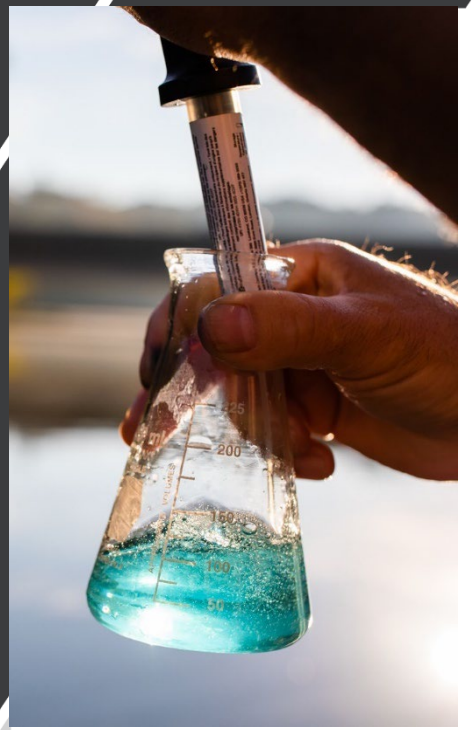
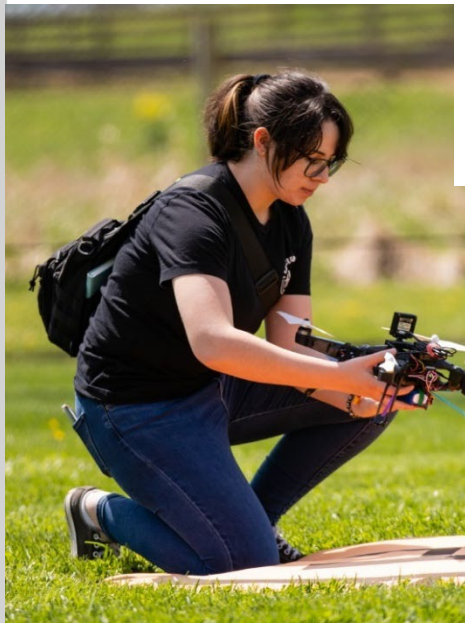




Research and Innovation at Virginia Tech

August 2023

RESEARCH AND INNOVATION
VIRGINIA TECH

NEW FACULTY WELCOME 2022

OFFICE OF RESEARCH AND INNOVATION

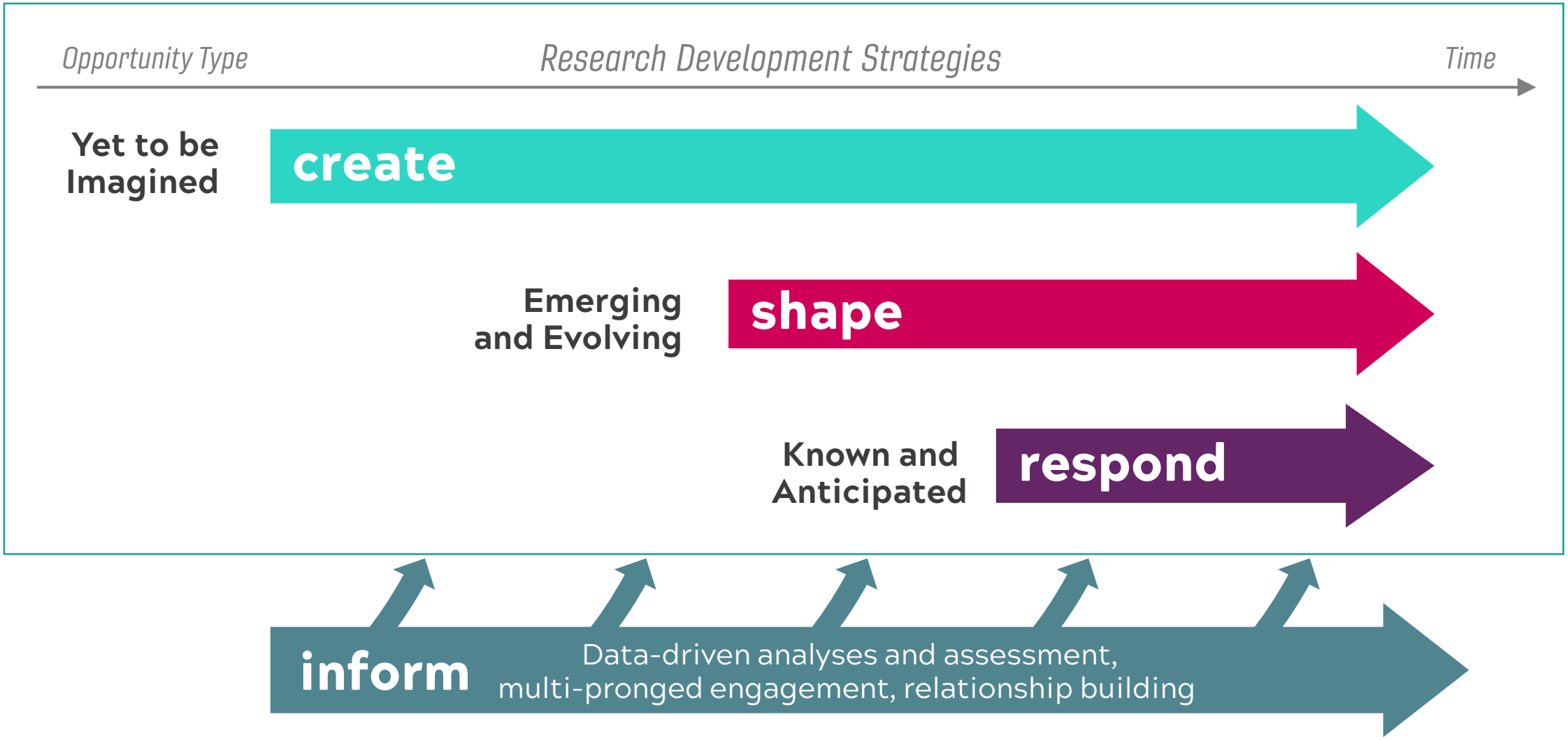
Planning and Proposal Development

- **Research Development Resources**
  Randy Heflin, Senior Associate Vice President, Research and Innovation
- Sponsored Programs: Pre-Award and Summit
- Sponsored Programs: Contracts

