

BioMedical Engineering and Imaging Institute

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Message from the Director

It's with a mix of sadness and gratitude that I announce that Willem Mulder, PhD has left his post as Director of Nanomedicine at BMEII. Dr. Mulder's contributions to the growth and success of BMEII since his arrival in 2006 are innumerable, from conducting innovative experiments to training the next generation of leading scientists, and we look forward to continued collaborations with him at his new institutions in the Netherlands. To honor his legacy at BMEII, we have created an endowed annual lectureship in Nanomedicine and an Award for Best Abstract in Nanomedicine at future BMEII annual symposia in his

name, made possible by a generous gift from Jean and Nathalie Boulle.

I am delighted to welcome new members to our research and operational staff, as well as to highlight our faculty's and trainee's important work in neuroimaging, and cancer and body imaging. I am pleased to announce a rebranding of our monthly seminar series in partnership with the Department of Diagnostic, Molecular and Interventional Radiology, focusing on Engineering and Medicine, as we continue to expand our research footprint. We hope you enjoy this newsletter and wish everyone health and peace in 2021.

BMEII News & Updates

New Media

BMEII, along with the rest of Mount Sinai, has adapted to the COVID-19 pandemic by implementing extra safety precautions. We created an Imaging Research Walkthrough video to illustrate to our research participants and those who use our facilities what to expect when they arrive for a scan. Take a look at the video [here](#), and subscribe to our YouTube Channel for more video updates from BMEII.

W. Hong Yeo, PhD, Assistant Professor in the George W. Woodruff School of Mechanical Engineering and Wallace H. Coulter Department of Biomedical Engineering and

Director of the Center for Human-Centric Interfaces and Engineering at Georgia Tech, delivered the Lucy G. Moses Lecture in Medical Imaging and Bioengineering on December 17, 2020. Dr. Yeo, an expert in nanomembrane electronics and human-machine interfaces discussed "Smart and Connected Soft Bioelectronics for Advancing Human Healthcare and Human-Machine Interfaces." We had a preliminary discussion with Dr. Yeo about the many applications of his work on our podcast, ImagingNation. You can listen and subscribe on Spotify, Apple, or YouTube.



Promotions, Awards, and New Arrival!

Xiang Xu, PhD, Assistant Professor of Diagnostic, Molecular and Interventional Radiology, is a recipient of Second Annual Icahn School of Medicine at Mount Sinai Distinguished Scholar Award for her research proposal entitled, "Simultaneous evaluation of glucose uptake and lymphatic function in Alzheimer's disease using dynamic glucose-enhanced MRI." The prize, sponsored by the Office of Gender Equity in Science and Medicine includes both funding and professional development opportunities.

Priti Balchandani, PhD, Associate Director

of BMEII, has been promoted to Professor with Tenure on the Investigator Track in the Department of Diagnostic, Molecular and Interventional Radiology, with secondary appointments in the Departments of Psychiatry and Neuroscience.

Octavia Bane of the Cancer and Body Imaging lab, with husband Max Bane and daughter Livia welcomed their youngest family member. Baby Edward Jonas Bane, weighing 9 lbs 14 oz and measuring 23 1/4 inches was born December 14th, 2020, at 11:40 am at Mount Sinai.



Welcome, New BMEII Staff

Emre Altinmakas is a post-doctoral fellow in Dr. Taouli's Cancer and Body Imaging lab, where he works on quantitative MRI applications in various abdominal diseases. He completed his medical training and radiology residency in Istanbul, Turkey, and a postdoctoral fellowship in the Department of Abdominal Radiology at The University of Texas, MD Anderson Cancer Center, followed by abdominal radiology clinical fellowship training in the Department of Medical Imaging at the University of Toronto.



