Research and Innovation at Virginia Tech

August 2023
NEW FACULTY WELCOME 2022
OFFICE OF RESEARCH AND INNOVATION

Planning and Proposal Development

• Research Development Resources
  Randy Heflin, Senior Associate Vice President, Research and Innovation

• Sponsored Programs: Pre-Award and Summit

• Sponsored Programs: Contracts
Research development in the Office of Research and Innovation

- The Office of Research and Innovation aims to ensure full-spectrum research development for the entire university research enterprise.
- The objective is to make each phase of developing the research portfolio more efficient and effective - from the earliest stages of relationships with potential sponsors to awards being made.
Advancing research development across multiple timelines

- **Yet to be Imagined**: create
- **Emerging and Evolving**: shape
- **Known and Anticipated**: respond

*Inform*: Data-driven analyses and assessment, multi-pronged engagement, relationship building
- Funding Institutional - customizable and searchable database of funding organizations and solicitations
- Proposal development support - in many colleges and departments
- VT-FAST
- Example successful proposals - colleagues and ADRs
- Proposal Development Institute
- NSF CAREER Award workshop
- Research Development Seminar Series (video archive)
- Limited Submissions
- Red Team review
- Cost-sharing and institutional commitment
Virginia Tech Institutes

**Investment**
- Fralin Life Sciences Institute (FLSI)
- Institute for Creativity, Arts, and Design (ICAT)
- Institute for Critical Technology and Applied Science (ICTAS)
- Institute for Society, Culture, and Environment (ISCE)

**Thematic**
- Fralin Biomedical Research Institute (FBRI)
- National Security Institute (NSI)
- Virginia Tech Transportation Institute (VTTI)
Sponsor and Corporate Engagement

- Office of Strategic Research Alliances
  - Contacts and engagement with federal agencies, foundations, companies, and other academic institutions
  - Steve McKnight and Jon Porter

- LINK + LICENSE + LAUNCH
  - Corporate Partnerships, Intellectual Property, Start-Up Company Formation
  - Brandy Salmon and Brad Fravel
- Research Development Seminar Series and new Research Development webpages
- Annual assessments of federal research budgets and spending (overall, agency, program, and award-level trends)
- Analyses and dissemination of agency S&T priorities and execution strategies
- Annual analysis of HERD, Federal Survey on Research, etc. to inform comparative standing
- Understanding the persona of successful proposers
Promote awareness of Virginia Tech research interests, priorities and talent

Participate in national-level thematic workshops

Convene broader community on priority research areas

Organize faculty visits to research agencies and program managers

Host agency visits to Virginia Tech
- Increase awareness among sponsors of Virginia Tech research interests, strengths and capabilities
- Align Virginia Tech capabilities with research interests in mission-driven agencies
- Analyze awardees for current programs to benchmark ourselves against successful teams
- Convene workshops or bilateral meetings with sponsors around emerging research topics
- Participate in agenda-setting activities by agencies, think-tanks, professional societies, NASEM
create

- Brainstorm around big ideas that align with our strengths and capabilities
- Drive interest in new and emerging research areas to stimulate research investment
- Actively participate in the establishment of national-level research agendas
- Advocate development of new research programs at sponsors and agencies
- Build collaborative alliances to generate interest and momentum for new and emerging research
https://profdev-lms.tlos.vt.edu/enroll/C7MARP
How Can the OSP Pre-Award Team Help You?

At the Proposal Stage
- Reviews the Request for Proposal (RFP)
- Creates the budget in accordance with PI specifications
- Assists PI in completing sponsor forms
- Ensures appropriate reviews have taken place - COI, Export Control, Contractual
- Prepares cover letter/Reps-Certs/Sub forms
- Obtains all required signatures on proposal documents
- Reviews proposal for compliance with RFP
- Submits proposal to sponsor OR provides approval for PI to submit

After Submission
- Works with faculty to correct or resolve any issues in the proposal package
- Submits updates or revisions to the original proposal
- Coordinates answers to sponsor regarding proposals
- Files all after-submission communication
- Transmits award documents to Contracts team
- Answers questions from Contracts/Post-award
When should you initiate your proposal in Summit?
As soon as possible.