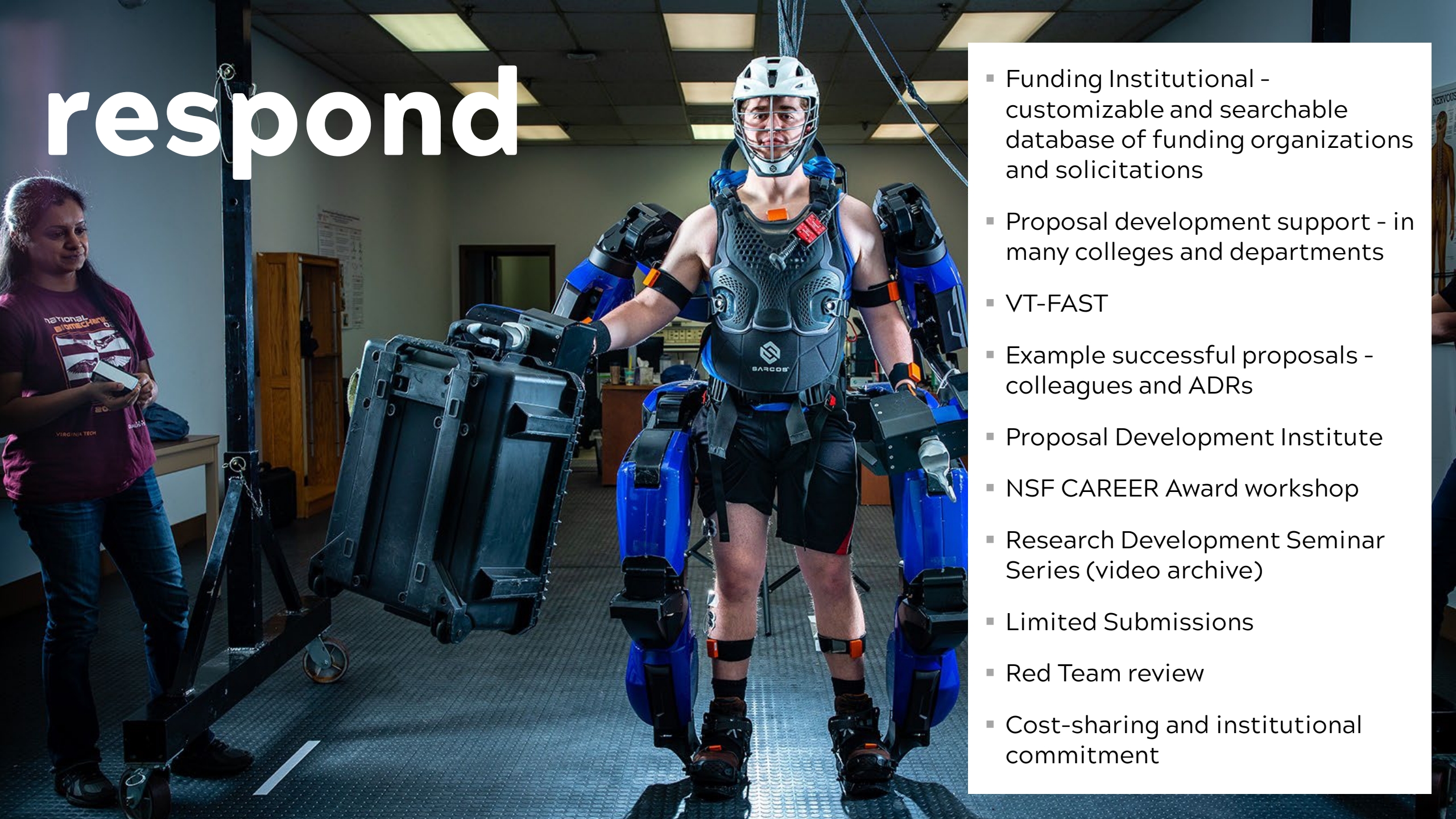
Research development in the Office of Research and Innovation

