Closed Session

Litigation Briefing
   • Kay Heidbreder: University Legal Counsel

Open Session

Briefing on Northern Virginia Plan
   • Dr. Julie Ross, Dean, College of Engineering and Special Advisor to the President

Innovation Campus Update (Faculty, Research, and Programs)
   • Dr. Lance Collins, Vice President and Executive Director for the Innovation Campus

Research Global Overview
   • Dr. Daniel Sui, Senior Vice President and Chief Research and Innovation Officer

Constituent Reports
   • Mr. William Storey, Undergraduate Student Representative to the Board
   • Ms. Emily Tirrell, Graduate Student Representative to the Board
   • Ms. LaTawnya Burleson, Staff Representative to the Board
   • Dr. Janice Austin, Administrative and Professional Faculty Representative to the Board
   • Dr. Joseph Merola, Faculty Representative to the Board
Committee Members

Chair: Julie Ross, Dean of Engineering

- Amy Sebring, Executive VP and Chief Operating Officer
- Don Taylor, Executive Vice Provost
- Lance Collins, VP and Executive Director, Innovation Campus
- Aimee Surprenant, Dean of the Graduate School
- Saonee Sarker, Dean of the Pamplin College of Business
- Laura Belmonte, Dean of Liberal Arts and Human Sciences
- Kevin Pitts, Dean of Science
- Dan Sui, Senior VP, Research and Innovations
- Steve McKnight, VP, Strategic Alliances
- Eric Paterson, Executive Director, National Security Institute
- Mike Friedlander, VP, Health Sciences and Technology and Founding Executive Director, Fralin Biomedical Research Institute
- Chris Yianilos, VP, Government and Community Relations
- Shannon Andrea, Director, Media Relations and D.C. Area Communications
Growth in the greater D.C. metro area is critical for Virginia Tech becoming a top global research university.

The steering committee will work to define the university’s role and presence in the region for the years ahead.
Significant work has already been accomplished surrounding Virginia Tech’s physical footprint in the D.C. area.

The goal of the steering committee is to review and assess these efforts, recommend adjustments as necessary, and chart a more detailed course for further development in the region.
SCOPE OF INTEREST

Instructional, research, and outreach missions, with an emphasis on those that will distinctively position Virginia Tech among land-grant universities and leverage the opportunities afforded by operating in the nation’s capital.
Virginia Tech Innovation Campus
Alexandria

Virginia Tech Research Center
Arlington

Redevelopment of Falls Church
Falls Church
Phases & Timelines

Committee work is organized into three phases with recommendations that will focus on strategic positioning, organizational structure, and operational support for the D.C area.

**PHASE 1: VISION, MISSION, POSITIONING**
- March – June 2023

**PHASE 2: ORGANIZATION AND OPERATIONAL PLANNING**
- July 2023 – June 2024

**PHASE 3: IMPLEMENTATION**
- Beginning Fall 2024
PHASE 1: March – June 2023

Attributes of Programs & Activities
Need: clear articulation of the purpose for our regional enterprise

Foundational Principles for Operation
Need: Summary of operational expectations for the regional enterprise

Mission & Vision Statement
Need: Consistent messaging across all locations in the region for communications and marketing

Revision to Thematic Emphases
Need: Updated description of site alignment and organization for regional activity
Attributes of Programs & Activities

**Provide Access to Partners** - types of partnerships or depth of partnerships that are available/possible because of the university’s location in the greater D.C. area.

**Leverage Region-Specific Opportunities** – access to diverse expertise and talent, unique research and educational programs, urban environment, and specialized laboratories to address regional, national, and global needs.

**Advance Graduate/Postdoctoral Education for the Future** - to provide students and trainees a world-class experience uniquely connected with the many government, industry, and urban community organizations in the area.
Phase 2 Focus Areas

- Organizational and administrative structure
- Facilities operating costs and space allocation
- Tuition models for in-person, hybrid, and fully online
- Transportation between Blacksburg, Roanoke and the D.C. area
- Budget models for the future
- Housing options for undergraduate and/or graduate students
Preview: Future Operational & Administrative Structure

Key Recommendations:

• Formation of a cross-cutting academic unit to serve as the core academic structure for the region. Structure, scope, and name to be determined. Transdisciplinary in nature, anchored in computing, and incorporating closely-related applications.

