BCOE Spring Update

June 4, 2021

CELEBRATING 30 YEARS
Marlan and Rosemary Bourns College of Engineering



Agenda

- Return to Work
- College Finances
- Rankings
- New Programs and Centers
- Enrollment for Fall
- Development Trends
- Faculty and Staff Highlights
- Distinguished Teaching Award Announcement
- Leadership Changes



Return to Work

Instructional Continuity: Guidelines to be shared this summer

- Fall primary instruction mode is in-person: 80% across all campus sections
- Campus subcommittee work:
  - Upgrading classroom technologies for remote/hybrid options
  - Enhancing teaching and learning support
  - Improving exam integrity
  - Addressing student equity issues

Research Ramp-Up: Currently at 50% density

- Worksite Specific Plan (WSSP) required via EH&S
- Undergraduate researchers returned to labs
- Human subjects research ramping up
- Potential starting June 15: 100% density; masking and physical distancing
- Potential starting July 15: 100% density; no masking and distancing limits



Return to Work

Summer & Fall Planning

- Return driven by operational needs, some may return sooner than others
- Flexibility for fall while college determines next steps

Campus Vaccination Requirements

- April 22 UCOP announcement; FDA approval expected; Few exceptions allowed
- COVID-19 Vaccine Tracking Form (1,818 submissions to date)
- Students must upload proof-of-vaccination by August 1
- Vaccinated: no periodic testing; Not vaccinated: weekly testing and PPE required
- Recommendation: Pursue vaccines soon

Parking

- Starting July 1,10-pack parking permits available
- Red and blue lot permits held until January 2022

Limited Remote Work & Activities

- Specific duties and responsibilities dictate whether remote work is an option
- May be approved under special consideration



Budget

First round cuts

- About half of 11% core cut has been managed through faculty and staff attrition, reorganization, reduction of TA-ships, and lecturer taught courses
- An additional BCOE lost tuition revenue due to decreased masters and masters non-resident, GPP

Moving Forward

- Latest Governor's budget allocates additional $807M to UC
  - Unsure how much will come to UCR, BCOE
- Financial future looks very optimistic
  - Additional 3.2% budget cut pending, but anticipate they will not occur
  - NR visa challenges improving
- Revenue generation focus
  - Grow NT tuition, GPP, SSP
  - Expand MSOL and related programs



BCOE Moves Up in Rankings

- **No. 79** – up one spot from prior year in US News & World Report Rankings
- Within **top 50** for public engineering schools
- Six of seven departments moved up in rankings
- Percentile among public programs:
  - 2 program areas in the first quartile
  - 5 program areas in second quartile



New Programs

- **M.S. in Robotics – Now accepting fall applications**
  - UC system's first M.S. in robotics
  - Recruitment underway
- **B.S. in Robotics – In process**
- **M.S. in Data Science – In process**
- **Expanding MSOL offerings**
  - Proposed fully technical tracks for MSOL
  - Potential offerings include:
    - Robotics
    - Automotive (CE-CERT)
    - Others



BCOE Enrollment

Undergraduate

- Applications: 14,000+ Fall 2021
  - 18% up from 2019 (first-year + transfer)
- SIR period is now closed
  - As of May 21, SIRs up 19% over 2019

Graduate

- Active M.S. application period
  - International deadline to apply: June 1
    - Robotics extended to July 15
  - Domestic deadline to apply: September 1
  - Point in time analysis as of May: M.S. accepts are trending higher than 2019

- Ph.D. application period closed June 1
  - Acceptances trending in range with 2019 numbers



Four New Externally Funded Research Centers

NSF Engineering Research Center: ATP-Bio

- Guillermo Aguilar (ME), Lorenzo Mangolini (ME), Yadong Yin (CNAS)
- Stopping biological time
- First successful ERC bid for UCR

Department of Defense Center of Excellence: NC4

- Amit Roy-Chowdhury (ECE), Srikanth Krishnamurthy (CSE), Nael Abu-Ghazaleh (ECE/CS), Yingbo Hua (ECE), Zhiyun Qian (CSE), Manu Sridharan (CSE), Basak Guler (ECE), Fabio Pasqualetti (ME)
- Creating robust, secure, learning-based networked systems for next-gen computing and communications
- One of nine Centers of Excellence in the U.S. and one of four in partnership with DEVCOM ARL