- 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



respond



- 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

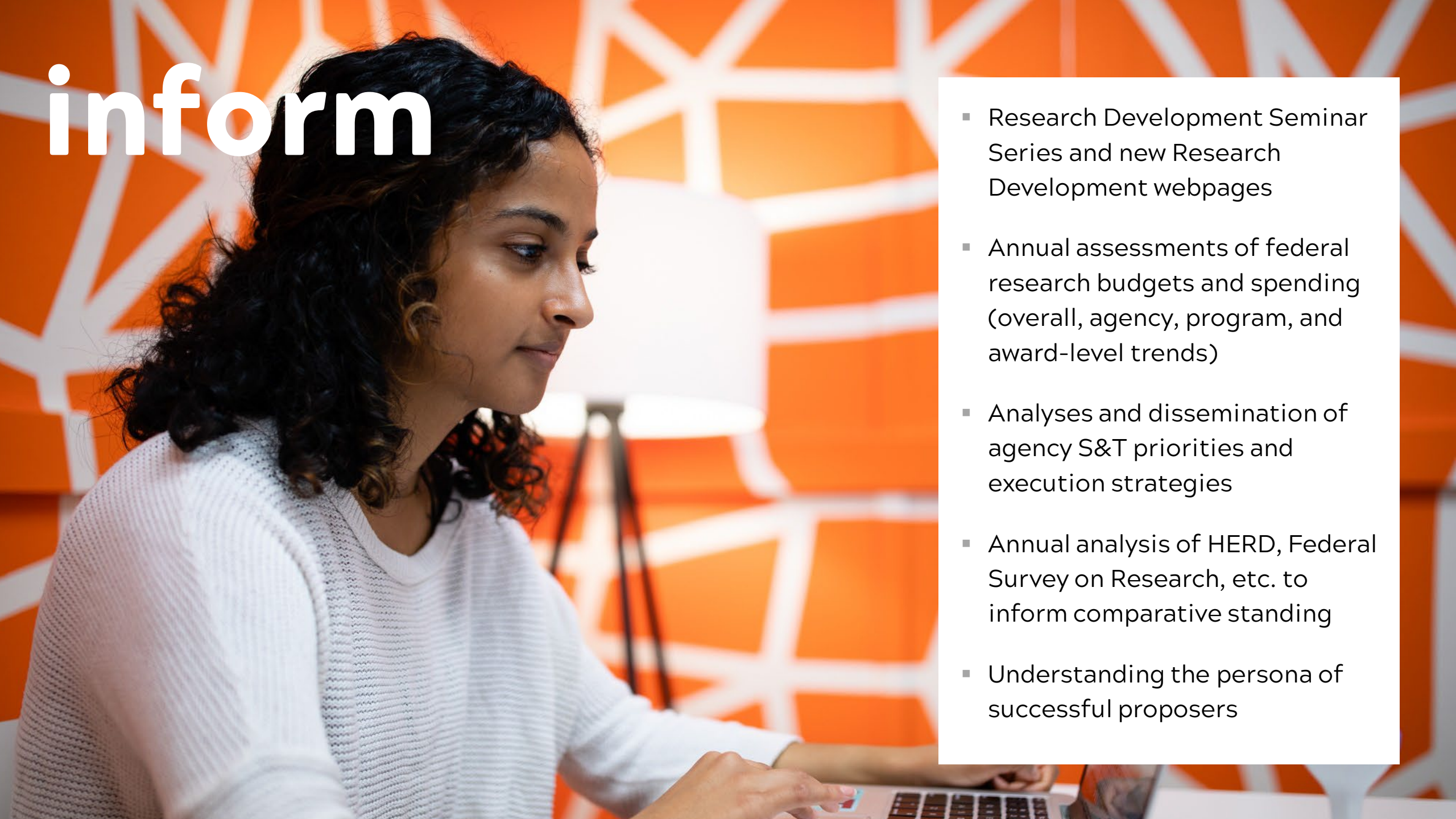
  Steve McKnight and Jon Porter

- LINK + LICENSE + LAUNCH

  Corporate Partnerships, Intellectual Property, Start-Up Company Formation

  Brandy Salmon and Brad Fravel

inform

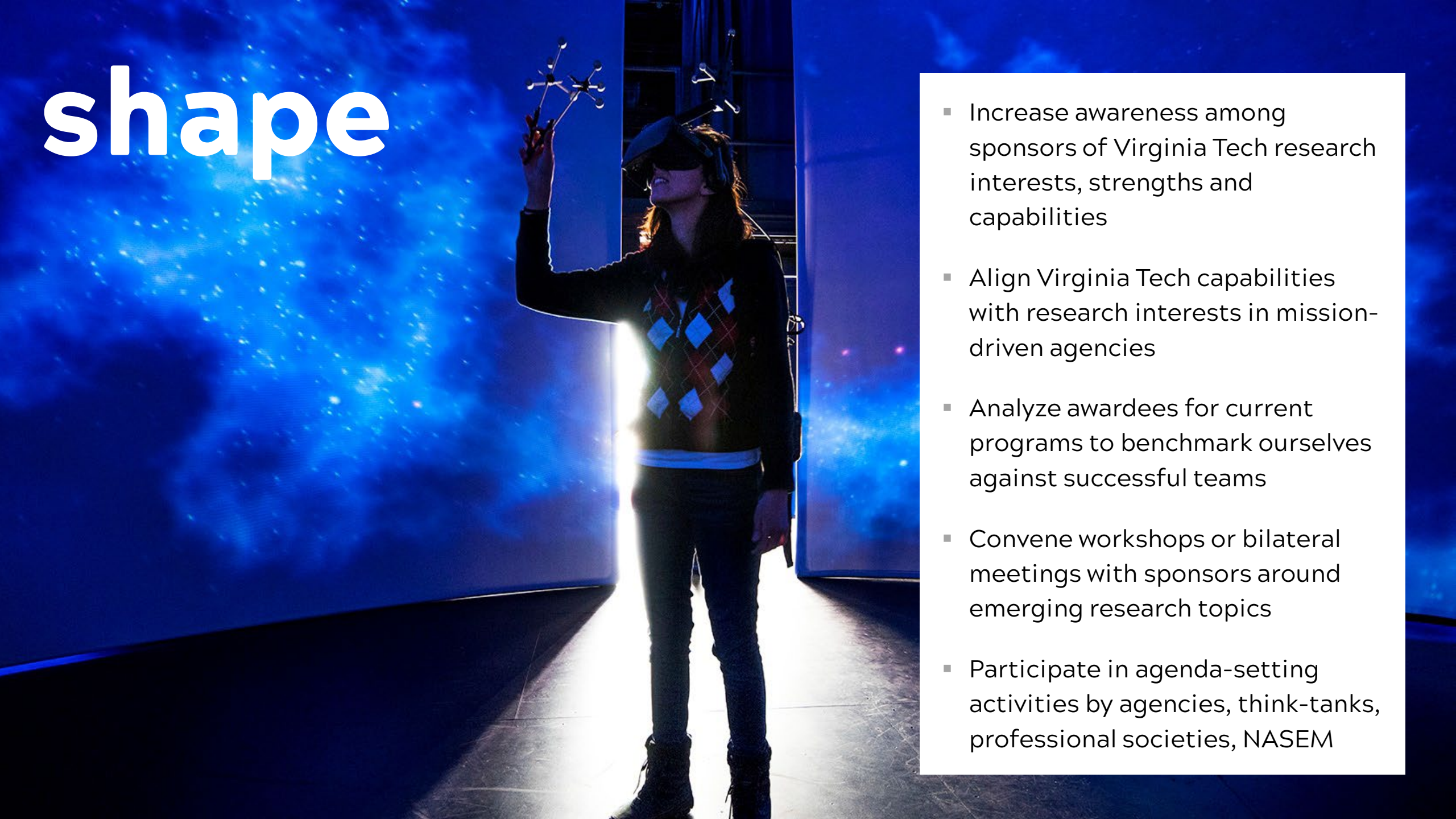


- Research Development Seminar Series and new Research Development webpages
- Annual assessments of federal research budgets and spending (overall, agency, program, and award-level trends)
- Analyses and dissemination of agency S&T priorities and execution strategies
- Annual analysis of HERD, Federal Survey on Research, etc. to inform comparative standing
- Understanding the persona of successful proposers

inform

- 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

shape



- 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

Principal Investigator Boot Camp

Jill O'Quin, Ed.D.

