

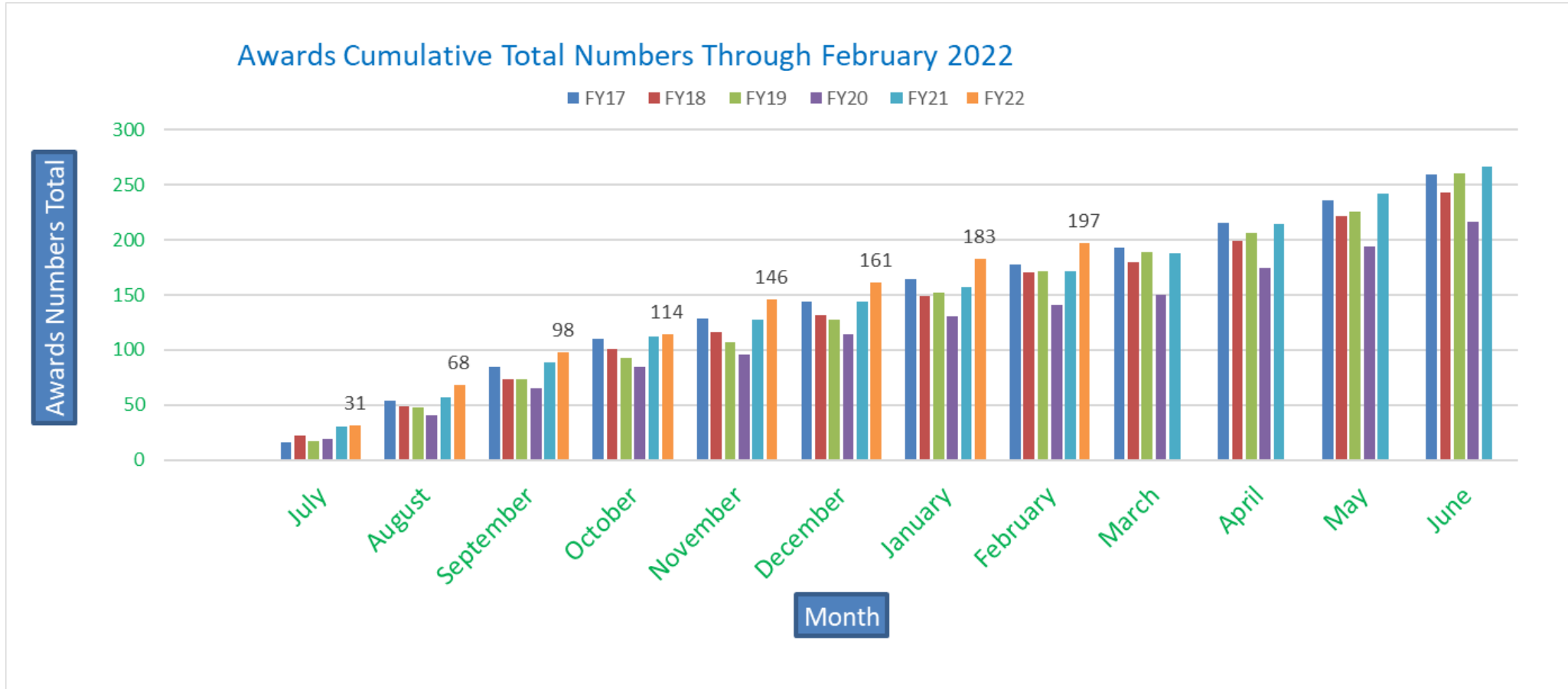
# RESEARCH 1 (VERY HIGH) PROGRESS REPORT

