Faculty Assembly: AFSE Town Hall

Hosted by the Executive Committee
September 10, 2021
AFSE Agenda

Welcome

AFSE Executive Committee Report
Marcus Herrmann
  • Introduction of Executive Committee
  • Distinguished Lecture Series
  • Dean’s Dissertation Award
  • Activities of the Executive Committee

Fulton Schools of Engineering
Dean Squires

Q&A Session
AFSE Officers and Executive Committee

President: Kyle Squires
Secretary and Parliamentarian: Dianne Hansford

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<th>School</th>
<th>2020–2021</th>
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<td>Andreas Spanias</td>
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AFSE Information: [https://engineering.asu.edu/assembly](https://engineering.asu.edu/assembly)
AFSE Officers and Executive Committee 2021–2022

Samantha Brunhaver, TPS
Chris Buneo, SBHSE
Dianne Hansford, SCAI
Marcus Herrmann, SEMTE
Rosa Krajmalnik-Brown, SSEBE
Tony Lamanna, SSEBE
Pitu Mirchandana, SCAI
Jit Muthuswamy, SBHSE
George Pan, ECEE
Rod Roscoe, TPS
Sefaattin Tongay, SEMTE
Yalin Wang, SCAI
Yong-Hang Zhang, ECEE
The Executive Committee of AFSE

Membership
Consists of the Secretary and two members from each school

Charges
• Shall provide advice and recommendations to the dean as representation of the individual schools within the FSE
• Responsibility to provide communication to the AFSE with regard to governance at the FSE level
  o Proposals for policy changes within FSE
  o Duty to keep their schools so informed

AFSE Bylaws: https://engineering.asu.edu/assembly/
Dean’s Distinguished Lecture Series

Annual event to host a widely recognized distinguished speaker
- April 27, 2021, Professor Ellen Stofan, Under Secretary for Science and Research, Smithsonian Institution
- Watch past lectures

Please provide suggestions for speakers using the online form
- Academics or high-level government officials in relevant fields
Dean’s Dissertation Awards

Award for excellence in dissertation research
• Awarded to up to ~5% of projected PhDs granted each year
• Nominees:
  • PhD candidates with completed comprehensive exam, expected to graduate by 5/31/22
  • PhD students who have graduated no earlier than 6/1/21

Nomination package
• 1-Page Abstract, Letter from Advisor, CV and Statement of Student, 1 Reference Letter from someone other than the advisor
• Call for nominees issued to Graduate Program Chairs and Directors on 8/23/21
• Up to 2 nominees per program and no more than 4 per school
• Nominations due no later than 9/17/21
• EC will send recommendations to dean on 10/22/21
• Awardees to receive plaque and invitation to Dean’s Graduate Reception
• Awardees invited to present poster at Dean’s Distinguished Lecturer Reception
Activities of the Executive Committee

• Providing feedback/advice to the Dean on
  • COVID strategies
  • Consulting disclosures
  • Reorganization of Fulton Schools of Engineering

• Planned focus in 2021
  • Update to the Bylaws
  • Lecturer contract lengths (Memorandum from 2020)
  • PI eligibility of non-tenured faculty (Memorandum from 2020)
Fulton Schools of Engineering
Dean Kyle Squires
Fall 2021 is upon us...

- **ABET visit** on September 27-28

- Fall 2021...**students and programs**...record enrollments...
  - Critical role of Learning and Teaching Hub to support faculty

- AY 2021-2022...**new faculty**...will welcome 26 (and counting) t/tt faculty...total FSE faculty count into 2022 ~370 t/tt faculty

- New schools – **MSN, SCAI, “TPS”** (new TPS name tbd)...official fall 2021
  - Planning stages of new building on Poly campus
Dean’s Report

Context
FSE in Fall 2021
What’s next
COVID update
Q&A
ASU as a National Service University

ASU continues to evolve in order to meet its goals

The university now organized around three core enterprises:

• **Academic Enterprise, Knowledge Enterprise, Learning Enterprise**

FSE’s evolution important in its own right and has become vital to institutional goals and direction

• Influencing regional economic impacts and growth and state investment strategies
• Continuing to advance quantity and quality of student attainment; research and faculty achievements; partner engagement and initiatives
The colleges, schools and enterprise units
Interdisciplinary structures
- 7 schools; 2 campuses + online
- Cross-campus partnerships

Academic programs, enrollments and graduates
- 25 undergraduate degree programs; 50+ graduate programs
- ~27,000 students (~9,000 online, ~18,000 on-campus)
- ~5,100 graduates across all degree levels in AY2020-2021

Faculty
- ~370 tenured/tenure-track faculty; ~100 lecturers and professors of practice
- 31 NSF CAREER awards over the past three years

Research and innovation: $141M in awards (10% increase)
- Lead two NSF ERC’s (partner on one other ERC)
- Lead DHS Center for Accelerating Operational Efficiency
- Entrepreneurial outputs (national ranking per $10M of research expenditures)
  - #7 for licenses & options; #6 IP disclosures; #5 for startups

Global connectivity: PLuS Alliance; capacity-building programs in Vietnam
Most innovative teaching and learning center in the US
- Broaden access to campus-immersion and digital immersion students
- Double the number of graduates to 10,000/yr
- Become the nation’s largest and most diverse producer of technical talent and innovation

National research leadership with local and regional impacts
- Increase the size of the tenured and tenure-track faculty to over 450 and total full-time faculty to over 700
- **Generate 50% of the university’s sponsored funding**
- Increase invention disclosures, patents, and licenses by 25% and faculty-led spinouts to 15/yr
- Move the ranking of the Fulton Schools to the **top 15 of public universities**

Comprehensive partner engagement
- Broaden **philanthropic gifts to $50M/yr** to support faculty, students, and programs
- Engage with community and industry partners to increase pipeline of human capital in Arizona and beyond that advances universal learning
- Secure funding of $15M/yr from global capacity-building opportunities and other projects
Intellectual property activity

- Invention Disclosures
- U.S. Patents Issued
- Start Ups

<table>
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<tr>
<th>Year</th>
<th>Invention Disclosures</th>
<th>U.S. Patents Issued</th>
<th>Start Ups</th>
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<tr>
<td>2021</td>
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Academic enterprise objectives

• **Double the number of graduates** to 10,000 per year.

• **Retain over 90%** of first year students within the university.

• **Increase 4-, 5- and 6-year graduation rates** by 15%.

• **Grow and evolve our schools, programs and campuses**, e.g., with the launch of the new School of Manufacturing Systems and Networks and prepare for the next generation of learners by advancing initiatives that leverage the strengths of all of our schools.

• **Increase diversity in students and programs** and enable URG student success through university and college initiatives, including LIFT and the 2020-2022 ASEE Diversity, Equity and Inclusion Plan.
Benchmark data is gathered from ASEE, which counts degrees awarded for engineering programs. ASEE lists the name of the higher ed institution (Arizona State University) rather than the name of the engineering college.
Partnership objectives

• **Raise $50M annually** through philanthropic gifts to support faculty, students and programs.

• Engage with community and industry partners to increase the pipeline of human capital in Arizona and beyond that advance universal learning.

• Launch the **New Economy Initiative** and establish Science and Technology Centers in key technology areas to drive research and entrepreneurial outcomes.

• Advance transformational national efforts such as the proposed **National Network for Microelectronics R&D** strengthened by government and industry partnerships.

