Stanford

Akshay Chaudhari

Associate Professor (Research) of Radiology (Integrative Biomedical Imaging Informatics at Stanford) and of Biomedical Data Science

CONTACT INFORMATION

- **Administrative Contact**

  Homaira Farooq - Administrative Associate

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Bio

BIO

Dr. Chaudhari is an Assistant Professor of Radiology and Biomedical Data Science, and is currently the Interim Division Chief of the Integrative Biomedical Imaging Informatics section in Radiology. Dr. Chaudhari leads the Machine Intelligence in Medical Imaging research group at Stanford focusing on improving both the acquisition and analysis of medical images and related healthcare data. His group develops new self-supervised and representation learning techniques for multi-modal deep learning for healthcare using vision, language, and medical records data. Dr. Chaudhari's research is funded by the NIH, ARPA-H, and several industry partners. He also serves as the Co-Director of Clinical AI at Stanford Radiology and as the Associate Director of Research and Education at the Stanford AIMI Center.

ACADEMIC APPOINTMENTS

- Associate Professor (Research), Radiology
- Associate Professor (Research), Department of Biomedical Data Science
- Member, Bio-X
- Member, Cardiovascular Institute
- Faculty Affiliate, Institute for Human-Centered Artificial Intelligence (HAI)
- Member, Wu Tsai Human Performance Alliance
- Member, Wu Tsai Neurosciences Institute

HONORS AND AWARDS

- Junior Fellow, International Society for Magnetic Resonance in Medicine (2020)
- W.S. Moore Young Investigator Award, International Society for Magnetic Resonance in Medicine (2019)
- Best Young Investigator Award, 12th Intl. Workshop on Osteoarthritis (2019)
- Best Emerging Investigator, Imaging Elevated Symposium (2019)
- 2nd - 'Best Science' Presentation, ISMRM and RSNA Workshop on Value in MRI (2018)
- 2nd – 'Best Value' Presentation, ISMRM and RSNA Workshop on Value in MRI (2018)

- 2x Magna Cum Laude Merit Award, International Society for Magnetic Resonance in Medicine Annual Meeting (2018)
- Best Healthcare Poster, NVIDIA GPU Technology Conference (2018)
- Best Junior Investigator Abstract, 11th Intl. Workshop on Osteoarthritis (2018)
- Best Overall Poster, NVIDIA GPU Technology Conference (2018)
- Editor's Monthly Pick, Magnetic Resonance in Medicine (2018)
- Outstanding Teacher Award, International Society for Magnetic Resonance in Medicine Annual Meeting (2018)
- Best Young Investigator Award, 10th Intl. Workshop on Osteoarthritis (2017)
- Biodesign NEXT Fellow, Stanford Biodesign (2017)
- Magna Cum Laude Merit Award, International Society for Magnetic Resonance in Medicine (2017)
- Best Young Investigator Award, 9h Intl. Workshop on Osteoarthritis (2016)
- Mobile Biodesign Innovation Award, Stanford Biodesign (2016)
- Siebel Scholar for Engineering Leadership, Siebel Foundation (2016)
- Award of Merit for Highly Rated Trainee Abstract, 8th Intl. Workshop on Osteoarthritis (2015)
- Whitaker International Program Summer Fellow, Whitaker Foundation (2015)
- Best Poster, Center for Biomedical Imaging at Stanford Symposium (2014)
- Graduate Research Fellow, National Science Foundation (2012)
- Best Undergraduate Research Poster, University of California San Diego Bioengineering Day (2011)
- Chuao Chocolate Alumni Scholar, University of California San Diego (2010)
- Most Informative Poster, Genentech Summer Intern Poster Expo (2010)
- Outstanding UCSD Junior, Genentech Process Research and Development (2010)
- Best Oral Presentation, Biomedical Engineering Society Lab Expo (2009)
- Gordon Scholar, Jacobs School of Engineering (UCSD) (2009)

LINKS

- Group Website: https://med.stanford.edu/mimi.html
- Google Scholar Profile: https://scholar.google.com/citations?user=08Y4NhMAAAAJ&hl=en