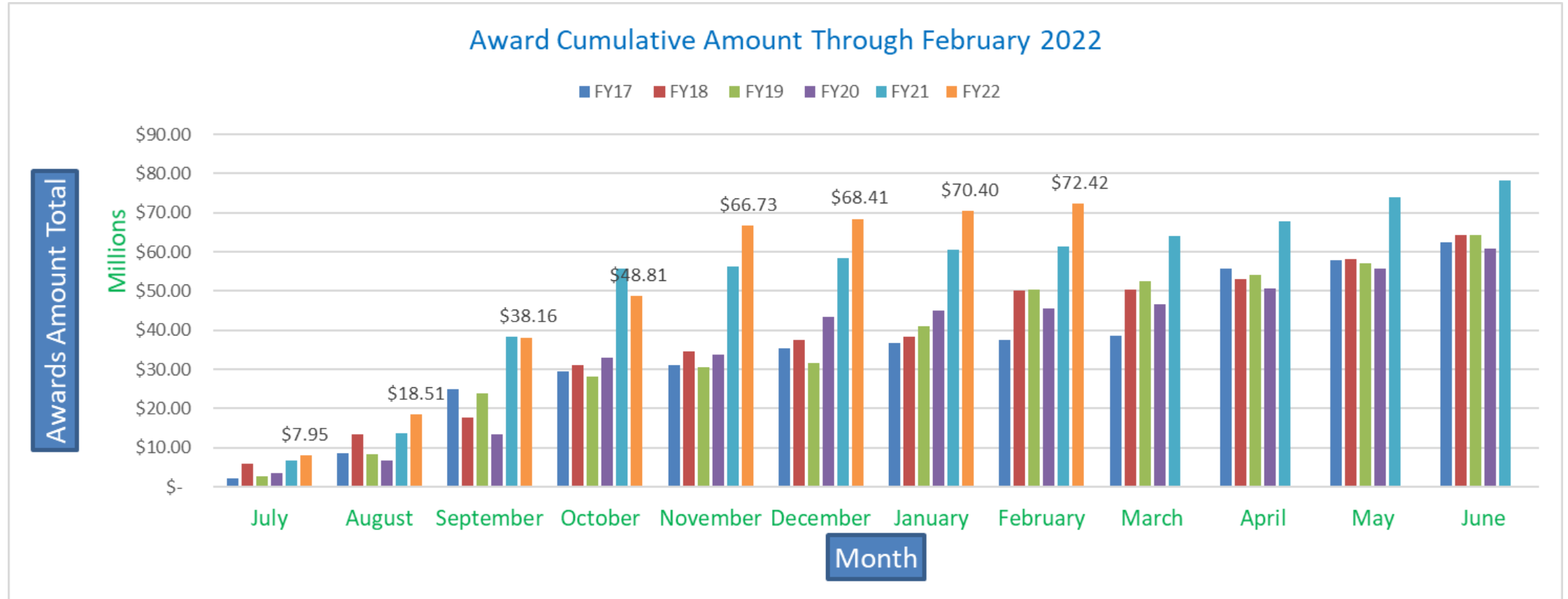


Eric R. Muth, Vice Chancellor for Research and Economic Development  
Clay Gloster Jr., Vice Provost for Graduate Research and Dean of the Graduate College  
Board of Trustees Meeting  
4/22/2022

- Envisioning N.C. A&T's R2-R1 journey
- Research annual progress report
- Graduate student annual progress report
- Recent research and graduate student initiatives
- Questions

- **Growing from a premier undergraduate/research institution to a comprehensive doctoral university that continues to value undergraduate education.**
- **Strategic budget models that incentivize growth and reward productivity.**
- **Comprehensive doctoral university that offers:**
  - Broad distribution of doctoral programs that mirror the breadth of disciplines reflected in our undergraduate programs
  - Diverse funding sources to support highly talented graduate students and postdoctoral scholars.
- **Access to research and creative inquiry spaces that facilitate the highest levels of productivity**
- **Robust and sustainable impact on the community through education, research, creative inquiry and innovation, aligned with the University's land grant mission.**
  - Total ownership, commitment and support of the mission of the university that includes every university employee and student.

