

Art Museum and Medical School Partnerships

Bibliography

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One recommendation from “The Art of Examination: Art Museum and Medical School Partnerships Forum” that took place on June 8 and 9, 2016 at the Museum of Modern Art, New York is to continue to support the network of collaborators and partnerships between art museums and medical schools by offering a current listing of resources. These will advance the field by creating opportunities to exchange teaching methodologies and establish networks for research and evaluation.

Participating art museums and medical schools who attended the Forum primarily contributed to this bibliography of journal articles, books and reports, and other media. New sources in this 2017 version are listed in **red**.

The Edith O'Donnell Institute for Art History, The University of Texas at Dallas continues to compile these sources and stores them on our website at <http://www.utdallas.edu/arthistory/medicine/#resources>.

The PDF version of this bibliography includes embedded links to resources. These links were all working at the time of publication, but we cannot guarantee they will remain stable over time.

The Bibliography is Organized into 5 sections

1. Program Overviews
2. Medical Humanities
3. Research and Evaluation
4. Books and Reports
5. Video, Podcast, and Other Media

Program Overviews

Bardes, C. L., Gillers, D., & Herman, A. E. (2001). Bardes, Charles L., Debra Gillers, and Amy E. Herman. "Learning to Look: Developing Clinical Observational Skills at an Art Museum." *Medical Education* 35.12 (2001): 1157-1161.

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<http://onlinelibrary.wiley.com/doi/10.1046/j.1365-2923.2001.01088.x/abstract>

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

Baruch, Jay. "From Museum to Bedside: The Need for Museum Educators in Medical Education." Manual/a resource about art and its making. Rhode Island: Rhode Island School of Design. Retrieved from

https://risdmuseum.org/manual/450_from_museum_to_bedside_the_need_for_museum_educators_in_medical_education

RISD program with Alpert Medical School.

Bell, Lawrence T., and Darrell J. R. Evans. "Art, Anatomy, and Medicine: Is There a Place for Art in Medical Education?" *Anatomical Sciences Education* 7.5 (2014): 370-378.

Retrieved from <http://onlinelibrary.wiley.com/doi/10.1002/ase.1435/abstract>

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.

Blanding, Michael. Harvard Medicine, "Museum Studies: Art Unleashes Emotions and Discussion Among New Doctors." Winter, 2016. Retrieved from

<http://magazine.hms.harvard.edu/art-medicine/museum-studies>

Overview of Boston programs in art of observation.

Boisaubin, E. V., and M. G. Winkler. "Seeing Patients and Life Contexts: The Visual Arts in Medical Education." *American Journal of Medical Science* 319.5 (2000): 292-296.

Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/10830552>

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

Boudreau, J. Donald, Eric J. Cassell, and Abraham Fuks. "Preparing Medical Students to Become Skilled at Clinical Observation." *Medical Teacher* 30.9-10 (2008): 857-862.

Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/18825545>.

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- Braverman, Irwin M. "To See or Not to See: How Visual Training Can Improve Observational Skills." *Clinics in Dermatology* 29.3 (2011): 343-346. Retrieved from [http://www.cidjournal.com/article/S0738-081X\(10\)00151-3/abstract](http://www.cidjournal.com/article/S0738-081X(10)00151-3/abstract)
History and importance of Yale's observational skills program.
- Buetow, Steven, and Tim Kenealy. "Learning to 'See' in the Clinician-Patient Relationship." *Journal of Primary Health Care* 1.2 (2009): 148-150. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/20690368>
Ten strategies to enhance clinician's ability to see and increase perceptiveness.
- DasGupta, Sayantani, and Rita Charon. "Personal Illness Narratives: Using Reflective Writing to Teach Empathy." *Academic Medicine* 79.4 (2004): 351-356. Retrieved from http://journals.lww.com/academicmedicine/Fulltext/2004/04000/Personal_Illness_Narratives_Using_Reflective.13.aspx
Describes a reflective writing exercise conducted in a second-year medical student humanities seminar.
- Dolev, J C, Friedlaender Linda K., Braverman Irwin. "Use of Fine Art to Enhance Visual Diagnostic Skills." *Journal of the American Medical Association* 286.9 (2001): 1020-1021. Retrieved from https://www.researchgate.net/publication/11789211_Use_of_fine_art_to_enhance_visual_diagnostic_skills
Yale Center for British Art study that measured students' observational abilities by analyzing their descriptions of representational paintings in pretests and posttests.
- Elder, Nancy C., Barbara Tobias, Amber Lucero-Criswell, and Linda Goldenhar. "The Art of Observation: Impact of a Family Medicine and Art Museum Partnership on Student Education." *Family Medicine* 38.6 (2006): 393-398. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/16741837>
Cincinnati Art Museum program.
- Frei, Judith, Sarah E. Alvarez, and Michelle B. Alexander. "Ways of Seeing: Using the Visual Arts in Nursing Education." *Journal of Nursing Education* 49.12 (2010): 672-676. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/20795611>
Qualitative evaluation on Art Institute of Chicago's "The Discerning Eye" program.
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Introduction to the methodology of the Yale Center for British Art observational program including visual analysis exercises.