Enamul Bhuiyan is a post-doctoral fellow in the Taouli lab. He received his PhD in Physics from the Sir Peter Mansfield Imaging Centre at the University of Nottingham (U.K.). His thesis focused on developing a novel method for motion correction in MRI, especially in brain imaging. His research focuses on the development of new methods and their applications for biomedical imaging. At BMEII, he is working on body imaging, mostly on liver imaging such as DCE-MRI, DWI, and motion-robust liver imaging. Recently he worked as a post-doc at the Yale School of Medicine.



Oleksandr (Alex) Khagai joined BMEII as a post-doctoral fellow in Dr. Balchandani's Ultrahigh Field MRI group and focuses on development of pulse sequences and methods for 7T MRI. He obtained his PhD degree in Physics from the Technical University of Munich (Germany) and holds an MBA degree from Universidad Carlos III de Madrid (Spain). He completed previous post-doctoral work in Taiwan and at NYU.



As an IT Systems Manager and Dev/Ops technologist, Harry Wong joins BMEII to support researchers through the management of IT systems and pipelines. Harry holds a BS in Computer Science from NYIT (Manhattan) and brings 20+ years of IT experience ranging from IT support, programming, server management, process re-engineering and team management.



Post-Doc Spotlight

Development of a Wireless Radio Frequency Array to Improve MRI

Akbar Alipour, PhD

Dr. Akbar Alipour received his Ph.D. in electrical and electronics engineering from Bilkent University, Ankara, Turkey, in 2017. He was a postdoctoral fellow at the Johns Hopkins School of Medicine and Biomedical Engineering from October 2017 to September 2019. During his Ph.D. research at Bilkent University, he worked on Magnetic Resonance Imaging (MRI) guided interventions through developing new devices and materials, under the supervision of Profs. Ergin Atalar and Hilmi Demir at the National Magnetic Resonance Research Center (UMRAM). During his postdoctoral research at Hopkins, Dr. Alipour worked with Prof. Henry Halperin on cardiac interventional MRI devices. He joined the BioMedical Engineering and Imaging Institute (BMEII) at Icahn School of Medicine at Mount Sinai (ISMMS) to continue his research in ultra-high field (UHF) MRI in the Neuroimaging laboratory led by Prof. Priti Balchandani in August 2019. He started by developing a

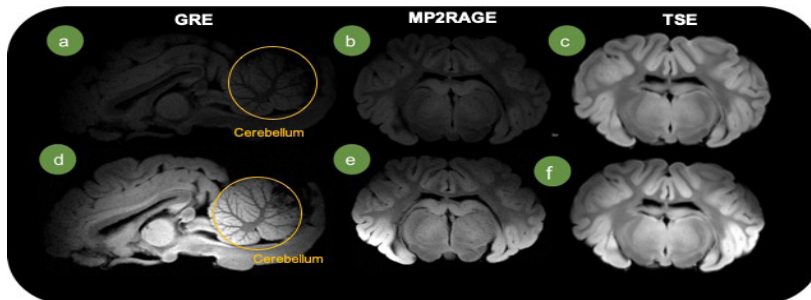


Figure 1. Top row shows MR images obtained without the RF array and bottom row shows MR images obtained in the presence of the RF array. The base of skull and cerebellum are more clearly visible in the presence of the array with about 4-fold SNR improvement.

new method to improve brain MRI at 7T, hypothesizing that it is possible to improve the transmit efficiency of a standard MRI coil using wireless radio frequency array to visualize the whole brain, focusing on the central nervous system.

