DA "DAVID" OUYANG, MD

CURRICULUM VITAE
Current as of August 19, 2026

PERSONAL STATEMENT

My clinical, operational, and research activities are centered around organizing and leveraging large-scale clinical data, particularly through the development and deployment of artificial intelligence (AI) in healthcare. Our research group's background ranges from computer science, data science, physics, mechanical engineering, bioengineering, to vascular surgery, emergency medicine, internal medicine, and cardiovascular medicine. We leverage large-scale clinical data to develop AI models and identify gaps in performance, lapses in care, and drive outcome-driven interventions to improve quality and efficiency of care. Our lab is funded by the NIH, American Heart Association industry, and non-profit foundations with a mandate ranging from development to deployment of AI in healthcare. We developed AI models some of the first comprehensive echo AI models and conducted the first blinded RCT of AI in cardiology, with presentations of late-breaking clinical science at *ESC, AHA, HRS,* and *ASE,* and publications in *Nature, Nature Medicine, NEJM AI, Circulation, JACC,* and *JAMA Cardiology.* This research has been operationalized in clinical deployments of AI in the healthcare system and FDA 510(k) clearance and breakthrough designation of our AI algorithms.

CURRENT POSITIONS

01/2025 – Present	Staff Cardiologist Kaiser Santa Clara Homestead Medical Center
01/2025 – Present	Research Scientist Division of Research Kaiser Permanente Northern California
09/2020 – Present	Assistant Professor, Clinical Scholar Track Department of Cardiology Cedars-Sinai Medical Center

PREVIOUS POSITIONS

09/2024 – 07/2026	Assistant Professor-in-Residence, Step IV Department of Medicine University of California, Los Angeles
09/2020 – 12/2024	Staff Physician, Department of Cardiology Cedars-Sinai Medical Center

EDUCATION

08/2007 – 05/2010	Bachelor of Arts (BA), Statistics Bachelor of Science (BS), Biochemistry Magna cum Laude, University Trustees Scholar, Rice University
08/2010 – 06/2014	Doctor of Medicine **(**MD), Clinical and Translational Research Pathway University of California, San Francisco (UCSF)
07/2014 – 06/2017	Internship and Residency in Internal Medicine, Stanford University
07/2017 – 07/2020	Fellowship in Cardiovascular Medicine, Stanford University
01/2019 – 09/2020	Postdoctoral Fellow, Computer Science, Stanford University

LICENSURE

09/25/15 – 03/31/27	California Medical License #A138463

BOARD CERTIFICATIONS

2017 – Present	Internal Medicine, American Board of Internal Medicine
2020 – Present	Cardiovascular Disease, American Board of Internal Medicine
2020 – Present	Echocardiography, National Board of Echocardiography

PROFESSIONAL ACTIVITIES

National Committee Services:

2020 – 2021	NeurIPS 2020 Machine Learning for Health (ML4H) Program Committee Member
2022 – Present	Amyloidosis Research Consortium Artificial Intelligence Committee Committee Member
2022 – Present	American Society of Echocardiography ImageGuideEcho Registry Committee Co-Chair (2022 – 2025) Chair (2025 – Present)
2023 – Present	American Society of Echocardiography Artificial Intelligence Task Force

2023 – Present	American College of Cardiology CV Imaging Workgroup on Multimodality Imaging and Artificial Intelligence
2023	NIH NHLBI Clinical Informatics and Digital Health (CIDH) Ad Hoc Member
2024	NIH NHLBI Clinical Integrative Cardiovascular and Hematological Sciences (CCHS) Ad Hoc Member
2025	NIH NHLBI Clinical and Translational Imaging Science (CTIS) Ad Hoc Member
2025	NIH NHLBI Emerging Imaging Technologies and Applications (EITA) Ad Hoc Member
2025	NIH NHLBI Small Business: Health Services and Systems (ZRG1 HHS-J) Ad Hoc Member

Professional Associations/Memberships:
AHA, American Heart Association, Member
ACC, American College of Cardiology, FACC
ASE, American Society of Echocardiography, FASE

Editorial Services:

2018 – Present	JACC EP; Ad hoc reviewer
2018 – Present	PLOS One; Ad hoc reviewer
2018 – Present	Circulation: Cardiovascular Quality & Outcomes; Ad hoc reviewer
2019 – Present	Circulation; Ad hoc reviewer
2019 – Present	BMJ Open; Ad hoc reviewer
2019 – Present	JAMA Cardiology; Ad hoc reviewer
2019 – Present	Neural Information Processing Systems (NeurIPS); Ad hoc reviewer
2020 – Present	Lancet Digital Medicine; Ad hoc reviewer
2020 – Present	New England Journal of Medicine; Ad hoc reviewer
2020 – Present	JACC; Ad hoc reviewer
2020 – Present	JACC Cardiovascular Imaging; Ad hoc reviewer

2020 – Present	JACC CardioOncology; Ad hoc reviewer
2020 – Present	JASE; Ad hoc reviewer
2020 – Present	Cell; Ad hoc reviewer
2020 – Present	Circulation: Genomics and Precision Medicine; Ad hoc reviewer
2020 – Present	Nature Medicine; Ad hoc reviewer
2021 – Present	ACC.21 Imaging Abstracts reviewer
2021 – Present	Nature; Ad hoc reviewer
2022 – 2023	Circulation: Cardiovascular Quality and Outcomes, Associate Editor
2022 – 2024	Annals of Thoracic Surgery, Editorial Board
2023 – Present	Journal of the American Society of Echocardiography, Editorial Board
2023 – Present	NEJM AI, Deputy Editor

Mentoring:

07/2018 – 06/2022	Neal Yuan, Assistant Clinical Professor of Medicine, Division of Cardiology, University of California, San Francisco (UCSF)
07/2020 – 06/2023	Nathan Stein, Assistant Professor, UCSD
10/2020 – 01/2022	John Theurer, Software Engineer, Ziphyr Labs
01/2021 – 09/2024	Grant Duffy, Data Scientist, Meta
05/2021 – Present	Milos Vukadinovic, PhD in Bioengineering, UCLA
10/2021 – 12/2024	Kai Christensen, Software Engineer, Roboflow
01/2022 – 06/2024	Ray Wu, PhD in Computer Science, Caltech
05/2022 – 06/2024	Yu Sun, PhD, Assistant Professor, Johns Hopkins
08/2022 – Present	Amey Vrudhula, Stanford IM Resident, Sarnoff Fellow
06/2023 – Present	Justin Rhee, Brown University Medical Student
05/2023 – 12/2024	Son Doung, MD, Pediatric Cardiology, Mt. Sinai, K23
08/2023 – 12/2024	I-Min Chiu, MD, PhD, Research Scientist, Apple
10/2023 – Present	Yuki Sahashi, MD, PhD Postdoc AHA postdoc award, ASE young investigator finalist
01/2025 – Present	Hirotaka Ieki, MD, PhD Postdoc AHA postdoc award
05/2025 – Present	Dilek Yalcinkaya, PhD Postdoc
06/2022 – Present	Victoria Yuan, UCLA Medical Student, Sarnoff Fellow
09/2024 – Present	Meenal Rawlani, Software Engineer/Analyst
08/2024 – Present	David Choi, Software Engineer/Analyst
07/2024 – 06/2025	Christina Binder-Rodriguez, Cardiologist, Medical University of Vienna
08/2025 – Present	Ruiyang Chen, UCLA Bioengineering PhD Student Mentored as a PhD student, primary mentor
08/2025– Present	Sahir Eusuff, Research Assistant
01/2026 – Present	Jay Kim, Research Assistant
07/2026 – Present	Alex Ye, Software Engineer/Analyst

HONORS AND SPECIAL AWARDS

2007 Rice University Trustees Distinguished Scholarship
2007 Rice University Century Scholarship for Research
2008 Welch Foundation Undergraduate Summer Research Fellowship
2009 Joe Hamner Scholarship for Excellence in Engineering
2009 USA Today All-USA College Academic 3rd Team
2009 Barry M. Goldwater Scholar for Excellence in Research
2009 Amgen Scholar at the University of California San Francisco
2010 Phi Beta Kappa
2012 UCSF Dean's Prize in Research Finalist
2014 The Permanente Medical Group Medical Student Scholarship
2018 Circulation Cardiovascular Quality and Outcomes Top Reviewer
2019 American Society of Echocardiography Arthur Weyman Young Investigator Award Competition Finalist
2019 American College of Cardiology Foundation / Merck Research Fellowship
2020 Edwin Alderman Award for Excellence in Clinical Research
2022 Early Career Clinical Research Symbiont Award
2026 Elected Member, American Society for Clinical Investigation (ASCI)