- Garino, Alexandria. "Improving Observation Skill in Physician Assistant Students." *The Journal of Physician Assistant Education* 19.1 (2008): 47-52. Retrieved from http://journals.lww.com/jpae/Abstract/2008/19010/Improving_Observation_Skill_in_Physician_Assistant.11.aspx
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- Gaufberg, Elizabeth, and Ray Williams. "Reflection in a Museum Setting: The Personal Responses Tour." *Journal of Graduate Medical Education* 3.4 (2011): 546-549. Retrieved from <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, Alexandra 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.
- Grossman, S., J. Deupi, and K. Leitaio. "Seeing the Forest and the Trees: Increasing Nurse Practitioner Students' Observational and Mindfulness Skills." *Creative Nursing* 20.1 (2014): 67-72. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/24730194>
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- Haseltine, Justin. "Art Observation as a Vehicle for Clinical Education." *American Medical Student Research Journal AMSRJ* 1.1 (2014): n. pg. doi: <http://dx.doi.org/10.15422/amsrj.2014.05.014>. Retrieved from [https://amsrj.org/index.php?journal=amsrj&page=article&op=view&path\[\]=57](https://amsrj.org/index.php?journal=amsrj&page=article&op=view&path[]=57)
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- Jacques, Andres, Rachel Trinkley, Linda Stone, Richard Tang, William A. Hudson, and Sorabh Khandelwal. "Art of Analysis: A Cooperative Program between a Museum and Medicine." *Journal for Learning through the Arts* 8.1 (2012): 1-13. Retrieved from <http://files.eric.ed.gov/fulltext/EJ985635.pdf>
Ohio State University College of Medicine, Columbus Museum of Art Art of Analysis.
- Karkabi, Khaled and Orit Cohen Castel. "Deepening Compassion through the Mirror of Painting." *Medical Education* 40.5 (2006): 197-203. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2929.2006.02439.x/abstract>
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Katz, Joel T. and Shahram Khoshbin. "Can Visual Arts Training Improve Physician Performance?" *Transactions of the American Clinical and Climatological Association* 125 (2014): 331-342. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4112699/>
Case study on three HMS and/or Brigham and Women's Hospital (BWH) courses that address specific health care provider competencies.

Klugman, Craig M., Jennifer Peel, and Diana Beckmann-Mendez. "Art Rounds: Teaching Interprofessional Students Visual Thinking Strategies at One School." *Art and Medical Education, Academic Medicine* 86.10 (2011). Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/21869658>
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Kumagai, Arno K. "Perspective: Acts of Interpretation: A Philosophical Approach to Using Creative Arts in Medical Education." *Academic Medicine* 87.8 (2012): 1138-1144. Retrieved from https://www.researchgate.net/publication/227856860_Perspective_Acts_of_Interpretation_A_Philosophical_Approach_to_Using_Creative_Arts_in_Medical_Education
University of Michigan Medical School's Family Centered Experience art making.