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Dr. Chaudhari is interested in the application of artificial intelligence techniques to all aspects of medical imaging, including automated schedule and reading prioritization, image reconstruction, quantitative analysis, clinical decision support, and prediction of patient outcomes. His interests focus on the development and evaluation new self-supervised and representation learning techniques for multi-modal deep learning in healthcare using vision, language, and medical records data

Teaching

COURSES

2025-26

- Foundation Models for Healthcare: BMDS 271, CS 277, RAD 271 (Win)

2024-25

- Foundation Models for Healthcare: BIODS 271, CS 277, RAD 271 (Spr)

2023-24

- Biomedical Data Science Student Seminar: BIODS 201, BIOMEDIN 201 (Sum)
- Essentials of Deep Learning in Medicine: BIOS 407 (Spr)
- Foundation Models for Healthcare: BIODS 271, CS 277, RAD 271 (Win)

2022-23

- Biomedical Informatics Student Seminar: BIODS 201, BIOMEDIN 201 (Sum)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Katie Marusich, Maya Varma

Postdoctoral Faculty Sponsor

Phil Adamson, Dennis Hein, Malte Jensen, Magdalini Paschali, McKenzie White

Doctoral Dissertation Advisor (AC)

Ates Fettahoglu, Ashwin Kumar, Ivan Lopez, Stefania Moroianu, Anoosha Pai S

Orals Evaluator

Maya Varma

Postdoctoral Research Mentor

Yunhe Gao, Robert Holland, Jiaming Liu

Publications

PUBLICATIONS

- **AI-driven smart patient retrieval for precision oncology.** *Nature reviews. Cancer*
  Wang, Y. J., Chaudhari, A. S.
  2026
- **Merlin: a computed tomography vision-language foundation model and dataset.** *Nature*
  Blankemeier, L., Kumar, A., Cohen, J. P., Liu, J., Liu, L., Van Veen, D., Gardezi, S. J., Yu, H., Paschali, M., Chen, Z., Delbrouck, J. B., Reis, E., Holland, et al
  2026
- **Radiology AI makes consistent diagnoses using 3D images from different health centres** *NATURE*
  Kumar, A., Chaudhari, A. S.
  2026
- **GaitDynamics: a generative foundation model for analyzing human walking and running.** *Nature biomedical engineering*
  Tan, T., Van Wouwe, T., Werling, K. F., Liu, C. K., Delp, S. L., Hicks, J. L., Chaudhari, A. S.
  2026
- **Automated real-time assessment of intracranial hemorrhage detection AI using an ensembled monitoring model (EMM).** *NPJ digital medicine*
  Fang, Z., Johnston, A., Cheuy, L. Y., Na, H. S., Paschali, M., Gonzalez, C., Armstrong, B. A., Koirala, A., Laurel, D., Campion, A. W., Iv, M., Chaudhari, A. S., Larson, et al
  2025; 8 (1): 608
- **Hamstring muscle architecture and microstructure changes following Nordic hamstring exercise training and detraining.** *Journal of sport and health science*
  S, A. P., Andrews, M. H., Gurchiek, R. D., Pincheira, P. A., Barbieri, M., Friedrich, T., Kogan, F., Gold, G. E., Mazzoli, V., Lichtwark, G. A., Delp, S. L., Chaudhari, A. S.

2025: 101070

- **Sarcopenia, Obesity, and Sarcopenic Obesity: Retrospective Audit of Electronic Health Record Documentation versus Automated CT Analysis in 17 646 Patients.** *Radiology*
  Zambrano Chaves, J. M., Hom, J., Lenchik, L., Chaudhari, A. S., Boutin, R. D.
  2025; 315 (1): e243525

- **Best Practices for Large Language Models in Radiology.** *Radiology*
  Bluethgen, C., Van Veen, D., Zakka, C., Link, K. E., Fanous, A. H., Daneshjou, R., Frauenfelder, T., Langlotz, C. P., Gatidis, S., Chaudhari, A.
  2025; 315 (1): e240528

- **Using deep feature distances for evaluating the perceptual quality of MR image reconstructions.** *Magnetic resonance in medicine*
  Adamson, P. M., Desai, A. D., Dominic, J., Varma, M., Bluethgen, C., Wood, J. P., Syed, A. B., Boutin, R. D., Stevens, K. J., Vasanawala, S., Pauly, J. M., Gunel, B., Chaudhari, et al
  2025

