1. Adoption of Agenda
   Dr. Dwayne Pinkney

2. Announcement of approval and posting of minutes of October 1, 2018
   These minutes have been voted on electronically and will be posted on the
   University web.
   Dr. Dwayne Pinkney

3. New Business
   Dr. Dwayne Pinkney
   Commission on Graduate Studies and Policies
   Resolution CGSP 2018-19B
   Resolution to Establish a Doctor of Philosophy Degree in Neuroscience
   Dr. Kevin Edgar
   Commission on Graduate Studies and Policies
   Resolution CGSP 2018-19C
   Resolution to Rename the Commission on Graduate Studies and Policies to the
   Commission on Graduate and Professional Studies and Policies and Update the Charge
   Dr. Kevin Edgar

4. Announcement of acceptance and posting of Commission Minutes
   These minutes have been accepted for filing by electronic vote and will be posted on
   the University web. Note that the purpose of voting on Commission minutes is to accept
   them for filing. University Council By-laws require that policy items be brought forward
   in resolution form for University Council action.
   Dr. Dwayne Pinkney

5. For Information Only
   Minutes of the University Advisory Council on Strategic Budgeting and Planning
   September 25, 2018
   Dr. Dwayne Pinkney

6. Presentation
   LINK (Virginia Tech’s Center for Industry Partnerships) and LAUNCH (The Center for New Ventures)
   Dr. Brandy Salmon

7. Discussion
   What can the wider community do to help the Office of the Vice President for Research
   and Innovation staff IRB with volunteers?
   Mr. Bob Hicok

8. Adjournment
   Dr. Dwayne Pinkney
University Council Minutes  
October 1, 2018  
3:00 PM  
1045 Pamplin Hall


Absent: Richard Blythe, Cyril Clarke (with notice), Michael Friedlander, Cynda Johnson, Steve McKnight, Menah Pratt-Clarke, Lisa Wilkes, Paul Winistorfer (with notice), Bob Hicok, Monika Lawless, Bryan Brown, David Tegarden, Matthew Gabriele, Yan Jiao, Chris Lawrence, LaTawnya Burleson, Brian Huddleston, Teresa Lyons, Jeannie Layton-Dudding, John Massey (with notice), Anurag Mantha (with notice), Conrad Briles, Madilynne Tanner, & Zo Amani

Guests: Rick Ashley, Lori Buchanan, Kristen Chang, Jack Finney, Tara Frank, Rachel Holloway, Laurel Miner, & Scott Nachlis

Dr. Sands called the meeting to order at 3:00 p.m. A quorum was present.

1. Adoption of Agenda

A motion was made and seconded to adopt the agenda. The motion carried.

2. Announcement of approval and posting of minutes of September 17, 2018

Dr. Sands noted that these minutes have been voted on electronically and can be publicly accessed on the Governance Information System on the Web (http://www.governance.vt.edu).

3. Old Business

Commission on Graduate Studies and Policies
Resolution CGSP 2017-18A
Resolution to Establish a Master of Science Degree in Nutrition and Dietetics

Dr. Rajesh Bagchi presented this resolution for second reading and made a motion to approve. The motion was seconded, and the motion passed.

Commission on Staff Policies and Affairs
Resolution CSPA 2017-18A
Resolution to Remove Board of Visitors Approval for Changes to the Staff Senate Constitution
Ms. Tammie Smith presented the resolution for second reading and made a motion to approve. The motion was seconded, and the motion passed.

4. **Announcement of Approval and Posting of Commission Minutes**

These minutes have been voted on electronically and will be posted on the University web (http://www.governance.vt.edu). Note that the purpose of voting on Commission minutes is to accept them for filing. University Council By-laws require that policy items be brought forward in resolution form for University Council action.

- Commission on Administrative and Professional Faculty Affairs  
  September 12, 2018

- Commission on Graduate Studies and Policies  
  September 5, 2018

- Commission on Undergraduate Studies and Policies 
  September 10, 2018

5. **Presentation**

Dr. Tyler Walters gave a presentation on the University Libraries at Virginia Tech (presentation attached).

6. **Announcement**

Kimberley Homer, chair of the Commission on Equal Opportunity and Diversity announced that Indigenous People’s Day will be observed on October 8, 2018. The schedule of events will be sent out to the community within the next couple of days.

7. **Adjournment**

There being no further business, a motion was made to adjourn the meeting at 3:41 p.m.
The University Libraries at Virginia Tech

Tyler Walters, Dean
University Libraries, Virginia Tech
October 1, 2018

Libraries provide resources to CREATE

“Libraries are no longer ‘grocery stores’ where students can go to pick up ingredients, but ‘kitchens’ where they have the resources necessary to create a finished product.”

- Joan Frye Williams
Libraries support the full knowledge production process

Resources / Technologies / Expertise

Library as Cultural Center: Inclusion and Diversity
Research Collaboration and Engagement

Provide research services to support team-based interdisciplinary research, creative, and scholarly groups

- **Collaboration Technologies / Platforms**
  - Open Science Framework
  - Overleaf Pro
    - (Collaborative authoring tool w/ LaTeX)
- **Systematic Reviews and Meta-analyses**
- **Impact Services**
  - Methods and tools to communicate impact
  - Explorer for Institutions (altmetrics)
- **Research Intelligence and Information**
  - CollabVT (web-based faculty profiles)
  - e-FARs (Elements)
  - ORCID (researcher ID)

Research Data

- Embed services and infrastructures to partner in current research environments
- **VTechData**
  (VT’s research data repository)
- Establish student research/ consulting cohort to support data analytics, curation, visualization
- **Informatics Lab:**
  - data consultants walk through your research problem and help replace your data-related struggle with knowledge and practice
Digital Libraries: VTechWorks – VT’s scholarship repository

Build internationally recognized digital library programs for management and use of research, scholarly, and creative digital assets

- 68,000 unique titles in VTechWorks
- FY18 Downloads: 16,777,235
- From 235 Countries, territories, regions

VTechWorks
Research Project Repositories

"Developing Library Cyberinfrastructure Strategy for Big Data Sharing and Reuse." 2 years, $308,175. Funded by IMLS

Digital Scholarship and Open Access Services

- Increase research impact and scholarship capacity
- Deliver open research and educational opportunities (open licensing, pedagogy, publishing)
Athenaeum: Digital Humanities and Social Sciences, opened September 2017

Changing research and pedagogical methods

- Courses
- Events
- Consultations on student and faculty projects

Transcribing the words of THE AMERICAN SOLDIER

May 8th
11 a.m. – 3 p.m.
Newman Library
Athenaeum (Room 124)

Digital Literacy
[Data / Info / Media / Creativity]
Student E-Portfolio Program

Launched university-wide student ePortfolio program for VT-shaped student experience

Interesting Facts, August 2017 – present (Sept. 2018)
- 100 students → 8,500 students activated accounts
- Student projects: 4,400
- Faculty participants: 270
- Hours of training/consultation: 1,200

Top Majors:
1. General Engineering
2. Business Technology
3. Mechanical Engineering

Top Skills Students are Presenting:
1. Teamwork and Collaboration (30% of users)
2. Leadership (23%)
3. Critical Thinking/Problem Solving (21%)

Top Industries Followed:
1. Internet
2. Aerospace and Defense
3. Consumer Electronics

# of Companies followed by Students: 6,445

The Studios Network

Develop learning environments and adaptive service models for:

- Collaborative / Experiential Learning
- Data Visualization
- Digital Media Design
- Virtual Reality
- Data Transformation
- 3-D Design / Protoyping
- Tech Lending
Newman Library and Creativity & Innovation District

Newman Library 4th Floor (draft example):

1. Strategic Project Rooms
2. Data Science Classroom
3. Data Exploration Rooms
4. Study Commons
5. Digital Literacy Lab
6. Group Rooms
7. Maker Space
8. Immersive Environments Studio
9. Smart Tech Lab
10. Visual Analytics Lab
11. Virtual Reality Production Lab

7) NCR and HS&T/Roanoke Development

- Expand NCR support for expected faculty/student FTE growth
  - Enterprise Operations Task Force – planning underway for NCR growth and development

- Create creative/innovative programs for NCR, HS&T/Roanoke campus

- Support Digital Research Methods and Environments through broad collaboration
**Examples of DAs, SGAs and University Libraries Involvement**

- **Creativity and Innovation**
  - Board and Stakeholders Committee – University Libraries serves on these
  - Developing variety of services and spaces, Media Building, Newman Library
  - Design team for new living learning community designated for Artists & Entrepreneurs

- **Adaptive Brain and Behavior**
  - Curriculum Committee
  - Health Analytics Summit
  - Co-PI on grant proposals
  - UH-4505 Honors Discovery and Innovation Studios: Big Data and Social Justice
  - New library home base for services in the HS&T Building (Roanoke)

- **Data and Decisions**
  - Data Analytics and Decision Sciences Pathways Minor
    - as well as discussion of core courses Data Matters and Capstone
  - Data Science and Data / Visual Analytics technologies, spaces, services

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**University Libraries at Virginia Tech -- Facts & Figures**