In recent years, new human magnetic resonance imaging systems operating at static magnetic fields strengths of 7 Tesla or higher have become available, providing better signal sensitivity compared with lower field strengths. However, imaging human-sized objects at such high field

strength and associated precession frequencies are limited due to the technical challenges associated with the wavelength effect, which substantially disturbs the transmit field uniformity over the human body when conventional coils are used. In collaboration with other scientists in BMEII, Dr. Alipour developed a novel passive inductively-coupled

radiofrequency resonator array design with a simple structure that worked in conjunction with conventional coils and required only to be tuned to the desired operating frequency. We showed that inductive-coupling between the resonator array and the coil improved the transmit efficiency and signal sensitivity in the interested region. The proposed array was independent of the coil type and static magnetic field strength making it an attractive approach

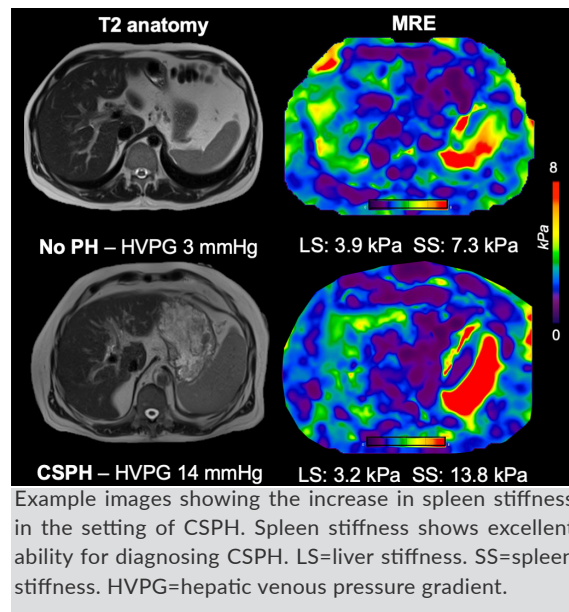
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New Faculty

Paul Kennedy, PhD

Dr. Paul Kennedy recently joined the BMEII faculty as an Instructor of Radiology, having initially joined the Institute as a postdoctoral fellow in Dr. Taouli's Cancer and Body Imaging lab in 2016. Dr. Kennedy completed his undergraduate degree in Physics and Astrophysics and master's degree in Medical Imaging physics at Trinity College Dublin, before completing his PhD in Medical Physics at The University of Edinburgh in Scotland. His PhD research was focused on magnetic resonance elastography (MRE), a noninvasive method for measuring tissue mechanical properties. As part of his PhD research, Dr. Kennedy explored the properties of human skeletal muscle with specific emphasis on the impact of intense exercise on quadricep muscle stiffness and highlighted differing engagement patterns associated with quadriceps muscle contraction. Dr. Kennedy also studied the changes in muscle stiffness associated with advanced aging (>80 years old) and found that aged muscles were significantly less stiff than those of younger subjects.

Having completed his PhD, Dr. Kennedy joined the Taouli lab to apply his knowledge of MRE to body and cancer imaging. At BMEII he has used multiparametric MRI to non-invasively assess clinically significant portal hypertension (CSPH), a condition associated with advanced liver disease and carries a risk of severe complications such as variceal



bleeding and ascites. CSPH is currently diagnosed via an invasive measure of hepatic venous pressure gradient (CSPH=HVPG ≥ 10 mmHg), a technique which is not widely available. Initial results are very promising, with spleen stiffness (affected by the hemodynamic changes associated with portal hypertension) diagnosing CSPH with excellent accuracy. The impact of CSPH on MRE is shown in Figure 1. Dr. Kennedy has also published work examining the response of liver cancer to locoregional radioembolization therapy with Yttrium 90 and the impact of kidney transplant dysfunction on kidney mechanical properties. More recently Dr. Kennedy worked on an automated method

for liver fibrosis diagnosis based on deep learning neural networks. Dr. Kennedy has also authored several review articles on elastography and portal hypertension imaging.

As an instructor Dr. Kennedy will continue his work on MRE and expand his research focus into long term outcome prognostication based on advanced multiparametric MRI and artificial intelligence. His interest in liver cancer therapy is continuing with studies examining tumor response to immunotherapy and non-invasive methods for predicting tumor immunophenotype which can impact therapy response. Dr. Kennedy looks forward to strengthening his existing collaborations within BMEII, Mount Sinai and external institutions and companies to perform impactful research with meaningful patient benefit.