- **Assessing Completeness of Clinical Histories Accompanying Imaging Orders Using Adapted Open-Source and Closed-Source Large Language Models.** *Radiology*
  Larson, D. B., Koirala, A., Cheuy, L. Y., Paschali, M., Van Veen, D., Na, H. S., Petterson, M. B., Fang, Z., Chaudhari, A. S.
  2025; 314 (2): e241051

- **Foundation Models in Radiology: What, How, Why, and Why Not.** *Radiology*
  Paschali, M., Chen, Z., Blankemeier, L., Varma, M., Youssef, A., Bluethgen, C., Langlotz, C., Gatidis, S., Chaudhari, A.
  2025; 314 (2): e240597

- **OpenCapBench: A Benchmark to Bridge Pose Estimation and Biomechanics**
  Gozlan, Y., Falisse, A., Uhlrich, S., Gatti, A., Black, M., Hicks, J., Delp, S., Chaudhari, A., IEEE COMPUTER SOC
  IEEE COMPUTER SOC.2025: 4056-4065

- **CheXalign: Preference fine-tuning in chest X-ray interpretation models without human feedback**
  Hein, D., Chen, Z., Ostmeier, S., Xu, J., Varma, M., Reis, E., Michalson, A., Bluethgen, C., Shin, H., Langlotz, C., Chaudhari, A. S.
  edited by Che, W., Nabende, J., Shutova, E., Pilehvar, M. T.
  ASSOC COMPUTATIONAL LINGUISTICS-ACL.2025: 27679-27702

- **A dataset and benchmark for hospital course summarization with adapted large language models.** *Journal of the American Medical Informatics Association : JAMIA*
  Aali, A., Van Veen, D., Arefeen, Y. I., Hom, J., Bluethgen, C., Reis, E. P., Gatidis, S., Clifford, N., Daws, J., Tehrani, A. S., Kim, J., Chaudhari, A. S.
  2024

- **T2 Clusters Are More Sensitive Than Mean T2 Change to Detect Early and Longitudinal Changes in Anterior Cruciate Ligament Reconstructed and Healthy Knees.** *Journal of magnetic resonance imaging : JMRI*
  Pai S, A., Gatti, A. A., Black, M. S., Young, K. A., Desai, A. D., Barbieri, M., Asay, J. L., Sherman, S. L., Gold, G. E., Kogan, F., Hargreaves, B. A., Chaudhari, A. S.
  2024

- **ShapeMed-Knee: A Dataset and Neural Shape Model Benchmark for Modeling 3D Femurs.** *IEEE transactions on medical imaging*
  Gatti, A. A., Blankemeier, L., Veen, D. V., Hargreaves, B., Delp, S. L., Gold, G. E., Kogan, F., Chaudhari, A. S.
  2024; PP

- **A vision-language foundation model for the generation of realistic chest X-ray images.** *Nature biomedical engineering*
  Bluethgen, C., Chambon, P., Delbrouck, J. B., van der Sluijs, R., Połacin, M., Zambrano Chaves, J. M., Abraham, T. M., Purohit, S., Langlotz, C. P., Chaudhari, A. S.
  2024

- **Merlin: A Vision Language Foundation Model for 3D Computed Tomography.** *Research square*
  Blankemeier, L., Cohen, J. P., Kumar, A., Veen, D. V., Gardezi, S., Paschali, M., Chen, Z., Delbrouck, J. B., Reis, E., Truyts, C., Bluethgen, C., Jensen, M., Ostmeier, et al
  2024

- **ShapeMed-Knee: A Dataset and Neural Shape Model Benchmark for Modeling 3D Femurs.** *medRxiv : the preprint server for health sciences*
  Gatti, A. A., Blankemeier, L., Van Veen, D., Hargreaves, B., Delp, S. L., Gold, G. E., Kogan, F., Chaudhari, A. S.