- **9.6 million** ebooks available
- **3.4 million** Scholarly article downloads
- **1.5 million** Annual visitors (4 locations)
- **1,600** Seats available in Newman
- **68,000** Items in VTechWorks
- **16.8 million** VTechWorks downloads
- **1,800** Data files in VTechData
- **800** Classes taught
- **10,000** Technology lending circulations
- **24,000** Peripherals lending circulations
- **437,000** Digitized items in Special Collections
- **2,500** Manuscript collections in Special Collections
- **152 FTE** Faculty & Staff
- **1.5 FTE** Graduate Assistants
- **12 FTE** Student Assistants
New Roles Research Libraries Play

- Research Data Services, Education & Consulting
- Research Impact & Collaboration Services
- Scholarly & Educational Publishing Services
- Digital Libraries & Repositories
- Informatics (Technology) Projects & Consulting
- Digital Literacies, Content Development, and ePortfolios
- Learning & Research Space Programming

Tyler Walters, Dean
University Libraries
tyler.walters@vt.edu | 540-231-5595
tywalters1 (social media)
WHEREAS, the mission of Virginia Tech is to discover and disseminate new knowledge through its focus on teaching and learning, research and discovery, and outreach and engagement; and

WHEREAS there is an urgent critical need for understanding the fundamental function of the brain from early development and across the lifespan, enabling scientists to develop treatments for neurological disorders and mental illness as well as inform advancements in the rapidly growing field of Neuroscience technology; and

WHEREAS, there is a growing demand in the Commonwealth of Virginia, nationally and internationally, in colleges and universities, in business, healthcare, the military, government agencies, and civilian communities; and

WHEREAS, the School of Neuroscience has the faculty and other resources for instructing and mentoring doctoral students to specialize in interdisciplinary research in molecular and computational neuroscience to understand and inform how the human brain functions, to develop treatment strategies and interventions for human neurological disease, and to develop neuroscience technologies to benefit society; and

WHEREAS, the Neuroscience program at Virginia Tech will join Virginia Commonwealth University, George Mason University and the University of Virginia in offering a doctorate in the fastest growing life science discipline, a fundamental component of graduate education;

THEREFORE BE IT RESOLVED, that the Doctor of Philosophy Degree in Neuroscience be established, effective Spring 2020.
Virginia Tech Degree Proposal
Neuroscience, PhD

(CIP: 26.1501)

Type of degree action (circle one):  New  Spinoff  Revision  Discontinuance

Program Description
Virginia Polytechnic Institute and State University requests approval for a new Doctor of Philosophy (PhD) in Neuroscience with a planned implementation date of Spring 2020. The proposed PhD degree will be housed in the School of Neuroscience within the College of Science, located on the Blacksburg campus. The School of Neuroscience at Virginia Tech is staffed by newly hired world-class faculty as well as a strong complement of existing neuroscience research faculty on the Blacksburg campus and the affiliated Virginia Tech Carilion Research Institute.

Neuroscience has become a regular part of rigorous scientific training in the biological and psychological sciences due in part to the advent of sophisticated methods for studying neural system structure, function and disease. The theories, empirical methods, and laboratory techniques for analysis of neural systems are critical features of biomedical research and medicine. The School of Neuroscience has created a unique opportunity to develop a PhD graduate program with an infusion of newly hired faculty with active research in drug addiction, mood disorders, neuroimmunology, brain development, sexual differentiation, language production and linguistics, computational neuroscience, genetics, epigenetics, CNS trauma, and brain cancer. The neuroscience faculty will provide a comprehensive core curriculum for graduate students during the first year in the program along with the opportunity to perform research rotations to directly apply their newly acquired knowledge under the supervision of research mentors. Once a member of a laboratory, PhD students and their research mentors will shape their additional academic training based on each individual research project. Newly designed graduate courses in the School of Neuroscience complemented by unique strengths of Virginia Tech including Engineering, Bioinformatics, Computer Science, Biomedical Engineering and Psychology, will individualize each student’s academic training. The core and elective coursework offered as part of the Neuroscience PhD graduate program will serve as a rich resource to existing Virginia Tech graduate programs with an interest in Neuroscience, including Translational Biology, Medicine and Health Neuroscience Track, Psychology, Biomedical Engineering, and Biomedical and Veterinary Sciences graduate programs.

Curriculum Summary
In the process of earning his/her degree, a PhD student gains a comprehensive knowledge of neuroscience subject matter and completes faculty-mentored research. Accordingly, each student’s curriculum is tailored by an advisory committee comprising at least four members of the graduate faculty with the requirements listed below.

Earning the PhD in Neuroscience requires the completion of 90 credit hour program. A cumulative GPA of 3.0 (4.0 point scale) is required for all coursework taken at the University.
The 90 credit hours are made up of a minimum of 28 graded credits, which include a common core, restricted and free electives. The remaining credits fulfill the research requirement.

1) Core courses: 16 credits
NEUR 5004* Principles in Neuroscience (3 credits)
NEUR 5024* Neuroanatomy and Systems Neuroscience (3 credits)
NEUR 5014* Cellular and Molecular Neuroscience (3 credits)
NEUR 5074* Current topics in Neuroscience (4 x 1 credit = 4 credits)
STAT 5615 Statistics in Research (Statistics department) (3 credits)

2) Restricted Electives: a minimum of 6 credits from the following list
NEUR 5054* Developmental Neuroscience (3 credits)
NEUR 5064* Cognitive and Behavioral Neuroscience (3 credits)
NEUR 5914* Drug Development in Neuroscience (3 credits)
NEUR 5314G* Advanced Genetics of Neuroscience (3 credits)
NEUR 5814G* Advanced Nutritional Neuroscience (3 credits)
NEUR 5364G* Advanced Neuroscience of Language and Communication Disorders (3 credits)
NEUR 5514G* Advanced Neuroimmunology (3 credits)
NEUR 5034G* Advanced Diseases of the Nervous System (3 credits)
* denotes a new course

3) Free electives: A minimum of 6 graded credit hours consisting of graduate coursework (5000 level or higher), as approved by the student’s thesis committee. These credits are tailored to the specific needs for the specific research topic and background of the students. Additional, in depth, courses related to the student’s research area, if applicable, would fall into this category.

4) Research Requirement: up to 62 credits of independent research credit hours are required (NEUR 7994 Research and Dissertation, variable; up to 12 credits per semester).

Degree Requirements: Candidates are eligible for graduation upon successful completion of all core, elective, and research credits, as well as passing performance on the Preliminary Doctoral Examination (advancement to candidacy), and successful defense of a written dissertation.

Relevance to University Mission and Strategic Planning
Virginia Tech is a logical and ideal location for a new PhD Neuroscience program in the Commonwealth. The School of Neuroscience and the undergraduate degree program were recently established on the Virginia Tech campus (spring 2016). As such, neuroscience has undergone a tremendous growth phase over the last year. This growth includes the addition of 10 tenure track faculty which join three additional tenure track faculty in place in the neurosciences at VT. The faculty’s expertise in neuroscience aligns well with each of the three organization sub themes of the 'adaptive brain and behavior destination area including 1) decision-making, 2) physical and psychological trauma and 3) healthy development across the lifespan. In total, these faculty members bring 64 years of teaching experience at the undergraduate and graduate level. They will be the core faculty responsible for the majority of the neuroscience graduate program curriculum.
The proposed PhD program in neuroscience is well aligned with the University mission. The mission of the newly proposed program in neuroscience is to cultivate inclusivity and advance scientific learning, basic and translational neuroscience research, as well as educate and train critical thinkers, innovators, scientists, policy makers, and tomorrow’s neuroscience leaders. By engaging the scientific and lay communities regarding new discoveries made in laboratories at Virginia Tech, our students will disseminate new knowledge locally, nationally and internationally. The proposed Neuroscience PhD degree will better position Virginia Tech to become a leader in the field of neuroscience. In line with the University Strategic Plan (2012-2018), the new PhD program in Neuroscience will leverage the unique strengths of Virginia Tech in areas of engineering, computational science and informatics to create a ‘distinctive profile of progressive and internationally recognized research’. It is anticipated that this new PhD program will increase the enrollment of graduate students at VT.

**Justification for the Proposed Program**
Neuroscience has traditionally been classified as a subdivision of biology. In the past 20 years neuroscience has evolved into an interdisciplinary science, which liaises closely with other disciplines, including mathematics, linguistics, engineering, computer science, chemistry, philosophy, psychology, engineering and medicine. Increasing understanding of the brain and improved methods to study brain function across development will enable scientists to develop treatments for neurological disorders and mental illnesses and may inform normal human behavior and psychological well-being. Furthermore, when applied with emerging tools in other sectors of the community, such as business, healthcare, the military, and civilian communities, neuroscience research may provide significant benefits for society and have implications for a diverse range of public policy areas such as health, education, law, and security.

