



Akshay Chaudhari

Assistant Professor (Research) of Radiology (Integrative Biomedical Imaging Informatics at Stanford) and, by courtesy, of Biomedical Data Science

CONTACT INFORMATION

- **Administrative Contact**

Homaira Farooq - Administrative Associate

Email hfarooq3@stanford.edu

Tel 6504982917

Bio

BIO

Dr. Chaudhari is an Assistant Professor in the Integrative Biomedical Imaging Informatics at Stanford (IBIIS) section in the Department of Radiology and (by courtesy) in the Department of Biomedical Data Science. He leads the Machine Intelligence in Medical Imaging research group at Stanford and has a primary research interest that lies at the intersection of artificial intelligence and medical imaging. His group develops new techniques for accelerated MRI acquisition and downstream image analysis, extracting prognostic insights from already-acquired CT imaging, and developing new multi-modal deep learning algorithms for healthcare that leverage computer vision, natural language, and medical records. Dr. Chaudhari has won the W.S. Moore Young Investigator Award and the Junior Fellow Award from the International Society for Magnetic Resonance in Medicine. Dr. Chaudhari has also been inducted into the Academy of Radiology's Council of Early Career Investigators in Imaging program. He also serves as the Associate Director of Research and Education at the Stanford AIMI Center and is an advisory board member of the Precision Health and Integrated Diagnostics Center.

ACADEMIC APPOINTMENTS

- Assistant Professor (Research), Radiology
- Assistant Professor (Research) (By courtesy), 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, 9th 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=08Y4NhMAAAJ&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, and prediction of patient outcomes. His interests range from developing novel data-efficient machine learning algorithms to clinical deployment and validation of patient outcomes, both for medical imaging acquisition and subsequent analysis. He is also exploring combining imaging with clinical, natural language, and time series data.

Teaching

COURSES

2023-24

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

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

2022-23

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

STANFORD ADVISEES

Postdoctoral Faculty Sponsor

Anthony Gatti, Magdalini Paschali, Alan Tan

Doctoral Dissertation Advisor (AC)

Louis Blankemeier, Arjun Desai, Stefania Moroianu, Anoosha Pai S

Doctoral Dissertation Co-Advisor (AC)

Ashwin Kumar

Postdoctoral Research Mentor

Sophie Ostmeier

Publications

PUBLICATIONS

- **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.** *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)