2024

- **Abdominal CT metrics in 17,646 patients reveal associations between myopenia, myosteatosis, and medical phenotypes: a phenome-wide association study** *EBIOMEDICINE*
  Chaves, J., Lenchik, L., Gallegos, I. O., Blankemeier, L., Liang, T., Rubin, D. L., Willis, M. H., Chaudhari, A. S., Boutin, R. D.
  2024; 103
- **Automated abdominal CT contrast phase detection using an interpretable and open-source artificial intelligence algorithm.** *European radiology*
  Reis, E. P., Blankemeier, L., Zambrano Chaves, J. M., Jensen, M. E., Yao, S., Truyts, C. A., Willis, M. H., Adams, S., Amaro, E., Boutin, R. D., Chaudhari, A. S.
  2024
- **Abdominal CT metrics in 17,646 patients reveal associations between myopenia, myosteatosis, and medical phenotypes: aphenome-wide association study.** *EBioMedicine*
  Zambrano Chaves, J. M., Lenchik, L., Gallegos, I. O., Blankemeier, L., Rubin, D. L., Willis, M. H., Chaudhari, A. S., Boutin, R. D.
  2024; 103: 105116
- **Adapted large language models can outperform medical experts in clinical text summarization.** *Nature medicine*
  Van Veen, D., Van Uden, C., Blankemeier, L., Delbrouck, J. B., Aali, A., Bluethgen, C., Pareek, A., Polacin, M., Reis, E. P., Seehofnerová, A., Rohatgi, N., Hosamani, P., Collins, et al
  2024
- **Self-Supervised Learning Improves Accuracy and Data Efficiency for IMU-Based Ground Reaction Force Estimation.** *IEEE transactions on bio-medical engineering*
  Tan, T., Shull, P. B., Hicks, J. L., Uhlrich, S. D., Chaudhari, A. S.
  2024; PP
- **Self-Supervised Learning Improves Accuracy and Data Efficiency for IMU-Based Ground Reaction Force Estimation.** *bioRxiv : the preprint server for biology*
  Tan, T., Shull, P. B., Hicks, J. L., Uhlrich, S. D., Chaudhari, A. S.
  2024
- **Opportunistic assessment of ischemic heart disease risk using abdominopelvic computed tomography and medical record data: a multimodal explainable artificial intelligence approach.** *Scientific reports*
  Zambrano Chaves, J. M., Wentland, A. L., Desai, A. D., Banerjee, I., Kaur, G., Correa, R., Boutin, R. D., Maron, D. J., Rodriguez, F., Sandhu, A. T., Rubin, D., Chaudhari, A. S., Patel, et al
  2023; 13 (1): 21034
- **Skeletal Muscle Area on CT: Determination of an Optimal Height Scaling Power and Testing for Mortality Risk Prediction.** *AJR. American journal of roentgenology*
  Blankemeier, L., Yao, L., Long, J., Reis, E. P., Lenchik, L., Chaudhari, A. S., Boutin, R. D.
  2023
- **Noise2Recon: Enabling SNR-robust MRI reconstruction with semi-supervised and self-supervised learning.** *Magnetic resonance in medicine*
  Desai, A. D., Ozturkler, B. M., Sandino, C. M., Boutin, R., Willis, M., Vasanawala, S., Hargreaves, B. A., Re, C., Pauly, J. M., Chaudhari, A. S.
  2023
- **Self-supervised learning for medical image classification: a systematic review and implementation guidelines.** *NPJ digital medicine*
  Huang, S., Pareek, A., Jensen, M., Lungren, M. P., Yeung, S., Chaudhari, A. S.
  2023; 6 (1): 74
- **A scoping review of portable sensing for out-of-lab anterior cruciate ligament injury prevention and rehabilitation.** *NPJ digital medicine*
  Tan, T., Gatti, A. A., Fan, B., Shea, K. G., Sherman, S. L., Uhlrich, S. D., Hicks, J. L., Delp, S. L., Shull, P. B., Chaudhari, A. S.
  2023; 6 (1): 46
- **Improving Data-Efficiency and Robustness of Medical Imaging Segmentation Using Inpainting-Based Self-Supervised Learning.** *Bioengineering (Basel, Switzerland)*
  Dominic, J., Bhaskhar, N., Desai, A. D., Schmidt, A., Rubin, E., Gunel, B., Gold, G. E., Hargreaves, B. A., Lenchik, L., Boutin, R., Chaudhari, A. S.
  2023; 10 (2)