**Public Health Challenges**
The growing importance of neuroscience to modern society is seen in growing awareness that more than 1,000 disorders of the brain and nervous system exist. These disorders affect, an estimated, 100 million Americans every year with the most common nine neurological disorders and costing American society a staggering 789 billion dollars per year.[1] The National Science and Technology Council’s Interagency Working Group on Neuroscience (IWGN) and the Brain Research through Advancing Innovative Neurotechnologies (BRAIN) initiative of the National Institutes of Health represent a $3 billion ($300 million per year for 10 years) effort to increase brain research and innovation across multiple disciplines.[2] The goal of these initiatives is to increase our understanding of the fundamental function of the brain and the effects that learning, cognition, and education might have on society, behavior and the economy writ large. Both of these federal initiatives aim to accelerate the development of innovative technologies to understand brain function. Similar large-scale investments by the European Union ($1 billion ) in the Human Brain Project, which aims to provide information computing technology infrastructure for neuroscience, indicate the global scope of this growth.[3] Only by bringing together classical and emerging concepts in neuroscience, molecular biology, genetics, computational science, engineering, and physics can scientists develop technologies to

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understand how the human brain functions and develop treatment strategies and interventions for human neurological disease.

**Neuroscience Technology**

Neuroscience is not just about disease but also about rapidly evolving technology in all sectors of the community, including business, healthcare, the military and civilian communities. Artificial intelligence, smart cities, neuromarketing and bionic limbs are just a few of the emerging neuroscience technologies. For instance, high priority opportunities for Army investment for neuroscience technologies include field deployable biomarkers of neural state, fatigue prediction models, models for head impact protection and threat assessment augmentation.\(^4\) "Commanders on the battlefield could benefit from decision support that alerts them in near real time to issues with personnel neural readiness, such as unexpectedly high levels of fatigue or sleep-deprivation deficits in individuals or across units."\(^4\) In the civilian world, tracking reactions of humans as they navigate cities with mobile EEG devices may allow for the development of smart cities, which ‘may work to mitigate stress and anxiety disorders.’\(^4\)

The global neuroscience market was valued at over >$24 billion in 2014, a value that is expected to increase by nearly 3% per year. North America constitutes 50% of the global market.\(^5\) The overall worldwide market for neurotechnology products (neuroprosthetics, neuromodulation, neurorehabilitation, and neurosensing) was projected to be $7.6 billion in 2016 and reach $12.0 billion in 2020.\(^6\) Areas of market growth include neuromodulation devices (i.e. for the treatment of obesity) and emerging applications for neurotechnology devices (i.e. migraine pain, and depression). This massive growth indicates a rapidly evolving field with high wage positions for PhD trained neuroscientists. These growth areas demand comprehensive knowledge from a neuroscience educated workforce – a knowledge our program will provide.

"The Brain State"

On May 6, 2016 Virginia Governor Terry McAuliffe signed a historic $2.2 Billion Bond Package Bill that includes $46.7 million dedicated to the Virginia Tech Carilion Research Institute to jumpstart a far-reaching Health Sciences and Technology Innovation District in Roanoke. “We are building a foundation for biotechnology and medical research that will establish Virginia as a hotbed for companies who want to be shoulder-to-shoulder with world-class collaborators and a highly trained technical workforce,” said Virginia Gov. Terry McAuliffe. “This is a cornerstone of a new Virginia economy and will position the Commonwealth as a national leader in advanced research."\(^7\) Officials hope to see this partnership with Carilion Clinic and Virginia Tech as a launching point so that the commonwealth can more easily attract investors and partnerships as it earns its new reputation of being the “Brain State.”

A partnership between the Virginia Tech Carilion Research Institute (VTCRI) with groundbreaking translational Neuroscience research and the substantial investment in the School of Neuroscience promises to raise awareness of Neuroscience research occurring in southern central

\(^4\) *Opportunities in neuroscience for future army applications*, National Research Council, 2008
\(^5\) [http://www.grandviewresearch.com/industry-analysis/neuroscience-market](http://www.grandviewresearch.com/industry-analysis/neuroscience-market)
Virginia, again aligning with the University Strategic Plan to create ‘a distinctive profile of progressive and internationally recognized research.’ Furthermore, the increased density of Neuroscientists between the two locations will enhance the experience of graduate students with an interest in neuroscience across the two campuses by:

1) a larger breadth of Neuroscience research
2) increasing opportunities for access to external experts invited as speakers
3) increase the number of Neuroscience related seminars, journal clubs and graduate elective courses
4) finally and most importantly, provide a strong sense of community between a group of individuals which as future colleagues are likely to contribute to the future of Neuroscience research, policy and healthcare.

**Student Demand**

*Graduate Education*

On a national level, the field of neuroscience finds itself in an era of exceptional growth and popularity. Therefore, it is not surprising that for the past decade, the number of new neuroscience PhD graduates has outpaced every other life sciences discipline.8 This demand is reflected on the Virginia Tech campus. Student demand for the new PhD program in Neuroscience at Virginia Tech is high. This is evidenced by 1) the tremendous growth of the Neuroscience undergraduate student body at Virginia Tech and 2) the high volume of email communication between our faculty/staff and potential PhD applicants interested in information regarding a Neuroscience PhD degree from Virginia Tech.

*Neuroscience growth at Virginia Tech:* The first undergraduate Introduction to Neuroscience course was offered at Virginia Tech in 2013 before the establishment of the School of Neuroscience. This course had 33 registered undergraduate students. The demand for this course has increased exponentially since the approval of the Neuroscience undergraduate degree with 242 registrants in the Fall 2017 and over 600 current declared Neuroscience majors as of January 2018. Notably, many neuroscience undergraduate students are actively engaging in research opportunities in preparation for graduate study. In the Fall 2017, nearly 60 undergraduate students registered for 'Undergraduate Research' with Neuroscience research faculty in the

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School of Neuroscience, Biological Sciences, Animal Poultry Sciences, Biomedical and Veterinary Sciences and the Carilion Research Institute. The vast majority of these students (53) have declared Experimental Neuroscience as their major which prepares students for a ‘hands-on’ career in academic science with a primary goal to matriculate students into graduate studies.

Additional evidence of interest in a Neuroscience PhD program at Virginia Tech stems from applicants for the new Molecular and Cellular Biology Program at Virginia Tech (mcb.vt.edu). This is an interdisciplinary PhD graduate program with four regions of specialization; Cell Signaling and Cancer, Inflammation and Immunity; Microbiology; and Neurobiology. Over 50% of applicants for the start of the 2018 fall class declared Neurobiology as their primary interest.

Finally, the faculty in the School of Neuroscience have written a large number of letters of recommendation for Neuroscience majors (graduation date spring 2018) whom are seeking PhD graduate studies in the field of Neuroscience.

**Market/Employer Demand**

Neuroscience is a discipline that ascends conventional disciplinary boundaries, generating students that provide modern solutions to the most important questions in the life sciences. Employment opportunities for Neuroscience students are therefore widespread and include a number of careers in the life sciences that range from software design, publishing, consulting, public policy, and communication, the rapidly growing fields of neurotechnology and neuroinformatics and opportunities to specialize in conventional disciplines such as genetics, and psychology.

Moreover, there is an increasing need to communicate neuroscience information at all levels, from editing scholarly journals to educating the public. On a national level, there is an increasing need for informed regulators and policy makers. The growth of the field, together with commercialization of new products and services, will result in the expansion of career opportunities in the public and private sector, including bench scientists, entrepreneurs, analysts, consultants, and intellectual property experts. Graduates of the program will be qualified for a number of positions where a PhD in neuroscience is required or preferred, including:

- Postdoctoral Fellow or Instructor at a College, University, or Academic Health Center
- Research Scientist in the Pharmaceutical or Biotechnology Industry
- Research Scientist or Health Science Administrator in a Government Agency
- Non-research position where biomedical/health expertise and excellent communication skills are required, such as: science writer, editor, or journalist; patent agent; health science administrator at a university/government/hospital or other non-profit; public policy analyst; scientific consultant

On a national level: The U.S. Bureau of Labor Statistics (BLS) does not currently have a separate designation for PhD in Neuroscience. Nonetheless, other relevant employment categories in the BLS are appropriate for graduates holding a PhD in neuroscience.\(^9\) The projected job growth for all categories listed below, except Biomedical Engineer’s, exceeds average national job growth which is 7%, indicating increasing demand in each of these fields. PhD’s in neuroscience may fall into any of the categories listed below.

\(^9\) https://www.bls.gov/ooh/ (once on the site, enter the job title or the SOC code) accessed February 2018
These statistics are born out in data from popular national job search engines. Current data from Indeed.com and Simplyhired.com indicates 500 - 600 current positions using the key words ‘Neuroscience and PhD’ with a mean income of $82,325 (data obtained February 2018).

In the Commonwealth: According to the Virginia Economic Development Partnership (VEDP), Virginia’s Life Sciences Industry employs over 25,400 people at more than 1,000 businesses. Research, Testing, and Medical Laboratories account for 46% of Virginia's Life Sciences employment and 32% of its businesses. Competitive operating costs, a business-friendly environment and a highly skilled workforce are driving Virginia's growing bioscience sector and fostering discoveries every day. Progressively, leading pharmaceutical, medical device and biotechnology firms are choosing to locate or develop their businesses in Virginia. This is likely due to the innovative research universities, numerous federally funded facilities, and renowned research institutes, as well as major manufactures including Merck, Abbott, Teva, Novozymes Biologicals and Fareva.