Four New Externally Funded Research Centers

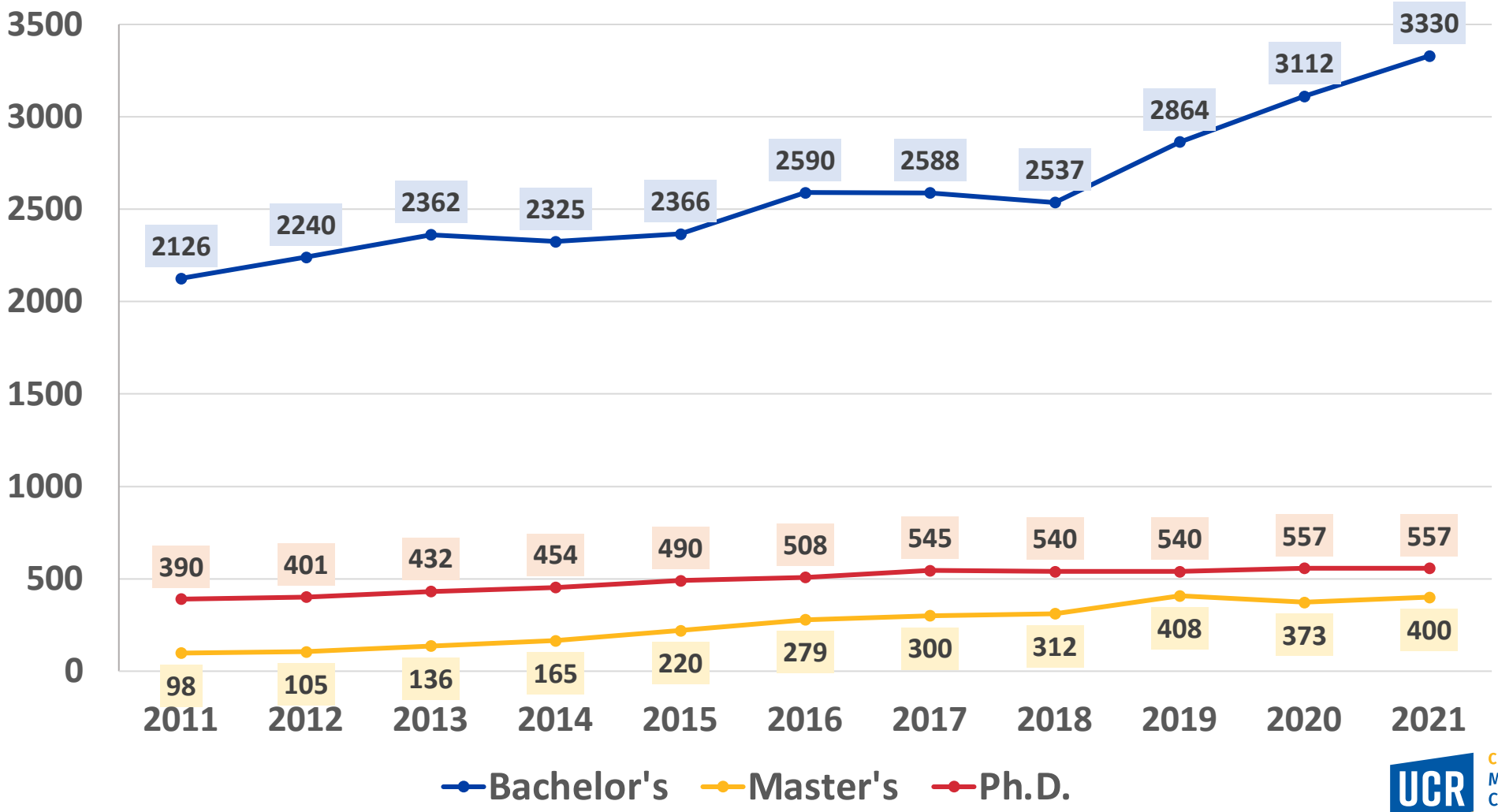
Department of Energy Frontier Research Center: Ultra EFRC

- Alexander Balandin (ECE), Richard Wilson (ME)
- Creating a more resilient and sustainable electricity grid by using next-generation materials