- **RaLEs: a Benchmark for Radiology Language Evaluations**
  Chaves, J., Bhaskhar, N., Attias, M., Delbrouck, J., Rubin, D. L., Loening, A., Langlotz, C., Chaudhari, A. S.
  edited by Oh, A., Neumann, T., Globerson, A., Saenko, K., Hardt, M., Levine, S.
  NEURAL INFORMATION PROCESSING SYSTEMS (NIPS).2023

- **Generalizability of Deep Learning Segmentation Algorithms for Automated Assessment of Cartilage Morphology and MRI Relaxometry.** *Journal of magnetic resonance imaging : JMRI*
  Schmidt, A. M., Desai, A. D., Watkins, L. E., Crowder, H. A., Black, M. S., Mazzoli, V., Rubin, E. B., Lu, Q., MacKay, J. W., Boutin, R. D., Kogan, F., Gold, G. E., Hargreaves, et al
  2022

- **Opportunistic Incidence Prediction of Multiple Chronic Diseases from Abdominal CT Imaging Using Multi-task Learning**
  Blankemeier, L., Gallegos, I., Chaves, J., Maron, D., Sandhu, A., Rodriguez, F., Rubin, D., Patel, B., Willis, M., Boutin, R., Chaudhari, A. S.
  edited by Wang, L., Dou, Q., Fletcher, P. T., Speidel, S., Li, S.
  SPRINGER INTERNATIONAL PUBLISHING AG.2022: 309-318

- **Low-count whole-body PET with deep learning in a multicenter and externally validated study.** *NPJ digital medicine*
  Chaudhari, A. S., Mittra, E., Davidzon, G. A., Gulaka, P., Gandhi, H., Brown, A., Zhang, T., Srinivas, S., Gong, E., Zaharchuk, G., Jadvar, H.
  2021; 4 (1): 127

- **The International Workshop on Osteoarthritis Imaging Knee MRI Segmentation Challenge: A Multi-Institute Evaluation and Analysis Framework on a Standardized Dataset.** *Radiology. Artificial intelligence*
  Desai, A. D., Caliva, F., Iriondo, C., Mortazi, A., Jambawalikar, S., Bagci, U., Perslev, M., Igel, C., Dam, E. B., Gaj, S., Yang, M., Li, X., Deniz, et al
  2021; 3 (3): e200078

- **Accuracy and longitudinal reproducibility of quantitative femorotibial cartilage measures derived from automated U-Net-based segmentation of two different MRI contrasts: data from the osteoarthritis initiative healthy reference cohort.** *Magma (New York, N.Y.)*
  Wirth, W., Eckstein, F., Kemnitz, J., Baumgartner, C. F., Konukoglu, E., Fuerst, D., Chaudhari, A. S.
  2020

- **Prospective Deployment of Deep Learning in MRI: A Framework for Important Considerations, Challenges, and Recommendations for Best Practices.** *Journal of magnetic resonance imaging : JMRI*
  Chaudhari, A. S., Sandino, C. M., Cole, E. K., Larson, D. B., Gold, G. E., Vasanawala, S. S., Lungren, M. P., Hargreaves, B. A., Langlotz, C. P.
  2020

- **Diagnostic Accuracy of Quantitative Multi-Contrast 5-Minute Knee MRI Using Prospective Artificial Intelligence Image Quality Enhancement.** *AJR. American journal of roentgenology*
  Chaudhari, A. S., Grissom, M. J., Fang, Z. n., Sveinsson, B. n., Lee, J. H., Gold, G. E., Hargreaves, B. A., Stevens, K. J.
  2020

- **Rapid Knee MRI Acquisition and Analysis Techniques for Imaging Osteoarthritis.** *Journal of magnetic resonance imaging : JMRI*
  Chaudhari, A. S., Kogan, F., Pedoia, V., Majumdar, S., Gold, G. E., Hargreaves, B. A.
  2019

- **Utility of deep learning super-resolution in the context of osteoarthritis MRI biomarkers.** *Journal of magnetic resonance imaging : JMRI*
  Chaudhari, A. S., Stevens, K. J., Wood, J. P., Chakraborty, A. K., Gibbons, E. K., Fang, Z., Desai, A. D., Lee, J. H., Gold, G. E., Hargreaves, B. A.
  2019