- As soon as you find an opportunity you want to apply to, initiate the proposal in Summit.
  
  https://summit.cloud.vt.edu/

- This does the following:
  - Places your proposal on the Pre-Award calendar
  - Puts your proposal in your Pre-Award Associate’s queue
  - Allows us to do a RFP review
  - Allows us to get Contracts get involved if needed
  - Lets us review to see if it is a Limited Submission opportunity

- Please contact the following with any questions:
  - Shannell Ball, Associate Director of Pre-Award, shannell@vt.edu or 540-231-5578
  - Lauren Magruder, Director of Pre-Award, Lmagrude@vt.edu or 540-231-8054
Office of Sponsored Programs - Contracts and Agreements

- The Contracts Team reviews and executes many types of research-related contracts and agreements. Contracts and agreements are initiated in the following ways:
  - Emailing ospcontracts@vt.edu or ospawards@vt.edu with sponsor acceptance of award for proposed funded agreements.
  - Summit Agreements for most other agreement types.
  - Refer to the Contracts and Agreements page for additional guidance.
Office of Sponsored Programs - Summit Agreements
Research Integrity, Ethics, and Compliance

Lisa M Lee
Associate Vice President for Research and Innovation
Director, Scholarly Integrity and Research Compliance

August 18, 2023
MISSION

The division of Scholarly Integrity and Research Compliance facilitates scholarly excellence by fostering ethical decision-making and ensuring research regulatory compliance.
Requirements for conducting research

- Research funded
- Protocol written
- Staff hired
- Supplies ordered

N=104

Regulations, state laws, federal laws, Virginia Tech policies

Start research
Research Integrity and Consultation Program

- Professional development trainings addressing research ethics and integrity (Investigator Series, RISE Lecture Series)
- Certification for NSF and NIH RCR training requirement
- Research Integrity Officer

Kory Trott, JD, MPH
Director, Research Integrity and Consultation Program

Samantha Brodie, MA
Administrative Specialist
Research Conflict of Interest Program

- Management Plan Advisory Committee (MPAC)
- Assessment and management of research conflicts of interest to ensure objectivity in research
- Disclosure system for conflicts of interest and commitment
- SBIR/STTR guidance for entrepreneurial researchers

Cristen Jandreau, PhD
Director, Research Conflict of Interest Program and University Official for Financial COI (Sponsored Projects)

Quinn Steen, JD, MBA
Senior Research Conflict of Interest Coordinator

Tennielle Hawkins, MPA
Research Conflict of Interest Coordinator

Leslie Thornton-O’Brien, MA
Administrative Specialist
Privacy and Research Data Protection Program

• Assess and manage privacy protections based on data sensitivity
• Ensure researchers have access to resources that keep data secure and compliant with university, state, and federal regulations
• Balance open-data requirements and data protection
• Oversight of privacy reviews for IRB
• Support researchers
  • 1:1 consultations
  • Training, class presentations
Human Research Protection Program

• Institutional Review Board (IRB)
  • Ensure ethical and compliant research involving human participants
  • Support researchers and IRB
    • Weekly office hours
    • 1:1 consultations
    • Training, class presentations

Barbara DeCausey, MPH, MBA
Director, Human Research Protection Program

Sarah Henderson, MS
QA/QI Coordinator

Samantha Bowling, MA
Protocol Coordinator

Lacey Doyle, MAEd
Protocol Coordinator

Andrea Nash, MS
Protocol Coordinator

Eric Newton, MSEd
Protocol Coordinator

Brandi Evans, MHP
Protocol Coordinator

Brynn Watson
Administrative Specialist
SCHOLARLY INTEGRITY AND RESEARCH COMPLIANCE

Animal Care and Use Program

- Institutional Animal Care and Use Committee (IACUC)
- Ensure ethical and compliant use of vertebrate animal species in teaching and research
- Support researchers and IACUC
  - Weekly office hours
  - 1:1 consultations
  - Training, class presentations

Stephanie Trout, MS
Director, Animal Care and Use Program and IACUC Administrator

Becky Burns, MS
Protocol Coordinator

Kim Skroupa
Protocol Coordinator

Vanessa Oetjens
Senior Administrative Specialist
Institutional Biosafety Committee Program

- Institutional Biosafety Committee (IBC) and Institutional Review Entity (IRE)
- Ensure ethical and compliant research involving biohazardous agents
- Support researchers and IBC and IRE
  - Office hours
  - 1:1 consultations
  - Laboratory training
  - Class presentations
Office of Export and Secure Research Compliance

- Ensures university-wide compliance with export controls, sanctions, and research security laws and regulations

- Research security programs cover:
  - Cybersecurity
  - Foreign Travel Security
  - Research Security Training
  - Export Control Training
  - Institutional Certification

- New requirements and procedures for mitigating foreign influence
Administrative and Office Management

Ann Thornhill
Office and Administrative Manager
Questions and Discussion
Mark Mondry

Director, LAUNCH

Mark’s extensive engineering, legal, and executive business experience shares a common theme of creating, developing, and commercializing new technologies. As a patent attorney in Silicon Valley and Washington DC, he helped create and grow extensive global patent portfolios, managed dozens of patent litigations, and drafted and negotiated hundreds of licensing and transactional contracts spanning the entire innovation spectrum. As an executive in the medical devices industry, he held leadership positions in operations, business development, and new product development in multi-national Fortune 100 companies and founded or helped build several startups and spinouts, including growing a young medical device startup to a successful IPO.
Grant Brewer

Executive Director, LICENSE

With two decades of experience in commercialization of highly technical business opportunities, Grant provides the practical experience one gains through doing things the wrong way and learning things the hard way. Unfortunately for Virginia Tech, Grant has been learning this way for almost 10 years in his current role.