• Increase funding to $15M per year from **global opportunities** with industry and government partners through projects that build educational capacity, including TEDI and via Cintana.
Launch the New Economy Initiative
- With AZ state support, Science and Technology Centers in key technology areas will drive research and entrepreneurial outcomes

Hire the next 200 faculty
- Faculty hires will support key research strengths and enable new domains

Strengthen linkages across ASU
- Deep ties across colleges, institutes and initiatives will maximize impact

Establish new initiatives, programs and structures
- Expansion of FSE’s campuses and schools to support scalable growth

Leverage national efforts
- As an example, the National Network for Microelectronics Research and Development will democratize semiconductor innovation and secure US manufacturing
1. **Foster the nexus of partnerships in Phoenix** – attract, build, and expand the strength of the companies in the greater Phoenix area

2. **Grow the Fulton Schools of Engineering** – become the largest producer of technical talent in the United States

3. **Establish Science and Technology Centers** – multiply industry partnerships, increase research output, and become a top 5 producer of patents
Future Science and Technology Centers
In New Economy Industries

**Future communications technologies**
Focus on driving Arizona to the forefront of physical information systems for sensing and communications.

**Extreme environments**
Focus on engineering resiliency into transportation, energy, water and materials systems of future cities.

**Human performance**
Focus on enhancing physical and cognitive performance, as well as medical prevention and intervention.

**Energy and materials**
Focus on advancing new energy materials and device technologies to market, growing industry engagement.

**Advanced manufacturing**
Focus on new technologies that strengthen links to private industry support in aerospace and defense.

These five STCs will add to Arizona’s existing two applied research centers focused on industry-led research – WearTech and Blockchain.
Faculty hiring in the NEI

- **Align recruitment with key themes**…primary emphasis to **increase research and innovation** impacts
  - **Energy, Materials and Devices**: Advancing new energy materials and device technologies to market, growing industry engagement
  - **Advanced Manufacturing**: New discoveries and technologies for future manufacturing across key foci in aerospace, semiconductors, and others
  - **Extreme Environments**: Engineering resiliency into transportation, energy, water, and materials systems of future cities
  - **Future Communications**: Physical information systems for sensing and communications
  - **Human Performance**: Enhancing physical and cognitive performance as well as medical prevention and intervention
  - **Computing, Analytics, AI and Security**: Strengthening foundational excellence and empowering all core technology themes

- How will our future hires advance multiple disciplines, multiple programs, and the NEI themes?
FSE Expansion and Evolution
From six Schools in Arizona to seven

School of Manufacturing Systems and Networks
• Advances our academic programs and research enterprise in manufacturing and systems engineering
• Provides focus for many efforts related to the future of work (Industry 4.0) broadly, and on the Polytechnic campus, specifically

School of Computing and Augmented Intelligence
• Explicitly signals our focus on computing and related areas, including artificial/augmented intelligence and its role in advancing human capabilities and impactful innovation
• Organized around FSE's academic programs and research core in computer science and closely related disciplines

The Polytechnic School
• A reimagined focus on learning through making and solving real-world challenges through collaboration with industry
• Nucleating innovation in engineering education
Diversity, Equity, Inclusion and Belonging (DEIB)
Diversity and Inclusion Initiative at the Ira A. Fulton Schools of Engineering (DII@FSE)

- Launched in Spring 2019 - an initiative focusing on diversity and inclusion
- Formed a task force that articulated a vision to follow strategies and practices that support environments where individuals feel included, valued and respected and where different kinds of people can succeed
- Task force submitted a proposal to the American Society for Engineering Education’s (ASEE) Diversity Recognition Program – proposal was awarded bronze status (the highest entry status a university can be awarded)
Vision/mission for diversity and inclusion @ FSE

• Our vision is to embed inclusivity as a core tenet of FSE so that all faculty, staff, academic associates, and students achieve their full potential enabled by an environment that is diverse, equitable and inclusive. We aim to achieve global leadership in engineering education, aligned with an access mission, by recognizing diversity and inclusivity as a source of strength to our collective success.

details of of full plan is [here](#)
FSE’s commitment to cultivating a culture of diversity, equity, inclusion and belonging

FSE efforts that advance diversity, equity and inclusion:

• Establishment of DII@FSE
• Implementation of ASEE-recognized Diversity, Equity and Inclusion Plan
• Contributions toward the LIFT (Listen, Invest, Facilitate, Teach) Initiative
• Participation in BSSI (Black Student Success Initiative)
• Diversity statements in faculty applications; trainings for search committees
• Presidential Postdoc Program
• Graduate Student Fellowships
• …numerous other efforts across the schools…

• Next step is to institutionalize
Diversity and Inclusion Advisory Council

“Graduation” of DII@FSE

- Next step in FSE’s commitment to cultivating a culture of diversity, equity, inclusion and belonging
- Establish an ad hoc committee towards formal institutionalization over the semester/year

Proposed membership of the ad hoc committee

- One faculty member appointed from each school
- DEI program manager (new staff position)
Proposed role of the committee

The Diversity and Inclusion Advisory Council shall make recommendations for activities, policies and practices to address topics related to diversity, equity, inclusion and belonging across the FSE and the communities it serves. The responsibility of the council is to help the Fulton Schools realize its vision to embed inclusivity as a core tenet of the FSE so that all faculty, staff, academic associates and students achieve their full potential enabled by an environment that is diverse, equitable and inclusive.
Diversity and Inclusion Advisory Council

Charge (examples)

1. Propose a standing committee structure that engages and is inclusive of all stakeholders (faculty, staff, and students) and effectively advances FSE goals to be codified in the FSE bylaws following appropriate faculty governance processes.

2. Explore mechanisms for formally recognizing DEIB contributions as part of the faculty development process.

3. Evaluate and communicate progress toward the goals identified by DII@FSE in the ASEE plan.

4. Continue to identify and implement activities that target the 10 strategic objectives outlined in the plan, including programs that support partnerships with HBCUs and other organizations that align with FSE values.
COVID-19 Update
COVID-19 and Fall 2021

0.13%
29 confirmed positive cases among 21,522 faculty and staff

0.37%
283 confirmed positive cases among student body of 77,063 (excluding ASU Online)

COVID-19 and Fall 2021

ASU’s mitigation strategies continue to create a safe harbor on campus and continue to protect students, faculty and staff

- COVID testing available at no cost to students and employees
- Random testing, regardless of vaccination status, to assess covid environment
- Community of Care training for all students and employees
- Weekly updates on the COVID Management & Data webpage
- Face cover policies across campuses
- Campaign to encourage all students and employees to get vaccinated
- NEW! ASU Health Services and Employee Health providing third doses of COVID-19 vaccine to immunocompromised individuals
As ASU returns to **Learning Mode 1**, the university has provided guidance with the primary goal of re-establishing the campus:

- Face coverings are strongly recommended when inside a university building.
- Face coverings are required in all classrooms and teaching or research labs. In addition, face coverings will be required in close-quarter environments where physical distancing may not be possible.
- If you learn of a positive COVID case, please email the student’s name and ID to deanofstudents@asu.edu.
- Please do not ask about vaccination status.
- Physical distancing is not required in classrooms but encouraged where possible.
- Accommodations considered for employees through the ADA process.
- More information, including syllabus resources, can be found on the [faculty FAQ page](#).

“Basically, the incentive is learn to be part of a community, learn to care about someone other than just yourself…be part of a community and then see what happens on the positive side.”
Some resources and reminders
Resources and reminders

Stay connected

• Upload a photo of your ASU ID card and update your My ASU profile

• Connect to on- and off-campus locations with the Tempe FLASH

• Check out other sustainable transit options

Health and wellness

• ASU Counseling offers a guide helping a student and responding to a crisis

• Employee Assistance Office and Wellness offers behavioral health services

• Make an appointment to get vaccinated against COVID-19

Training

• Fall 2021 Community of Care

• Seeds of Sustainability

• Annual Fire Safety

• Annual Information Security
Fulton Diversity Difference

a series of voluntary learning opportunities for FSE faculty, staff, and students focused on increasing openness and inclusion leading to recognition of participation for those individuals who take advantage of these opportunities.

Presented by FSE Academic and Student Affairs
Q&A