Materials Science in Extreme Environments (MSEE) University Research Alliance

- Michael Zachariah (CEE), Lorenzo Mangolini (ME), Bryan Wong (CEE)
- Working with the Defense Threat Reduction Agency (DTRA)
- Seeks to understand, predict, and control the behavior of materials in extreme conditions caused by weapons of mass destruction

Enrollment Trends



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Donor Trends

Private Support Fiscal Year-to-Date

$2,609,910

Current FYTD

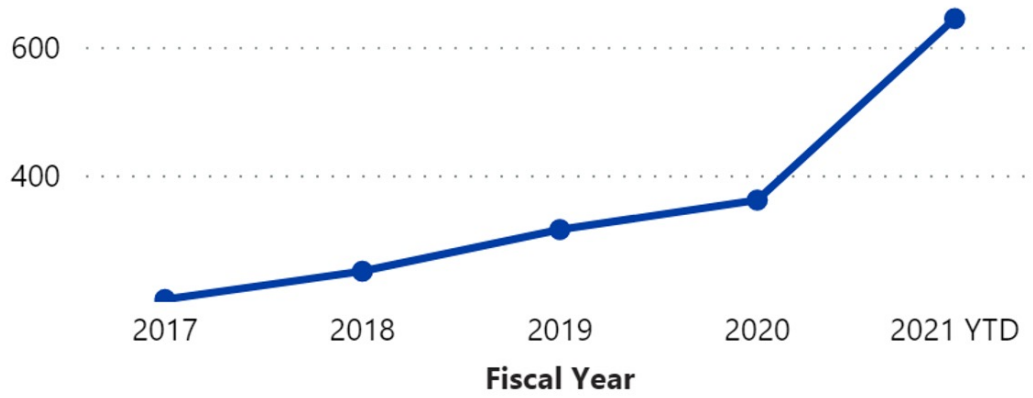
-0.45%

over Previous FYTD

Donors Year-over-Year Comparison

644

Donors Current Fiscal YTD



Faculty Accomplishments



ACM Distinguished Member Doctoral Dissertation Award
Nael Abu-Ghazaleh



ASME Fellow
Guillermo Aguilar



DoD Vannevar Bush Faculty Fellow
Alexander Balandin
DoD's most prestigious single-investigator award



NAI Fellow
Bir Bhanu



TMS Brimacombe Medal
Suveen Mathaudhu



TUBITAK Scientific Achievement Award
Professor Cengiz Ozkan
Turkey's highest scientific honor

Eight CAREER Awardees

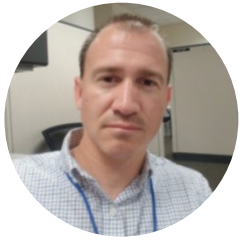
- **Salman Asif**, ECE
- **Konstantinos Karydis**, ECE
- **Yujie Men**, CEE
- **Joshua Morgan**, BIEN
- **Samet Oymak**, ECE
- **Vagelis Papalexakis**, CSE
- **Chengyu Song**, CSE
- **Daniel Wong**, ECE

Staff Recognitions

Inaugural Recipients of the Mitchell Boretz Engineering Excellence Award Fund



Jun Dizon, ECE
NACADA Membership



Brandon Reese, Contracts and Grants
SRAI Course + Webinars



Steven Rightnar, Mechanical Engineering
Mastercam Training and Certification



Kim Underhill, ECE
NACADA Membership



Distinguished Teaching Award



Vagelis Papalexakis

- Strong **record of innovation** in education both in and out of the classroom
- Reputation for **inspiring and energizing** students
- Eagerness to promote and support the college's **educational mission** both on-campus and beyond

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Changes in Leadership

Outgoing Associate Deans and Chairs – Thank You!

- C.V. Ravishankar
- Jay Farrell
- Suveen Mathaudhu
- Amit Roy-Chowdhury *(shifting to lead the robotics program)*
- Guillermo Aguilar

Incoming Associate Deans and Chairs

- TBD, associate dean for graduate research and education
- Marek Chrobak, associate dean for academic personnel
- Juchen Guo, chair of materials science and engineering
- Ertem Tuncel, chair of electrical and computer engineering
- Lorenzo Mangolini, chair of mechanical engineering


THANK YOU
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