The U.S. Bureau of Labor Statistics (BLS) provides occupation profile by state. Again, the projected job growth for many of these careers that an individual holding a PhD in Neuroscience might chose show substantial positive projections.

Table 1. Employment Projections 2010 - 2020 (U.S. Bureau of Labor Statistics)

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<tbody>
<tr>
<td>Medical scientists</td>
<td>19-1042</td>
<td>120,000</td>
<td>136,100</td>
<td>13%</td>
<td>$80,530</td>
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<tr>
<td>Computer and information research scientists</td>
<td>15-1111</td>
<td>27,900</td>
<td>28,300</td>
<td>19%</td>
<td>$111,840</td>
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<td>Natural sciences managers</td>
<td>11-9121</td>
<td>56,700</td>
<td>62,300</td>
<td>10%</td>
<td>$119,850</td>
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<tr>
<td>Biological Science Post-secondary teachers</td>
<td>25-1042</td>
<td>62,300</td>
<td>71,700</td>
<td>15%</td>
<td>$75,430</td>
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<td>Education administrators, postsecondary</td>
<td>11-9033</td>
<td>180,100</td>
<td>198,300</td>
<td>10%</td>
<td>$90,760</td>
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<tr>
<td>Biochemists and biophysicists</td>
<td>19-1021</td>
<td>31,500</td>
<td>35,100</td>
<td>11%</td>
<td>$82,180</td>
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<tr>
<td>Biomedical engineers</td>
<td>17-2031</td>
<td>31,300</td>
<td>22,800</td>
<td>7%</td>
<td>$85,620</td>
</tr>
</tbody>
</table>

Table 1. Employment Projections 2010 - 2020 (U.S. Bureau of Labor Statistics)

10 http://www.yesvirginia.org/KeyIndustries/LifeSciences
11 https://www.careeronestop.org/Toolkit/Careers/Occupations/occupation-profile.aspx (at site, enter SOC code or job title and state)- accessed February 2018
**Issues of Duplication**

*Statewide duplication*

Three PhD programs in the state of Virginia offer PhD programs in Neuroscience with CIP 26.1501. These include the Neuroscience graduate program at Virginia Commonwealth University (VCU), the Neuroscience PhD graduate program at George Mason University (GMU) and the Neuroscience PhD program at the University of Virginia (UVA). Given the strong interest over the last two decades in the field of Neuroscience, it makes sense at this time, with the massive growth of the undergraduate program on the Virginia Tech campus, that VT would develop a competitive Neuroscience PhD program. Like Biology, Biochemistry, Psychology, the Physical Sciences and Engineering, which are all represented at the PhD level at UVA, VCU and GMU, so Neuroscience has become a fundamental component of undergraduate and graduate education.

<table>
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<tr>
<th>Enrollments 12</th>
<th>Fall 2013</th>
<th>Fall 2014</th>
<th>Fall 2015</th>
<th>Fall 2016</th>
<th>Fall 2017</th>
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<td>George Mason University</td>
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<td>University of Virginia</td>
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<td>Virginia Commonwealth University</td>
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Table 3: Enrollments and Degrees Awarded at Comparable Programs in the Commonwealth

While there are similarities between the existing Neuroscience PhD programs in Virginia and the proposed program, several attributes of the proposed program render it unique. 

1) Students entering the proposed program enter directly into the Neuroscience PhD program, enabling the core coursework to focus exclusively on Neuroscience. Additional restricted neuroscience electives chosen by the student and their committee enable unique neuroscience curriculum for each student.

2) The Neuroscience faculty in the School of Neuroscience and their specific areas of research are unique to these faculty.

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3) Of the programs listed above, Virginia Tech is the only campus with a Neuroscience department (in this case, the School of Neuroscience). Instead faculty are interspersed in Pharmacology, Biology, Biochemistry, Psychology, etc. The large concentration of faculty, post-doctoral fellows, research technicians and support staff in the School of Neuroscience, coupled with the substantial undergraduate Neuroscience program will provide a distinctive experience for Neuroscience PhD seeking students.

**Virginia Commonwealth University (VCU)** PhD seeking students enter into a Biomedical Sciences Doctoral program at VCU. These students take Biochemistry, Cell and Molecular Biology during the first and second semester of the program. Students with a primary interest in Neuroscience also participate in Cellular and Molecular Neuroscience during the fall semester and Systems Neuroscience during the spring semester during year one. Research rotations are performed during the first year and can be in any discipline in Biomedical science. At the end of year one students formally transition to the PhD program in Neuroscience. The core curriculum in Neuroscience at VCU includes only two required graduate Neuroscience courses, differentiating VCU’s Neuroscience PhD program from the proposed program.

**University of Virginia (UVA)** Students entering the PhD program in Neuroscience at UVA participate in an intensive course in integrative biosciences (BIMS 6000), laboratory rotations, and a seminar in Neuroscience during the first semester of year one. The core neuroscience curriculum begins during the second semester of year one and includes eight graded Neuroscience core credits. No other neuroscience courses, including electives are required.

**George Mason University (GMU)** The PhD program in Neuroscience at GMU is a 72 credit PhD program focusing on cognition and higher brain function. Students in this program take a core of 9 Neuroscience credits, a required statistics course (3-4 credits) and a research methods course (3 credits). Unlike the proposed program, students at GMU take an additional 20-21 credits of free electives graduate courses and only 24 credits of dissertation research.

**Relationship to existing Virginia Tech programs**
The Translational Biology Medicine and Health PhD (TBMH) program at VT is an integrative, research intensive, PhD program with a focus on translational science. The flagship first semester course for TBMH students is an 8 credit course training students in the general principles of a translational approach to basic biomedical and health sciences, biomedical interventions and health behavior and health care systems and delivery. At the end of the first semester students, choose a focus area (an additional 8 credits), which may include neuroscience, cancer, immunity and infectious disease, metabolic and cardiovascular science, development aging and repair or health implementation science. The TBMH program targets students with a broad interest in translational science. Strengths of the TBMH program include a strong foundation in principles of translational biology, medicine and health research, preparing their students to tackle some of the most challenging aspects of healthcare today. A similarity between the newly proposed program and a TBMH student that chooses a neuroscience track include an intensive, independent research project with a mentor whose research focus falls broadly into the field of Neuroscience. However, the two programs target different populations of students. Namely, the proposed program seeks students with a focused interest exclusively in Neuroscience. The core curriculum provides a comprehensive foundation in current aspects of
neuroscience. The series of core courses span from structure and function of cells to anatomy and systems neuroscience, development of the nervous system, and behavior. Upon completion of the core coursework, students will be prepared to investigate the genetic aspects of neurologic disease or the neural bases of various brain-behavior relationships including sensation, memory, attention, motivation and reward, emotion, decision-making, sleep, language and social cognition. No program in the state of Virginia and few across the nation that provide this holistic, 360-degree view of current topics in Neuroscience. All core and elective coursework offered as part of the Neuroscience PhD graduate program are unrestricted to students of existing VT graduate programs with an interest in Neuroscience, including TBMH Neuroscience Track, Psychology, Biomedical Engineering, and Biomedical Veterinary Sciences graduate programs.

**Resource Needs/Savings**

*Program Director:* The Neuroscience PhD graduate program will be managed by the program Director. The Director of the program will be a tenured faculty member in the School of Neuroscience. The director will oversee all aspects of program management but will work closely with committees comprising groups of tenure track faculty. Working together, the Director and committees will coordinate the curriculum, student advising, student research, marketing and recruitment, review application material and oversee the steering committee. The Program Director and all members of committees will be on a three-year rotation.

*Faculty:* The School of Neuroscience and the undergraduate major were recently established on the Virginia Tech campus (spring 2016). As such, it has undergone a tremendous growth phase over the last 18 months. This includes the addition of 10 tenure track faculty (1 full professor, 2 associate professors, 7 assistant professors). The School of Neuroscience is slated to hire an additional 5 tenure track faculty. Together, these faculty will provide research laboratories for PhD seeking students, instruct the proposed curriculum, and provide the majority of financial resources for stipends, tuition and healthcare.

*Administrative Needs:* The increased administrative duties for the proposed PhD in Neuroscience will be coordinated and managed within the existing framework and support of the School of Neuroscience. It is anticipated that one full time program administrator will be sufficient to manage the day to day activities for Neuroscience graduate programs. Web design and social media presence will be administered by the current School of Neuroscience web designer. Instruction will take place on the Blacksburg campus.