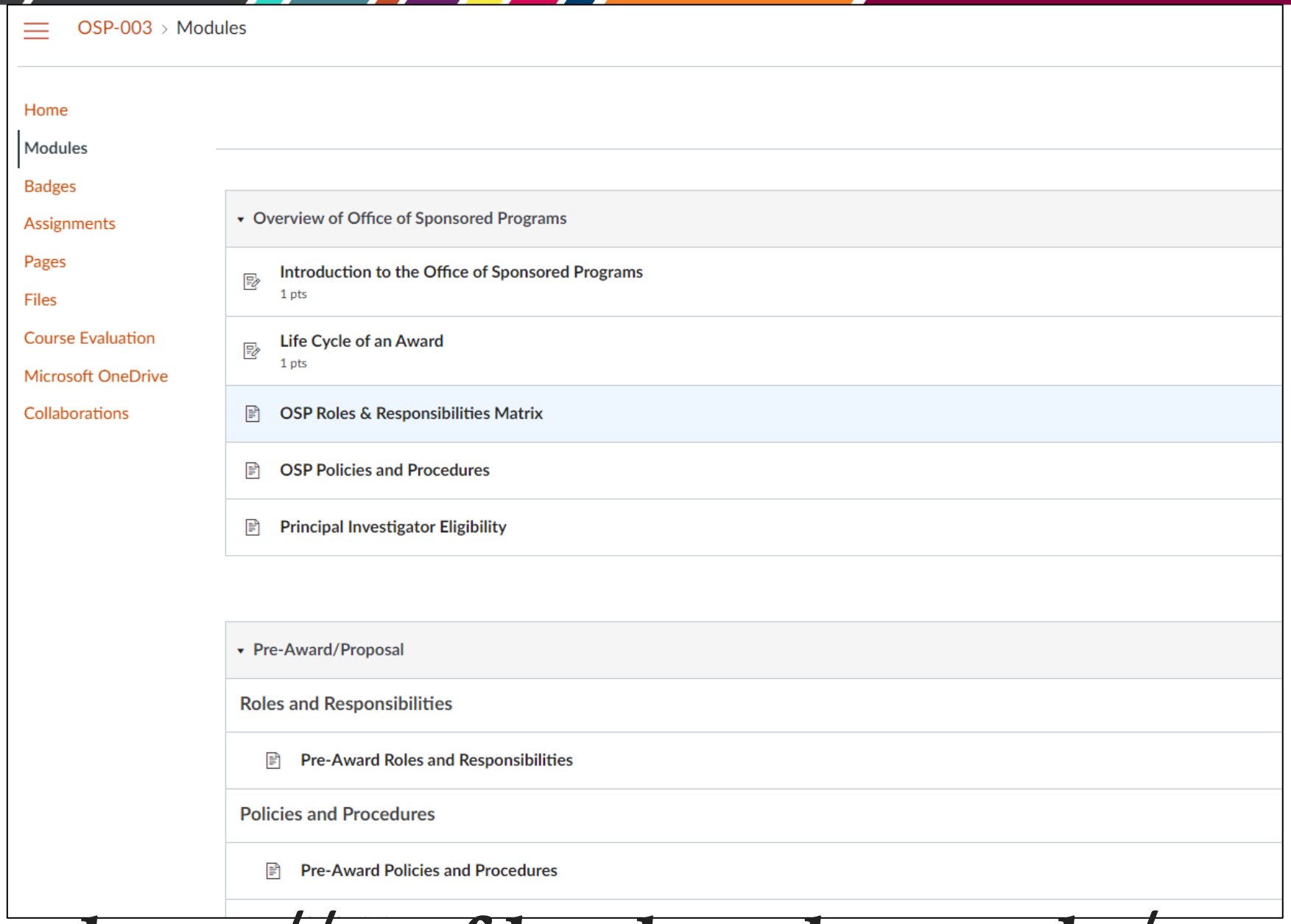
Office of Sponsored Programs

Scholarly Integrity and Research Compliance

oquin@vt.edu

August 18, 2023

https://profdev-lms.tlos.vt.edu/enroll/C7MARP



Set a bookmark in your browser for easy access.

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.

