

School of Engineering - Faculty Meeting Minutes

March 3rd, 2023

Richard Weeks Hall of Engineering, room 102

Present: E K Akdogan, W Bajwa, P Balaguru, F Berthiaume, O Bilgen, D Birnie, H Buettner, J Cadena, K Cameron, Y Chen, K Cook-Chennault, A Cuitiño, F Diez, J Freeman, H Gea, M Golden, X Gu, N Gucunski, Q Guo, W Guo, M Jafari, MK Jeong, S Kilduff, L Klein, D Knight, N Langrana, H Lin, H Liu, R Malhotra, N Mandayam, A Mann, A Mazzeo, H Najm, E Nikolopoulos, S Niu, T Oathes, T Ozel, A Pelegri, A Petropulu, H Pham, M Pierce, A Reihani, D Rider, I Rosen, A Safari, D Shreiber, R Sills, P Song, M Sorensen, M Striki, W Trappe, V Tutwiler, R Wang, G Weng, E Wicks, Y-K Yong, J Zahn.

Interim Dean Alberto Cuitiño called the meeting to order at 2:08 pm.

No objections were raised concerning the minutes of the faculty meeting held on November 11th, 2022, nor on the agenda of the current meeting.

- Dean's Report:
 - Interim Dean Cuitiño began with an overview of the school's budget. A forthcoming meeting with the Chancellor-Provost's office will discuss budget matters for FY24.
 - The School of Engineering is on track for revenue from grant funding, though an increase in this area would be welcome. Salaries are projected to increase, pending ongoing negotiations between the university administration and unions. Fringe rates continue to rise, representing challenges for university and research operations.
 - The main source of revenue for the school is tuition fees. Revenue from undergraduate tuition is stable but revenue from graduate programs has declined. Graduate student enrollment dropped by approximately 100 students last year, mostly driven by students pursuing master's degrees.
- Department Highlights:
 - Assimina Pelegri (MAE): A project co-led by Jonathan Singer (with Adam Gormley (BME)) was approved for a phase 1 submission to the Keck Foundation. Master's student Luke Brennan received a New Jersey Space Grant Consortium graduate fellowship.
 - David Shreiber (BME): Maribel Vazquez received the Professional Impact award from the American Institute for Medical and Biological Engineering (AIMBE). Li Cai and Valerie Tutwiler received a grant from the New Jersey Spinal Cord Commission. The BME department received a major gift from the Gerald B Shreiber foundation to support its mission in education and training.

- Nenad Gucunski (CEE): Searches to fill two faculty positions have been completed efficiently. New faculty will strengthen efforts in studying urban environments, sustainability, and resiliency.
- Mohsen Jafari (ISE): Faculty received new grants from the ONR and DOE. A reception event for ISE alumni is scheduled for April 27th in Jersey City.
- Yingying Chen (ECE): Michael Wu received a new grant from DARPA. Waheed Bajwa and Dario Pompili also received new awards. Shirin Jalali and Bo Yuan both received NSF CAREER awards.
- Helen Buettner (CBE): Several faculty received grant awards, including Benjamin Schuster (NSF CAREER award) and Alex Niemark (Pittsburgh Computing Center).
- New faculty
 - Yingying Chen (ECE) introduced Assistant Professor Hang Liu
 - David Shreiber (BME) introduced Assistant Professor Simiao Niu
- Presentation: Peng Song
 - Dean Song provided an update on undergraduate student enrollment within SoE. Undergraduate enrollment has met the target level of 3900-4000 for the past several years. 1029 1st year students were enrolled in Fall 2022. Women in SoE number around 1000 or 26% of the school, compared to 22% nationwide.
 - Challenges to student learning and knowledge retention due to COVID will take time to feed through the system. For example, pre-COVID between 8-10% of engineering students placed into the precalculus course based on performance in the standard placement test. This figure was 25% in Fall 2021 and 35% in Fall 2022. Delayed progression through the math sequence increases the risk of students taking 5 years to graduate.
- Presentation: Wade Trappe
 - Wade Trappe gave a presentation on collaborating across academic units. SoE faculty were encouraged to work with other schools at Rutgers to create teams with the expertise and capacity to compete for larger grants. Examples where Rutgers has been successful include the offshore wind collaborative at Rutgers, and in artificial intelligence and machine learning.
- Presentation: Mohsen Jafari and Ilene Rosen
 - Mohsen Jafari and Ilene Rosen provided a review of Big10+ initiatives in the areas of student health and wellbeing. They surveyed other Big10 schools and peer institutions including Georgia Tech, The Ohio State University, Purdue, University of Wisconsin, USC, Penn State University, University of Michigan, University of Iowa, University of Illinois, Urbana-Champaign, University of California, Berkeley, and Northwestern University.
 - An action item that emerged from this investigation is to develop a roadmap for Rutgers SoE to improve efforts related to student health and wellbeing. This

includes forming department teams to compile information on activities at the department levels, to be shared and coordinated across the school.

- Presentation: Chirag Rana and Nicole Mallari
 - EGC representatives Chirag Rana and Nicole Mallari gave a review of engineering week activities within SoE. Activities included Spirit Day, RU smarter than a professor, cardboard canoe races, interns present, and the Dean’s Distinguished Lecture. The “Battle of the Majors” was won by biomedical engineering.
- Announcements
 - Onur Bilgen and colleagues have organized a vigil to mark 1 month since the devastating earthquakes in Turkey, scheduled for 5pm on Sunday March 5th at the Yard (College Ave). All are welcome to show their support, raise awareness, and donate toward this ongoing humanitarian disaster.
- Old Business
 - None
- New Business
 - Tugrul Ozel (ISE) requested to open discussion on a proposal to limit the number of consecutive terms that department chairs are permitted to serve. Interim Dean Cuitiño requested that this proposal first be discussed at the department level. Faculty should convey opinions to their representatives on the SoE Rules and Procedures Committee (RPC), who may present the proposal at a future SoE faculty meeting.

With no further business to discuss, the meeting was adjourned at 3:42 pm.

Respectfully submitted,



Mark C. Pierce
Secretary, Engineering Faculty