Outside of research, Dr. Kennedy enjoys snowboarding, running, cycling and swimming. These pursuits will be superseded in April when he and his wife are expecting their first child.

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for altering the transmit field distribution specially at high field systems, where the wavelength is comparable with the human size. The array imaging performance in cadaver brain MRI is shown in Figure 1. The preliminary data of this work resulted in one submitted provisional patent, one paper, and two international conference proceedings.

In another study, in collaboration with Drs. Priti Balchandani, Trey Hedden, and Bradley Delman, Dr. Alipour used 7T MRI

to investigate baseline and change in brain iron levels in individuals with Alzheimer's disease (AD) compared with healthy control participants. This study aimed to evaluate the correlation between brain iron levels and beta-amyloid aggregation in patients with AD. This study was recently funded by the Alzheimer's Disease Research Center (ADRC) at ISMMS.

Dr. Alipour believes that being a part of BMEII's dynamic environment and being surrounded by hardworking, smart, and

kind people built the foundations of his career goal to become a recognized leader and educator in translational neuroimaging.

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Nanoscale Engineering with Massive Impact: Farewell to Prof. Willem Mulder

Jazz Munitz

As the BioMedical Engineering and Imaging Institute continues to rapidly expand, there have been numerous researchers and staff members who have made this institute so exceptional. It is with a grateful and saddened heart that we say goodbye to Prof. Willem Mulder, one of the first members of the original Translational and Molecular Imaging Institute, whose unhindered creativity and stoicism helped build BMEII to its current stature. To honor his impact, we sat down with him for an interview to reflect on where it all started, and how far it's come.

Q: How did you first hear about Mount Sinai?

A: I had heard of Mount Sinai from movies and TV shows like *Law & Order*. Scientifically, Sinai became something mythical to me back when I was a PhD student. Reading the work from Zahi and Dr. Fuster, I was intrigued by both the science and the people behind it.

Q: When did you first meet Zahi?

A: I was working on vessel wall molecular imaging in mice back when I was a PhD student. I reached out to Zahi by email and we arranged to meet in Cologne in, I believe, September of 2005 at the annual Molecular Imaging Conference. Two months later I was on a flight to NYC (for the first time) to spend the tail end of my PhD trajectory in Zahi's lab, from mid-November to mid-December. We were exceptionally productive together, and produced the manuscript "Molecular imaging of macrophages in atherosclerotic plaques using bimodal PEG-micelles" in a month, which was published in *Magnetic Resonance in Medicine*.

Q: How did the Nanomedicine program start?

A: In April 2006 Zahi called me out of the blue, as he had set up meetings with Dr. Drayer and Dr. Charney for my recruitment. I remember spending time in Central Park prior to these meetings where I had sunburnt my head terribly, and went into the meetings looking like a tomato. How could I have known that the NYC sun is burning hard in April? In October 2006, I moved to the US to work on a preclinical molecular imaging program, but I was mostly interested in developing nanomedicine into an immunotherapy modality, which is exactly what BMEII's Nanomedicine Program is internationally renowned for today.

Q: Who was your first student?

A: My first student was a Dutch medical student, Mark Lobatto who got to spend an externship at Mount Sinai. He was introduced through his aunt to Dr. Fuster and then ended up with Zahi. Mark and I have completely different personalities, but hit it off and he set up all of our first nanomedicine studies in atherosclerotic rabbit models. We remained in touch and through the Amsterdam Medical Center, I was able to hire Mark as a PhD student to come to Mount Sinai and work on his research. He was awarded his doctorate cum laude (top 2 percentile in Dutch Academia).

Q: What do you remember of moving into the Hess Center?

A: Since I travelled between NYC and the Netherlands very frequently, I was fortunate to spend the first part of my tenure in a basement where I had no sense of time. We were very productive even with limited means, but our research program really levelled up when we took our lean and mean attitude to Hess. I can't think of a better imaging facility in the world. The infrastructure is unique, particularly in how it's managed by Radiology and BMEII.