<table>
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<th>RESOURCE</th>
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<td>Faculty</td>
<td>5 FTE by target enrollment year 2024-2025</td>
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<tr>
<td>Program Administrator</td>
<td>1 FTE by target enrollment year 2024-2025</td>
</tr>
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<td>Graduate Teaching/Graduate Research Assistants</td>
<td>GRA’s will be supported by grants and contracts written by faculty, and by faculty start up funds. Neuroscience PhD students may also supported by School of Neuroscience allocated GTA positions.</td>
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<tr>
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Commission on Graduate Studies and Policies
Resolution 2018-19C
A Resolution to Rename the Commission on Graduate Studies and Policies to the Commission on Graduate and Professional Studies & Policies and Update the Charge

Approved, Commission on Graduate Studies and Policies October 17, 2018
Faculty Senate Review (waived) October 16, 2018
Staff Senate Review October 17, 2018
Graduate Student Assembly Review (waived) October 15, 2018
Student Government Association Review (waived) October 15, 2018
First Reading, University Council October 29, 2018
Approved, President
Approved, Board of Visitors
Effective Date Fall, 2019

WHEREAS, the Commission on Graduate Studies and Policies (CGSP) is charged currently to “study, formulate, and recommend to University Council policies and procedures concerning on- and off-campus graduate academic matters. Areas for consideration include: admissions, academic progress, degree requirements, commencement; registration and scheduling; curricula, courses, advising, and instruction; teaching and research; financial assistance including assistantships, scholarships, fellowships, and tuition; library resources; and other matters affecting the graduate student academic environment”; and

WHEREAS, Virginia Tech includes among its schools and colleges the Virginia-Maryland College of Veterinary Medicine and more recently the Virginia Tech Carilion School of Medicine, which are encompassed under the existing Commission; and

WHEREAS, students in the Virginia-Maryland College of Veterinary Medicine and the Virginia Tech Carilion School of Medicine are considered professional degree students rather than graduate students; and

WHEREAS, the existing CGSP has been tasked with the above duties for the Virginia-Maryland College of Veterinary Medicine and the Virginia Tech Carilion School of Medicine;

NOW, THEREFORE BE IT RESOLVED, that the Commission on Graduate Studies and Policies be renamed to the Commission on Graduate and Professional Studies and Policies in order to more clearly reflect the inclusion of all post-baccalaureate students of Virginia Tech within its scope, and that the University Council Constitution be revised accordingly; and

BE IT FURTHER RESOLVED, that the charge for the renamed Commission on Graduate and Professional Studies and Policies also be modified to reflect the inclusion of all post-baccalaureate students of Virginia Tech, as follows: “study, formulate, and recommend to University Council policies and procedures concerning on- and off-campus post-baccalaureate academic matters. Areas for consideration include: admissions, academic progress, degree requirements, commencement; registration and scheduling; curricula, courses, advising, and instruction; teaching and research; financial assistance including assistantships, scholarships, fellowships, and tuition; library resources; and other matters affecting the graduate and professional student academic environment.”
CAPFA Minutes  
Commission on Administrative and Professional Faculty Affairs  
October 10, 2018 – 1:30pm – 2400 North End Center/Zoom

Present: Janice Austin, Lujean Baab, John Benner, Allen Campbell, Martin Daniel, Greg Fansler, Alan Grant, Joy Hottenstein, Jennifer Hundley, Monika Lawless, Maia Greene-Havas, Terri Pecora, Emilee Hillman, Margaret Radcliffe, John Massey, Jeremy Daubert, Maria Balota

Absent: Mary Christian, Cayce Meyers, Karen Watson (with notice), Amy Hogan (with notice)

Monika Lawless called the meeting to order at 1:30pm. A quorum was present.

Note of Approval of Minutes from September 12, 2018 done electronically.

Ms. Lawless reported the minutes were sent out for review and were approved electronically. They have since been forwarded to the University Council.

Old Business

There was no old business to report.

New Business:

Ms. Erin McCann from the Office for Strategic Affairs provided an update on the university’s strategic plan. She indicated that their work started with Beyond Boundaries in 2016, which continues to serve as the foundation for the strategic plan. All attendees received a handout with a list of themes that have emerged thus far in the strategic planning process. Ms. Monika Lawless asked how various parts of the strategic plan will be prioritized and the speaker shared that these conversations held across campus will help to determine the answer to that question. Several commission members shared feedback regarding concerns that were not directly addressed on the handout. Some of these concerns included: How to retain high-quality employees, how to continue alumni engagement, and lack of mention of quality education. A concern was also raised regarding the theme of Ut Prosim but the speaker clarified that Ut Prosim is at the core of all focus areas. The strategic affairs team will continue to meet with committees and various departments across campus through December. Between January and May the strategic framework will be finalized and hopefully approved during the summer of 2019.

The appointment of a Vice Chair was discussed. Greg Fansler volunteered to be considered for the position. Dr. Janice Austin made a motion for Greg to be Vice Chair and Ms. Jennifer Hundley seconded the motion.
A CAPFA Awareness working group was established. A discussion ensued around the CAPFA listserv that existed in the past. Ms. Margaret Radcliffe noted that only 70 out of the approximately 1700 A/P faculty employees joined the listserv. It was suggested that a Google Group be created with all 1700 employees added to the listserv. They would then be able to unsubscribe if desired. Other ideas suggested speaking at orientation sessions about CAPFA and holding annual or biannual large meetings for A/P faculty. There was further discussion regarding how often listserv emails would be sent. Some ideas included the sharing of meeting information, election material, and a call for Grievance Panel volunteers. In this case emails would be sent about six – seven times a year. With regard to action items, Mr. Martin Daniel will see if the commission can have access to all A/P faculty email addresses. Ms. Monika Lawless will find out how other commissions have broached this topic. She also suggested the distribution of CAPFA information on postcards. Ms. MaDonna Overstreet noted the importance of contacting people in a manner that does not suggest they are being given additional tasks. It was suggested that occasional networking events could be useful, but other members shared that it may be too challenging to find common themes of interest among the array of A/P faculty.

The Revision of AP Faculty Grievance Submission Form workgroup was also created and will include Ms. Monika Lawless, Dr. Janice Austin, Ms. Maia Greene-Havas, and Mr. Rodney Irvin

**Commission representative reports:**

Ms. Margaret Radcliffe shared a Commission on Staff Policies and Affairs (CSPA) report. She explained that a task force was created to develop action items that would work to improve issues such as parking, childcare, and leave benefits. The report will be presented to the Board of Visitors.

No other commission reports were shared.

**Other Business/Discussion:**

Mr. Martin Daniel shared a reminder that the university climate and engagement survey will launch Monday or Tuesday of next week. The survey will be open for about a month and should take about 10 - 15 minutes to complete.

The meeting concluded with an announcement that the next meeting will be held on November 14th at 1:30pm.
Absent: Z. Mackey, J. Hawdon, L. Brogdon, R. Blythe
Guests: M. Lewis, E. Plummer

Upcoming Meeting: September 28, 2018

1. Approval of agenda

Meeting called to order at 10:30 a.m.

2. Introductions

Introductions were made by all those in attendance.

3. Approval of April 27, 2018 minutes

The minutes were approved unanimously.

4. Discussion of goals and agenda for 2018-19:

The first goal for the 2018-19 agenda is the process of the revision to the P&T section of the Faculty Handbook. The section was completed by the working group this summer and is approximately 16 pages long. The goal is to have the edits completed for the BOV meetings next summer (June or August). Thus, the revised document must be through University Council by the end of May. E. Plummer will post a calendar with a schedule concerning the deadline(s) for this to happen (action item).

The next goal for the 2018-19 agenda concerns taking a look at the Collegiate Faculty promotion process. J. Finney pointed out that a separate university committee to evaluate the promotion of Collegiate Faculty would be appropriate based on the current workload and time
constraints of the one existing university-level committee. This new university-level committee would be comprised of representatives from the different faculty groups, while being educated on the expectations and requirements for promotion of Collegiate Faculty. M. Agah raised the point of possibly consulting external individuals/parties to assist in the promotion guidelines for this faculty group.

Continuing with the discussion of goals and agenda items for the 2018-19 CFA, the issue of EFARS was presented. Questions were posed concerning whether or not there has been an increase in staff and whether those faculty using EFARS are satisfied. J. Finney informed the group that an individual to serve as a program developer has been secured. However, two other potential hires were lost during the hiring process due to a competing offer and a relocation issue. Currently, it is believed that all colleges have either a faculty or AP faculty member assigned to EFARS curation. M. Paretti and others inquired about Barbara Locklee’s role and responsibilities, which has not been specified yet (action item; update when available).

The issue of the IRB/WIRB processes was raised as a potential agenda item, however there was considerable discussion as to whether this was a CFA or faculty senate issue. M. Paretti informed the group of the overall challenges existing in the research division and the need to have this addressed for faculty morale and success. B. Hicok posed the question of how can the IRB/WIRB issue be constructively addressed, at which time J. Finney informed the group that faculty senate had some ideas that could possibly be shared by a representative from faculty senate. M. Agah raised the question of comparing Virginia Tech’s IRB process with some of its peers, which J. Finney noted may have already been done by VPRI.

Following the conclusion of the IRB/WIRB discussion, the group raised the issue of internal affiliated faculty appointment policies and procedures not being recognized in the Faculty Handbook. In other words, policies and guidelines for those affiliated faculty positions across departments employed at Virginia Tech. J. Finney points out there should be some university guidance, while as of now this has been left to the colleges. This is important due to the focus on interdisciplinary research, which requires faculty members to be able
to affiliate with multiple departments across colleges. This should go in chapter 2. M. Paretti pointed out that several departments have guidelines/policies already established. Thus, an internal inquiry of these guidelines/policies already established may assist in informing university policy on the matter.