RESEARCH AWARDS AND GRANTS

Current Grants

09/22/2025 – 08/31/2028
U01 FD008704 Feliciano (Contact PI), Ouyang (MPI)
AI-Enabled Echocardiographic Biomarkers and Real-World Data for Predicting Cancer Therapy-Related Cardiac Dysfunction
Role: MPI
Funding: $1,498,464

07/2025 – 12/2026
American Heart Association Novel Artificial Intelligence Approaches to Advance Cardiovascular and Cerebrovascular/Brain Health
Opportunistic Screening of Liver and Kidney Disease with Computer Vision in a High Cardiovascular Risk Population (PI: D. Ouyang)
Role: Principal Investigator
Funding: $5,000,000

01/2025 – 12/2028
R01 HL173487-01A1 (PI: D. Ouyang)
Artificial Intelligence Imaging Biomarkers of Longitudinal Cardiovascular Stress
Role: Principal Investigator
Funding: $3,075,079

07/2024 – 06/2028
R01 HL168940-01A1 (PI: S. Shah)
Machine Learning Guided Precision Genetic Testing for Identification of Monogenic Cardiovascular Disorders
Role: Co-Investigator
Funding: $3,076,378

04/2024 – 03/2029
R01 HL1573426 (PI: D. Ouyang)
Deep Learning Based Phenotyping and Outcomes Prediction for Valvular Heart Disease
Role: Principal Investigator
Funding: $4,075,527

Past Grants

01/2024 – 12/2025
High-Throughput Precision Identification of Cardiac Amyloidosis in a Diverse Population
PI (D. Ouyang)
Betty and Gordon Moore Foundation
Role: Principal Investigator
Funding: $750,000

02/2023 – 01/2026
R01 HL16584001 (PI: C. Albert)
PRE-DETERMINE: Advancing Sudden Arrhythmic Death Prediction in Coronary Artery Disease in the Absence of Severe Systolic Dysfunction
Role: Co-Investigator
Annual Funding $1,538,200

01/2023 – 12/2025
R00 HL157421 (PI: D. Ouyang)
Deep Learning Assessment of the Right Ventricle: Function, Etiology, and Prognosis
Role: Principal Investigator
Funding: $747,000

01/2023 – 12/2024
AHA Second Century Implementation Science Grant (PI: P. Cheng)
Role: Co-Investigator
Funding: $400,000

01/2023 – 12/2024
Alexion Sponsored Research Grant
Machine Learning for Detection of Systemic Amyloidosis
Role: Principal Investigator
Funding: $351,457

01/2023 – 12/2023
Radiological Society of North America
Medical Imaging Data Resource Center Grant on Covid-19 Cardiovascular Diagnostics
Role: Principal Investigator
Annual Funding: $150,000

03/2022 – 02/2026
R01 HL131532-06A1 (PI: S. Cheng)
Cardiac microstructure and the immune-inflammatory response to SARS-CoV-2
Role: Co-Investigator
Funding: $2,975,696

01/2020 – 01/2021
Kirschstein NRSA (F32HL149298-01)
Applying Machine Learning in Echocardiography to Identify and Predict Subclinical Phenotypes of Cardiovascular Disease "Declined for ACC/Merck"
Role: Principal Investigator
Annual funding: $214,266

11/2019 – 11/2020
Stanford Cardiovascular Institute and Maternal Child Health Institute Seed Grant
Developing Novel Computational Methods for the Early Detection of Right Heart Failure and Pulmonary Hypertension in the Pediatric and Adult Populations
Role: Principal Investigator
Annual funding: $20,000

11/2019 – 11/2020
Stanford Cardiovascular Institute Seed Grant
Precision Approach to Ventricular Mass: Image-Based Differentiation of Hypertrophic Cardiomyopathy, Amyloidosis, and Phenocopies
Role: Principal Investigator
Annual funding: $20,000