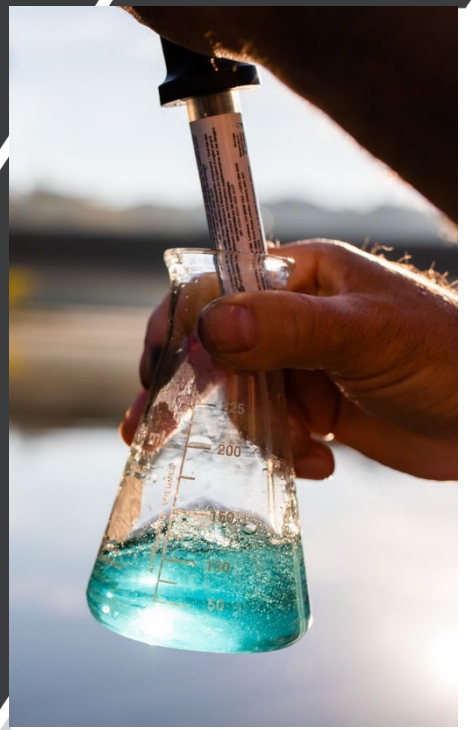
  https://summit.cloud.vt.edu/

- 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

RESEARCH AND INNOVATION
VIRGINIA TECH

Scholarly Integrity and Research Compliance

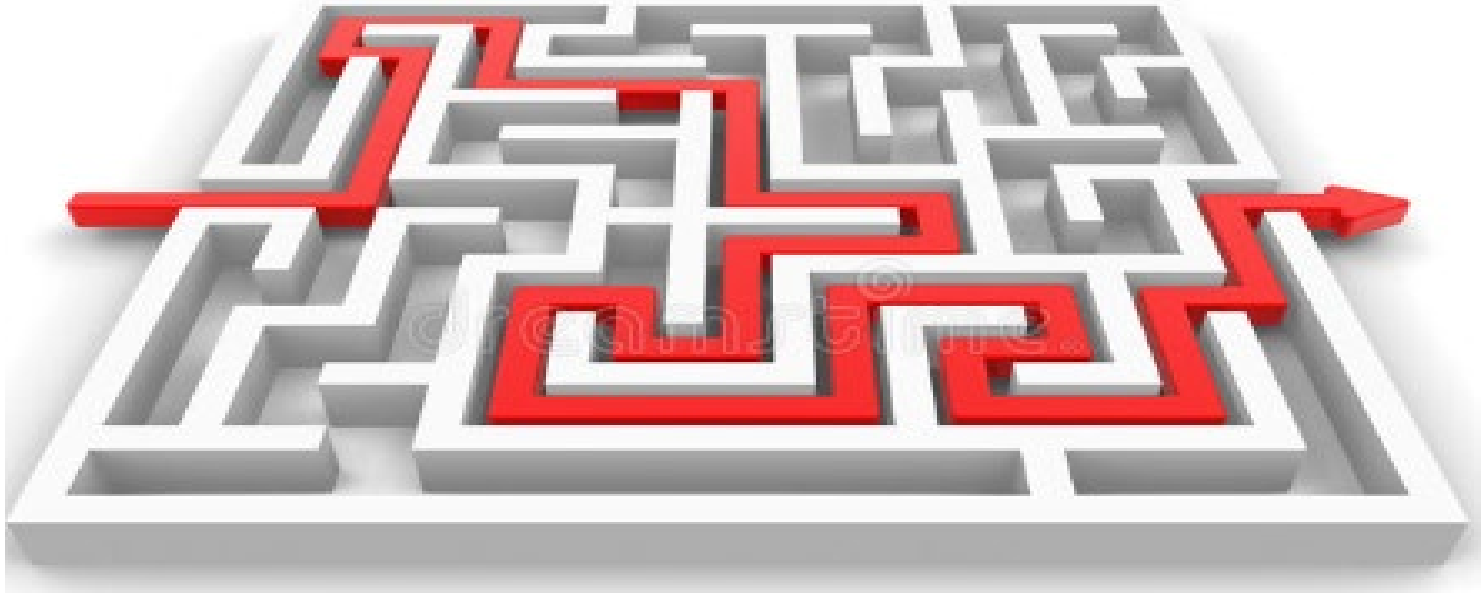
MISSION

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

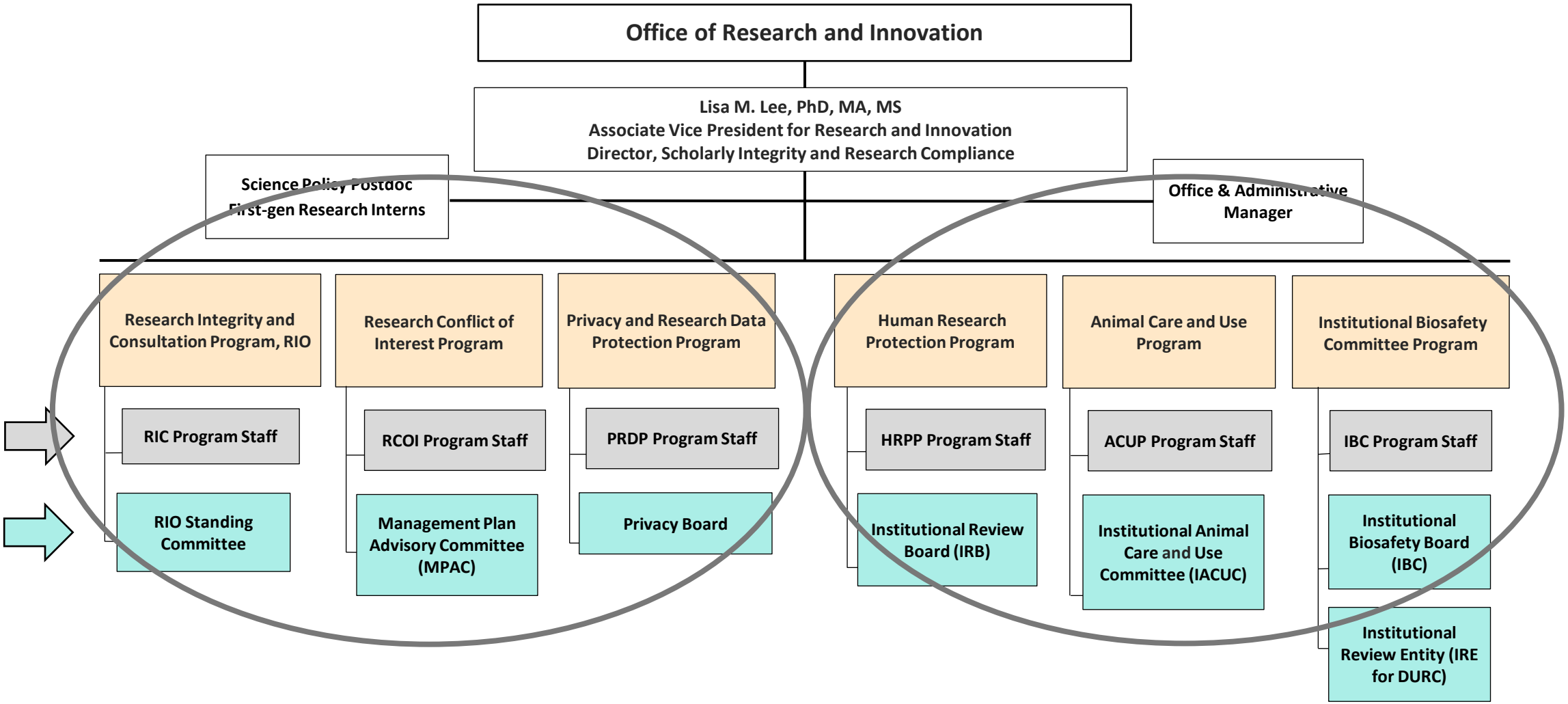
Regulations, state laws, federal laws, Virginia Tech policies



Start research

N=104

Research compliance programs



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

Julie Cook
Director, Privacy and Research Data Protection Program

Samantha Brodie, MA
Administrative Specialist

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

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

Regina Allen, PhD
Institutional Biosafety Committee Program Director and Institutional Biosafety Committee Administrator

Ling Chen, PhD
Senior Protocol Coordinator

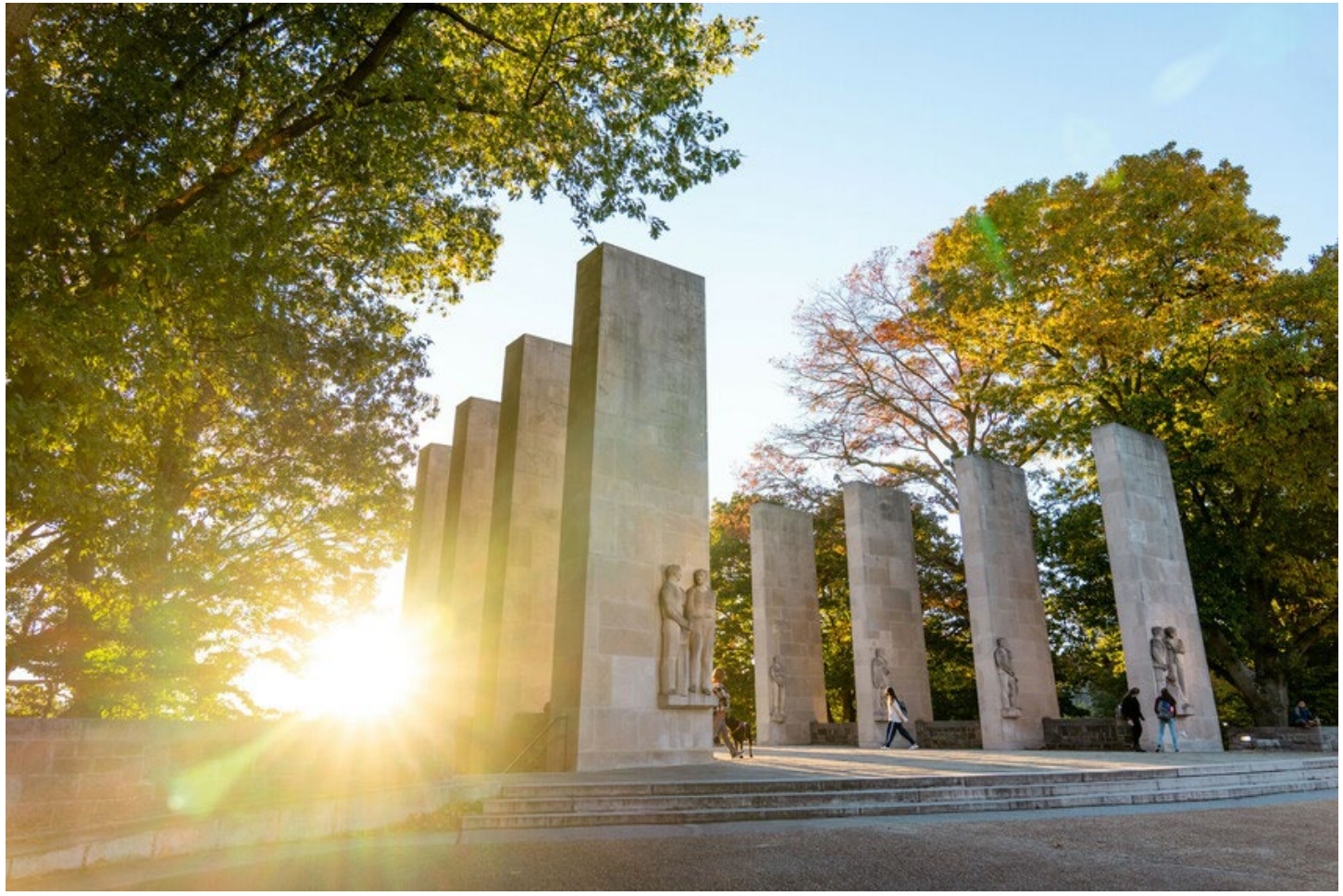
Office of Export and Secure Research Compliance

- 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

John Talerico

Director, Export and Secure Research Compliance

Administrative and Office Management



Ann Thornhill

Office and Administrative Manager

Questions and Discussion

RESEARCH AND INNOVATION
VIRGINIA TECH

RESEARCH AND INNOVATION
VIRGINIA TECH

VIRGINIA TECH

Technology Commercialization

OVPRI Resources

LINK + LICENSE + LAUNCH

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.

MEET YOUR INSTRUCTORS

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.