Q: What was the first big paper you published, when you really felt that you'd made it?

A: I still don't feel that I've made it, but there have certainly been milestone papers:

1) Lobatto et al. *Nature Reviews Drug Discovery*, the first time that we'd shared with the world our vision of nanomedicine in cardiovascular disease; 2) Raphael Duivenvoorden, Jun Tang et al. *Nature Communications*, which we had worked on for five years, beginning in 2008.

It was our first study where we fully integrated immunology and demonstrated the application of nanomedicine for innate immune regulation;



Willem Mulder stand up paddleboarding, one of his favorite activities. Photo credit: Bart van Overbeek

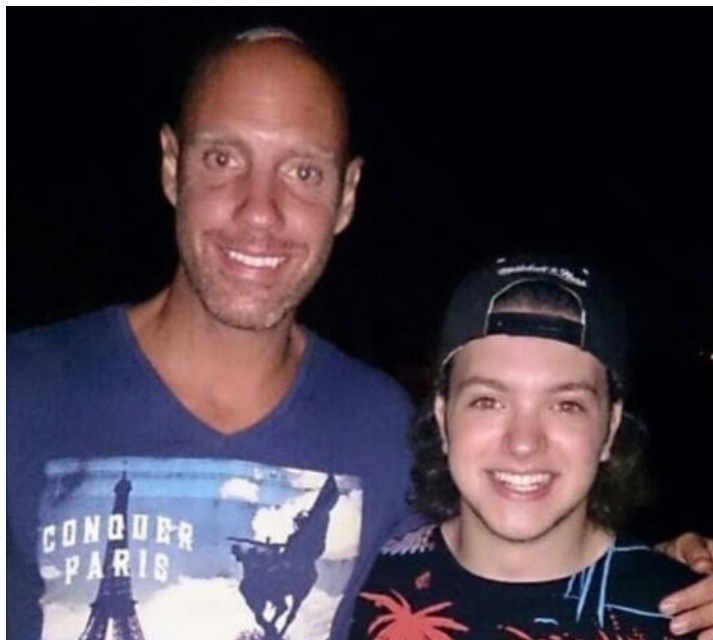
3) Binderup, Duivenvoorden, Fay et al. in *Science Translational Medicine*. As one of the reviewers eloquently stated: "A tour de force." Zahi and I worked on a large NHLBI Program of Excellence in Nanotechnology, which started in 2010. This study is the climax of that program. We pulled off nano-immunotherapy of atherosclerotic inflammation in large animal models, facilitated by clinical PET/MR imaging; 4) Max Senders et al. in *Nature Nanotechnology*, where we demonstrated the use of new nanotech and multimodal imaging methods to study immune cell dynamics in living mice; 5) Bram Priem et al. *Cell*, demonstrating the use of our proprietary nanobiologic technology as an efficacious and safe immunotherapy for cancer.

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Q: What have been some of your favorite memories?

A: I've made a lifetime of memories at Mount Sinai and in NYC. Funniest memory: taking my stand up paddleboard on the Hudson River, and getting pulled off the water by helicopter, boat, firetruck, etc. Most rewarding: Seeing



Dr. Willem Mulder and Jazz Munitz, circa 2015.

some 15-year-old kid, Jazz Munitz, who sent me an email back in 2012, develop his talents toward becoming a highly versatile individual. I see in him the doctor of the future, with strong a scientific foundation, highly interested in technology and engineering, and exceptional social skills. Most grateful: working with uniquely talented individuals like Bram Teunissen and Mandy van Leent.

Q: What went into your decision to leave Mount Sinai?