07/2019 – 07/2020
Translational Research and Applied Medicine Pilot Grant
Deep Learning to Identify Systemic Phenotypes and Unsupervised Learning of Clinical Measurements in Echocardiography
Role: Principal Investigator
Annual funding: $20,000

07/2019 – 07/2020
Stanford Artificial Intelligence in Medicine and Imaging Center Seed Grant Computer Vision Prediction of Cardiovascular Outcomes through Echo
Role: Co-Principal Investigator
Principal Investigator: Dr. James Zou

Annual funding: $73,524

06/2019 – 06/2020
American College of Cardiology Foundation /Merck Research Fellowship
Big Data Analysis and Machine Learning in Cardiovascular Imaging
Role: Principal Investigator
Annual funding: $70,000

04/2019 – 03/2023
K99 HL157421-01: NIH NHLBI Pathway to Independence Award
Deep Learning Assessment of the Right Ventricle: Function, Etiology, and Prognosis
Role: Principal Investigator
Annual Funding: $154,780 / year

11/2018 – 11/2019
Translational Research and Applied Medicine Pilot Grant
Deep Learning to Identify Systemic Phenotypes and Unsupervised Learning of Clinical Measurements in Echocardiography
Role: Principal Investigator
Annual funding: $20,000

02/2012 – 02/2013
T1 Catalyst Mobile Health Translational Project Award Mobile Image Processing for the Identification of Pills. UCSF Clinical and Translational Science Institute (CTSI)
Role: Principal Investigator
Annual funding: $30,000

11/2011 – 11/2012
UCSF Mobile Health Consultation Award Exploring Image Processing Using Mobile Applications. UCSF Clinical and Translational Science Institute (CTSI)
Role: Principal Investigator
Annual funding: $3,000

CLINICAL TRIALS

11/2025 – Present	AI ECHO INSIGHT: Kaiser Permanente Artificial Intelligence Echocardiogram Interpretation for Systematic Integration and Guided Healthcare Transformation ClinicalTrials.gov NCT07229300 Role: Co-Principal Investigator
04/2025 – Present	ECHONET-LVH-RCT: Blinded, Randomized Controlled Trial of Artificial Intelligence Guided Precision Assessment of Wall Thickness ClinicalTrials.gov NCT05791227

Role: Principal Investigator

10/2024 – Present ECHONET-SCREENING: Artificial Intelligence Guided Echocardiographic Screening of Rare Diseases
ClinicalTrials.gov NCT06664866
Role: Co-Principal Investigator

04/2022 – 06/2022 ECHONET-RCT: Blinded Randomized Controlled Trial of Artificial Intelligence Guided Assessment of Cardiac Function
ClinicalTrials.gov NCT05140642
Role: Principal Investigator

Planned 01/2028 SCOUT ECHO-AI: Screening Cardiometabolic Opportunities Using Transformative Echocardiography Artificial Intelligence
ClinicalTrials.gov NCT07216859
Role: Principal Investigator

INDUSTRY AND REGULATORY

2022 – Present Co-founder, InVision Medical Technology (Y Combinator S22)
Palo Alto, California

Regulatory and reimbursement milestones for AI algorithms developed with InVision:

08/2026	CMS New Technology Add-on Payment (NTAP), InVision Precision Cardiac Amyloid; effective October 1, 2026
11/2025	FDA Breakthrough Device Designation, InVision Precision Cirrhosis
05/2025	FDA 510(k) clearance, InVision Precision Cardiac Amyloid
05/2024	FDA 510(k) clearance, InVision Precision LVEF
01/2024	FDA Breakthrough Device Designation, Precision Cardiac Amyloid

PATENTS

Ouyang D, He B, Zou J, Ashley EA. Methods and systems using video-based machine learning for beat-to-beat assessment of cardiac function. US Patent 11,704,803. Filed March 30, 2021; priority March 30, 2020; granted July 18, 2023. Publication US 2021/0304410 A1, September 30, 2021. Assignee: The Board of Trustees of the Leland Stanford Junior University. Stanford docket S20-050.

