Virginia Tech Board of Visitors Meeting

Information Session

Monday, August 30, 2021
10:30 a.m. – 12:00 p.m.

The Inn – Latham Ballroom
Virginia Tech Campus

Innovation Campus Update
• Dr. Lance Collins, Vice President and Executive Director for the Innovation Campus

Sesquicentennial Update
• Dr. Rosemary Blieszner, Chair of the Sesquicentennial Steering Committee, Interim Dean for the College of Architecture and Urban Studies, and Alumni Distinguished Professor
• Ms. Angela Hayes, Associate Vice President for Advancement and Sesquicentennial Director

Covid-19 Research
• Dr. Navid Ghaffarzadegan, Associate Professor, Industrial and Systems Engineering

Constituent Reports
• Mr. Paolo Fermin, Undergraduate Student Representative to the Board
• Mr. Phil Miskovic, Graduate Student Representative to the Board
• Ms. Serena Young, Staff Representative to the Board
• Dr. Robert Weiss, Faculty Representative to the Board
UPDATE TO BOARD OF VISITORS
Lance Collins, Vice President and Executive Director
August 30, 2021
Innovation Campus Progress Report

- Faculty
- Curriculum
- Facilities
- Students
- Staffing
Our goal: 50 faculty by 2028

• Reviewing requests by VT computer science and computer engineering faculty

• Conducting external searches for faculty this fall.

• Scale hiring of teaching/research faculty with enrollment growth plans.
Transition to project-based learning

- Training faculty in best practices
- Planning pilot projects this academic year.
- Reviewing M.Eng curriculum and developing plan to transition over the next three years.
Ready to break ground

• Design continues on-time and on-budget.

• Ceremony planned for Sept. 14th at 4 p.m.

• Working closely with JBG Smith to find an anchor tenant for the adjacent Innovation Building.
Enrollment growth
Our focus: Grow M.Eng programs in the D.C. region.

Fall 2021 Admissions (as of 8/12)
Applications: 355
Will Attend: 157

- Progress on in-state and under-represented populations. (Still work to do)

- Context: Last year, 40 degrees awarded to D.C. based students in CS and CPE programs.
A new academic year

• Classes started last week
• In-person instruction continues at the Northern Virginia Center.
• Launched a new services hub there for the growing number of students.
Growing team

We are continuing to fill key leadership positions.

• Welcomed Franki Fitterer, Communications and Marketing Director, on Aug. 25.

• Interviewing candidates for K-12 Programming Director, funded from the Boeing gift.

• Hiring Principal Partnerships Officer, position shared with Link, License and Launch.
Thank you and please join us in Alexandria for the groundbreaking event September 14th!
CAMPUS IS DRESSED FOR THE SESQUICENTENNIAL
POP-UP AND FLAG POLE BANNERS & BOOKSTORE DISPLAY
BLACKSBURG/ROANOKE REGIONAL AIRPORT DISPLAY
SESQUICENTENNIAL CELEBRATION HIGHLIGHTS

• Featured Colleges and Units
• Official Public Launch - Homecoming 2021
• Sesquicentennial Road Show
• Capstone Event - April 2021 - “Ut Prosim Month”
• International Presence
• Key Anniversaries
• 150,000 Hours of Service
• Time Capsule
• Sesquicentennial Grove of Trees
• Sesquicentennial Class Acknowledgement
• Symposium
• PDN Credit and Digital Badge
• Other Highlights
THANK YOU!

ROSEMARY BLIESZNER, CHAIR
SESQUICENTENNIAL STEERING COMMITTEE
RMB@VT.EDU

ANGELA HAYES, DIRECTOR
UNIVERSITY SESQUICENTENNIAL
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Model-based policy-making for containing COVID-19 in universities: Fall 2021 updates

Navid Ghaffarzadegan

navidg@vt.edu
Industrial and Systems Engineering, Virginia Tech
8/30/2021

Based on:

Link to the covid-19 research website: https://sites.google.com/vt.edu/navid/research/covid-19-research

Navid Ghaffarzadegan 2021, Covid-19 in Universities
Background: COVID Modeling Group at Virginia Tech

- April 2020: A covid-modeling group was formed
- Objectives:
  - Build infectious disease modeling capacity with public health and wider transdisciplinary input and expertise
  - Develop COVID-19 models to provide guidance for university operation
- Interdisciplinary group, close collaboration with the university, led by Ron Fricker and Laura Hungerford.
- My objective: A simulation model that incorporates behavioral responses of students to help projection and policy-making
- Reports prior to each semester including projections and suggestions

Navid Ghaffarzadegan 2021, Covid-19 in Universities
Virginia Tech and COVID-19

• Two waves of COVID-19 during Fall and Spring semesters. One wave per semester (black lines).

• Common pattern:
  • Early overshoot starting immediately after school opens.
  • (After 2-6 weeks) followed by a declining pattern to “some” steady state daily cases.
  • About the same number of total cases (1783 vs. 1518).
  • Fewer cases during only-online periods.

• Differences:
  • Sharper rise in Fall than Spring, possibly due to starting with 1-2 weeks only-online.
  • More tests in Spring than Fall. (45K vs. 59K)

Fig.1 - COVID-19 daily cases and tests at Virginia Tech (7-day moving average) during 2020-2021 academic year

Navid Ghaffarzadegan, VT ISE
COVID-19 Simulation Model of Universities

• A simulation model of the spread of covid-19 in universities was developed, as an input for policy-making.
• Calibrated for Virginia Tech
• Provided policy suggestions at different points.