- **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., Wang, L., Dou, et al
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., Podoia, 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. 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., 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
- **Biomarkers of Body Composition.** *Seminars in musculoskeletal radiology*
Chang, C. Y., Lenchik, L., Blankemeier, L., Chaudhari, A. S., Boutin, R. D.
2024; 28 (1): 78-91
- **Differences in Anatomic Adaptation and Injury Patterns Related to Valgus Extension Overload in Overhead Throwing Athletes.** *Diagnostics (Basel, Switzerland)*
Stevens, K. J., Chaudhari, A. S., Kuhn, K. J.
2024; 14 (2)
- **Accelerated Musculoskeletal Magnetic Resonance Imaging.** *Journal of magnetic resonance imaging : JMRI*
Yoon, M. A., Gold, G. E., Chaudhari, A. S.
2023
- **AI in osteoarthritis: illuminating the meandering path forward.** *Osteoarthritis and cartilage*
Chaudhari, A. S.
2023
- **Reconsidering Conclusions of Bias Assessment in Medical Imaging Foundation Models.** *Radiology. Artificial intelligence*
Chaudhari, A. S., Bluethgen, C., Ouyang, D.
2023; 5 (6): e230432
- **Reconsidering Conclusions of Bias Assessment in Medical Imaging Foundation Models** *RADIOLOGY-ARTIFICIAL INTELLIGENCE*
Chaudhari, A. S., Bluethgen, C., Ouyang, D.
2023; 5 (6)
- **Clinical Text Summarization: Adapting Large Language Models Can Outperform Human Experts.** *Research square*
Veen, D. V., Uden, C. V., Blankemeier, L., Delbrouck, J. B., Aali, A., Bluethgen, C., Pareek, A., Polacin, M., Reis, E. P., Seehofnerova, A., Rohatgi, N., Hosamani, P., Collins, et al
2023
- **OpenCap: Human movement dynamics from smartphone videos.** *PLoS computational biology*
Uhlrich, S. D., Falisse, A., Kidzi#ski, #., Muccini, J., Ko, M., Chaudhari, A. S., Hicks, J. L., Delp, S. L.
2023; 19 (10): e1011462
- **LIVER VOLUME PREDICTS MORTALITY IN ALCOHOL ASSOCIATED LIVER DISEASE**
Manikat, R., Wu, W., Kwo, P., Kothary, N., Chaudhari, A., Kwong, A. J.
LIPPINCOTT WILLIAMS & WILKINS.2023: S1622-S1623
- **Association of Coronary Artery Calcium Detected by Routine Ungated CT Imaging With Cardiovascular Outcomes.** *Journal of the American College of Cardiology*
Peng, A. W., Dudum, R., Jain, S. S., Maron, D. J., Patel, B. N., Khandwala, N., Eng, D., Chaudhari, A. S., Sandhu, A. T., Rodriguez, F.
2023; 82 (12): 1192-1202
- **Federated benchmarking of medical artificial intelligence with MedPerf** *NATURE MACHINE INTELLIGENCE*
Karargyris, A., Umeton, R., Sheller, M. J., Aristizabal, A., George, J., Wuest, A., Pati, S., Kassem, H., Zenk, M., Baid, U., Moorthy, P., Chowdhury, A., Guo, et al
2023
- **Patellar Tracking: An Old Problem with New Insights.** *Radiographics : a review publication of the Radiological Society of North America, Inc*
Watts, R. E., Gorbachova, T., Fritz, R. C., Saad, S. S., Lutz, A. M., Kim, J., Chaudhari, A. S., Shea, K. G., Sherman, S. L., Boutin, R. D.
2023; 43 (6): e220177
- **[Formula: see text] Field inhomogeneity correction for qDESS [Formula: see text] mapping: application to rapid bilateral knee imaging.** *Magma (New York, N.Y.)*
Barbieri, M., Watkins, L. E., Mazzoli, V., Desai, A. D., Rubin, E., Schmidt, A., Gold, G. E., Hargreaves, B. A., Chaudhari, A. S., Kogan, F.
2023