- **Combined 5-minute double-echo in steady-state with separated echoes and 2-minute proton-density-weighted 2D FSE sequence for comprehensive whole-joint knee MRI assessment** *JOURNAL OF MAGNETIC RESONANCE IMAGING*
  Chaudhari, A. S., Stevens, K. J., Sveinsson, B., Wood, J. P., Beaulieu, C. F., Oei, E. H. G., Rosenberg, J. K., Kogan, F., Alley, M. T., Gold, G. E., Hargreaves, B. A.
  2019; 49 (7): E183–E194

- **Super-resolution musculoskeletal MRI using deep learning.** *Magnetic resonance in medicine*
  Chaudhari, A. S., Fang, Z., Kogan, F., Wood, J., Stevens, K. J., Gibbons, E. K., Lee, J. H., Gold, G. E., Hargreaves, B. A.
  2018

- **Five-minute knee MRI for simultaneous morphometry and T2 relaxometry of cartilage and meniscus and for semiquantitative radiological assessment using double-echo in steady-state at 3T.** *Journal of magnetic resonance imaging : JMRI*

Chaudhari, A. S., Black, M. S., Eijgenraam, S. n., Wirth, W. n., Maschek, S. n., Sveinsson, B. n., Eckstein, F. n., Oei, E. H., Gold, G. E., Hargreaves, B. A.

2018; 47 (5): 1328–41

- **Deep Learning Super-Resolution Enables Rapid Simultaneous Morphological and Quantitative Magnetic Resonance Imaging**

  Chaudhari, A., Fang, Z., Lee, J., Gold, G., Hargreaves, B.

  edited by Knoll, F., Maier, A., Rueckert, D.

  SPRINGER INTERNATIONAL PUBLISHING AG.2018: 3–11

- **connective tissues in the knee using ultrashort echo-time double-echo steady-state (UTEDESS).** *Magnetic resonance in medicine*

  Chaudhari, A. S., Sveinsson, B., Moran, C. J., McWalter, E. J., Johnson, E. M., Zhang, T., Gold, G. E., Hargreaves, B. A.

  2017

- **Predicting the Value of Radiology Artificial Intelligence Applications: Large-Scale Predeployment Evaluation of a Portfolio of Models.** *AJR. American journal of roentgenology*

  Larson, D. B., Poff, J. A., Krishnan, S., Avondo, J., Armstrong, B. A., Na, H. S., Chaudhari, A., Kottler, N.

  2026

- **Reporting checklist for foundation and large language models in medical research (REFINE): an international consensus guideline.** *Diagnostic and interventional radiology (Ankara, Turkey)*

  Mese, I., Akinci D'Antonoli, T., Bluethgen, C., Bressem, K., Cuocolo, R., Chaudhari, A., Tejani, A. S., Isaac, A., Ponsiglione, A., Meddeb, A., Khosravi, B., Le Guellec, B., Kahn, et al

  2026

- **Guidelines for Reporting Studies on Large Language Models in Radiology: An International Delphi Expert Survey.** *Radiology*

  Kottlors, J., Iuga, A. I., Bluethgen, C., Bressem, K., Kather, J. N., Moy, L., Wald, C., Wang, W., Liu, T., Ranschaert, E., Dratsch, T., Kleesiek, J., Gertz, et al

  2026; 318 (2): e250913

- **AI-Quantified Patient Frailty Predicts Clinical Response to CAR-T**

  Smith, C. J., Fettahoglu, A., Johnston, A., Smith, B. R., Mikkilinenni, L., Sidana, S., Weng, W., Frank, M., Dahiya, S., Smith, M., Chaudhari, A., Miklos, D. B., Boutin, et al

  ELSEVIER SCIENCE INC.2026

- **Holistic evaluation of large language models for medical tasks with MedHELM.** *Nature medicine*

  Bedi, S., Cui, H., Fuentes, M., Unell, A., Wornow, M., Banda, J. M., Kotecha, N., Keyes, T., Mai, Y., Oez, M., Qiu, H., Jain, S., Schettini, et al

  2026

- **Effects of Real-Time Notification of AI-Derived Incidental Coronary Artery Calcium on Statin Initiation: the NOTIFY-PICTURE Trial**

  Dudum, R., Jain, S., Mastrodicasa, D., Ngo, S., Furst, A., Xu, S., Eng, D., Khandwala, N., Langlotz, C., Chaudhari, A., Sandhu, A., Maron, D., Rodriguez, et al