Ouyang D, Holmstrom L, Christensen MK. Systems and methods for deep learning based electrocardiographic screening for chronic kidney disease. US Patent Application 18/595,237; publication US 2024/0296952 A1, September 5, 2024. Filed March 4, 2024; priority March 3, 2023 (provisional 63/488,334). Pending. Assignee: Cedars-Sinai Medical Center.

Ouyang D, Cheng S, Theurer J. Deep learning-derived myocardial strain. US Patent Application 18/191,745; publication US 2023/0316525 A1, October 5, 2023. Filed March 28, 2023; priority March 31, 2022 (provisional 63/325,807). Assignee: Cedars-Sinai Medical Center.

Ouyang D, Cheng S, Duffy G, He B. Precision phenotyping of left ventricular hypertrophy with echocardiographic deep learning. PCT Application PCT/US2022/072977; publication WO 2022/266651 A1, December 22, 2022. Filed June 16, 2022; priority June 17, 2021 (provisionals 63/212,045 and 63/298,562). Assignee: Cedars-Sinai Medical Center.

Ouyang D, Theurer J. Deep neural networks for predicting post-operative outcomes. US Patent Application 18/556,613; publications WO 2022/226227 A1, October 27, 2022 and US 2024/0212857 A1, June 27, 2024. Filed April 21, 2022; priority April 21, 2021 (provisionals 63/177,489 and 63/197,023). Assignee: Cedars-Sinai Medical Center.

INVITED LECTURES AND PRESENTATIONS:

International Presentations:

1. EchoNet-RCT: Blinded, Randomized Controlled Trial of Sonographer vs. Artificial Intelligence Assessment of Cardiac Function. European Society of Cardiology Congress, Barcelona, Spain, 08/2022

2. Debate Point of View: Artificial Intelligence will Replace the Echocardiographer in the Near Future. EchoAsia, Singapore, Singapore. October 28, 2022.

3. AI: The Next Frontier. South African Heart Society Congress. Sandton, Johannesburg. October 29, 2022.

4. Clinical Trials of Artificial Intelligence. Symposium on Artificial Intelligence for Learning Health Systems. Rio Grande, Puerto Rico, May 12, 2023.

5. Precision Phenotyping of Echocardiographs. KSE AI Research Summer Symposium 2023, Seoul, Korea, June 16, 2023.

6. Development of Cardiovascular AI in Echocardiography. Japanese Society of Echocardiography. EchoKobe. Kobe, July 22, 2023.

7. Development to Deployment of AI in Echocardiography. Montreal Heart Institute Grand Rounds. Quebec, Canada. November 14, 2024.

8. Development of Medical AI. Federation of Medical Specialists of Quebec. Quebec, Canada. November 15, 2024.

9. Development of Cardiovascular AI in Echocardiography. Harnessing AI for Clinical Medicine: An International Perspective on Future Healthcare. National Defense Medical Center. Taipei, Taiwan. November 22, 2024.

10. AI in Echo Interpretation and Reporting: Is it Here Yet? Canadian Society of Echocardiography, Toronto, ON. April 21, 2025.

11. Keynote: Towards Cardiovascular AI, 6th International Workflow of Advances in Simplifying Medical Ultrasound (ASMUS), Daejeon, Korea, September 27, 2025.

National Presentations:

1. "Big Data Analysis and Machine Learning in Cardiovascular Imaging" American College of Cardiology 2019 Scientific Sessions, March 17, 2019. New Orleans, LA

2. "Deep Learning to Identify Systemic Phenotypes and Supervised Learning of Clinical Measurements" American Society of Echocardiography 2019 Scientific Sessions,2019 Arthur E. Weyman Young Investigator's Award Competition. June 24, 2019. Portland, OR.