A ONE-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

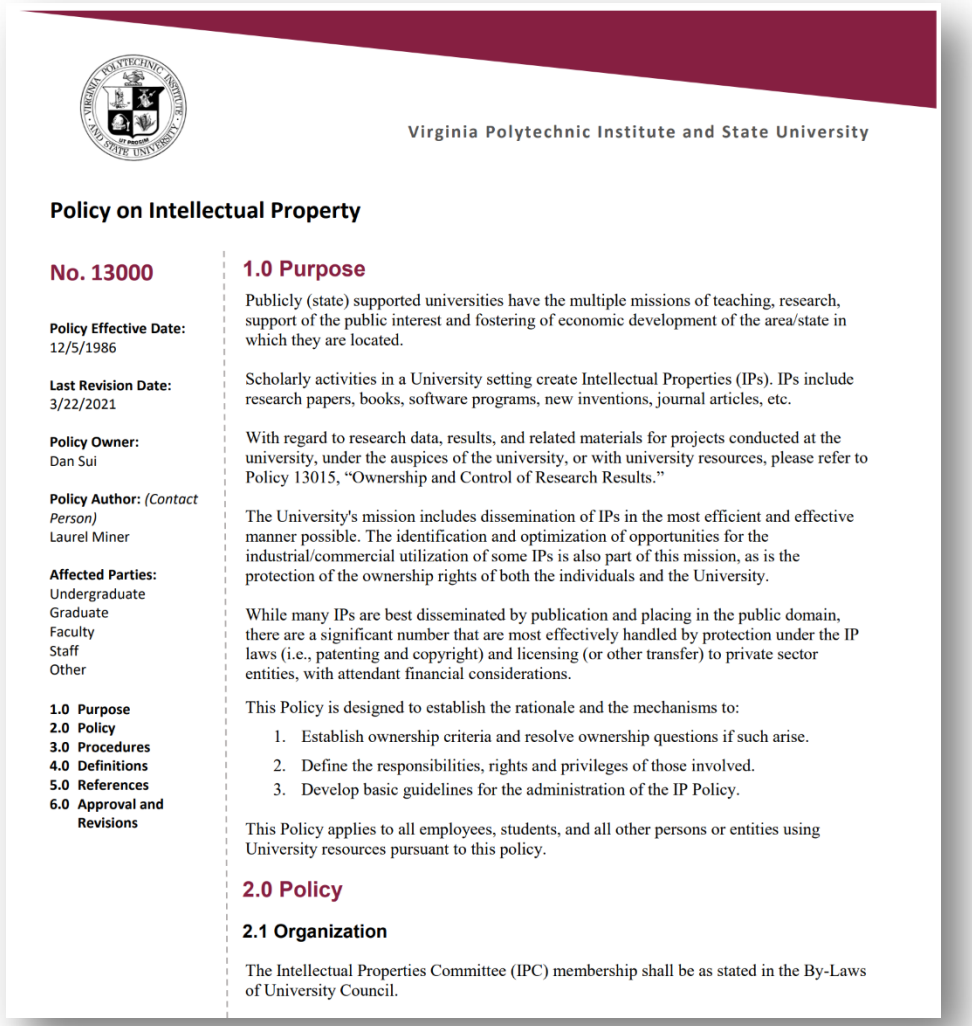
- Focus on translating technologies to market.
- Coordinates with VTIP
- Invention disclosure process
- Patent application process
- Licensing process
- Distributing licensing revenues
- LICENSE Tech Transfer Bootcamp professional development workshop

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?



Virginia Polytechnic Institute and State University

Policy on Intellectual Property

No. 13000

Policy Effective Date:
12/5/1986

Last Revision Date:
3/22/2021

Policy Owner:
Dan Sui

Policy Author: *(Contact Person)*
Laurel Miner

Affected Parties:
Undergraduate
Graduate
Faculty
Staff
Other

1.0 Purpose
2.0 Policy
3.0 Procedures
4.0 Definitions
5.0 References
6.0 Approval and Revisions

1.0 Purpose

Publicly (state) supported universities have the multiple missions of teaching, research, support of the public interest and fostering of economic development of the area/state in which they are located.

Scholarly activities in a University setting create Intellectual Properties (IPs). IPs include research papers, books, software programs, new inventions, journal articles, etc.

With regard to research data, results, and related materials for projects conducted at the university, under the auspices of the university, or with university resources, please refer to Policy 13015, "Ownership and Control of Research Results."

The University's mission includes dissemination of IPs in the most efficient and effective manner possible. The identification and optimization of opportunities for the industrial/commercial utilization of some IPs is also part of this mission, as is the protection of the ownership rights of both the individuals and the University.

While many IPs are best disseminated by publication and placing in the public domain, there are a significant number that are most effectively handled by protection under the IP laws (i.e., patenting and copyright) and licensing (or other transfer) to private sector entities, with attendant financial considerations.

This Policy is designed to establish the rationale and the mechanisms to:

1. Establish ownership criteria and resolve ownership questions if such arise.
2. Define the responsibilities, rights and privileges of those involved.
3. Develop basic guidelines for the administration of the IP Policy.

This Policy applies to all employees, students, and all other persons or entities using University resources pursuant to this policy.

2.0 Policy

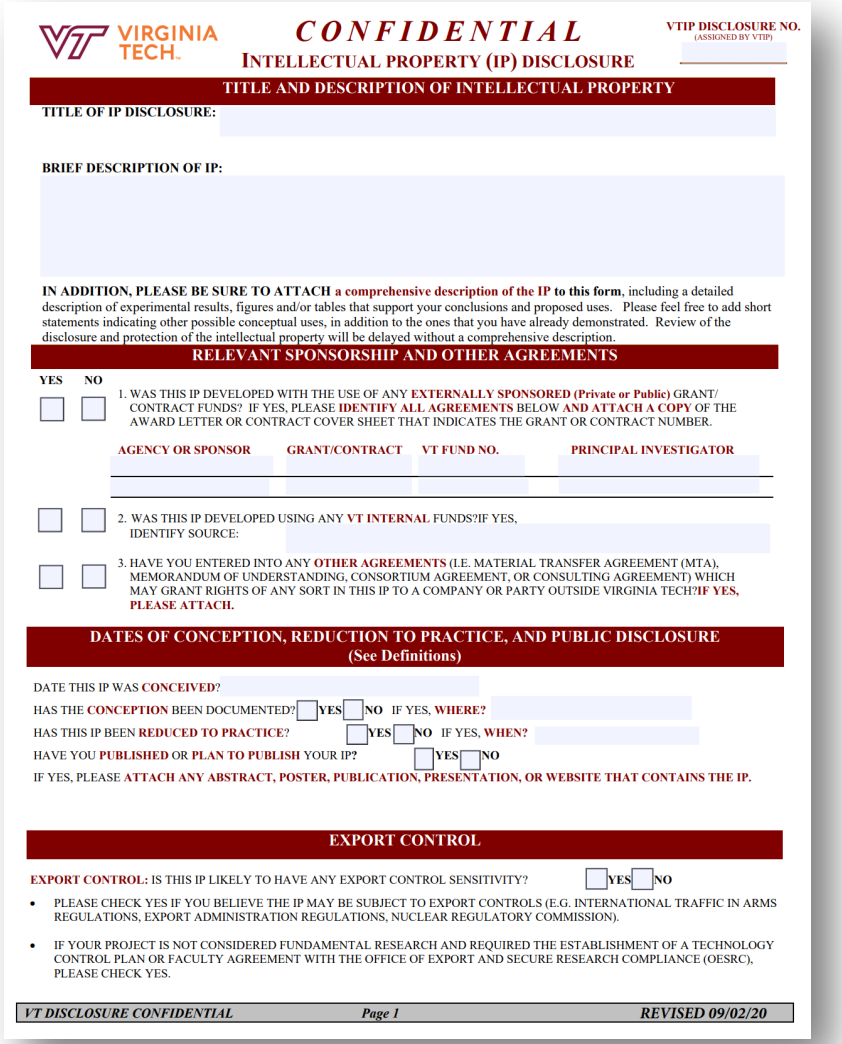
2.1 Organization

The Intellectual Properties Committee (IPC) membership shall be as stated in the By-Laws of University Council.

