BIRI Past News

2016

- **Hui Han, PhD, Debiao Li, PhD, and team created prototype novel UNIC (unified coils) systems that promise improved detection fidelity and decreased artifacts in imaging of the human body (patents pending). Hui Han, PhD, presented this work at the prestigious Gordon Research Conference, held July 17-22, 2016. The development of UNIC technology sets the stage for precision medicine in MRI.**

- **Wei Gao, PhD, has a paper titled "Longitudinal Study of the Emerging Functional Connectivity Asymmetry of Primary Language Regions During Infancy" published in the October 2016 issue of The Journal of Neuroscience ("Language-Circuit Function Is Lateralized After First Year"). (October 2016)**

- **Debiao Li, PhD and Dan Gazit, DMD, PhD, have research featured in the Cedars-Sinai Discoveries magazine in an article titled "Back to the Future." (Fall 2016 Issue)**

- **Anthony Christodoulou, PhD, is awarded the E. James Potchen Award for Best Oral Presentation at the 28th Annual Meeting of the Society for Magnetic Resonance Angiography for project "Low-rank tensor imaging for non-ECG multidimensional cardiovascular MRI." (September 2016)**

- **Debiao Li, PhD and Hyung Kim, MD, are awarded a Precision Medicine Initiative grant for "Clinical trial evaluating high resolution PET-MRI and molecular markers to identify prostate cancers for focal ablation using high intensity focused ultrasound (HIFU)." (August 2016)**

- **Zixin Deng is awarded a predoctoral fellowship from the National Institutes of Health for her project "Pressure Gradient Measurement in the Coronary Artery: Towards Noninvasive Quantification of Fractional Flow Reserve," under the mentorship of Debiao Li, PhD. (July 2016)**

- **Damini Dey, PhD, is awarded an NIH R01 for project "Automated Quantitative CT Imaging of Epicardial Adipose Tissue and Risk of Cardiac Events." With this grant, researchers propose to establish automated analysis of fat which**
surrounds the heart, as well as novel computerized scores that identify the patients who are at highest risk of suffering a heart attack. (July 2016)

- **Wei Gao, PhD**, has a paper titled "Neural Connectivity Evidence for a Categorical-Dimensional Hybrid Model of Autism Spectrum Disorder" published in *Biological Psychiatry*’s July 15 issue. (July 2016)

- **Rohan Dharmakumar, PhD**, receives Editor's Pick award for their Manuscript in Circulation: Cardiovascular Imaging entitled "Iron-Sensitive Cardiac Magnetic Resonance Imaging for Prediction of Ventricular Arrhythmia Risk in Patients with Chronic Myocardial Infarction: Early Evidence." (April 2016)

- **Ivan Cokic, MD**, from Rohan Dharmakumar's lab receives a Best Poster Award at the American College of Cardiology’s 65th Annual Scientific Session & Expo for his abstract "Persistent Microvascular Obstruction Accompanying Myocardial Infarction Leads to Chronic Iron-Driven Inflammation." (April 2016)

- **Debiao Li, PhD**, is awarded an NIH S10 for "4Dx Small Animal Scanner for Functional Lung Imaging." This is a joint effort by BIRI and Lung Institute with key co-investigators Heather Jones, MD, and BIRI faculty, Andreas Fouras, PhD. The 4DXV scanner uses a technique called 4D X-ray velocimetry (4DXV), which is a low dose X-ray imaging technology that measures lung tissue motion and airflow throughout the lungs and over the breath. (March 2016)

- **Feng Shi, PhD**, joins BIRI as a project scientist. He will continue to expand his research on medical image processing and analysis of the brain and heart. (February 2016)

- **Andreas Fouras, PhD**, joins BIRI as faculty research scientist. He will continue to develop his research interests in dynamic lung imaging and cardiovascular systems from the cellular scale to heart lung interactions. (February 2016)