A: This was the hardest decision of my life. I had been struggling with my personal life for years, due to living in NYC, so far away from my wife and daughters in the Netherlands. This is something I discussed with Zahi many times. As a sidebar for the new BMEI folks, Zahi is a great mentor for career advice, because he reads and understands people very well. I intended to remain at Sinai after turning down an awarded ERC Consolidator Grant in 2019. Then 2020 happened and it became increasingly

clear last summer that travel would remain compromised for a long time, and I was forced to rethink this decision. Zahi recommended I pursue a nontraditional structure. Together with Mihai Netea, a prolific clinician and infectious disease specialist at Radboud University Medical Center (Radboudumc) and the discoverer of trained immunity, I worked on establishing a program between my alma mater, Eindhoven University of Technology (TU/e) and Radboudumc. I now have positions at Radboudumc and the TU/e to establish a translational immunology program between the institutions. I have also been appointed CSO of our biotech startup Trained Therapeutix Discovery, which is the direct result of the technologies the Nanomedicine Lab generated.

Q: How did the founding of [Trained Therapeutix Discovery](#) (TTxD), your biotech startup, come to be?

A: This was truly my dream. When I started working with Jordi Ochando, Mihai Netea and Leo Joosten we knew this was the time. The idea started in November of 2016, had real traction in 2017, and negotiations took place from mid-April 2018 to May 2019, which was an absolutely insane process. We have raised a \$6 million seed investment with the support of the Jean Boule group.

Q: How are you doing now back in the Netherlands?

A: The experience at Mount Sinai overall, and my relationship with Zahi shaped me in many ways. The ties between Radboudumc, TU/e, and Sinai investigators remain very strong, and we're fully involved in two large programs. On a personal level, I finally live full time with my wife, daughters, and dogs, and I finally feel like a fulfilled and happy man.

Q: What does the future of the BMEI Nanomedicine program look like, and who will be directing in your absence?

A: Mandy van Leent, my former PhD student, and Bram Teunissen, former post-doc, have recently been promoted to Instructors. They are for a large extent responsible for some of the Lab's recent successes. They are capable of taking my crazy white board drawings and concepts and solidifying them into tangible realities. They are hyper productive and now they get the opportunity to work on their own concepts, and I am convinced they'll do brilliantly. Bram and Mandy are more advanced in their thinking and science than I was at that stage. Bram and Mandy will continue their independent careers off the lab I built, with Mandy specializing in immunology and in vivo imaging and Bram in radiochemistry and nanotechnology. They will work on their own programs, but collectively they will give immuno-imaging at BMEI a tremendous boost, which will be of interest to the entire institute and will find application in a wide range of conditions. It goes without saying that I plan to maintain collaborations with Sinai/BMEI. We are already working on establishing two large Program Project Grants. We will continue to work together and I will stay formally connected through an adjunct position, which was made possible through an endowment by Jean Boule.

We are forever grateful for the creativity and brilliance that Dr. Mulder brought to Mount Sinai. His vision formed a unique and productive nanomedicine program, which will continue to churn out new and exciting research into nanotechnology and immunomodulation. We all wish Willem the best of luck in his future endeavors, and his influence here at BMEI will never be forgotten. Willem, you will be missed, and we raise a beaker in cheers towards your bright future!

Willem Mulder, PhD
Former Director,
Nanomedicine
Professor, Radiology



BMEII 2021 Engineering & Medicine Seminar Series

In December 2020, we launched our inaugural Engineering and Medicine seminar, a new series focused on the innovation and opportunity at the intersection of engineering and medicine. In partnership with the Department of Diagnostic, Molecular and Interventional Radiology, this series invites experts in the fields of neuroimaging, cardiovascular imaging, cancer/body imaging, nanomedicine, and artificial intelligence, including lectures from some of our newest faculty members at BMEII. Save the dates for this year's seminars, which will be delivered via Zoom. [Click here to join.](#)