Next, the issue of retiree health benefits was raised. The question posed to the group by B. Hicok was whether or not this issue should be an agenda item for CFA. J. Finney informed the group that retirees receive $4 per year of service (e.g., 30 years of service = $120) toward paying for supplemental Medicare. M. Paretti and others inquired as to whether or not this issue was being addressed by the benefits committee, which is chaired by Kim Dulaney. B. Hicok informed the group that he has reached out to Kim Dulaney regarding this question, but has yet to receive a response (action item; follow-up once response is received). M. Agah noted that a peer comparison would be helpful on this issue, as well.

The last discussion item was the coordination of committees. J. Finney informed the group that this is reserved the reporting out by members of CFA that serve on other committees. No reporting out was recorded.

4. **Begin discussion of P & T revision**

   Due to time constraints, B. Hicok informed the group that discussion of the P&T revision would not start today, but would start at the 9/28 meeting. However, B. Hicok presented a framework as to how he wanted to proceed. First, a reading of the current working group write-up would occur at the beginning of the 9/28 meeting, which would be followed by a division of the work based on the perceived workload. B. Hicok was asked by M. Paretti and others to share the document, as well as to supply printed copies to CFA members prior to the next meeting.

5. **Other business**

   A final call for other business was made. M. Agah briefly raised an issue regarding Research Faculty leave being unethical, however there was scant information supplied to him. Thus, M. Agah informed the group that he would follow-up and provide the group with a more comprehensive description of the issue at the 9/28 meeting.
6. **Adjourn**

The meeting was adjourned at 11:58 a.m.

B. Hicok
MINUTES
Commission on Graduate Studies & Policies
October 3, 2018
3:30 – 5:00 p.m.
Graduate School Conference Room


Absent with notification: Lesa Hanlin, Rachel Holloway (ex officio), Annie Pearce, and Robert Sumichrast.

Absent without notification: Alan Abrahams, Sarah Karpanty, Tyler Walters (ex officio), and Zhiwu Xie.

Visitors and invited guests: Zo Amani, Janice Austin, Kevin Edgar, Catherine Grimes, Bill Huckle, Kacy Lawrence, Michelle Olsen, and Tremayne Waller.

Call to Order

The meeting was called to order by Dr. Bagchi at 3:30 p.m.

Approval of the Agenda

The agenda was approved as presented.

Approval of the Minutes

The minutes of September 19, 2018 were approved as presented.

Committee Reports

Graduate Curriculum Committee

The Graduate Curriculum Committee Minutes of September 27, 2018 were accepted as presented. Twelve proposals were reviewed by the committee and nine proposals were approved, including a certificate. The graduate certificate will be in nuclear science.

Graduate Student Appeals Committee

There was no report.
The representatives to the committee have elected Dr. Bodenhorn as chair. A draft resolution is being prepared.

**Old Business**

Dr. Edgar reported on the NASEM Report on 21st Century Graduate Education. He provided a document that is a condensed summary of key recommendations and suggested Virginia Tech responses. The document is available on the SharePoint site. Ms. Lawrence informed the group of a plan to go live with data from the Coalition of Life Sciences. Career data will also be added to the Graduate School website in the spring. Dr. DePauw suggested an Alumni Office representative attend a future CGS&P meeting.

Dr. Olsen presented the Resolution to Establish a Doctor of Philosophy Degree in Neuroscience, CGS&P 2018-2019B. The resolution was approved by the membership and has previously been forwarded to the Faculty Senate, Staff Senate, Graduate Student Assembly and Student Government Association for review. Further discussion will be held at University Council.

**New Business**

Dr. Bagchi opened up a discussion for a name change for the Commission. A suggested name change has been discussed in DRSCAP. In particular, Vet-Med and the Medical School have their own policy groups, however, there are instances when an outside review would occur through this Commission. A first reading was presented of the CGS&P Resolution 2018-2019C, A Resolution to Rename the Commission on Graduate Studies and Policies to the Commission on Graduate and Professional Studies & Policies. Dr. Bodenhorn will send this resolution to Ms. O’Rourke and the deans of Vet-Med and the Medical School for review. The resolution will not be sent to the Faculty Senate, Staff Senate, Graduate Student Assembly and Student Government Association until the revised language becomes available.

**Graduate School Update**

Dr. DePauw reported the Graduate Certificate in Nuclear Science, Technology, and Policy has been approved and is available for current students.

Dr. DePauw is considering making the EFAR available for students. ORCID identifiers are also being considered for graduate students. This identification is used in EFARS as well as attached to publications and research funding. Dr. DePauw recommended that all students being admitted would establish their ORCID account. This account is attached to the person permanently. Students would also add their ORCID identifier to their ETD.

The Graduate Program Directors Meeting will be held on October 11, 2018.

**Constituency Updates**

**Graduate Student Assembly**

Ms. Fried had no updates.
Graduate Honor System

Mr. Mantha reported there are now five open cases, with one case resolved since the last meeting.

University Library Committee

There was no report.

Faculty Senate

There was no report.

Student Government Association

There was no report.

Board of Visitors

Mr. Amani had no report.

University Council and Commission Updates

Dr. Bagchi reported the CGS&P Resolution 2018-19B, offering a master’s degree in dietetics, was approved at University Council. The Library reported on e-portfolio updates. The e-portfolio will include the ability for the student to track their relationships with other companies.

There were no other commission updates.

Announcements

There were no announcements.

Adjournment

The meeting was adjourned at 4:32 p.m.

Respectfully Submitted,

/s/

Marilynn R. King
On behalf of Karen P. DePauw, Ph.D.
Vice President and Dean for Graduate Education
1. Welcome and Introductions
Brett Shadle welcomed the group, self-introductions were made. The charge was made to the group: To study, formulate, and recommend to the University Council policies and procedures concerning the engagement of the University in service, outreach, and international affairs. Areas for consideration include: Cooperative Extension, continuing and professional education; economic development including community resource and leadership development; liaison with affiliated corporations and institutes; international programs; and other matters affecting service, outreach, and international affairs. The Commission on Outreach and International Affairs will liaison with the Commission on Undergraduate Studies and Policies with issues regarding study abroad and international exchange programs.

2. Agenda Approval
Brett made the call for motion to approve the agenda; motion made; was seconded; all were in favor and the agenda was approved.

3. Call for Announcements
The call for announcements was made; there were no announcements.

4. Announcement of Approval of Minutes, May 10, 2018
The minutes from the May 10, 2018 meeting were sent out electronically for updates; were approved electronically; were sent to University Council and will be posted to the University Governance website upon approval by University Council. Minutes can be found at: http://www.governance.vt.edu/. The main web page for COIA is: https://www.outreach.vt.edu/VP/CommissionsAndCommittees/coia.html.

5. Chairman's Report
Brett announced that there was no University Council meeting as of yet, the first meeting will be on September 17, 2018.

The Engagement Leadership Council meeting scheduled for June 7, 2018 was cancelled, there is no report.

6. Election of Vice-Chairman
Brett described the Vice-Chairman’s duties as running the meeting when the Chair is unavailable, and the Vice-Chair organizes and chairs the sub-committee for the Alumni Awards for Outreach Excellence (both individual and team). Brett asked for nominations/volunteers for members to serve as Vice-Chair. Urs Buehlmann volunteered to serve as Vice-Chair; he will serve as Vice-Chair for 2018-2019; and serve as Chair of COIA for 2019-2020. The selection committee for review of the Alumni Awards for Outreach Excellence will need to be formed.

7. Reports
a. Virginia Cooperative Extension (VCE)
Ed Jones was unable to attend, Tom Thompson gave an update. Tom announced that the VCE working group met with regard to on-going international exchanges aimed at Extension agents. Currently there is a group of four (4) going to Senegal in November for 1-3 weeks and more will go
in the spring. Initially the project was under USAID, but it is now led by Tom Archibald through a grant. There is an exchange program with Ireland; the program with Brazil is not as active and will be re-evaluated; and discussion included forming a program with a Spanish speaking country, perhaps the Dominican Republic.

b. **University Committee on International Affairs (UCIA) Meeting**

Tom Thompson, Chair of UCIA, reported from the UCIA meeting held on August 27, 2018. He indicated discussion included a new way of conducting meetings; that reports wouldn’t come from each area, and that colleges and departments would be given an opportunity for a 10-15 minute update, but not every meeting. UCIA identified topics to make progress on for the upcoming year; 1) Dual Degrees with international partners; 2) Housing for international visitors; 3) Bring forth more information about international rankings and the effect by international students; 4) The need for Advancement, Development; Internationalization and Education Abroad. Guru Ghosh is to attend the September 24th UCIA meeting to speak to questions UCIA has for the upcoming year. Tom asked what UCIA could do in order to support COIA. Discussion included the UCIA reports that are discussed at COIA; exploring department goals and issues; gathering information from departments and colleges; and what should the future look like. Other important area of concern include the Global Education Office (GEO) and need for scholarships; and the Advancement and Alumni pieces discussed last year with COIA. The intent is not to duplicate efforts between UCIA and COIA; and to work on the new strategic plan to fill gaps within the different groups; as well as initiating new issues. The resolution process is still the appropriate way to bring up changes in policy, etc. with first and second readings. Additionally, to bring information to corresponding constituents to include the Dean’s Council and Faculty Senate will be important.