• Inputs:
  • Data on coronavirus characteristics, domestic prevalence, test accuracy, etc. (Source CDC, published papers).
  • Data on university operation, population, demographics, cases, tests, etc. (Source Virginia Tech)
• Process:
  • A mathematical model, the core structure consistent with the literature, modified to represent a college town, consistent with Blacksburg.
• Outcome:
  • Projection.
  • Policy insights (through what-if analysis).
Let’s simulate the model.

In this part, we will run the simulation model and test a few policies.

The model is very complicated and includes many variables. It also has a dashboard that looks like this figure, and one can run what-if scenario analysis to evaluate effects of different policies without the need to go to the details of the equations.

Questions and comments: Navid Ghaffarzadegan, navidg@vt.edu
Constituent Report by Undergraduate Student Representative to the Board, Paolo Fermin, will be presented at Monday’s Information Session.
Constituent Report by Graduate Student Representative to the Board, Phil Miskovic, will be presented at Monday’s Information Session
Rector Long, members of the Board of Visitors, President Sands, administrators, and guests: Thank you for this opportunity to speak with you about Virginia Tech’s staff.

I would like to take a moment to thank President Sands and Administrators for your transparency and leadership during this last year and a half and for continuing that leadership into what will become our new normal. We appreciate your ongoing communication and your attentiveness to staff. Thank you!

I am honored and proud to represent the Staff today and I want to take a moment to brag on our phenomenal staff here at Tech. I am always astounded and proud to see the strength and resilience that our staff show time and time again. Whether it be in the day-to-day things or things that pop up and surprise us like a Pandemic. Our staff always come through better and stronger. They are truly the backbone of this University and without them the University couldn’t function.

This summer our Senate has been busy. Our constitution and by-laws are currently under review because we are trying to align them with the new and improved governance restructure which is also on-going. We are excited to see the changes happening in shared governance which appears to give all senates a collective voice in areas that impact our specific constituent groups. Hopefully the changes will be making their way through the governance system this year. I am also happy to announce we have added an ad-hoc committee for Staff Diversity, Equity, and Inclusion. Up to this point all most all of the DE&I efforts have been faculty and management focused so, we are looking forward to having DE&I professional development and involvement opportunities available to staff in the coming year. Our staff are really excited for the new “Future of Work” Program that HR’s Bryan Garey and his team have created. This is going to be the main focus of my report.

The “Future of Work” Program is a program which allows and encourages flexible work options whether it be flexible work hours, hybrid work options, or fully remote work. I would like to take a second to personally thank Bryan and his team. It’s because of their hard work that the door is now opening for more flexible work options for employees moving forward. So many people have now experienced the benefits of flexible work, such as time and money saved since they no longer have to commute/or commute as much. Morale and productivity have also increased in most cases and the overwhelming issue of caregiving responsibilities and safety concerns have been made easier because of this flexibility as well. The university is also seeing the benefits of flexible work, it can now expand the size and breadth of Virginia Tech’s candidate pools for jobs by reducing historic barriers, including geographically remote and rural locations. Flexible work options also make Virginia Tech more
competitive in the job market while increasing retention efforts. There is also space savings as well, as we all know, space here at Virginia Tech is a hot commodity. These are just a few of the benefits of flexible work options here at Tech. We understand that some jobs have to remain in-person but normalizing flexible work could help initiate long-term change. I believe this is the way of the future and part of our new normal.

Just like with any new program or change there come challenges. While HR is a large supporter and advocate for this program, the decision to allow staff to have flexible work options have been delegated to each Department and its Leadership. A large number of staff are reporting inequitable use of the new flexible work program. While some departments/leadership are open to having conversations about flexible work options and are willing to allow their staff to continue or start new flexible work schedules, other departments/leadership have a different philosophy. It’s what I like to refer to as the “old school philosophy” where the thought is people have to fill the seats in the office to get the work done and done well. Not to mention some of the leaders are unwilling to even have conversations about flexible work options because they feel their marching orders have been given to have everyone back in-person. It sounds clear that the problem isn’t the old school mindset necessarily but, one of poor communication and accountability. If the communication throughout leadership, departments, and supervisors were the same, in supporting flexible work options when feasible and then have leadership holding all departments and supervisors accountable for providing such flexibility, this would ensure much less inequalities within the Future of Work program. Staff have proven for the past year and a half that they can do this just as well from home and other states as they ever could do it from an office. It is important for staff to have this support and what is needed is a trickle-down effect to accomplish lasting change for the future of work. Virginia Tech stands to have a tremendous loss of many valuable staff if the inflexibility and lack of support aren’t address quickly. I don’t think anyone wants to see that happen. Together we can create a better work force and stronger Hokie Nation well into the future.

On behalf of Staff Senate, I would like to thank you for listening today and thank you for the opportunity to share our thoughts. I look forward to sharing our ongoing progress and collaborating with you all to make this year the best one yet!

Sincerely,
Serena D. Young
Constituent Report by President of Faculty Senate, Robert Weiss, will be presented at Monday’s Information Session