



## Fall 2023 Advisory Board Meeting Minutes

Friday, October 27, 2023

8:30am-4:30pm

Manufacturing Related Disciplines Complex, Room 4211

### Board Members Attended

- David Adams
- Michael Alesandro
- Rebecca Brown (Chair)
- Kenneth Escoe
- Dolan Falconer
- Russell Ford
- Linda Gilday
- Anthony Hylick (Virtual)
- Philip June
- Fredda Lerner
- Mark Ligler
- Josiah Lindsay
- Calvin Mackie
- James “Noah” McNeely
- Emily Muhlberger
- Shweta Natarajan (Virtual)
- Peter Newby
- Steven Pinsky
- Barry Powell (Vice Chair)
- Angela Sherman
- Nzinga Tull
- Kyle Turner
- Laura Wand
- Tracy Hawkins West
- James Williamson

### Board Members Absent

- Susan Hubbard
- Matt Sparks
- David “Chip” Wade

### Faculty, Staff, and Guest

- Devesh Ranjan
- Jaimie Hayes
- Eden Kahssai
- Courtney Sykes
- Cary Ogletree
- Angela Hicks
- Lula Baker
- Ashley Ritchie
- Kyriaki Kalaitzidou
- Stephen Fuller
- Bert Bras
- Andrei Fedorov
- Steve Biegalski
- Brandon Dixon
- Anna Erickson
- Jonathan Gaines

## Agenda

### Welcome and Introduction of New Members

- Rebecca Brown welcomed the board to the Fall 2023 Advisory Board Meeting and introduced the virtual attendees, Shay Natarajan, and Anthony Hylick.
- She discussed engagement opportunities to support the school and emphasized the need for board members to work together to increase involvement and support. She suggested creating



opportunities for engagement beyond meetings to encourage more involvement and support from board members.

- Rebecca shared concerns about graduation rates and addressed the issue with stakeholders, noting that Devesh is not concerned about the four-year graduate rates.

## Presentations

### State of the Woodruff School

- **Improving Student Outcomes at Woodruff School:** Devesh Ranjan emphasized the importance of broadening the partnership with the community to increase diversity and improve yield from 60% to 80%. He highlighted the need for engagement and utilizing the board to support students and ensure they see Georgia Tech as their place. Devesh introduced Jonathan, a new member of the Woodruff Cabinet, who previously worked at AUC partnership and is now Associate Chair for Inclusive Excellence. Jonathan shared that his focus is on building community.
- Devesh acknowledged and thanked long-serving board members for their support and time serving on the EAB. He expressed gratitude for the opportunity to have one-on-one conversations with alumni and students who are making a positive impact in their respective fields.
- **Alumni Engagement and Mentoring:** Devesh highlighted the success of young alumni, including one who started a company. He shared a story of a professor's \$1,000 scholarship to a student that changed the trajectory of his life and company (Raj Sardana, MSME), who was featured as Atlanta's 2023 Most Admired CEO. Devesh shared another story about a female ME grad who dropped out of the PhD program in Mechanical Engineering to attend Harvard Business School but still received her MS from GTME.
- Devesh discussed the Women in Engineering Leadership Lecture Series and the impact of sharing the stories of alumni. He emphasized the importance of sharing both the good and bad experiences of students to keep them engaged and motivated. He announced the Young Alumni Council and noted that Co-Chairs automatically have a spot on the Woodruff School Board.
- **Supporting Students and Improving Ranking at GT:** Devesh discussed engaging a group of students and utilizing their energy and passion to build something forward. He shared a story about Jean Marie, a successful entrepreneur who faced 199 rejections before creating a billion-dollar company, inspiring students to persevere.
- Devesh discussed Georgia Tech's ranking, highlighting its undergraduate program as #2 and graduate program as #5, while expressing concern about supporting students and addressing the gap between in state and out-of-state tuition.
- **Scholarships, Research, and Partnerships at Georgia GT:** Devesh shared that a Georgia Tech faculty member (Chris Saldana) leads a \$400 million DoD Advanced Manufacturing Office, and Tom Kurfess is the new President of ASME. He emphasized the importance of need-based scholarships and the need to increase scholarship funding by 30-35 million dollars over the next three years, focusing on need-based awards. Devesh mentioned that CNN reached out to Georgia Tech's solar racing team, advised by Mike Penske, and highlighted the Student Competition Center as the "crown jewel" of experiential learning at Georgia Tech. He asked Matt McDowell to discuss the Georgia Tech advanced battery center's goal of coordinating research and education in the battery and EV space.