- **Zhengwei (Jenny) Zhou, MS**, from Debiao Li’s lab was awarded a Society of Cardiac Magnetic Resonance (SCMR) Seed Grant for her project "Assessing Myocardial Metabolic Activity Using Cardiac Chemical Exchange Saturation Transfer (CEST)." (February 2016)

- **Yibin Xie, PhD**, from Debiao Li’s lab was awarded a Society of Cardiac Magnetic Resonance (SCMR) Regional Scholarship and was also a finalist of the SCMR Early Career Award for his project "Coronary Atherosclerosis T1-weighed Characterization with Integrated Anatomical Reference (CATCH)." (February 2016)
Hui Han, PhD, joins BIRI as faculty research scientist. His research interests focus on developing novel MRI hardware and methodologies for in vivo and material applications, and using this technology to improve diagnosis and prevention of diseases. (October 2015)

Debiao Li, PhD, is appointed Chair of Academic Promotions and Appointments Council (CS-APAC) at Cedars-Sinai Medical Center. (October 2015)

Debiao Li, PhD, is awarded an NIH R01 for "3D MRI Characterization of High-Risk Carotid Artery Plaques Without Contrast Media." The ultimate goal of the study is to eventually improve the prognosis for patients with carotid atherosclerosis. (July 2015)

Daniel Berman, MD, is awarded the inaugural Gold Medal Award from the Society of Cardiovascular Computed Tomography (SCCT). The Gold Medal Award is the Society's highest honor and recognizes outstanding leaders who best exemplify leadership and a lifetime commitment to clinical excellence, research, and education. (July 2015)

Wei Gao, PhD, joins BIRI and the Department of Imaging as the new director of Neuroimaging Research. In this new role, he will develop a cross-departmental program to improve understanding of the human brain development and adult brain disorders using imaging. (July 2015)

Zhaoyang Fan, PhD, receives an AHA Scientist Development Grant for "Carotid Atherosclerotic Disease: 3D MRI Characterization of Vulnerable Plaque Features Without Contrast Media." (May 2015)

Debiao Li, PhD, is awarded an NIH R01 for "Whole-Heart Myocardial Blood Flow Quantification Using MRI." The broad aim of this project is to improve the prognosis of patients with myocardial ischemia caused by coronary artery disease or coronary microvascular dysfunction. (April 2015)

Shawn Wagner, PhD, receives a 2015 Donna and Jesse Garber Award for Cancer Research for his project "Radiation Enhancement with Targeted Platinum Nanoparticles for Metastatic Breast Cancer Treatment." (April 2015)
2014

- **Avinash Kali** receives a SCMR 2015 Regional Scholarship to attend the annual Scientific Sessions. (December 2014)
- **Jaime Shaw** is awarded an AHA Predoctoral Fellowship for her project "Whole-Heart Non-ECG-Gated Free-Breathing Myocardial T1 Mapping with Isotropic Resolution," under the mentorship of **Debiao Li, PhD**. (November 2014)
- **Debiao Li, PhD**, is featured in a Cedars-Sinai *Discoveries* magazine article titled "A New 3-D Experience." (Fall 2014 issue)
- **Christopher Nguyen, MS**, is awarded an NIH F31 Predoctoral Research Fellowship Award for his work on clinically translatable cardiac diffusion MR for non-contrast characterization of myocardial fibrosis, under the mentorship of **Debiao Li, PhD**. (September 2014)
- Co-PIs **Debiao Li, PhD**, (contact) and **Dan Gazit, PhD, DMD**, are awarded an NIH R01 grant to develop and validate a novel pH level-dependent MRI approach for discogenic lower back pain. (August 2014)
- **Piotr Slomka, PhD**, is awarded an NIH R01 grant to develop new image processing algorithms for myocardial perfusion single photon emission tomography to enhance diagnosis of heart disease. (August 2014)
- **Behzad Sharif, PhD**, is awarded an NIH K99 Pathway to Independence Award for his work on improving the noninvasive diagnosis of microvascular coronary disease using cardiac magnetic resonance first-pass myocardial perfusion imaging. (July 2014)
- **Janet Wei, MD**, receives an Eigler-Whiting-Mann Award through the Cedars-Sinai Clinical Scholars Program. Co-mentored by **Noel Bairey Merz, MD**, and **Debiao Li, PhD**, Wei will explore ways to use novel MRI techniques to combine plaque measurements into a global assessment of cardiovascular risk. (July 2014)
- **Behzad Sharif, PhD**, is awarded an American Heart Association Scientist Development Grant. The award will fund Sharif's work on developing ungated cine myocardial perfusion MRI methodologies for accurate diagnosis of ischemic heart disease. (June 2014)
- The article entitled "The New 3-D Experience" is published in the Fall 2014 issue of Cedars-Sinai's *Discoveries* magazine. (Fall 2014)
Rohan Dharmakumar, PhD, is awarded an NIH R01 grant for his work on developing an imaging strategy free of ionizing radiation, exogenous contrast media, and pharmacological stress agents to assess myocardial ischemia due to CAD. (August 2013)

