader Guide
http://museumeducation.info/jme/reader-guide


Hanna, PhD, MFA, Gay with Judy Rollins, PhD, RN and Lorie Lewis, MA. "Arts in Medicine Literature Review". February 2017. 


http://www.artofsciencelearning.org/phase2-research-findings/
