Stanford



Eric J. Keller

- Postdoctoral Medical Fellow, Radiology
- · Resident in Radiology

Bio

BIO

Eric J. Keller is an interventional/diagnostic radiology resident (2019-2024) with research interests in bioethics and the anthropology of professional groups within healthcare. He graduated from Northwestern's Feinberg School of Medicine where he also completed an MA in medical humanities & bioethics. Eric also has some background in web design, 4D flow MRI, automated cardiac strain analysis, and legal guardianship.

CLINICAL FOCUS

• Residency

HONORS AND AWARDS

- Radiology Resident Research Grant, Society of Interventional Radiology Foundation (2020)
- Etta Kalin Moskowitz Fund Research Award, Department of Radiology, Stanford University (2020)
- Member, Alpha Omega Alpha Honor Medical Society (2018)
- Member, Gold Humanism Honor Society (2018)
- Lee F. Rogers Award for Excellence in Medical Student Research, Department of Radiology, Northwestern University (2017)
- Enterprise Data Warehouse Pilot Data Grant, Northwestern Medicine (2017)
- Center for Bioethics & Medical Humanities Pilot/Exploratory Grant, Northwestern University (2016)
- Radiology Pilot Research Grant, Department of Radiology, Northwestern University (2015)
- Dr. and Mrs. W.C. Culp Student Research Grant, Society of Interventional Radiology Foundation (2015)
- Research Medical Student Grant, Radiological Society of North America (2015)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Clinical & Applied Ethics Committee, Society of Interventional Radiology (2019 present)
- Applied Ethics Task Force, Society of Interventional Oncology (2019 present)
- Member, The Interventional Initiative (2019 present)
- Webmaster, Resident Fellow Section, Society of Interventional Radiology (2014 2019)

PROFESSIONAL EDUCATION

- Internship, Santa Clara Valley Medical Center, Transitional Year (2019)
- M.D., Northwestern University, Feinberg School of Medicine, Medicine (2018)
- M.A., Northwestern University, The Graduate School, Medical Humanities & Bioethics (2016)

- B.A., Purdue University (IUPUI Campus), Chemistry (2013)
- B.S., Purdue University (IUPUI Campus), Biology (2013)

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

I primarily focus on two areas of research: applied ethics and professional cultures in healthcare.

- 1. Applied ethics Many approaches to ethics start with abstract theory, followed by looking at clinical behaviors and then suggesting how those behaviors should be adjusted. Applied ethics instead takes a bottom-up approach, starting with understanding how a group of clinicians perceive and experience a challenging issue and then adapting theory into practical resources/initiatives based on that initial understanding. I use my own specialty, interventional radiology, as my 'lab,' to test out approaches that I hope to be useful throughout healthcare.
- 2. Professional cultures in healthcare We all realize that an internist is different than a surgeon just like a nurse is different than a physician that is different from a CMO. Forming multiple interlacing social groups is a natural part of human life. However, the impact and specific characteristics of these distinct professional cultures are often underappreciated. I've spent the last few years working to describe those distinct cultures and how they affect perceptions, behaviors, relationships, and ultimately, patient care. I think collaboration is critical in healthcare and that it can be improved by fostering better cross-cultural understanding.

Furthermore, understanding professional cultural dynamics can help organizations plan and implement more effective interventions. Behavior change is hard, but it's much easier if you start with an understanding of people's perceptions and experiences.

Publications

PUBLICATIONS

- Research Ethics in IR: The Intersection Between Care and Progress. Journal of vascular and interventional radiology: JVIR
 Bozorghadad, S., Newton, I. G., Perez, A. W., Makary, M. S., Keller, E. J.
 2020; 31 (5): 846–48
- Informed Consent: Beating a Dead Horse or an Opportunity for Quality Improvement? *Journal of vascular and interventional radiology : JVIR* Keller, E. J., Perez, A. W., Makary, M. S. 2020; 31 (1): 139–40
- Efficacy of endovascular Z-configuration stenting for malignant versus nonmalignant caval obstruction. Journal of vascular surgery. Venous and lymphatic disorders

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Han, T. M., Bondarev, S., Keller, E. J., Vogelzang, R. L., Resnick, S. A. 2020
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- You're Performing My Procedure: Teamwork and Tribalism in IR. Journal of vascular and interventional radiology: JVIR
 Bozorghadad, S., Perez, A. W., Makary, M. S., Keller, E. J.
 2019
- Predictors of Disease Recurrence after Venoplasty and Stent Placement for May-Thurner Syndrome JOURNAL OF VASCULAR AND INTERVENTIONAL RADIOLOGY