• Vice President of the Greater D.C. Area, reporting to the Provost in alignment with all academic enterprises at Virginia Tech.

• Matrixed organizational structure that maintains close connection with colleges, academic departments and central administrative offices.

• Shared academic, business and student support services operating at the regional level.
### PURPOSE:
Growth in the greater D.C. metro area is critical for Virginia Tech becoming a top global research university. The steering committee is working to define the university’s role and presence in the D.C. metro area for the years ahead.

### FOCUS AREAS:
Virginia Tech Research Center in Arlington; Virginia Tech Innovation Campus in Alexandria; and the redevelopment of Falls Church.

<table>
<thead>
<tr>
<th>PHASE 1: VISION, MISSION, POSITIONING (March – June 2023)</th>
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</tr>
</thead>
<tbody>
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</tr>
<tr>
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</tr>
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### PHASE 3: IMPLEMENTATION (Beginning Fall 2024)
-We expect to deliver final recommendations this summer and begin implementation in the Fall 2024
RESEARCH FOCUS AREAS

- Artificial Intelligence (Sanghani Center for AI and Data Analytics)
- Quantum Architecture and Software Development
- Intelligent Interfaces (e.g., Virtual Reality)
- Next Gen Wireless
Expanding Virginia Tech’s faculty leadership in Northern Virginia

17 faculty members as of spring 2024

Innovation Campus faculty are purpose-driven, industry connected, and make up a distinct, action-oriented culture

12 tenured faculty brought in $15.2 million in 2023
UNMATCHED IMPACT

Our faculty members’ publication impact is commensurate or better than that of top institutions
YANG “CINDY” YI

- Semiconductor grant from National Science Foundation (NSF): $500,000
  - Grant awarded to enable semiconductor research and create artificial intelligence-enabled wireless circuits and systems

- UPWARDS: an international partnership between 11 Japanese and United States universities, funded by a $30 million investment from Micron Technology, Tokyo Electronics, and the NSF, with a Virginia Tech share of $3.47 million
  - Virginia Tech leads the Women in Semiconductors focus area
LINGJIA LIU

- FutureG grant from the Department of Defense: $9 million
  - Liu will lead a team researching Mobile Distributed Multiple-Input, Multiple-Output (Mobile dMIMO)-facilitated complex and large-scale wireless networks to help define and set the standards for FutureG technology

- Open Radio Access Networks (O-RAN) grant from the Public Wireless Supply Chain Innovation Fund: $2 million
  - Grant awarded to develop O-RAN technology and drive a more competitive wireless network market that lowers costs and creates jobs

- NextG wireless grant from the NSF: $800,000
  - Grant awarded to create next generation (NextG) mobile broadband networks that increase the availability of access to users by providing seamless wireless coverage and supporting varying service requirements
STEVE FLAMMIA

- Taught at University of Sydney and University of Washington
- Provides an opportunity for Virginia Tech to spearhead a regional powerhouse in quantum
- Founding director of Center for Quantum Architecture and Software Development
  - The Quantum Center was announced in 2021 as a part of a $12.5 million gift from Northrop Grumman
  - Building on strengths of VTQ and research in NSI, Virginia Tech is positioned to be a national leader
- Former principal research scientist for the Amazon Web Services (AWS) Center for Quantum Computing
NAREN RAMAKRISHNAN

- Director of Sanghani Center for Artificial Intelligence and Data Analytics
- Oversees Amazon-Virginia Tech Initiative for Efficient and Robust Machine Learning
- Working with Washington Nationals on an AI/ML research project that is updating models to account for new game structure
- Partnering with The Washington Post to develop AI-powered tools to improve reader experience
- Recently elected Institute of Electrical and Electronics Engineers (IEEE) Fellow and American Association for the Advancement of Science (AAAS) Fellow
ENGINEERING FACULTY AWARDS

- 2024 VT College of Engineering Dean’s Awards for Excellence
  - Kirk Cameron
    Excellence in Service
  - Kurt Luther
    Excellence in Outreach
  - Cindy Yi
    Excellence in Research
FACULTY SEARCH UPDATE

- Senior faculty search for the Sanghani Center is concluding (offer accepted)
- Senior faculty search in Intelligent Interfaces, in partnership with Boeing (in final stage)
- One collegiate faculty hire completed for fall semester; search underway for two additional faculty
CURRICULUM
For students to have the experience – to have done something real with machine learning and algorithms – is a distinguishing factor when I look at a resume for potential candidates to hire.