DISCLOSE

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



VIRGINIA TECH

CONFIDENTIAL

INTELLECTUAL PROPERTY (IP) DISCLOSURE

VTIP DISCLOSURE NO. (ASSIGNED BY VTIP)

TITLE AND DESCRIPTION OF INTELLECTUAL PROPERTY

TITLE OF IP DISCLOSURE:

BRIEF DESCRIPTION OF IP:

IN ADDITION, PLEASE BE SURE TO ATTACH a comprehensive description of the IP to this form, including a detailed description of experimental results, figures and/or tables that support your conclusions and proposed uses. Please feel free to add short statements indicating other possible conceptual uses, in addition to the ones that you have already demonstrated. Review of the disclosure and protection of the intellectual property will be delayed without a comprehensive description.

RELEVANT SPONSORSHIP AND OTHER AGREEMENTS

YES NO

1. WAS THIS IP DEVELOPED WITH THE USE OF ANY **EXTERNALLY SPONSORED (Private or Public)** GRANT/ CONTRACT FUNDS? IF YES, PLEASE **IDENTIFY ALL AGREEMENTS** BELOW **AND ATTACH A COPY** OF THE AWARD LETTER OR CONTRACT COVER SHEET THAT INDICATES THE GRANT OR CONTRACT NUMBER.

AGENCY OR SPONSOR	GRANT/CONTRACT	VT FUND NO.	PRINCIPAL INVESTIGATOR

2. WAS THIS IP DEVELOPED USING ANY **VT INTERNAL** FUNDS?IF YES, IDENTIFY SOURCE:

3. HAVE YOU ENTERED INTO ANY **OTHER AGREEMENTS** (I.E. MATERIAL TRANSFER AGREEMENT (MTA), MEMORANDUM OF UNDERSTANDING, CONSORTIUM AGREEMENT, OR CONSULTING AGREEMENT) WHICH MAY GRANT RIGHTS OF ANY SORT IN THIS IP TO A COMPANY OR PARTY OUTSIDE VIRGINIA TECH?**IF YES, PLEASE ATTACH.**

DATES OF CONCEPTION, REDUCTION TO PRACTICE, AND PUBLIC DISCLOSURE (See Definitions)

DATE THIS IP WAS **CONCEIVED**?

HAS THE **CONCEPTION** BEEN DOCUMENTED? YES NO IF YES, **WHERE?**

HAS THIS IP BEEN **REDUCED TO PRACTICE**? YES NO IF YES, **WHEN?**

HAVE YOU **PUBLISHED** OR **PLAN TO PUBLISH** YOUR IP? YES NO

IF YES, PLEASE **ATTACH ANY ABSTRACT, POSTER, PUBLICATION, PRESENTATION, OR WEBSITE THAT CONTAINS THE IP.**

EXPORT CONTROL

EXPORT CONTROL: IS THIS IP LIKELY TO HAVE ANY EXPORT CONTROL SENSITIVITY? YES NO

- PLEASE CHECK YES IF YOU BELIEVE THE IP MAY BE SUBJECT TO EXPORT CONTROLS (E.G. INTERNATIONAL TRAFFIC IN ARMS REGULATIONS, EXPORT ADMINISTRATION REGULATIONS, NUCLEAR REGULATORY COMMISSION).
- IF YOUR PROJECT IS NOT CONSIDERED FUNDAMENTAL RESEARCH AND REQUIRED THE ESTABLISHMENT OF A TECHNOLOGY CONTROL PLAN OR FACULTY AGREEMENT WITH THE OFFICE OF EXPORT AND SECURE RESEARCH COMPLIANCE (OESRC), PLEASE CHECK YES.

VT DISCLOSURE CONFIDENTIAL *Page 1* *REVISED 09/02/20*

DISCLOSE

Obligations to disclose in faculty handbook

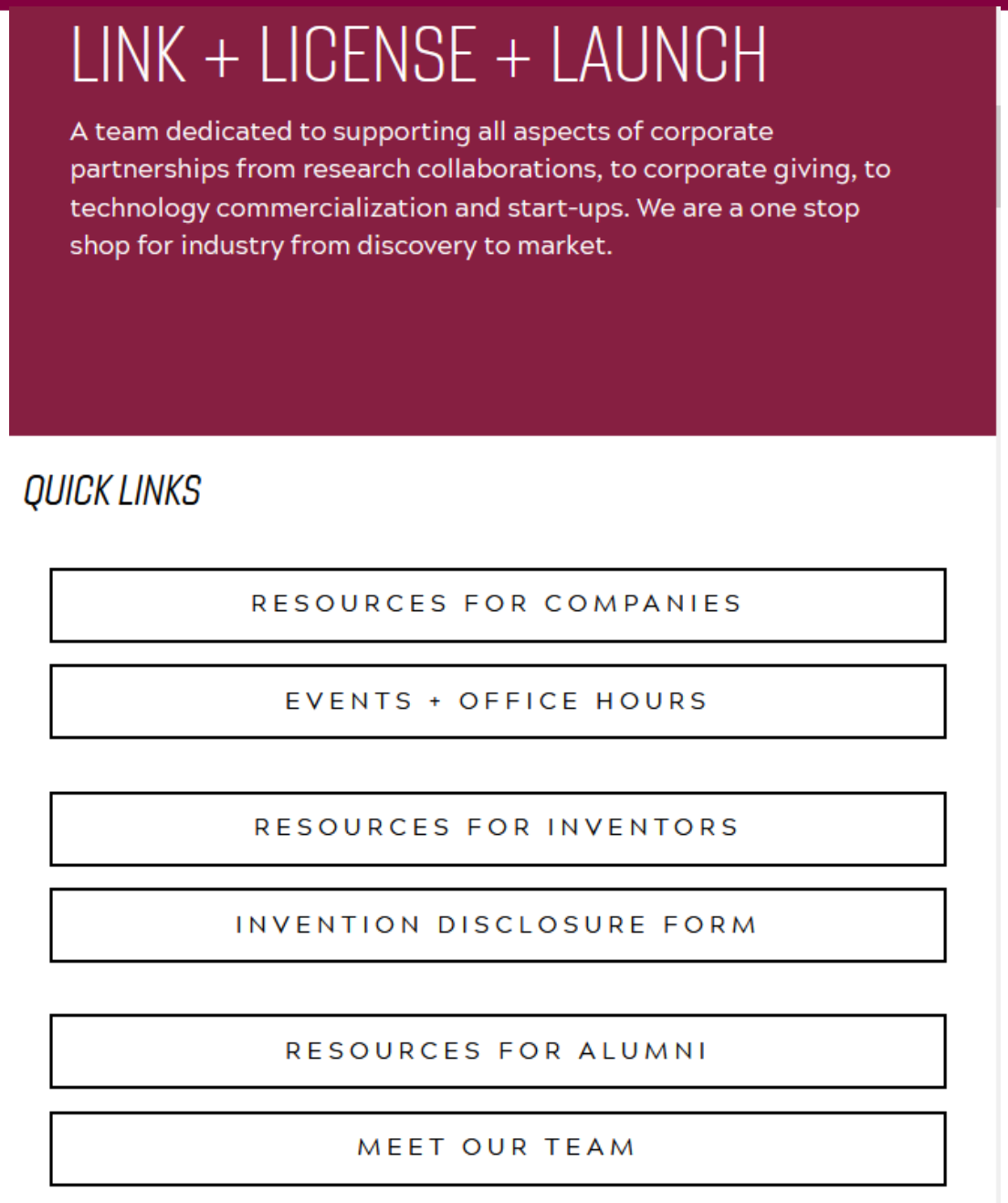
- The university asserts its right to the results of research funded wholly, or in part, with university resources.
- “Creation of intellectual property (IP) must be disclosed to the university by submitting an IP disclosure form.”