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Bondarev, S., Keller, E. J., Han, T., Young, V. A., Gupta, S., Vogelzang, R. L., Eskandari, M., Resnick, S. A. 2019; 30 (10): 1549–54
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- Gluteal Vein Anatomy: Location, Caliber, Impact of Patient Positioning, and Implications for Fat Grafting. Aesthetic surgery journal
 Turin, S. Y., Fracol, M., Keller, E., Markl, M., Collins, J., Krochmal, D., Kim, J. Y.
 2019
- Reconsidering Requests-Futility in IR. Journal of vascular and interventional radiology: JVIR

Clark, J. M., Keller, E. J. 2019; 30 (6): 961–62

• Reflect and Remember: The Ethics of Complications in Interventional Radiology. Seminars in interventional radiology

Keller, E. J.

2019; 36 (2): 104-7

 Cost-Effectiveness of a Guided Peripherally Inserted Central Catheter Placement System: A Single-Center Cohort Study JOURNAL OF VASCULAR AND INTERVENTIONAL RADIOLOGY

Keller, E. J., Aragona, E., Molina, H., Lee, J., Salem, R., Resnick, S. A., Chrisman, H., Collins, J. D. 2019; 30 (5): 709–14

• The growing pains of physician-administration relationships in an academic medical center and the effects on physician engagement PLOS ONE

Keller, E. J., Giafaglione, B., Chrisman, H. B., Collins, J. D., Vogelzang, R. L.

2019; 14 (2): e0212014

• Understanding Bias: A Look at Conflicts of Interest in IR. Journal of vascular and interventional radiology: JVIR

Clark, J. M., Anderson, D., Makary, M. S., Keller, E. J.

2019; 30 (5): 765-66

 Who We Are and What We Can Become: The Anthropology of IR and Challenges of Forming a New Specialty JOURNAL OF VASCULAR AND INTERVENTIONAL RADIOLOGY

Keller, E. J., Vogelzang, R. L.

2018; 29 (12): 1703-4

• Single-Center Retrospective Review of Radiofrequency Wire Recanalization of Refractory Central Venous Occlusions

Keller, E. J., Gupta, S. A., Bondarev, S., Sato, K. T., Vogelzang, R. L., Resnick, S. A.

ELSEVIER SCIENCE INC.2018: 1571-77

• Reinforcing the Importance and Feasibility of Implementing a Low-dose Protocol for CT-guided Biopsies ACADEMIC RADIOLOGY

Keller, E. J., Lewandowski, R. J., Goodwin, L., Yaghmai, V., Nemcek, A., Carr, J. C., Collins, J. D.

2018; 25 (9): 1146-51

Perceptions of Quality in Interventional Oncology JOURNAL OF VASCULAR AND INTERVENTIONAL RADIOLOGY

Keller, E. J., Kennedy, K. Y., Patel, A. P., Ivanovic, M., Collins, J. D., Sato, K., Thornburg, B. G., Riaz, A., Nemcek, A. A., Desai, K., Lewandowski, R. J., Salem, R., Vogelzang, et al

2018; 29 (3): 367-72

• The consistency of myocardial strain derived from heart deformation analysis INTERNATIONAL JOURNAL OF CARDIOVASCULAR IMAGING

Keller, E. J., Fang, S., Lin, K., Freed, B. H., Smith, P. M., Spottiswoode, B. S., Davids, R., Carr, M., Jolly, M., Markl, M., Carr, J. C., Collins, J. D.

2017; 33 (8): 1169-77

• Four-Dimensional Flow MRI-Based Splenic Flow Index for Predicting Cirrhosis-Associated Hypersplenism AMERICAN JOURNAL OF ROENTGENOLOGY

Keller, E. J., Kulik, L., Stankovic, Z., Lewandowski, R. J., Salem, R., Carr, J. C., Schnell, S., Markl, M., Collins, J. D.

2017; 209 (1): 46–53

 Who We Are and What We Can Become: An Analysis of Professional Identity Formation in IR JOURNAL OF VASCULAR AND INTERVENTIONAL RADIOLOGY

Keller, E. J., Mcgee, K. A., Resnick, S. A., Trerotola, S. O., Valji, K., Johnson, M. S., Collins, J. D., Vogelzang, R. L. 2017; 28 (6): 850–56

 Why Vascular Surgeons and Interventional Radiologists Collaborate or Compete: A Look at Endovascular Stent Placements CARDIOVASCULAR AND INTERVENTIONAL RADIOLOGY

Keller, E. J., Collins, J. D., Crowley-Matoka, M., Chrisman, H. B., Milad, M. P., Vogelzang, R. L. 2017; 40 (6): 814–21

• Specialty-Specific Values Affecting the Management of Symptomatic Uterine Fibroids JOURNAL OF VASCULAR AND INTERVENTIONAL RADIOLOGY Keller, E. J., Crowley-Matoka, M., Collins, J. D., Chrisman, H. B., Milad, M. P., Vogelzang, R. L.