- Educational Innovation: Devesh highlighted the university's partnership with a leading company in the decarbonization of the cement and steel industry and discussed the importance of communication in engineering. He mentioned a successful partnership with Siemens to offer a unique class on decarbonization, thanked Advisory Board Member Barry Powell for his support in this area.
- Devesh also addressed the issue of staff retention in the department and announced new Woodruff School staff members.

### Feedback/Suggestions

- Staff Retention: Advisory Board Members suggested offering growth opportunities and understanding what employees want to reduce the turnover rate. They emphasized the importance of understanding employee needs, offering unique benefits, and providing flexibility and work-life balance for non-exempt staff.
- Devesh highlighted the challenge of finding the right person for a role, particularly those with more experience, and suggested offering flexible compensation packages or professional development opportunities to keep them engaged.
- Advisory Board Members shared similar experiences with newer staff members feeling less invested and more likely to leave, while longer-tenured staff are more invested and less likely to leave. They suggested a family-focused approach to retention and appreciation of spouses.

### Questions to Consider

- What are the growth opportunities?
- How do you balance work life and personal life?
- How can we make staff feel like they are part of a team?
- What is important for staff to feel appreciated and invested?

### Recommended Books

- "Love Works: Seven Timeless Principles for Effective Leaders" by Joel Manby
- "Lasting Change: The Shared Values Process That Makes Companies Great" by Rob Lebow and William L. Simon

### Challenges

- The volume of work is very high.
- Limited resources for staff.
- Newer staff members coming in are less invested, while longer-tenured staff are more invested.



## Committee Updates

### Infrastructure Committee

- Tracy West highlighted strategizing for nuclear research space, AI, safety committee, and sustainability. She shared that a sub-committee was formed to address safety concerns in makerspaces and student labs, with a focus on best practices and education.
- Safety Practices (Sub-Committee) will be led by Mark Ligler.
- The committee discussed safety measures and infrastructure improvements at the university, emphasizing the importance of safety training for students in the makerspace.
- Bert Bras mentioned the need for a senior academic professional to help with safety issues due to the retirement of Rick Cowen.
- The committee also discussed engaging alumni in infrastructure planning and plans to renovate university buildings.
- AI, Machine Learning, and Interdisciplinary Research: The importance of an interdisciplinary approach in applying AI and machine learning to mechanical systems was emphasized. Devesh Ranjan highlighted the potential of AI and machine learning to make a significant impact in various domains and the need for interdisciplinary collaboration.

### Philanthropy & Student Success Committee

- Angela Sherman and Rebecca Brown

### Women of Woodruff (WoW)

- Angela Sherman discussed the organization's goal to raise funds and provide fellowships for women graduate students, with a focus on supporting undergraduates in the future. She emphasized the importance of supporting women in STEM fields and the need for corporate sponsorships.
- An Advisory Board Member suggested creating a book for the 40th reunion of women who have graduated from the school, featuring profiles of trailblazers and other notable alumnae. An online questionnaire was mentioned to gather information for the book.

### Philanthropy

- Rebecca Brown acknowledged the campaign materials and philanthropy efforts in the school. She highlighted the \$2 billion campaign for the institute, with a focus on transforming lives and learning. She emphasized the need to indicate the desire for funds to come to ME to impact the school.
- The Woodruff School is currently at 92% to the \$75M campaign goal. The campaign time elapsed is 55% complete.
- Rebecca mentioned that new donors made up 40% of the total donations, with 642 donations indicated for the school given to the campaign.

### Student Success

- Kenneth Escoe discussed the formation of a subcommittee to diversify the application pool. He highlighted the importance of supporting students, particularly those from underrepresented groups, to increase diversity and retention rates.



- Advisory Board Members were tasked with determining how to ensure students have the proper support to be successful, not just to graduate. The committee members will work together to develop ideas for improving student support, including mentoring, personal care, and design thinking.