Miller, Alexa, Michelle Grohe, Shahram Khoshbin, and Joel T. Katz. "From the Galleries to the Clinic: Applying Art Museum Lessons to Patient Care." *Journal of Medical Humanities* 34.4 (2013): 433-438. Retrieved from <http://link.springer.com/article/10.1007%2Fs10912-013-9250-8#/page-1>
Summary results from ten weekly art museum sessions. Describes the benefits of VTS facilitation and includes a process example.

Mullangi, S. "The synergy of medicine and art in the curriculum." *Acad Med* 2013;88(7):921–923. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/23799442>
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Naghshineh, Sheila, Janet Hafler, Alexa Miller, Maria Blanco, Stuart Lipsitz, Rachael Dubroff, Shahram Khoshbin, Joel T. Katz. "Formal Art Observation Training Improves Medical Students' Visual Diagnostic Skills." *Journal of General Internal Medicine* 23.7 (2008): 991-997. Doi: [10.1007/s11606-008-0667-0](https://doi.org/10.1007/s11606-008-0667-0) Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2517949/>
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Pearson, Rachel. "How Doctors Can Confront Racial Bias in Medicine." *Scientific American* (2015). Retrieved from <https://www.scientificamerican.com/article/how-doctors-can-confront-racial-bias-in-medicine>
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Pellico, Linda N., Linda Friedlaender, and Kristopher P. Fennie. "Looking Is Not Seeing: Using Art to Improve Observational Skills." *Journal of Nursing Education* 48.11 (2009): 648-653. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/19731892>
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Phillips, P. S. "Running a Life Drawing Class for Pre-Clinical Medical Students." *Medical Education* 34.12 (2000): 1020-1025. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/11123568>
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.

Pitman, Bonnie. "The Art of Examination: Medical School and Art Museum Partnerships." *San Antonio Medicine*. (July 2017): 14 – 17. Retrieved from <http://www.bcms.org/SAM/2017/SAMJuly2017/mobile/index.html#p=14>
*Dallas Museum of Art and UT Southwestern Medical School partnered program.**

Reilly, Jo Marie, Jeffrey Ring, and Linda Duke. "Visual Thinking Strategies: A New Role for Art in Medical Education." *Family Medicine* 37.4 (2005): 250-252. Retrieved from <http://www.stfm.org/fmhub/fm2005/april/jo250.pdf>
Visual Thinking Strategies methodology and benefits.

Roberts, H. J., and J. M. Noble. "Education Research: Changing Medical Student Perceptions of Dementia: An Arts-Centered Experience." *Neurology* 85.8 (2015): 739-741. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/26224726>
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Schaff, Pamela B., Suzanne Isken, and Robert M. Tager. "From Contemporary Art to Core Clinical Skills: Observation, Interpretation, and Meaning-Making in a Complex Environment." *Academic Medicine* 86.10 (2011): 1272-1276. Retrieved from http://journals.lww.com/academicmedicine/Fulltext/2011/10000/From_Contemporary_Art_to_Core_Clinical_Skills_.25.aspx
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- Shapiro, Joanna, Dean Gianakos, ed., Richard W. Pretorius, Ginney O'Brien Lohr, Niv Mor, Karen H. Zinnerstrom, and Ana T. Blohm. "Is It Impressionism or Is It Medicine?" *Family Medicine* 41.4 (2006): 246-248. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/19343553>
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- Stonehocker S, MD, Wood K, MD Candidate (2016), Robinson L, MD Candidate (2015), Brett-MacLean P, PhD. "The Art of Observation: Learning to See". *University of Alberta Health Sciences Journal* (July 2015): Volume 11, Issue 1, 23 – 24. Retrieved from <https://www.researchgate.net/publication/295707047>
*University of Alberta Arts & Humanities in Health & Medicine Program.**
- Wellbery, Caroline, and Rebecca A. McAteer, MD. "The Art of Observation: A Pedagogical Framework." *Academic Medicine* 90.12 (2014): 1624-1630. Retrieved from http://journals.lww.com/academicmedicine/Citation/2015/12000/The_Art_of_Observation_A_Pedagogical_Framework.19.aspx
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- Williams, Ray. "Honoring the Personal Response: A Strategy for Serving the Public Hunger for Connection." *Journal of Museum Education* 35, no. 1 (2010), 93-101. Retrieved from <http://www.jstor.org/stable/25701644>
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- Zazulak, J., et al. "The Impact of an Arts-Based Programme on the Affective and Cognitive Components of Empathic Development." *Medical Humanities* 41.1 (2015): 69-74. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/25657263>
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