2017; 28 (3): 420–28

Superior Abdominal 4D Flow MRI Data Consistency with Adjusted Preprocessing Workflow and Noncontrast Acquisitions ACADEMIC RADIOLOGY
Keller, E. J., Collins, J. D., Rigsby, C., Carr, J. C., Markl, M., Schnell, S.
2017; 24 (3): 350–58

 Fostering better policy adoption and inter-disciplinary communication in healthcare: A qualitative analysis of practicing physicians' common interests PLOS ONE

Keller, E. J., Crowley-Matoka, M., Collins, J. D., Chrisman, H. B., Milad, M. P., Vogelzang, R. L. 2017; 12 (2): e0172865

 Reduction of aberrant aortic haemodynamics following aortic root replacement with a mechanical valved conduit INTERACTIVE CARDIOVASCULAR AND THORACIC SURGERY

Keller, E. J., Malaisrie, S., Kruse, J., McCarthy, P. M., Carr, J. C., Markl, M., Barker, A. J., Collins, J. D. 2016; 23 (3): 416–23

 Physicians' professional identities: a roadmap to understanding "value" in cardiovascular imaging JOURNAL OF CARDIOVASCULAR MAGNETIC RESONANCE

Keller, E. J., Vogelzang, R. L., Freed, B. H., Carr, J. C., Collins, J. D. 2016: 18: 52

Providing Context: Medical Device Litigation and Inferior Vena Cava Filters SEMINARS IN INTERVENTIONAL RADIOLOGY

Keller, E. J., Vogelzang, R. L. 2016; 33 (2): 132–36

 Spatio-temporal Visualization of Regional Myocardial Velocities Eurographics Workshop on Visual Computing for Biology and Medicine Sheharyar, A., Chitiboi, T., Keller, E. J., Rahman, O., Schnell, S., Markl, M., Bouhali, O., Linsen, L.
 2016: 89–98

• Philosophy in Medical Education: A Means of Protecting Mental Health ACADEMIC PSYCHIATRY

Keller, E. J. 2014; 38 (4): 409–13

• Ethical Considerations Surrounding Survival Benefit-Based Liver Allocation LIVER TRANSPLANTATION

Keller, E. J., Kwo, P. Y., Helft, P. R. 2014; 20 (2): 140-146

PRESENTATIONS

- The Sharks and Jets of Healthcare: Professional Cultural Dynamics between Clinicians and Administrators Stanford Radiology Improvement Summit (2/7/2020)
- MedicoLegal/Ethics Considerations Mile High Meltdown Conference (12/14/2019)
- Who we are and where we're going University of Colorado Department of Radiology (9/29/2018)
- Who we are and what we can become: the anthropology of IR SIR 2018 (3/17/2018 3/22/2018)
- The Dramatic Shift in Professional Values of Interventional Radiology Fellows SIR 2018 (3/17/2018 3/22/2018)
- The Puberty of Physician-Administration Relationships in a Growing Healthcare Organization Northwestern's Center for Bioethics & Medical Humanities Montgomery Lecture Series (11/2/2017)
- Measuring Quality & Value SIR 2017 (3/4/2017 3/9/2017)
- Why Vascular Surgeons and Interventional Radiologists Collaborate or Compete: a Look at Endovascular Stent Placements SIR 2017 (3/4/2017 3/9/2017)
- Splenic Flow Index More Accurately Predicts Cirrhosis-associated Hypersplenism than Splenic Volume or Flow Alone SIR 2017 (3/4/2017 3/9/2017)
- Legal Guardianship and the Wishard Volunteer Advocates Program Rush University Medical Center Palliative Care Fellowship (1/19/2017)
- Case-control Study Comparing Aortic Hemodynamics Following Aortic Root Replacement with Mechanical and Bioprosthetic Valved-Conduits SMRA 2016 (9/21/2016 - 9/23/2016)
- Why Gynecologists Do Not Perceive any Conflict with IR over Uterine Fibroid Treatments CIRSE 2016 (9/10/2016 9/14/2016)
- Liver Perfusion as a Predictor of Post-radioembolization Changes in Liver and Spleen Volumes SIR 2016 (4/2/2016 4/7/2016)
- Fibroid Treatment Options: A Ten Year Analysis of Utilization and Referral Patterns SIR 2015 (2/28/2015 3/5/2015)