- **Radiology Decision Support System for Selecting Appropriate CT Imaging Titles Using Machine Learning Techniques Based on Electronic Medical Records** *IEEE ACCESS*
Shokrollahi, P., Chaves, J., Lam, J. H., Sharma, A., Pal, D., Bahrami, N., Chaudhari, A. S., Loening, A. M.
2023; 11: 99222-99236
- **Developing medical imaging AI for emerging infectious diseases.** *Nature communications*
Huang, S., Chaudhari, A. S., Langlotz, C. P., Shah, N., Yeung, S., Lungren, M. P.
2022; 13 (1): 7060
- **The KNee OsteoArthritis Prediction (KNOAP2020) Challenge: An image analysis challenge to predict incident symptomatic radiographic knee osteoarthritis from MRI and X-ray images.** *Osteoarthritis and cartilage*
Hirvasniemi, J., Runhaar, J., van der Heijden, R. A., Zokaenikoo, M., Yang, M., Li, X., Tan, J., Rajamohan, H. R., Zhou, Y., Deniz, C. M., Caliva, F., Iriondo, C., Lee, et al
2022
- **Preliminary Clinical Validation Results of a Deep Learning Approach for Ankle Brachial Index Prediction in Noncompressible Tibial Vessels**
Fereydooni, A., Rao, A., Chaudhari, A., Battenfield, K., Aalami, O.
MOSBY-ELSEVIER.2022: E85
- **A method for measuring B0 field inhomogeneity using quantitative double-echo in steady-state.** *Magnetic resonance in medicine*
Barbieri, M., Chaudhari, A. S., Moran, C. J., Gold, G. E., Hargreaves, B. A., Kogan, F.
2022
- **Imaging of Sarcopenia.** *Radiologic clinics of North America*
Boutin, R. D., Houston, D. K., Chaudhari, A. S., Willis, M. H., Fausett, C. L., Lenchik, L.
2022; 60 (4): 575-582
- **Scale-Equivariant Unrolled Neural Networks for Data-Efficient Accelerated MRI Reconstruction**
Gunel, B., Sahiner, A., Desai, A. D., Chaudhari, A. S., Vasanaawala, S., Pilanci, M., Pauly, J., Wang, L., Dou, Q., Fletcher, P. T., Speidel, S., Li, S.
SPRINGER INTERNATIONAL PUBLISHING AG.2022: 737-747
- **ViLMedic: a framework for research at the intersection of vision and language in medical AI**
Delbrouck, J., Saab, K., Varma, M., Eyuboglu, S., Dunnmon, J. A., Chambon, P., Zambrano, J., Chaudhari, A., Langlotz, C. P., Assoc Computat Linguist
ASSOC COMPUTATIONAL LINGUISTICS-ACL.2022: 23-34
- **MRSaiFE: An AI-Based Approach Toward the Real-Time Prediction of Specific Absorption Rate (vol 9, pg 140824, 2021)** *IEEE ACCESS*
Gokyar, S., Robb, F. L., Kainz, W., Chaudhari, A., Winkler, S.
2022; 10: 19925
- **Validation of Deep Learning-based Augmentation for Reduced 18F-FDG Dose for PET/MRI in Children and Young Adults with Lymphoma.** *Radiology. Artificial intelligence*
Theruvath, A. J., Siedek, F., Yerneni, K., Muehe, A. M., Spunt, S. L., Pribnow, A., Moseley, M., Lu, Y., Zhao, Q., Gulaka, P., Chaudhari, A., Daldrup-Link, H. E.
2021; 3 (6): e200232
- **Author Correction: 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): 139
- **Open Source Software for Automatic Subregional Assessment of Knee Cartilage Degradation Using Quantitative T2 Relaxometry and Deep Learning.** *Cartilage*
Thomas, K. A., Krzeminski, D., Kidzinski, L., Paul, R., Rubin, E. B., Halilaj, E., Black, M. S., Chaudhari, A., Gold, G. E., Delp, S. L.
2021: 19476035211042406
- **Synthesizing Quantitative T2 Maps in Right Lateral Knee Femoral Condyles from Multicontrast Anatomic Data with a Conditional Generative Adversarial Network.** *Radiology. Artificial intelligence*
Sveinsson, B., Chaudhari, A. S., Zhu, B., Koonjoo, N., Torriani, M., Gold, G. E., Rosen, M. S.
2021; 3 (5): e200122
- **Challenges in ensuring the generalizability of image quantitation methods for MRI.** *Medical physics*
Keenan, K. E., Delfino, J. G., Jordanova, K. V., Poorman, M. E., Chirra, P., Chaudhari, A. S., Baessler, B., Winfield, J., Viswanath, S. E., deSouza, N. M.