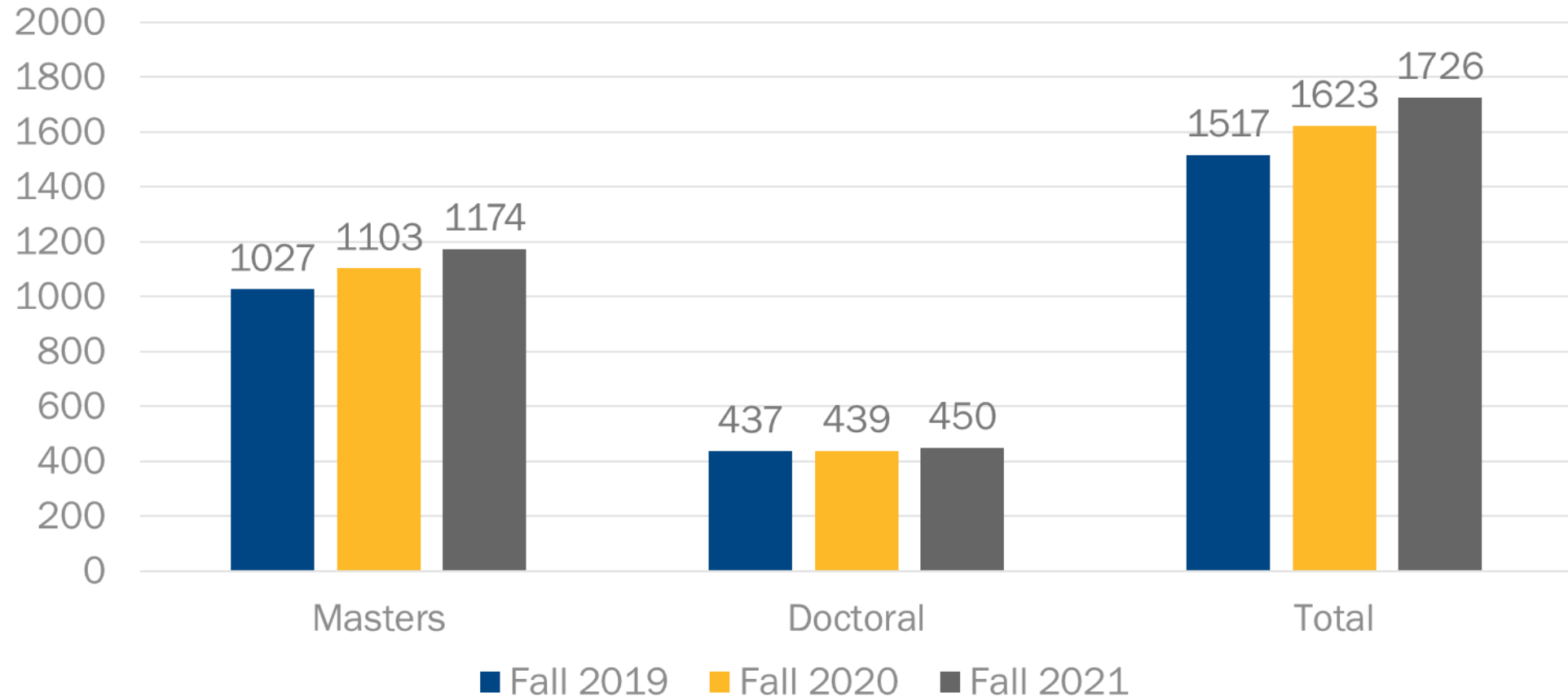


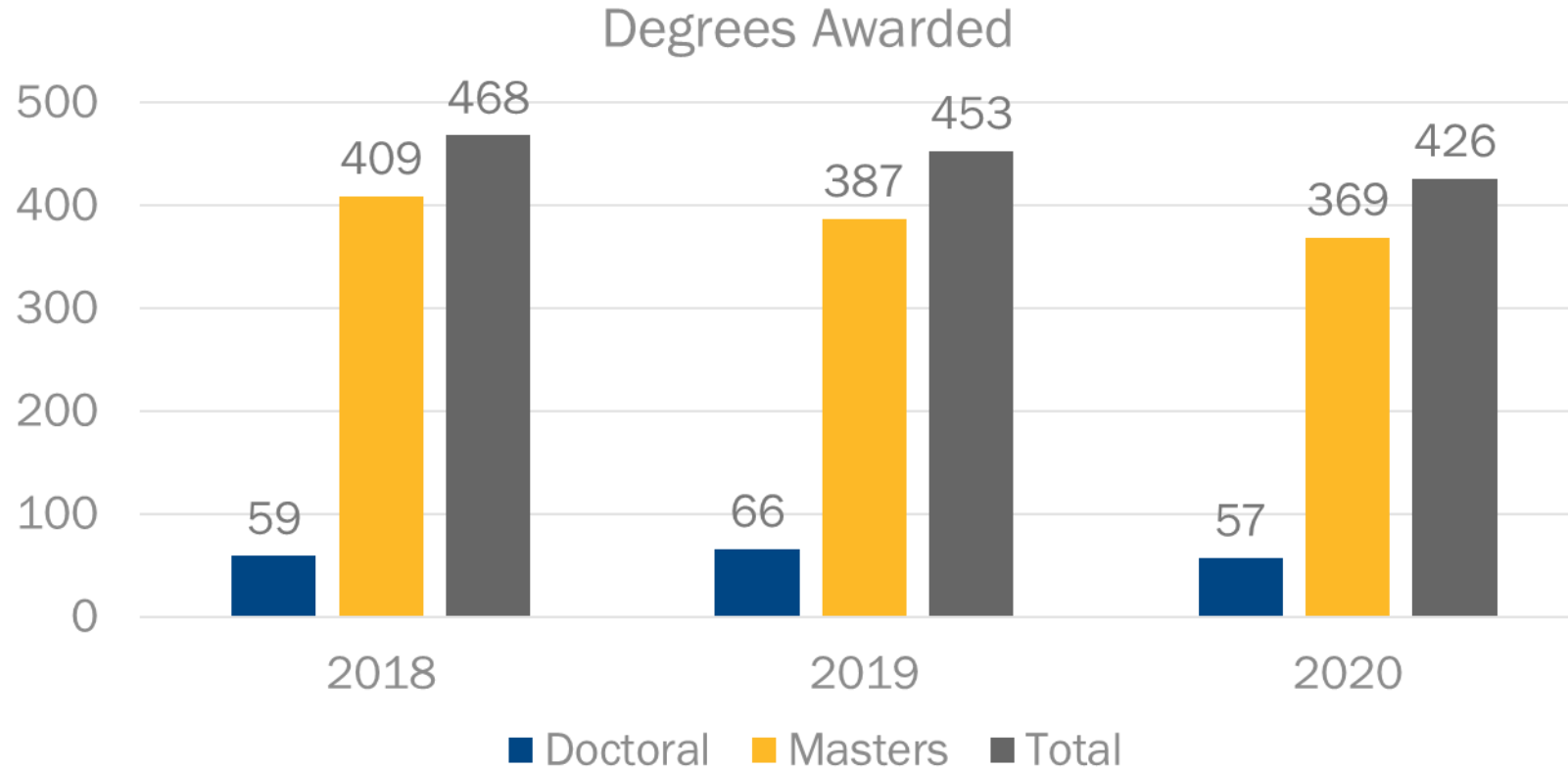


### Patent Prosecution Matters

- 5 new patents issued in FY2022
  - ✓ US 11,104,611 “Swine-Waste Biochar as a Sustainable Cement Replacement Material” (Ofori-Boadu, CoST)
  - ✓ US 11,168,207 “Green Epoxy Resin with Biobinder from Swine Manure” (Zhang, JSNN)
  - ✓ US 11,155,696 “Preparation and Uses of Biobinder” (Fini, past COE)
  - ✓ US 11,208,647 “Electrical stimulation via nanoelectrodes to modulate adipose-derived stem cells” (Aravamudhan, JSNN)
  - ✓ US 11,261,315 “Environmentally Friendly Asphalt Binder Additive” (Mohtarami et al past COE)
- 9 new patent filings in FY2022
  - ✓ 4 utility applications
  - ✓ 5 provisional applications
- 22 total pending patent applications
  - ✓ 3 applications have been allowed (issue date depends on USPTO action)
  - ✓ 4 utility applications are in active prosecution (process can take 2-3 years)
  - ✓ 7 utility applications are awaiting start of prosecution (depends on USPTO action)
  - ✓ 8 are provisional applications (awaiting 1 year utility patent filing decision)

Graduate Enrollment







### Research Initiatives

- Rollout of new electronic research administration software InfoEd has begun
- Engagement with multiple Federal agencies
  - Sandia National Laboratories
  - National Institute on Drug Abuse
  - Defense Advance Research Projects Agency
  - US Space Force University Partnership Program
- Comprehensive analysis of research space underway

### Graduate Student Initiatives

- 2 new graduate programs approved and enrolling for Fall 2022
  - M.S. in Health Psychology
  - Ph.D. in Agriculture and Environmental Sciences
- 5 new online M.S. programs approved and beginning in Fall 2022
  - Civil Engineering
  - Computer Science
  - Data Science and Engineering
  - Electrical Engineering
  - Industrial and Systems Engineering

**QUESTIONS?**

AGG  
IESDO