- Arntfield, Shannon L., Kristen Slesar, Jennifer Dickson, and Rita Charon. "Narrative medicine as a means of training medical students toward residency competencies." *Patient Educ Couns.* June (2013); 91(3): 280–286. doi:10.1016/j.pec.2013.01.014. Retrieved from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3992707/pdf/nihms-572162.pdf>
*This study sought to explore the perceived influence of narrative medicine training on clinical skill development of fourth-year medical students, focusing on competencies mandated by ACGME and the RCPSC in areas of communication, collaboration, and professionalism.**
- Baruch, J. M. "Doctors as Makers." *Acad Med.* (2017): Jan;92(1):40-44.
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<https://www.ncbi.nlm.nih.gov/pubmed/27438158>
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- Brody, Howard, and Mark Clark. "Narrative Ethics: A Narrative". *Hastings Center Report* Jan-Feb (2014): S7-S11. Retrieved from
<http://onlinelibrary.wiley.com/wol1/doi/10.1002/hast.261/full>
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- Campo, Rafael. "'The medical humanities,' for lack of a better term." *Journal of the American Medical Association* (2005): 294(9):1009-1011. Retrieved from
<https://jamanetwork.com/journals/jama/article-abstract/201480>
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- Charon, Rita. "Narrative Medicine: A Model for Empathy, Reflection, Profession, and Trust." *Journal of the American Medical Association* 286.15 (2001): 1897-1902. Retrieved from
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- Christenson, Gary. "Why We Need the Arts in Medicine: Studies Show the Incorporating the Arts Can Save Money, Improve the Patient Experience – and Do a Lot More." *Minnesota Medicine* (2011). Retrieved from www.researchgate.net/publication/51622219_Why_we_need_the_arts_in_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.
- Collins, Francis S. MD, Fleming Renée, PhD. "Sound Health: An NIH-Kennedy Center Initiative to Explore Music and the Mind". *Journal of the American Medical Association* (June 2, 2017). Retrieved from <https://jamanetwork.com/journals/jama/article-abstract/2630954>
*Sound Health: Music and the Mind initiative workshops in which music therapists, experts in the neuroscience of music, and supporters of biomedical research and the arts discuss the current state of the field and identify future research needs.**
- De la Croix, Anne, Catharine Rose, Emma Wildig, and Suzy Willson. "Arts-Based Learning in Medical Education: The Students' Perspective." *Medical Education* 45.11 (2011): 1090-1100. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2923.2011.04060.x/abstract>
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- De Santis Sara, Giuliani Chiara, Staffoli Claudia, Ferrara Vincenza. "Visual Thinking Strategies in Nursing: a systematic review" In *Senses Sci* 2016; ; 3 (4):297-302
doi: 10.14616/sands-2016-4- 297302. Retrieved from <http://www.sensesandsciences.com/ferrarav3i4>
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- Ferrara Vincenza, De Santis Sara, Staffoli Claudia. "Art and medicina: from anatomic studies to Visual Thinking Strategies" in *Senses Sci* 2015; 2 (2):40 -44 doi: 10.14616/sands-2015-2-4044). Retrieved from: http://media.wix.com/ugd/00b67f_89512a6d4fdf434895216f5e044c3c9c.pdf
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- Grossman, E., et al. "Flipped Classroom on Humanities: Medicine, Narrative and Art." *Medical Education* 49.11 (2015): 1142. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/26494071>
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- Haidet, P., J. Jarecke, N.E. Adams, H. L. Stuckey, M. J. Green, D. Shapiro, C. R. Teal, and D. R. Wolpaw. "A Guiding Framework to Maximise the Power of the Arts in Medical Education: A Systematic Review and Metasynthesis." *Medical Education* 50.3 (2016): 320-321. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/26896017>
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- 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>
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- Katz, Joel T. "Applied medical humanities: Addressing vexing deficits, promoting enduring skills." *Journal of Medical Ethics: Virtual Mentor.* (2014): 16;8:610-13. Retrieved from <http://journalofethics.ama-assn.org/2014/08/medu1-1408.html>
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- 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
Retrieved from: <http://link.springer.com/article/10.1007%2Fs10459-015-9628-7>
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- Kumagai, Arno K., and Delese Wear. "‘Making Strange’: A Role for the Humanities in Medical Education." *Academic Medicine* 89.7 (2014): 973-977. Retrieved from https://www.researchgate.net/publication/261770361_Making_Strange_A_Role_for_the_Humanities_in_Medical_Education
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- Lesser, Casey. "Why Med Schools are Requiring Art Classes." *Artsy*. August 21, 2017. <https://www.artsy.net/article/artsy-editorial-med-schools-requiring-art-classes>
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- Ness, Roberta. B. "Commentary: Teaching Creativity and Innovative Thinking in Medicine and the Health Sciences." *Academic Medicine* 86.10 (2011): 1201-1203. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/21955715>
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- Perry, Mark, Nicola Maffulli, Suzy Willson, and Dylan Morrissey. "The Effectiveness of Arts-Based Interventions in Medical Education: A Literature Review." *Medical Education* 45.2 (2011): 141-148. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2923.2010.03848.x/abstract>
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- Reiss, Helen. "Are Empathic Doctors Seen as More Competent?" *Greater Good Magazine, The Greater Good Science Center at the University of California, Berkeley*. (2017). Retrieved from https://greatergood.berkeley.edu/article/item/are_empathic_doctors_seen_as_more_competent
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- Shapiro, Johanna. "Walking a Mile in Their Patients' Shoes: Empathy and Othering in Medical Students' Education." *Philosophy, Ethics, and Humanities in Medicine* (2008). 12. 3:10. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2278157/>
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- Vergheze, Abraham. "The Importance Of Being." *Health Affairs* 35.10 (2016): 1924-1927. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/27702966>
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Research and Evaluation