3. "Deep Learning and Data Science to Enhance Echocardiography" University of Pennsylvania Cardiovascular Imaging Conference, November 19, 2019. Philadelphia, Pennsylvania

4. "Deep Learning and Data Science to Enhance Echocardiography" Universityof Washington Cardiovascular Imaging Conference, January 31, 2020. Seattle, Washington

5. "Deep Learning and Data Science to Enhance Echocardiography" Johns Hopkins Cardiovascular Imaging Conference, February 19, 2020. Baltimore, Maryland

6. Deep Learning and Data Science to Enhance Echocardiography" CornellCardiovascular Imaging Conference, February 21, 2020. New York, New York

7. "Deep Learning and Data Science to Enhance Echocardiography" Northwestern Cardiovascular Imaging Conference, February 21, 2020. Chicago, Illinois

8. "AI/ML: Hype vs. Hope" American Heart Association Scientific Sessions. November 18, 2020

9. "Deep Learning and Data Science to Enhance Echocardiography" Siemens Research Presentation, October 23, 2020

10. “Cardiovascular AI: Development to Deployment.” Cedars-Sinai Smidt Heart Institute Cardiology Grand Rounds. February 1, 2022.

11. AI in Echocardiography. High Country Nuclear Medicine Conference. March 6, 2022.

12. “Cardiovascular AI: Development to Deployment”. City of Hope. Los Angeles, CA. March 28, 2022.

13. “Cardiovascular AI: Development to Deployment”. Michigan Integrated Center of Health Analytics & Medical Prediction. Michigan. April 15, 2022.

14. “AI of Cardiac Imaging to Guide Therapy”. Heart Rhythm. San Francisco, CA. April 29, 2022.

15. “Deep Learning and AI for Heart Rhythm Disorders”. Heart Rhythm. San Francisco, CA. April 29, 2022.

16. “Clinical Applications of Artificial Intelligence: Clinical Decision Support”. AIMed Global Summit. San Francisco, CA. May 2022

17. “Automated Pipelines for Disease Detection and Characterization”. American Society of Echocardiography (ASE 2022). Seattle, WA. June 13, 2022.

18. “Deployment of AI in the Echocardiography Lab”. BrainX. Zoom. July 13, 2022.
19. “Cardiovascular AI: Development to Deployment”. Stanford Division of Bioinformatics Research April 21, 2022.

20. “AI in Echocardiography”. Economic Development Meeting with Delegation from Baden Wurttemberg, Germany. Los Angeles, CA. October 6, 2022.

21. “Cardiovascular AI: Development to Deployment”. UCSF Fresno Cardiology Grand Rounds, Fresno, CA. October 26, 2022.

22. Cardiovascular AI: Development to Deployment. Cedars-Sinai Medical Center Medicine Grand Rounds. October 28, 2022.

23. “Designing and Building AI-ready Data and Infrastructure”. Second Annual AI+HEALTH Online Conference. December 7, 2022,

24. “How Should We Apply AI in Echo? 2023 and Beyond.” CVI’s 15th Annual Echo Update. Philadelphia, PA. January 15, 2023. Keynote Talk

25. "AI in Cardiovascular Medicine--What's Here and What's Yet to Come". 20th Annual ACC Oregon Cardiovascular Symposium. Portland, OR. April 14th-15th, 2023.

26. “Cardiovascular AI: Development to Deployment”. University of California San

Francisco Fresno Cardiology Grand Rounds, Fresno, CA. May 16, 2023.

27. “Practical Discussion in Deployment of AI in Cardiology.” Stanford Cardiology Grand Rounds, Palo Alto, CA. June 15, 2023.

28. “Clinical Trials of AI in Cardiology”. Apple Workshop on Machine Learning in Healthcare. June 21, 2023.

29. “AI: Tips for Data Mining Echo Reports and EMR”. American Society of Echocardiography. National Harbor, MD, June 23, 2023.

30. “Cardiovascular AI for Amyloidosis Screening”. Alexion Pharmaceuticals, Boston, MA, August 24, 2023.

31. “Development to Deployment of AI for Echocardiography”. Stony Brook University Cardiology Grand Rounds, Virtual/New York. September 21, 2023.

32. “Development to Deployment of Cardiovascular AI”. Providence St. Vincent, Bryant Family Heart Lectureship**.** Portland, Oregon, November 2, 2023.

33. “Development to Deployment of Cardiovascular AI”. Cedars-Sinai Medical Center Cardiac Surgery Grand Rounds. February 14, 2024

34. “Development to Deployment of Cardiovascular AI”. Vanderbilt Medical Center, Cardiology Grand Rounds. Nashville, Tennessee, February 15, 2024.