Speaker Name	Date and Time	Seminar Title
Twan Lammers, DSc, PhD RWTH Aachen University Clinic, Germany	January 11 1-2 PM	Smart Strategies to Improve Cancer Nanomedicine
Olivia Viessmann, PhD Massachusetts General Hospital, Harvard Medical School	January 20 12-1 PM	Anatomical and Physiological Biases in Modern High-resolution fMRI
Jessica Zhang, PhD Carnegie Mellon University	February 8 1-2 PM	Material Transport Simulation in Complex Neurite Networks Using Isogeometric Analysis and Machine Learning Techniques
Jinghua Wang, PhD Deep MRI Imaging Inc.	February 17 12-1 PM	Novel Techniques to Improve MR Image Quality
Mandy van Leent, MD BMEII, Icahn School of Medicine at Mount Sinai	February 22 1-2 PM	Regulation of Innate Immunity through Nanotherapeutics
Dustin Scheinost, PhD Yale University School of Medicine	February 25 12-1 PM	Developing Connectome-Based Predictive Models of Behavior
Hugo Aerts, PhD Brigham and Women's Hospital, Harvard Medical School	March 8 1-2 PM	Artificial Intelligence in Cancer Imaging
Daniel A. Heller, PhD Memorial Sloan Kettering Cancer Center	March 15 2-3 PM	Nanomedicines for the Research, Detection, and Treatment of Cancer and Allied Diseases
Bram Teunissen, PhD BMEII, Icahn School of Medicine at Mount Sinai	March 22 1-2 PM	Chemistry in Nanomedicine: Developing New Nanotherapeutics and Imaging Probes
Jon Lovell, PhD, MS State University of New York at Buffalo	April 12 1-2 PM	Drug and Antigen Delivery Applications Using Porphyrin-Based Particles
Octavia Bane, PhD BMEII, Icahn School of Medicine at Mount Sinai	April 26 1-2 PM	Multiparametric MRI of the Kidney
Dan Ennis, PhD Stanford University	May 10 1-2 PM	Novel MRI Techniques to Measure Cardiac Structure and Function
Hayit Greenspan, PhD BMEII, Icahn School of Medicine at Mount Sinai	May 24 1-2 PM	AI in Medical Imaging: Deep Learning Challenges and Solutions for Detection, Segmentation, and Characterization, with Applications to Automated COVID-19 Tools for Severity Analysis Over Time
Jurgen Futterer, MD, PhD Radboud University Nijmegen Medical Centre, The Netherlands	June 14 1-2 PM	Interventional MRI in Oncology
Robin de Graaf, PhD Yale University School of Medicine	June 28 1-2 PM	Recent Advances in In Vivo MR Spectroscopy - Deuterium Metabolic Imaging
William Grissom, PhD, MSE Vanderbilt University	July 12 1-2 PM	New Encoding Approaches in Low-Field MRI
Xiang Xu, PhD BMEII, Icahn School of Medicine at Mount Sinai	September 13 1-2 PM	CEST MRI: APT, glucoCEST and Beyond
Peng Hu, PhD UCLA	October 11 1-2 PM	Ferumoxitol-enhanced Cardiovascular MRI: Opportunities and Challenges
James Duncan, PhD Yale University	October 25 1-2 PM	Neuroimage Analysis in Autism: from Model-Based Estimation to Data-driven Learning
Paul Kennedy, PhD BMEII, Icahn School of Medicine at Mount Sinai	November 8 1-2 PM	Magnetic Resonance Elastography - Applications and Advancements
TBN: Lucy G. Moses Lecture in Medical Imaging and Bioengineering	December 16	TBD

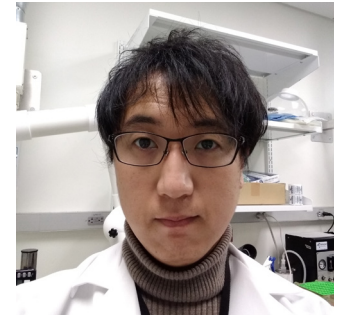
Imaging Spotlight

Congratulations to the 2021 ANRP Pilot Grant Winners

The ANRP pilot grant mechanism is designed to provide junior investigators with the opportunity to develop and implement new neuroimaging related research projects. These grants enable pilot scans on the research MRI scanners at the BioMedical