8. **Commission Board Member Comments**

Shelly Martin asked what are the next steps since we have not received a response back from President Sands about the Scholarship letter that was sent last spring (this letter was sent out to members prior to the meeting today, and is [attached here](#)). Shelly asked if it would be possible to show a visual that included numbers dropping to display a better picture. Brett indicated he would find a tactful way to follow-up. Erin McCann will be attending the October meeting for a Strategic Planning follow-up discussion. The suggestion was made to invite the Provost and/or President to a COIA meeting in the future.

A motion to adjourn was made, seconded, all in favor; adjourned at 4:12 p.m.

Respectfully submitted,

Kimberly Rhodes
Recording Secretary

**TENTATIVE MEETING DATES FOR 2018-2019** *(All meetings will be from 3:30-4:30 p.m. and will take place at the Gateway Center-902 Prices Fork)*

- September 20, 2018
- October 18, 2018
- November 15, 2018
- December 13, 2018
- February 21, 2019
- March 21, 2019
- April 18, 2019
- May 9, 2019
- NO JANUARY MEETING
May 23, 2018

Dear President Sands,

Since your arrival at Virginia Tech, you have expressed a welcomed appreciation for the life-changing experiences students undergo while studying abroad. Similarly, you quickly recognized that Virginia Tech should be proactive in reducing obstacles to study abroad and global engagement, for both faculty and students. In your remarks at your installation as president of Virginia Tech, you stated, “Every undergraduate who wishes to participate in study abroad should have the opportunity to do so without delaying progress toward degree goals and without financial hardship.” Unfortunately, this has yet to be realized, especially concerning the latter issue. It has recently come to the attention of the Commission on Outreach and International Affairs (COIA) that study abroad scholarships will soon decrease dramatically.

Following your installation speech, Outreach and International Affairs Division’s (OIA) self-support operation, the Language and Culture Institute (LCI) initiated a scholarship program offered by the Global Education Office (GEO), also within OIA. Last year, for example, LCI provided $100,000 to GEO, which represents 35% of overall scholarship funding and 71% of the funding allocated to students participating in a non-Steger Center (Riva San Vitale, Switzerland) experience.

International student enrollment in LCI’s programs has dropped precipitously due to our nation’s evolving global priorities; in turn, so too has the Institute’s ability to support GEO. LCI has agreed to honor the $7,500 scholarship commitments GEO already offered for the 2018-19 academic year, but the loss of further funding means that GEO will be unable to offer significant financial aid to our students. The number of non-Steger Center students who receive scholarships (small though the scholarships have been, between $1,500 and $6,500) will drop from around 50 to under 20. The result will be that students from affluent families will go abroad, while others will be excluded from this transformative opportunity. GEO’s ongoing efforts to reach out to students from groups traditionally hesitant or unable to engage in study abroad programs—including first generation college students, students from underrepresented minority groups, athletes, and STEM majors—will be for naught.

We are approaching you with two requests. The first is short-term. We ask that the President’s office commit funds to make up for the loss of LCI’s support to GEO. Without a sustained infusion of funds to GEO, many of our current students will be precluded from studying abroad. An annual commitment of at least $150,000 over the next five years will permit GEO to continue to recruit students who, due to financial limitations, would not otherwise even consider studying abroad.

Given the critical importance of study abroad to the institution—to students and faculty alike, and to our mission to be a global land grant university—it is deeply concerning that GEO has had to
rely so heavily on soft money funneled through another office within the OIA division. Medium and long term planning is compromised, and it is difficult for us, as faculty, to advise students when we cannot assure them that scholarships will in fact be available. Scholarships must also be larger, since at current levels they can defray only a portion of study abroad costs and for a limited number of students. For low-income students, scholarships that cover fifty or seventy-five per cent of costs can be insufficient to make study abroad realistic; without significant increases in the number and size of scholarships, we will never be able to approach our goals of expanding study abroad.

This reflects poorly on the university, suggesting that we are not truly committed to our students and to our global mission. Thus, our second request is for you and your advancement team to work with GEO, OIA, and COIA to establish a robust philanthropic plan that will generate substantial funds for study abroad scholarships for Virginia Tech students.

The Commission looks forward to your response and to working with your office on this critical issue in the coming months.

Sincerely,

Brett Shadle, Current Vice-Chair and Incoming Chair
Commission on Outreach and International Affairs (COIA)
Professor of History, Virginia Tech

cc: Cyril Clarke
    Guru Ghosh
Approval of Agenda and Minutes

Members Present: Lisa Boothe, Lori Buchanan, LaTawnya Burleson, LeeAnn Ellis, Teresa Lyons, Danette Poole, Margaret Radcliffe, Robert Sebek, Hazem Sharaf, Sally Shupe, Sue Teel, and Betty Wilkins. Guest: Ellen Banks.

Minutes: The minutes from the April meetings were approved electronically with no revisions.

Agenda: Approval of the agenda was moved and seconded. The agenda was approved.

Announcements: Ms. Smith introduced Ellen Banks, HR Compliance & Policy Officer in Human Resources, who is the co-chair of Staff@VT with Ms. Smith. This task force will be looking at issues affecting staff in conjunction with CSPA. Representatives for this task force were appointed from colleges and administrative units. They were asked if there were representatives from the NCR (yes, one stakeholder) and underrepresented groups like Facilities who have lots of staff employees (they will reach out).

Mr. Sebek served on the search committee for a new VP of Human Resources. Four finalists were interviewed and comments on them were sent to President Sands, Dwight Shelton, and the new COO Dwayne Pinkney. We should hear who is selected soon.

New Business

Staff Senate Strategic Plan: Mr. Sebek discussed that Staff Senate has formed an Strategic Planning ad hoc committee to advise our representative to the strategic planning group, Ms. Smith. Once a University strategic plan is drafted, this ad hoc will write a plan for Staff Senate that follows the university’s plan.

Winter Closing Update: We still plan for a survey to go out this summer, with some additional questions from the Child Care committee and about supervisor issues.

Goals for 2018-19: The commission members brainstormed goals for the 2018-2019 academic year (and brought forward some goals from this year):

- Child care issues, benefits
- Ways to market transportation options and measure increase in usage
- Improving upon the president’s endorsement of shared governance participation
- Training for supervisors
- Training for staff on how to develop themselves
- New benefits for university staff under the Restructuring Act
  - UVA and W&M have already offered new benefits and compensation models

The meeting was adjourned at 3:00 PM.

Respectfully Submitted by Robert Sebek
MINUTES
COMMISSION ON UNDERGRADUATE STUDIES AND POLICIES
SEPTEMBER 24, 2018
230 STUDENT SERVICES BUILDING, 3:00 PM

Present: M. Kasarda (Chair); K. Albright; M. Andrews; B. Huckle for K. Edgar; V. Fowler; S. Sumner for A. Grant; R. Holloway; S. Johnson; L. Khansa; C. Leeth; J. Loferski; R. Panneton for S. Morton; J. Orr; B. Watford for J. Ross; J. Sible; S. Tatum; D. Thorp; D. Wodak; L. Zietsman

Absent with Notification: A. Knoblauch; K. Redican

Absent without Notification: M. Byers; G. Daniel; T. Hammett; K. Hosig; C. Johnson; S. Metko; P. Tarkenton; C. Touzel

Visitors: N. Akers; P. Becksted for M. Pratt-Clarke and E. McCann; G. Costello; M. Coulter; M. Marsh

Call to Order

The meeting was called to order at 3:01 PM by M. Kasarda.

Adoption of the Agenda

A motion was made and seconded to approve the agenda. The motion to approve the agenda passed unanimously.

Announcement of Approval and Posting of Minutes

M. Kasarda announced the September 10, 2018 minutes were electronically approved and can be accessed via the University Registrar’s website: http://registrar.vt.edu/content/dam/registrar_vt_edu/documents/Updates/governance/2018-2019/sept10/minutes_cusp_9_10_18.pdf

Reports and Minutes from Commission Committees/Sub-Committees

Committee Reports

Academic Support Committee

No Report.

Academic Policies Committee

No Report.
Athletics Committee

The Athletics Committee had its first meeting. Minutes will be brought forward at the next Commission on Undergraduate Studies and Policies meeting.

Commencement Committee

No Report.

Honor Council

M. Andrews shared that the Honor Council has received 369 reported cases since the start of the 2018-2019 academic year. He further noted that the numbers reflect that more professors are engaged in the process and willing to report incidents, not that there is more cheating overall.

M. Andrews also shared that of the cases so far, there have not been as many F * grades. He further elaborated that F * grades are the recommended sanction for honor code violations, and they appear on the transcript to indicate an F final grade in the course due to an honor code violation officially noted as “*By Committee Action”. He further noted that fewer F * grade sanctions indicates lower level honor code violations which professors are catching early and using as teachable moments.

M. Andrews also announced that the Honor Council is available to provide presentations at faculty member request in classes. So far, they have conducted roughly 45 in-class presentations and further noted that these presentations can be tailored to the specific class when possible.

Library Committee

No Report.