**Design in ME, Carolyn Seepersad, Professor in Woodruff School**

- Carolyn Seepersad discussed design initiatives at Georgia Tech, emphasizing the importance of technical skills and computational knowledge for engineers to design products that make a difference in people's lives.
- She discussed the need for interdisciplinary collaboration between designers and domain experts to create innovative solutions.
- Carolyn proposed the idea of "tech fellows" who are PhDs or postdocs with expertise in technical areas to mentor student teams and help bridge the gap between design and technical areas.
- She highlighted the goal of establishing a Design Institute at Georgia Tech, differentiating it by emphasizing technical expertise and interdisciplinary collaboration.
- Ideas for initiatives included design threads at the undergraduate level, minors/certificates in engineering design, interdisciplinary PhD programs, seed grants, and bringing in innovators and entrepreneurs as residents.
- The collaboration between industrial design and mechanical engineering to create well-rounded engineers was discussed.
- The importance of project selection and scoping was emphasized, cautioning against becoming too ambitious.
- Carolyn suggested offering a "design minor" for mechanical engineering students to complement capstone projects.
- An Advisory Board Member raised the challenge of differentiating between capstone and design minor projects.
- The presentation also covered the importance of incorporating AI and machine learning into the curriculum and increasing diversity through outreach and inclusion in K-12 education.

**Thoughts:**

- Considering creating a junior level/design elective class.

**Actions:**

- Gathering input on Techmade initiatives.
- Brainstorming a name for the initiative: Ideas suggested included StingTech, SharkTech, StingTank.

**Implementation Undergraduate Program Vision, Brandon Dixon, Associate Chair for Undergraduate Students and Professor**

- The discussion focused on college admissions, diversity goals, and strategies to improve yield rates at Georgia Tech, with a particular emphasis on reaching underrepresented groups.
- Personal phone calls to admitted students from underrepresented groups were highlighted as a strategy to improve yield rates.



- Strategies were discussed to increase enrollment among students who are not considering Georgia Tech, aiming to bridge the enrollment gap.
- The importance of rigorous coursework in high school, particularly calculus, to prepare students for college was emphasized.
- The need for more AI and ML courses in the curriculum was discussed, along with creating a makerspace for AI and ML projects.
- Challenges related to teaching AI and ML and the demand for these courses were addressed.

**Actions:**

- Creating a mechanism to collect data on accepted students by region for phone calls.
- Planning for blitz calls to students and their parents.
- Gathering data on why admitted students didn't enroll.

**SCOTUS Decision and Georgia Tech Admissions, Rick Clark, AVP of Undergraduate Enrollment**

- The presentation addressed Georgia Tech's admissions goals and diversity efforts.
- Admissions and yield rates were discussed, with specific focus on underrepresented groups.
- Challenges and strategies for increasing diversity in engineering schools were explored.

**Actions:**

- Providing data on undergraduate admission broken down by gender.
- Providing data on how Georgia Tech compares to other schools in terms of yield rates.

**College of Engineering Inclusive Excellence K-12 Outreach, Damon Williams, Associate Dean of Inclusive Excellence, College of Engineering**

- The presentation highlighted the challenges in K-12 education and college readiness at Georgia Tech, particularly in preparing students for engineering programs.
- Initiatives and curriculum development for K-12 education were discussed to expose students to engineering principles and create inclusivity in STEM fields.
- The need for outreach, exposure to engineering, and inclusivity was emphasized to address the underrepresentation of female and minority students in engineering.
- Gender diversity, workforce development, and outreach strategies were explored.

**Executive Session - Board Members Only**

**Executive Session Debrief**

- During the executive session, discussions included bylaws, giving metrics, and philanthropic options.
- Josiah Lindsay will lead the project to update and format the bylaws to meet ABET requirements, ensuring flexibility without frequent amendments.
- The Board voted to require 100% participation in annual GT giving.
- Kenneth Escoe will lead the effort to evaluate philanthropic options for the Board, determine interest, and make a final proposal.



Georgia Tech College of Engineering

**George W. Woodruff School  
of Mechanical Engineering**

**Woodruff School Chair and Board Chair**

- The next board meeting will be held in Spring 2024, with the date and location to be announced later.
- The meeting concludes at 4:30 pm.