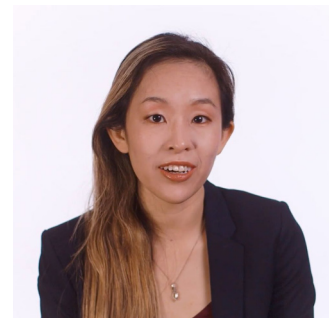
Engineering and Imaging Institute (BMEII) to facilitate the acquisition of preliminary data for NIH applications. All innovative neuroimaging related projects are considered. The objective of the grant program is to stimulate new neuroimaging NIH grants and

provide the resources for new investigators to obtain critical pilot data and achieve independence. We convened a committee of experts across many departments involved in brain research to review grants and select our winners.



Winners top row: Catherine Elorette, PhD, "Role of face selective patches within macaque frontal cortex in valuation of face stimuli"; Rui Feng, MD, MS, "Complex imaging of the facial nerve in skull base surgical planning and resection of vestibular schwannoma: technological development in 7T ultra-high field MRI"; Yael Jacob, PhD, "Network based real-time neurofeedback using 7-Tesla MRI for treatment of depression"; Kazuya Okamura, MD, "Chemo-fMRI: Coupling chemogenetic circuit manipulation and fMRI in mice for translation."

Winners bottom row: Philip Robson, PhD, "Development of Arterial Spin Labeling Cerebral Perfusion Measurements at 7T"; Alan Seifert, PhD, "Functional MRI of Visual-Vestibular-Cerebellar Interaction"; Genevieve Yang, MD, PhD, "Emotion and cognition as a therapeutic target for real-time fMRI neurofeedback in addiction."



Core Spotlight

BMEII and ANRP Introduce New Imaging Processing Platform

ANRP is now supporting [Flywheel](#), a new platform for data management, automated image processing and pipelining. The Flywheel platform allows for groups to implement standardize processing routines across an entire study and manage data access for collaborations.

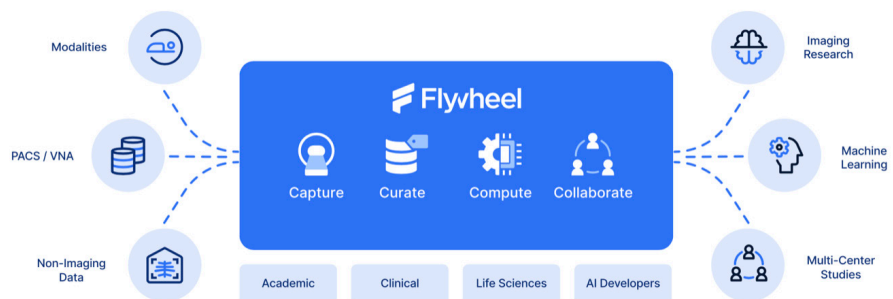
Through Flywheel gear exchange, the platform will host a number of standard image processing routines that include; FreeSurfer segmentation, fMRI and diffusion preprocessing, and much more. In addition to the standard processing we have worked with Flywheel to implement customizable anonymization, multi-echo processing, and MRS automated quantification with LCModel.

ANRP will help the groups set up projects

on the platform by uploading archived data, setting up auto send for new acquisitions and, setting up processing pipelines.

While many of the gears have been

developed for neuroimaging, many can be applied to any MRI datasets and other acquisition modalities. Additionally, support can be provided to create new, customized gears for specific processing needs.



For additional information and costs, please reach out to Dr. Priti Balchandani at priti.balchandani@mssm.edu or Chris Cannistraci at christopher.cannistraci@mssm.edu.

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