



January 11, 2021

Dear former student and friend of the department,

Welcome to this edition of the Biomedical Engineering Department newsletter. Similar to what most of the country has experienced, the last few months have been challenging for our department, its faculty, staff, and students. We used a hybrid teaching model this fall, where smaller classes were taught in person, while larger classes were held virtually. Additionally, all classes included an online component to ensure that students who could not be on campus could participate. All students, faculty, and staff were regularly tested for COVID-19 where protocols ranged from testing twice a week to once a month. A result of the safety measures that were implemented was that the number of people who tested positive for COVID-19 was extremely small. From August 1 until Thanksgiving, when all classes went virtual, only 0.025% of all tests were positive which is two orders of magnitude less than the rate in New York State. Furthermore, none of the infections could be traced to exposure on campus. Given the success of this approach, the teaching and testing protocol for the spring will be similar to what they were in the fall.

Despite these challenges, a number of accomplishments have been made, awards and honors were received, and research milestones were met:

- Ryan Gilbert elected to AIMBE College of Fellows [\[More\]](#)
- Research: In Alzheimer's, Connection Between Bone, Brain, and Microbiome May Be Critical [\[More\]](#)
- Research: Rensselaer-Developed Algorithm Accurately Predicts COVID-19 Patient Outcomes [\[More\]](#)
- Research: To Benefit Paralyzed Veterans, Polymer Coating Aims To Extend Life of Microelectrodes [\[More\]](#)
- David Corr named Fellow of American Society of Mechanical Engineers [\[More\]](#)
- Research: To Improve Surgeons' Skills, Researchers Will Tap Directly Into Their Brains [\[More\]](#)
- Research: With Deep Learning Algorithms, Standard CT Technology Produces Spectral Images [\[More\]](#)
- Research: Rensselaer, GE Research, Cleerly, and Cornell Partner With NIH To Improve Cardiac CT Diagnosis [\[More\]](#)
- Research: Physiological Test for Autism Proves Effective Independent of Co-occurring Conditions [\[More\]](#)
- Research: Brain-NET Accurately Predicts Surgeon Certification Scores Based on Neuroimaging Data [\[More\]](#)
- Research: NIH Grant Supports Development of AI Tools To Identify High-Risk COVID-19 Patients [\[More\]](#)
- Bowen Wang selected for ASBMR Young Investigator Award [\[More\]](#)

I am excited about these developments, especially given the current circumstances and look forward to future achievements by our faculty and students in the coming year!

Best regards,

Juergen Hahn
Professor and Department Head