35. “Development to Deployment of Cardiovascular AI”. Weill Cornell - NYP, Institute of Artificial Intelligence in Digital Health. New York, New York, March 13, 2024.

36. “Development to Deployment of Cardiovascular AI”. Paoli Hospital, Medicine Grand Rounds, Paoli, Pennsylvania, March 20, 2024.

37. “Development to Deployment of AI for Echocardiography”. Brigham and Women’s Hospital, Cardiovascular Imaging Grand Rounds, Boston, Massachusetts, May 1, 2024.

38. “Computer Vision and Predictive Analytics in Cardiovascular Imaging”. Kaiser Permanente Northern California, Cardiovascular Research Symposium, San Jose, California, May 3, 2024.

39. “Development to Deployment of AI for Echocardiography”. Cornell-NYP, Machine Learning in Medicine, New York, New York, May 10, 2024.

40. “High-Throughput Precision Identification of Cardiac Amyloidosis in Diverse Populations”. Augmented Intelligence in Medicine and Healthcare Initiative, Health AI Partnership, Durham, North Carolina, May 9, 2024.

41. “Development to Deployment of AI for Echocardiography”. AIM-HI Meeting/JAMA Summit. Chicago, IL. October 16, 2024.

42. “Development to Deployment of Cardiovascular AI”. UCLA Cardiology Grand Rounds. September 27, 2024.

43. “The Pulse of Progress: AI in Cardiology with Dr. David Ouyang”. NEJM AI Grand Rounds. Podcast. October 16, 2024.

44. “Development to Deployment of AI for Echocardiography”. Clinical and Translational Epidemiology Unit Research Seminar. Mass General Hospital. Boston, MA (Virtual). November 6, 2024.

45. “AI for Heart Failure Management”. AI in Clinical Medicine. Harvard Medical School (Virtual). November 7, 2024.

46. "Discussant: AI-ECHO and PanEcho”. 2024 AHA Scientific Sessions. Chicago, IL. November 16, 2024.

47. "Applications of AI in Cardiology”. Statistics Methods in Imaging Conference, American Statistics Association, Houston, TX, May 18, 2025

48. “Development to Deployment of Cardiovascular AI”, UCLA Health Data Day, Los Angeles, CA, June 3, 2025

49. "Path to Cardiovascular AI”. Vanderbilt Department of Medicine Grand Rounds, Nashville, TN, July 10, 2025

50. "Deployment and Disease Detection with Cardiovascular AI”. Stanford Division of Cardiology Grand Rounds, Palo Alto, CA, October 9, 2025

51. "The Path Towards Echocardiographic AI”. Stanford Department of Radiology Grand Rounds, Palo Alto, CA, October 10, 2025
52.
53. “Development and Deployment of Echocardiography AI”. Stanford IBIIS and AIMI Seminar, Stanford, CA, January 21, 2026.

Regional and Extramural Local Presentations:

1. An EPIC Use of Time. Internal Medicine Residency Noon Conference, November 30, 2015. Stanford University, Palo Alto.

2. Outcomes Research using the Electronic Medical Record System. Bay AreaR User Group, February 9, 2016. Thermo Fisher Scientific, South San Francisco.

3. Residency in 16 Graphs: Data Visualization in Medicine. Internal Medicine Residency Senior Talk, March 12, 2017. Stanford University, Palo Alto.

4. Beyond Traditional Data Streams: Analysis of Organic Datasets in Healthcare. Biomedical Informatics Division Research in Progress, October 26, 2017.Stanford Center for Biomedical Informatics Research, Palo Alto.

5. Big Data Analysis and Machine Learning in Cardiovascular Imaging. Translational Research and Applied Medicine Annual Research Symposium, June 11,2019. Stanford University, Palo Alto

6. Big Data Analysis and Machine Learning in Cardiovascular Imaging. Stanford Cardiovascular Medicine Grand Rounds, September 6, 2019. Stanford University, Palo Alto

7. Deep Learning and Data Science to Enhance Echocardiography. Stanford Cardiovascular Medicine Grand Rounds, January 16, 2020. Palo Alto, California

8. Democratizing Medical AI with Shared Datasets. Stanford AIMI Symposium. August 5, 2020

9. Data Science, Artificial Intelligence, and Echocardiography. Los Angeles Echocardiography Society. December 2, 2020

10. Applications of AI in Cardiology. Heart Lab, Stanford University, March 17, 2021

11. Machine Learning Applications in Cardiovascular Imaging. ACC Precision Medicine, April 16, 2021. Zoom.

12. Improving Clinical Precision with Artificial Intelligence. Stanford AIMI Symposium. August 5, 2021.

13. Cardiovascular AI: Development to Deployment. Medical College of Wisconsin Cardiology Grand Rounds. February 17, 2022.