2021

- **Sarcopenia in rheumatic disorders: what the radiologist and rheumatologist should know.** *Skeletal radiology*
Manzano, W., Lenchik, L., Chaudhari, A. S., Yao, L., Gupta, S., Boutin, R. D.
2021
- **Non-contrast MRI of synovitis in the knee using quantitative DESS.** *European radiology*
Thoenen, J., Stevens, K. J., Turmezei, T. D., Chaudhari, A., Watkins, L. E., McWalter, E. J., Hargreaves, B. A., Gold, G. E., MacKay, J. W., Kogan, F.
2021
- **Measuring Robustness in Deep Learning Based Compressive Sensing**
Darestani, M., Chaudhari, A. S., Heckel, R., Meila, M., Zhang, T.
JMLR-JOURNAL MACHINE LEARNING RESEARCH.2021
- **Upstream Machine Learning in Radiology.** *Radiologic clinics of North America*
Sandino, C. M., Cole, E. K., Alkan, C., Chaudhari, A. S., Loening, A. M., Hyun, D., Dahl, J., Imran, A. A., Wang, A. S., Vasawala, S. S.
2021; 59 (6): 967-985
- **MRSaiFE: An AI-Based Approach Towards the Real-Time Prediction of Specific Absorption Rate** *IEEE ACCESS*
Gokyar, S., Robb, F. L., Kainz, W., Chaudhari, A., Winkler, S.
2021; 9: 140824-140834
- **Improving in vivo human cerebral cortical surface reconstruction using data-driven super-resolution.** *Cerebral cortex (New York, N.Y. : 1991)*
Tian, Q., Bilgic, B., Fan, Q., Ngamsombat, C., Zaretskaya, N., Fultz, N. E., Ohringer, N. A., Chaudhari, A. S., Hu, Y., Witzel, T., Setsompop, K., Polimeni, J. R., Huang, et al
2020
- **Layer-specific analysis of femorotibial cartilage t2 relaxation time based on registration of segmented double echo steady state (dess) to multi-echo-spin-echo (mese) images.** *Magma (New York, N.Y.)*
Furst, D., Wirth, W., Chaudhari, A., Eckstein, F.
2020
- **Preoperative MRI of Articular Cartilage in the Knee: A Practical Approach.** *The journal of knee surgery*
Fritz, R. C., Chaudhari, A. S., Boutin, R. D.
2020; 33 (11): 1088-99
- **MRSaiFE: Tissue Heating Prediction for MRI: a Feasibility Study**
Winkler, S., Saniour, I., Chaudhari, A., Robb, F., Vaughan, J., IEEE
IEEE.2020
- **A Deep Learning Automated Segmentation Algorithm Accurately Detects Differences in Longitudinal Cartilage Thickness Loss - Data from the FNIH Biomarkers Study of the Osteoarthritis Initiative.** *Arthritis care & research*
Eckstein, F. n., Chaudhari, A. S., Fuerst, D. n., Gaisberger, M. n., Kemnitz, J. n., Baumgartner, C. F., Konukoglu, E. n., Hunter, D. J., Wirth, W. n.
2020
- **Time-saving opportunities in knee osteoarthritis: T2 mapping and structural imaging of the knee using a single 5-min MRI scan.** *European radiology*
Eijgenraam, S. M., Chaudhari, A. S., Reijman, M., Bierma-Zeinstra, S. M., Hargreaves, B. A., Runhaar, J., Heijboer, F. W., Gold, G. E., Oei, E. H.
2019
- **Evaluation of a Flexible 12-Channel Screen-printed Pediatric MRI Coil** *RADIOLOGY*
Winkler, S., Corea, J., Lechene, B., O'Brien, K., Bonanni, J., Chaulhari, A., Alley, M., Taviani, V., Grafendorfer, T., Robb, F., Seem, G., Pauly, J., Lustig, et al
2019; 291 (1): 179-84
- **Simultaneous NODDI and GFA parameter map generation from subsampled q-space imaging using deep learning** *MAGNETIC RESONANCE IN MEDICINE*
Gibbons, E. K., Hodgson, K. K., Chaudhari, A. S., Richards, L. G., Majersik, J. J., Adluru, G., DiBella, E. R.
2019; 81 (4): 2399-2411
- **Clinical evaluation of fully automated thigh muscle and adipose tissue segmentation using a U-Net deep learning architecture in context of osteoarthritic knee pain.** *Magma (New York, N.Y.)*
Kemnitz, J. n., Baumgartner, C. F., Eckstein, F. n., Chaudhari, A. n., Ruhdorfer, A. n., Wirth, W. n., Eder, S. K., Konukoglu, E. n.

2019

- **3D Ultrashort TE MRI for Evaluation of Cartilaginous Endplate of Cervical Disk In Vivo: Feasibility and Correlation With Disk Degeneration in T2-Weighted Spin-Echo Sequence** *AMERICAN JOURNAL OF ROENTGENOLOGY*
Kim, Y., Cha, J., Shin, Y., Chaudhari, A. S., Suh, Y., Yoon, S., Gold, G. E.
2018; 210 (5): 1131–40
- **Simultaneous bilateral-knee MR imaging.** *Magnetic resonance in medicine*
Kogan, F. n., Levine, E. n., Chaudhari, A. S., Monu, U. D., Epperson, K. n., Oei, E. H., Gold, G. E., Hargreaves, B. A.
2018; 80 (2): 529–37
- **A simple analytic method for estimating T2 in the knee from DESS.** *Magnetic resonance imaging*
SVEINSSON, B., Chaudhari, A. S., Gold, G. E., Hargreaves, B. A.
2016; 38: 63-70