  LIPPINCOTT WILLIAMS & WILKINS.2025

- **3D Patellar instability Anatomical Severity Score (3D-PASS): A Novel Machine Learning Score Using 3D Bone Position From MRI to Predict Outcomes of Patellar Instability Treatment (Using a Subset of Data in the JUPITER Cohort).** *Orthopaedic journal of sports medicine*

  Sinopoli, M. L., Gatti, A. A., Wright, C. E., Bartsch, A., Veerkamp, M. W., Boutin, R. D., Mintz, D. N., Emery, K. H., Shea, K. G., Chaudhari, A. S., JUPITER Study Group, Wall, E. J., Elangovan, S., et al

  2025; 13 (12): 23259671251362675

- **Improving Performance, Robustness, and Fairness of Radiographic AI Models with Finely-Controllable Synthetic Data.** *Research square*

  Moroianu, S. L., Bluethgen, C., Chambon, P., Cherti, M., Delbrouck, J. B., Paschali, M., Price, B., Gichoya, J., Jitsev, J., Langlotz, C. P., Chaudhari, A. S.

  2025

- **Effects of Real-Time Notification of AI-Detected Incidental Coronary Artery Calcium on Statin Prescription: the NOTIFY-PICTURE Trial.** *Circulation*

  Dudum, R., Jain, S. S., Mastrodicasa, D., Furst, A., Xu, S., Ngo, S., Eng, D., Khandwala, N., Sousa, D., Chaudhari, A., Langlotz, C., Sandhu, A. T., Maron, et al

  2025

- **Automated Segmentation of Forearm Muscles: Clinical Associations With Hand Function, Muscle Volume and Intramuscular Fat.** *JCSM communications*

Fundaun, J., Oliva, V., Bédard, S., Wesselink, E. O., Lynn, B. P., Pai S, A., Pfyffer, D., Kaptan, M., Berhe, N., Ratliff, J., Hu, S. S., Smith, Z. A., Hastie, et al
2025; 8 (2): e70015

- **Spectral Graph Sample Weighting for Interpretable Sub-cohort Analysis in Predictive Models for Neuroimaging.** *PRedictive Intelligence in MEdicine. PRIME (Workshop)*
  Paschali, M., Jiang, Y. H., Siegel, S., Gonzalez, C., Pohl, K. M., Chaudhari, A., Zhao, Q.
  2025; 15155: 24-34
- **A Machine Learning System to Automate Body Computed Tomography Protocoling.** *Journal of imaging informatics in medicine*
  Shokrollahi, P., Zambrano Chavez, J. M., Lam, J. P., Sharma, A. A., Pal, D., Bahrami, N., Gatidis, S., Chaudhari, A. S., Loening, A. M.
  2025
- **Mapping hand function with simultaneous brain-spinal cord functional MRI.** *Imaging neuroscience (Cambridge, Mass.)*
  Oliva, V., Bédard, S., Kaptan, M., Pfyffer, D., Chy, B., Aufrichtig, S., Berhe, N., Chaudhari, A. S., Tharin, S., Hu, S. S., Ratliff, J., Smith, Z. A., Smith, et al
  2025; 3
- **Rapid and robust quantitative cartilage assessment for the clinical setting: deep learning-enhanced accelerated T2 mapping.** *Skeletal radiology*
  Carretero-Gómez, L., Wiesinger, F., Fung, M., Nunes, B., Pedoia, V., Majumdar, S., Desai, A. D., Gatti, A., Chaudhari, A., Sánchez-Lacalle, E., Malpica, N., Padrón, M.
  2025
- **Comparison between coronal FLASH and sagittal double echo steady state MRI in detecting longitudinal cartilage thickness change by fully automated segmentation - Data from the FNIH biomarker cohort.** *Osteoarthritis and cartilage open*
  Eckstein, F., Chaudhari, A. S., Hunter, D. J., Wirth, W.
  2025; 7 (3): 100657
- **Cartilage Imaging: MRI of Chondral Degeneration and Injury.** *Clinics in sports medicine*
  Zandee van Rilland, E. D., Fritz, R. C., Chaudhari, A. S., Boutin, R. D.
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