Undergraduate Curriculum Committee

On behalf of K. Redican, M. Kasarda presented the September 14, 2018 report of the Undergraduate Curriculum Committee. A motion was made and seconded to approve the September 14, 2018 report of the Undergraduate Curriculum Committee.

The motion passed unanimously.
New:

Spring 2019

College of Engineering
BMES 3154 Bioinstrumentation and Analysis (CM-4579)
CEM 3154 Smart Construction (CM-4562)
ENGR 2174 Principles of Computer Systems (CM-4408)

College of Science
CHEM 4584 Bioorganic Chemistry (CM-4571)
PHYS 2324 Thermal Physics Module (CM-4551)
PHYS 2334 Waves and Sound Module (CM-4549)
PHYS 2344 Optics Module (CM-4548)
PSYC 2014 Psychology of Social Interventions (CM-4570)

Revised:

Spring 2019

College of Agriculture and Life Sciences
ALS 3304 Physiology of Reproduction (CM-4550)

Pamplin College of Business
MKTG 4604 Retail Management (CM-4553)
University Curriculum Committee for General Education

L. Zietsman presented the minutes of the September 5, 2018 University Curriculum Committee for General Education. A motion was made and seconded to accept the minutes of the September 5, 2018 University Curriculum Committee for General Education.

The motion passed unanimously.

L. Zietsman presented the minutes of the September 12, 2018 Pathways Ad Hoc Review Committee. A motion was made and seconded to accept the minutes of the September 12, 2018 Pathways Ad Hoc Review Committee.

The motion passed unanimously.

CONSTITUENT REPORTS

Commission on Administrative and Professional Faculty Affairs

No report.

Staff Senate

No report.

Faculty Senate

D. Wodak reported that the Faculty Senate has met and is considering various topics to be reviewed this academic year.

Student Government Association

No report.

Graduate Student Assembly

No report.

OTHER BUSINESS

Strategic Planning Presentation

P. Becksted, Assistant Director for Strategic Planning, conducted a presentation to share the strategic planning work and current initiatives. Presentation topics included an overview of the
work completed so far, an invitation for the campus community to provide feedback regarding the themes that have emerged from the research, and time frame for continued work. The Office for Strategic Affairs welcomes feedback on the prioritization of the Strategic Objectives and Beyond Boundaries Concepts that emerged from the research so far.

Resources:
- Online Poll: https://tinyurl.com/stratplanpoll
- Website: https://strategicaffairs.vt.edu/
- Email: strategicaffairs@vt.edu

**ADJOURNMENT**

A motion was made and seconded to adjourn the meeting at 3:23 PM.

_Respectfully Submitted,
Megan Coulter, Office of the University Registrar_
PRESENT: Jai-Qiang He (substitute for Sherri Clark-Deener), Terry Clements, William Dougherty, John Fike, Bob Hicok, Tim Hodge, Liza Morris, Cayce Myers, Quinton Nottingham, Andi Ogier, Robert Sebek, Dwight Shelton, Jeff Earley (substitute for Ken Smith), Michael Sorice, and Bronson Weston.

ABSENT: Maria Balota, Cyril Clarke, Linging Wang, and Susan White.

1. CALL TO ORDER AND WELCOME NEW MEMBERS

Mr. Dwight Shelton, Vice President for Finance and CFO, called the meeting to order. Mr. Shelton introduced himself then asked members to introduce themselves, as it was the first meeting of the 2018-19 fiscal year.

2. APPROVAL OF THE MARCH 15, 2018 MINUTES

Mr. Shelton stated that the March 15, 2018 minutes have been approved and forwarded to the University Council for posting on the web.

3. OVERVIEW AND GENERAL DISCUSSION OF THE ACTIVITIES OF THE COUNCIL

Mr. Shelton gave an overview of the Council's purpose and noted examples of how input from Council members has been used in the past. Mr. Shelton explained that the committee has taken on several roles since its inception, including working through several rounds of budget reductions, and advising on issues of strategic and financial importance to the university.

4. REVIEW OF UNIVERSITY FINANCIAL STRUCTURE, FINANCIAL TRENDS, AND EXTERNAL OPERATING BUDGET TIMELINE

Mr. Hodge, Associate Vice President for Budget and Financial Planning, presented an overview of the University’s financial structure, operating trends, and state budget timeline. He reviewed the university’s program structure, explaining how the university is split into two agencies (Agency 208 and Agency 229), how each of those agencies are funded, and which programs fall under each. Mr. Hodge also reviewed resources the university receives from the State, tuition & fees, self-generated and private funds, and showed the trend of those resources over the past 10 years. Mr. Hodge also provided an overview of the state budget process and timeline, and explained that the committee would be updated at future meetings as the state budget process unfolded. A PDF of the presentation are attached to these minutes.

5. TOPICS COUNCIL WOULD BE INTERESTED IN DISCUSSING

Mr. Hodge asked the Council members for recommendations of topics they would like to see the Council discuss over the coming months. Several topics where shared, including an update on the University's Strategic Planning process, update on the PIBB model, resources for Destination Areas and Strategic Growth Areas, the relationship between the University and the Virginia Tech Foundation, auxiliary fees, compensation for graduate assistantships, F&A rates, and administrative efficiency. The Council was encouraged to send any additional topics to Mr. Hodge.

6. No further business was discussed, and the meeting adjourned at 5:00 p.m.
OPERATING BUDGET

UNIVERSITY ADVISORY COUNCIL ON STRATEGIC BUDGETING AND PLANNING
SEPTEMBER 25, 2018
## PUBLIC & PRIVATE RESOURCES
### 2018-19 Budget ($ in Millions)

<table>
<thead>
<tr>
<th>Source Description</th>
<th>State</th>
<th>In-State T&amp;F</th>
<th>T&amp;F</th>
<th>Self-Generated</th>
<th>Private</th>
<th>Total</th>
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<tr>
<td>208 E&amp;G</td>
<td>$164.4</td>
<td>$264.3</td>
<td>$288.1</td>
<td>$45.1</td>
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<td>$762.0</td>
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<tr>
<td>229 E&amp;G</td>
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<td>Student Financial Aid</td>
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<td></td>
<td></td>
<td>8.3</td>
<td></td>
<td>30.1</td>
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<tr>
<td>Auxiliary Enterprises</td>
<td>43.2</td>
<td>22.8</td>
<td></td>
<td>282.4</td>
<td></td>
<td>348.4</td>
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<tr>
<td>Sponsored Programs</td>
<td>5.4</td>
<td></td>
<td></td>
<td>316.7</td>
<td></td>
<td>322.1</td>
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<tr>
<td>All Other Programs (UMA)</td>
<td>2.3</td>
<td></td>
<td></td>
<td>5.2</td>
<td></td>
<td>7.5</td>
</tr>
<tr>
<td><strong>Subtotal Public Resources</strong></td>
<td>266.2</td>
<td>307.5</td>
<td>310.9</td>
<td>674.2</td>
<td></td>
<td>1,559.0</td>
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<tr>
<td>Virginia Tech Foundation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>168.7</td>
<td>168.7</td>
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<tr>
<td>Other University-Related Entities</td>
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<td>27.3</td>
<td>27.3</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$266.1</strong></td>
<td><strong>$307.5</strong></td>
<td><strong>$310.9</strong></td>
<td><strong>$674.2</strong></td>
<td><strong>$196.0</strong></td>
<td><strong>$1,755.0</strong></td>
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<tr>
<td>% of total</td>
<td>15%</td>
<td>18%</td>
<td>18%</td>
<td>38%</td>
<td>11%</td>
<td></td>
</tr>
</tbody>
</table>
2018-19 OPERATING BUDGET TREND BY COMPONENT

($ in Millions)
GENERAL FUND SUPPORT BY PROGRAM

Trend of General Fund by Major Program from FY1999-00 through 2018-19

- University Division
- CE/AES Division
- Student Financial Aid
- Financial Assistance for E&G Programs
- Unique Military Activities
- Total
EXTERNAL OPERATING BUDGET TIMELINE - BIENNium

- **July**: University Develops and Submits Draft Six-Year Plan to State
- **August**: SCHEV Works on Statewide Issues
- **September**: University Responds to State Comments on Six-Year Plan
- **October**: BOV Reviews Final Six-Year Plan
- **November**: DPB Reviews Agency Submissions
- **December**: Governor’s Executive Budget Proposal
- **January**: General Assembly Session
- **February**: Money Committees Reports
- **March**: General Assembly Session Closes
- **April**: Reconvened Session
- **May**: Appropriation Act
- **June/July**: New Fiscal Year Begins

<table>
<thead>
<tr>
<th>Month</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td>Six-Year Plan</td>
</tr>
<tr>
<td>August</td>
<td>State Budget Development</td>
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<tr>
<td>September</td>
<td>Executive Budget Development</td>
</tr>
<tr>
<td>October</td>
<td>Six-Year Plan Finalization</td>
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<tr>
<td>November</td>
<td>General Assembly Session</td>
</tr>
<tr>
<td>December</td>
<td>Final Consideration and Approval of Appropriation Act</td>
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</tbody>
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**2018**

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**2019**
DISCUSSION