14. Cardiovascular AI: Development to Deployment. Rutgers Cardiology Grand Rounds. March 7, 2022.

15. AI in Healthcare. El Camino Hospital CME Grand Rounds. March 8, 2022.

16. “Cardiovascular AI: Development to Deployment.” CTSI K Scholars Society Seminar. Los Angeles. March 15, 2022.

17. “Cardiovascular AI: Development to Deployment”. California Institute of Technology. Pasadena, CA. April 6, 2022.

18. “Cardiovascular AI: Development to Deployment”. Stanford University. Stanford, CA. April 21, 2022.

19. “AI applications in Echocardiography”. BrainX. Virtual. July 13, 2022

20. “Development to Deployment of Cardiovascular AI”. Tempus. Virtual. September 24, 2024.

21. “Artificial Intelligence (AI) Applications in Echocardiography. 38th Hoag Advanced Echo Conference. Huntington Beach, CA. October 25, 2024.

22. “Development to Deployment of Cardiovascular AI”. Computational Biomedicine Science Cafe. Cedars Sinai Center. November 6, 2024.

23. “Development to Deployment of Cardiovascular AI”. AI in Medicine Division Symposium 2024. December 12, 2024.

24. “State of the Art Lecture: AI in the Future of Echocardiography and How We Get There”. Controversies and Advances in the Treatment of Cardiovascular Disease 2025. January 30, 2025.

TEACHING ACTIVITIES:

2016 – 2020	Teaching Stanford Internal Medicine residents in Data Science, EHR data analysis, and Research Ethics
2020 – 2025	Teaching Cedars-Sinai Cardiology fellows in Echocardiography
2020 – 2025	Teaching Cedars-Sinai Cardiology fellows in Critical Care Cardiology
2020 – 2024	Deep Learning and Artificial Intelligence in Medicine Forum Bi-weekly Virtual Meeting. Cedars-Sinai
2020 – 2024	Machine Learning Journal Club Bi-weekly Virtual Meeting Cedars-Sinai

BIBLIOGRAPHY AND PUBLICATIONS:

Research Papers - Peer-Reviewed:

1. Englot DJ, **Ouyang D**, Garcia PA, Barbaro NM, Chang EF. Epilepsy surgery trends in the United States, 1990-2008. Neurology. 2012 Apr 17;78(16):1200-6. doi: 10.1212/WNL.0b013e318250d7ea. Epub 2012 Mar 21. PMID: 22442428; PMCID: PMC3324320.

2. Englot DJ, **Ouyang D**, Wang DD, Rolston JD, Garcia PA, Chang EF. Relationship between hospital surgical volume, lobectomy rates, and adverse perioperative events at US epilepsy centers. J Neurosurg. 2013 Jan;118(1):169-74. doi: 10.3171/2012.9.JNS12776. Epub 2012 Oct 26. PMID: 23101453.

3. **Ouyang D**, Yuan N, Sheu L, Lau G, Chen C, Lai CJ. Community health education at student-run clinics leads to sustained improvement in patients' hepatitis B knowledge. J Community Health. 2013 Jun;38(3):471-9. doi: 10.1007/s10900-012-9631-3. PMID: 23161212.

4. Wang DD, **Ouyang D**, Englot DJ, Rolston JD, Molinaro AM, Ward M, Chang EF. Trends in surgical treatment for trigeminal neuralgia in the United States of America from 1988 to 2008. J Clin Neurosci. 2013 Nov;20(11):1538-45. doi: 10.1016/j.jocn.2012.12.026. Epub 2013 Aug 7. PMID: 23932422.

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