Grant’s professional experiences range from bench-top research assessment to directing FDA approved pharmaceutical manufacturing. He has been involved in multiple start-up companies, many of which achieved success through strong exits and sales revenues.
AONE-STOP SHOP FOR PARTNERS

LINK + LICENSE + LAUNCH

Advancing corporate partnerships
Patenting and licensing technologies
Propelling startup creation from research
Meet our team.
Want to increase the societal impact of your research?

We are here to help.
Technology commercialization’s Contribution to our Land Grant Mission

Pursuing commercialization …

+ is a way of increasing impact from your research
+ potential financial gain for VT’s inventors (refer to university policy 13000)
+ attracts diverse and talented faculty, graduate students and post-docs (fly-wheel effect)
+ compliance with federal Bayh-Dole Act
LICENSE

+ Focus on translating technologies to market.
+ Coordinates with VTIP
+ Invention disclosure process
+ Patent application process
+ Licensing process
+ Distributing licensing revenues
+ LICENSE Tech Transfer Bootcamp professional development workshop

LAUNCH

+ Mentoring for exploratory innovation and spin-out creation
+ Proof-of-Concept fund program
+ NSF I-Corps courses and mentoring
+ Presidential Postdoc Innovation Fellowship program
+ LAUNCH Startup Labs professional development workshop (7 sessions)
Meet policy 13000

+ Who owns my invention?
+ What happens when we disclose an invention?
+ How is success shared?
The invention disclosure process

+ Not “just housekeeping” or mandatory paperwork (although it is required by law);
+ Initiates the process for ultimately protecting your intellectual property.
+ Also available through online disclosure portal
The university asserts its right to the results of research funded wholly, or in part, with university resources.

“Creation of intellectual property (IP) must be disclosed to the university by submitting an IP disclosure form.”
LAUNCH resources:

+ Proof-of-Concept fund ($50k grants
+ VIPC commercialization funding
+ NSF I-Corps courses and mentoring
+ Presidential Postdoc Innovation Fellowship program
+ LAUNCH Startup Labs
Find out more

Visit our website: vt.edu/link
LICENSE

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LAUNCH

Mark Mondry
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Using media (owned and earned) to elevate your work

Michael Stowe
Communications and Marketing

Michael Stowe
Communications and Marketing
Working together

Communications and Marketing

- Research
- Colleges
- Institutes
- Units
Better connections

Editorial Integration

- Content Producers
- Social Media
- Virginia Tech News
- Media Relations
Elevating research

- **PLAN**: Know the embargo
- **PRODUCE**: Written & visual
- **PREPARE**: Media training
- **PUBLISH**: EurekAlert Web, Social
- **PITCH**: Before & after
Police vehicle stop research

CASE STUDY
Communications Timeline
March 16: Researcher reaches out to communications
April 11: Media call with Stanford communications team
April 12: Amplification plan created
May 22: Embargo date set for May 29 (Memorial Day)
May 24: Story loaded to EurekAlert under embargo
May 25: Media outreach under embargo
May 29: Embargo lifts, media coverage begins
Content Amplification Plan

**Updated:** 5/23/23
**Contact:** Margaret Ashburn, mkashburn@vt.edu

**Key Partners:**
- Margaret Ashburn, Assistant Director of Media Relations
- Shannon Andrea, Director of Media Relations & DC Area Communications
- Lindsey Haugh, Senior Director, Marketing & Communications, Office of Research & Innovation
- Travis Williams, Writer, Office of Research & Innovation
- Suzanne Miller, Assistant Director of Communications, College of Engineering
- Eugenia Rho, Researcher, 650-218-5841

**Summary**
Virginia Tech researcher sheds light on when and how law enforcement traffic stops escalate, as well as their psychological impact on Black men.
First impressions matter, even during vehicle stops.

New research by @VT_CS assistant professor Eugenia Rho reveals how the initial words spoken by law enforcement officers to Black drivers can indicate the outcome of the stop.

Read more ➡️
https://news.vt.edu/articles/2023/05/cm-trafficstopstudy.html

Vehicle stop study illuminates importance of officer's first words

Eugenia Rho is the lead author of a recent study that highlights key components of traffic stops that end in escalation

Peer-Reviewed Publication

VIRGINIA TECH
For Black drivers, a police officer's first 45 words are a portent of what's to come

npr.org