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*Describes the effects of an art-based module in an entry-level curriculum for occupational therapy (OT) students in which an exploratory pilot study investigated the feasibility of a group-administered visual art-based module for 20 first-year OT graduate students with the Ackland Art Museum.**
- Dennhardt, Silke, Tavis Apramian, Lorelei Lingard, Nazi Torabi, and Shannon Arntfield. "Rethinking Research in the Medical Humanities: A Scoping Review and Narrative Synthesis of Quantitative Outcome Studies." *Medical Education* 50.3 (2016): 285-299. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/medu.12812/abstract>
Review and analysis of 62 studies using quantitative evaluation methods.
- Ferrara Vincenza, De Santis Sara, Giuliani Chiara, et al., "L'Arte dell'osservazione, dall'opera artistica alla diagnosi Le prime esperienze in Sapienza Università di Roma, a Medicina e Chirurgia", *Medicina e Chirurgia*, 72: 3269-3273, 2016.
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Qualitative Results of Art elective in collaboration between Sapienza University and Art specialist group (Intro English, article Italian)
- Jasani, Sona K., and Norma S. Saks. "Utilizing Visual Art to Enhance Observation Skills of Medicine." *Medical Teacher* 35.7 (2013): 1327-1331. Retrieved from <http://www.pubfacts.com/detail/23641917/Utilizing-visual-art-to-enhance-the-clinical-observation-skills-of-medical-students>
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- Kirklin, Deborah, Jane Duncan, Sandy McBride, Sam Hunt, and Mark Griffin. "A Cluster Design Controlled Trial of Arts-Based Observational Skills Training in Primary Care." *Medical Education* 41.4 (2007): 395-401. Retrieved from <http://scholar.qsensei.com/content/136wg7>
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*New source as of October, 2017