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

Grant Brewer

Executive Director, LICENSE Center for Technology Commercialization

grantb76@vt.edu

540-231-6648

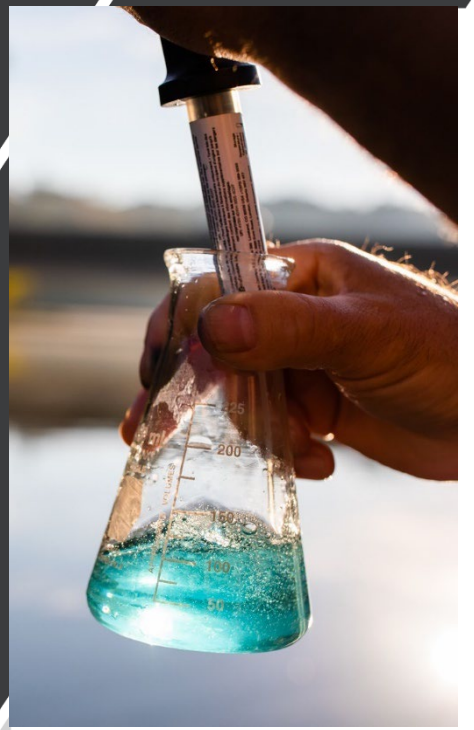
LAUNCH

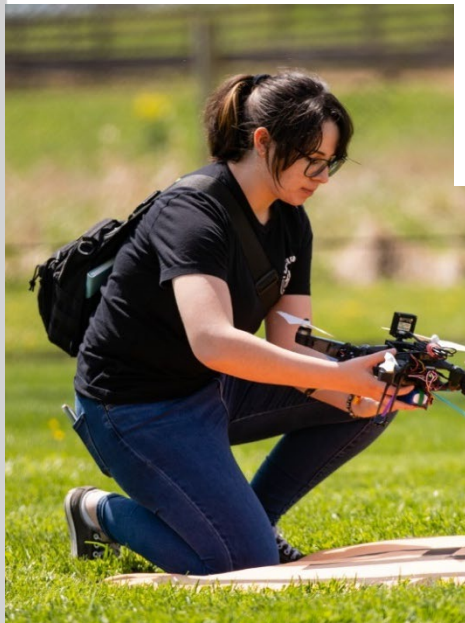
Mark Mondry

Director, LAUNCH Center for new Ventures

mmondry@vt.edu

540-231-4131





Using media (owned and earned) to elevate your work

Michael Stowe
Communications and Marketing

Michael Stowe

Communications and Marketing

VIRGINIA TECH

Working together

Communications and Marketing

- Research
- Colleges
- Institutes
- Units

VIRGINIA TECH

Better connections

Editorial Integration

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

VIRGINIA TECH

Elevating research

VIRGINIA TECH

Police vehicle stop research

CASE STUDY

VIRGINIA TECH

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

VIRGINIA TECH

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.

VIRGINIA TECH

’Owned’ Media

VIRGINIA TECH®

NEWS

RESEARCH

Vehicle stop study illuminates importance of officer's first words

By Travis Williams

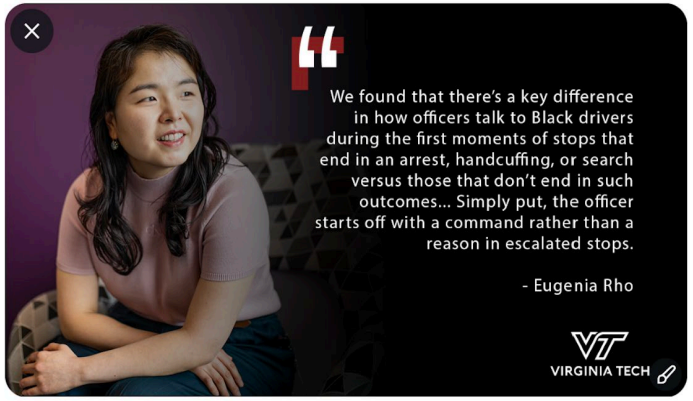
29 MAY 2023

6 minute read

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



EurekAlert! | AAAS

NEWS RELEASES MULTIMEDIA MEETINGS LOGIN REGISTER

NEWS RELEASE 29-MAY-2023

Vehicle stop study illuminates importance of officer's first words

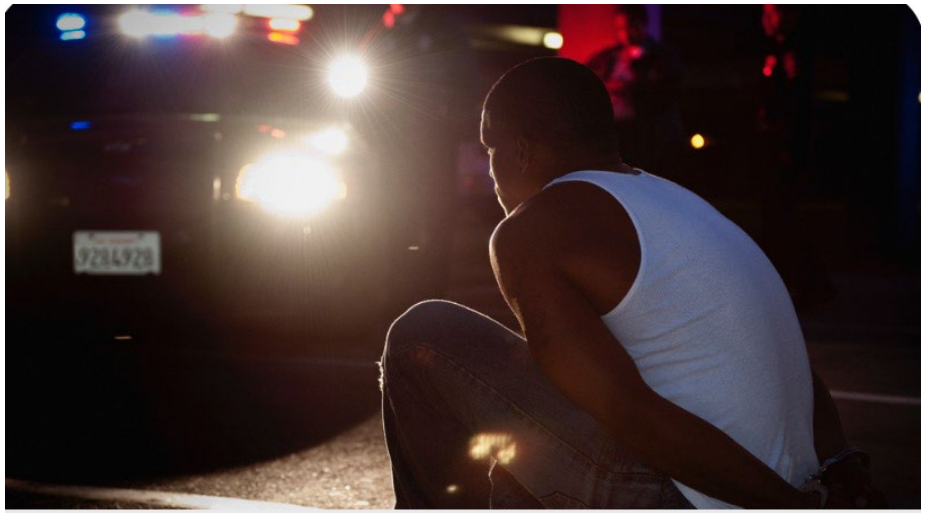
Eugenia Rho is the lead author of a recent study that highlights key components of traffic stops that end in escalation

Peer-Reviewed Publication

VIRGINIA TECH

VIRGINIA TECH

Earned Media



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

npr.org

VIRGINIA TECH