DEREK PROSPERIE
Principal Systems Engineer
MITRE Corporation
M. ENG INTEGRATED PROJECT CURRICULUM

NEAR-TERM GOAL:
Integrate multi-semester team projects throughout the curriculum

- 15 of 30 graduate credits will be project-based
- Team projects sourced from industry, non-profits, government agencies, and faculty research
- Students have the option to propose their own entrepreneurial team projects
- First cohort begins fall 2024
- Starting with computer science in 2024-25 then integrate with CPE in 2025-26
INTEGRATED PARTNERSHIPS

- Corporations and agencies sponsor projects
- Sponsors, in collaboration with faculty, specify the technical need or challenge
- Sponsors are required to provide in-kind support of project team
- Opportunities to sponsor hack-a-thons, bootcamps, etc.
QUESTIONS?
RESEARCH AND INNOVATION UPDATES

June 10, 2024
BEAT OUR STRATEGIC PLAN GOAL FOR SPONSORED EXPENDITURES TWO YEARS EARLY
RESEARCH EXPENDITURES UP ACROSS THE BOARD

Trajectory continues on strong upward path in FY24.

Note: this only captures funds flowing through the Office of Sponsored Programs; excludes affiliated corporations, Agency 229, foundation funds.
BALANCED PORTFOLIO

Virginia Tech’s sponsored research portfolio has support from a broad number of agencies.

Growth was led by Department of Defense (+27%) and Department of Health and Human Services (+27%)
Faculty and researchers across all colleges and institutes are actively engaged in sponsored research programs.
GROWTH ACROSS ALL UNITS

Engineering

Veterinary Medicine

Science

Agriculture and Life Sciences

Virginia Tech Transportation Institute

Fralin Biomedical Research Institute

Virginia Tech National Security Institute

Actuals

Projected
RESEARCH FRONTIERS

Grow and diversify the research portfolio by prioritizing strengths and focusing on emerging areas for competitive growth.
UNDERSEA AUTONOMY AND ROBOTICS

• Testing and demonstration in collaboration with the Navy, industry
• FY23-25 funding: $17M
• At-sea demonstration 2026-27
COMMONWEALTH CYBER INITIATIVE

The Commonwealth Cyber Initiative has become a key contributor to the Wireless Innovation Fund managed by the National Telecommunications and Information Administration.
Constituent Report by Undergraduate Student Representative to the Board, William Storey, will be presented at Monday’s Information Session.
Rector Baine, members of the Board of Visitors, President Sands, Provost Clarke, administrators, guests, and friends. Thank you for this opportunity to speak with you all about the graduate and professional students today. It is bittersweet as I give my final constituency report, as it feels like just yesterday when I was attending my very first board meeting - what a wonderful year it has been! In this report I want to highlight what an incredible opportunity this position has been for me, what an honor it has been to serve Virginia Tech, and share what we have been able to accomplish this year.

Firstly, I would like to thank all of the faculty and leadership at the university who welcomed me into this role, and collaborated with me and other graduate and professional students this year. Dean Surprenant, Dean Givens, Dean Learman, Dean Hoopes, Lauren Surface, Ellen Plummer, Dr. Francis Keene, Dr. James Bridgeforth, and everyone else I am failing to mention, thank you for all of your support and guidance this year. To the board, it has been an absolute pleasure getting to know each of you, and see the incredible amount of time, dedication, and passion that you bring to each of these meetings. Not only do you make Virginia Tech a global destination for innovation and education, but a strong community and a home. Thank you for everything you do here, and the difficult decisions I know you make.

As a reminder, I focused on two main topics that impact graduate and professional student attraction and retention: student financial wellness and overall student engagement and wellbeing.