Avinash Kali receives an American Heart Association predoctoral fellowship for his project "MRI-Based Assessment of Late Reperfusion Therapies" under the mentorship of Rohan Dharmakumar, PhD. (July 2013)

Damini Dey, PhD, has a manuscript, "Automated knowledge-based detection of nonobstructive and obstructive arterial lesions from coronary CT angiography," highlighted in the Editor’s Picks column for Medical Physics. (April 2013)

Zhaoyang Fan, PhD, is selected as an International Society for Magnetic Resonance in Medicine Junior Fellow. (February 2013)

Behzad Sharif, PhD, receives a Society for Cardiovascular Magnetic Resonance Early Career Award in Basic Science for his work entitled "Eliminating Dark-Rim Artifacts in First-Pass Myocardial Perfusion Imaging." (February 2013)

Behzad Sharif, PhD, is awarded a 2013 Society for Cardiovascular Magnetic Resonance Regional Scholarship (November 2012)

Damini Dey, PhD, receives an American Heart Association grant for her project entitled "Automated Non-invasive Measurements of Epicardial and Thoracic Fat." (May 2012)

V. Krishnan Ramanujam, PhD, is awarded an American Cancer Society grant for his project entitled "Imaging Mitochondrial Dynamics for Early Detection of Breast Cancer In vivo." (April 2012)

Avinash Kali receives the Summa Cum Laude Merit Award for the 20th annual ISMRM Meeting for his abstract entitled "Temporal Features of Edema in Acute Myocardial Infarction: T2 Maps vs T2-STIR". (April 2012)

Debiao Li, PhD, is elected program director of the International Society of Magnetic Resonance in Medicine Cardiac MR Study Group. (March 2012)

Zhaoyang Fan, PhD, receives the Magna Cum Laude Merit Award for the 20th Annual International Society for Magnetic Resonance in Medicine Meeting for his abstract entitled "3D Variable-Flip-Angle TSE with Prospective Self-Gating of Swallowing Motion: Initial Experience in Carotid Artery Wall MRI." (April 2012)

Behzad Sharif, PhD, is awarded an American Heart Association Postdoctoral Fellowship for his project entitled "Whole-heart Myocardial Perfusion MRI:
Artifact-minimized Projection Imaging" under the mentorship of Debiao Li, PhD. (July 2011)

- **Zhaoyang Fan, PhD**, is awarded an American Heart Association Postdoctoral Fellowship for his project entitled "Non-Contrast MR Angiography of Peripheral Arteries: Improved Flow-Sensitive Dephasing-Prepared Balanced SSFP" under the mentorship of Debiao Li, PhD. (July 2011)
- **Debiao Li, PhD**, is elected president of the International Society for Magnetic Resonance Imaging in Medicine. (May 2011)
- The article entitled "**Imaging: Proteins and Cancer**" is published in the Summer 2011 issue of Cedars-Sinai's *Discoveries* magazine. (Summer 2011)