Much has happened this year in relation to student financial wellbeing, specifically surrounding the university's commitment to increasing graduate student stipends. According to data collected by the Graduate School earlier in my term, 19.8% of graduate students received a 5% stipend increase, 38.4% received between 5.1% - 10% increase, and 35.6% of graduate students received more than a 10% increase in stipend amount this year. Similarly, work has been done on the “Graduate Candidacy Status Tuition Reduction,” with great collaboration between the Graduate School and the Finance Office to reduce tuition costs for those who have met Candidacy status. The financial wellness of graduate
Students has been an ongoing challenge, and I appreciate the care and dedication that has gone toward supporting our graduate students financially.

Student engagement with campus resources is another contributing factor for student attraction and retention that I focused on this year. As a reminder, graduate school data showed that approximately 41% of graduate and professional students want to connect with campus resources surrounding mental health initiatives. I have collaborated with multiple campus resources, and have seen much work go into supporting our students. In our last board meeting, I mentioned the great success of the Graduate and Professional Student Resource Fair. With 21 campus partners in attendance, we had over 100 students attend and learn more about the resources that Virginia Tech has to offer - it was a huge success! Rumor even has it that Graduate School will continue to host this event in the future, and I don’t think that it’s a bad legacy to have from my term.

Finally, thank you for this incredible opportunity to serve our institution. I cannot put into words how impactful this experience has been for me, or what an honor and a privilege it has been to work alongside you all. This fall marks my seventh year here at Virginia Tech, and taking a peek behind the curtain of what makes this institution tick has been incredibly rewarding and inspiring. As my term comes to an end, I am excited to know that the Graduate and Professional Student Representative position will be taken over by a driven and compassionate young man. A second year masters student in Electrical Engineering, William Poland is incredibly talented and accomplished in the academic field, studying the scattering of electromagnetic waves over rough surfaces. A Blacksburg native, William has a deep connection to and a rich history with Virginia Tech. He is passionate about graduate and professional student experiences, collaborative with administrators and student leaders across campus, and will be an excellent addition to the Board of Visitors family. Both William and Leslie will do incredible work next year serving this institution, and will represent their respective constituents well.

On behalf of the graduate and professional students, thank you for listening today. I appreciate your attention and I thank you again for this opportunity to share. It has been an honor to share my ongoing progress in this role and collaborating with you all in serving Virginia Tech! For a final time - Go Hokies!
Constituent Report by President of Staff Senate, LaTawnya Burleson, will be presented at Monday’s Information Session
Good afternoon, Rector Baine, board members, President Sands, Provost Clarke, Executive Vice President Sebring, administrators, and guests. It is a pleasure to be with you all for the June board meeting.

Our 2024-25 officer elections were held in April and I’m pleased to share the officers will be Dr. Marlena McGlothlin Lester, Vice President; Enrique Noyola, Secretary/Treasurer; and I will serve a second term as President.

President Sands joined our May senate meeting to discuss a variety of topics including our system of shared governance, free speech at Virginia Tech, discussions President Sands has had with various student groups, and the AP Faculty employee group and Job Architecture project. We greatly appreciate President Sands taking the time to join us for discussion and look forward to continued interactions in the coming academic year.

The AP Faculty employee group is comprised of over 2500 individuals doing a great diversity of work in support of the university's strategic initiatives. In the AP Faculty Senate, we’ve clustered ourselves into seven constituent areas: Extension, Research, Academic Support, Student Affairs, Athletics, General Professional, and General Administrative. Today I would like to highlight some of the varied work done by AP Faculty members in Academic Support. These AP Faculty members are advisors and other professionals working to support our colleges. Many AP Faculty members in academic support work within the colleges in roles such as advising undergraduate students on their curriculum selections or leading graduate programs with recruitment and academic progress as well as administrative functions in the colleges such as finance and program operations. Other academic support AP Faculty work in units outside of, yet support, the colleges and the university’s academic mission. These AP faculty members work in areas such as the Undergraduate Research Office supporting research opportunities for students, Technology-Enhanced learning and online strategies (TLOS) supporting teaching and learning efforts across the university, Analytics & Institutional Effectiveness using data and information to provide insights used for decision making and continuous improvement efforts, and managing finance and operations for university centers such as the Center for Coal Energy Research. I will share more about our other constituent areas during our future meetings this coming year.
Thank you for the opportunity to update you today and I look forward to updating you on the work of the A/P Faculty Senate at the August meeting.
Constituent Report by President of Faculty Senate, Joseph Merola, will be presented at Monday’s Information Session