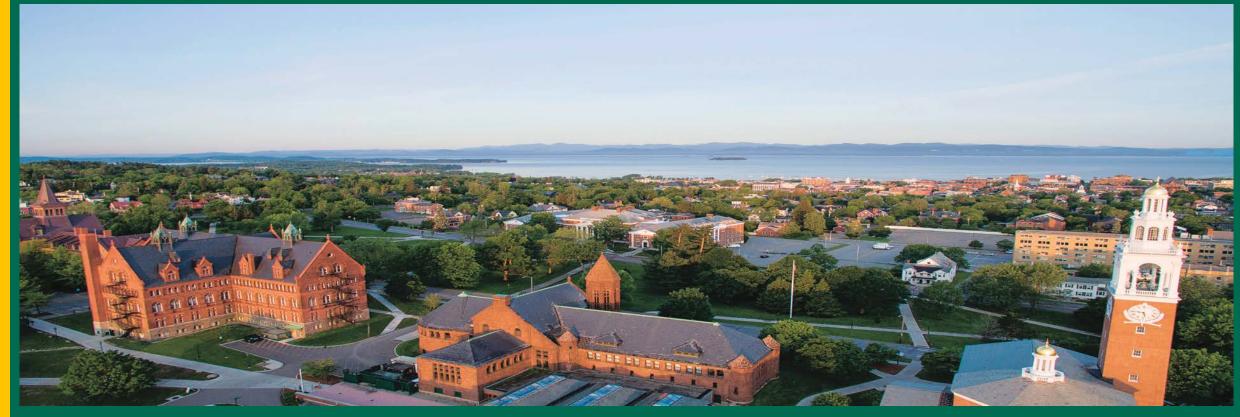
University of Aberdeen and the University of Vermont Leadership Exchange Program May 23-25, 2023



Welcome & Logistics

Jane Okech, Professor of Counselor Education & Supervision and Vice- Provost for Faculty Affairs





UVM's Land Acknowledgment Statement

The campus of the University of Vermont sits within a place of gathering and exchange, shaped by water and stewarded by ongoing generations of Indigenous peoples, in particular the Western Abenaki.

Acknowledging the relations between water, land, and people is in harmony with the mission of the university. Acknowledging the serious and significant impacts of our histories on Indigenous peoples and their homelands is a part of the university's ongoing work of teaching, research, and engagement and an essential reminder of our past and our interconnected futures for the many of us gathered on this land.

UVM respects the Indigenous knowledge interwoven in this place and commits to uplifting the Indigenous peoples and cultures present on this land and within our community.



The University of Vermont's Research Strategy and Ambition

Dr. Kirk Dombrowski, Vice President for Research





UVM Office of Research: University of Aberdeen Visit

Kirk Dombrowski, Vice President for Research May 24, 2023



Who we are...



Units in the Office of Research

Administration and Support

- Sponsored Projects Administration
- Office of Research Protections
- UVM Innovations
- Office of Research Development
- Office of Animal Care Management
- Instrumentation and Technical Services
- Vermont Center for Emerging Technologies

Institutes and Centers

- Gund Institute for Environment
- UVM WATER Center
- Vermont Advance Computing Center
- Vermont Biomedical Research Network
- Vermont EPSCoR
- Institute for Agroecology
- Office of Engagement
- Institute for Rural Partnerships



Other large-scale centers

- Center for Rural Studies
- Proctor Maple Research Center
- Horticulture Research and Education Center
- Food Systems Research Center
- Center for Holocaust Studies
- Center for Research on Vermont
- NASA Space Grant Program

- Osher Center for Intergrative Health
- Lake Champlain Sea Grant
- Humanities Center
- Center on Disability and Community Inclusion
- Tarrant Institute for Innovative Education
- Electrical Systems and Power Systems
- Transportation Research Center
- Vermont Complex Systems Center



College of Medicine Research Centers and Cores

- Cancer Center
- Cardiovascular Research Institute of Vermont
- Center for Clinical and Translational Science
- Clinical Research Center
- Office of Clinical Trials Research
- Office of Health Promotion Research
- Program in Integrative Health

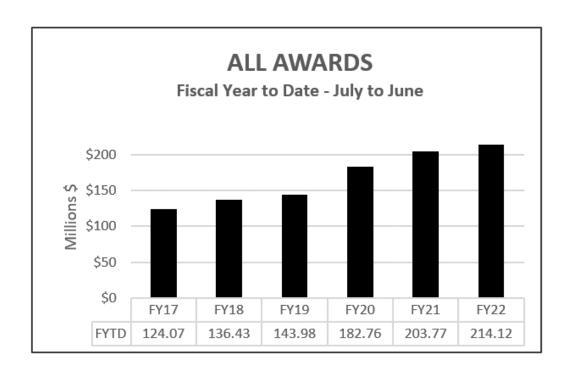
- Microscopy Imaging Center
- Neuroscience Center of Biomedical Research
 Excellence
- Vaccine Testing Center
- Vermont Center for Children, Youth and Families
- Vermont Center for Immunology and Infectious
 Diseases
- Vermont Center on Behavior and Health
- Vermont Lung Center

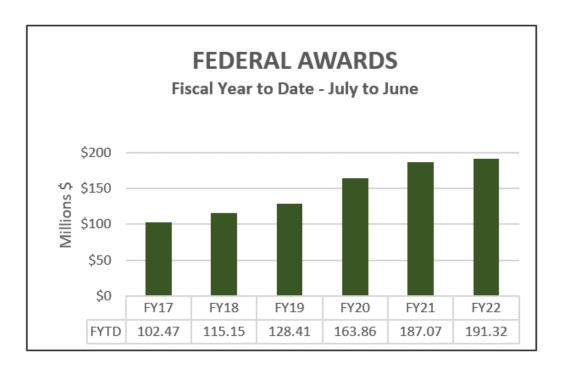


Current levels of Research Activity:

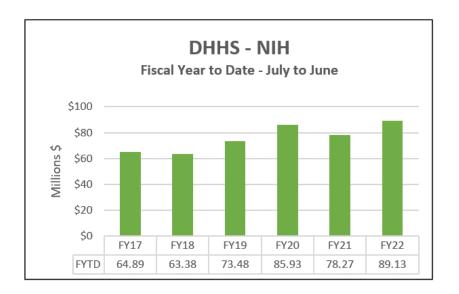


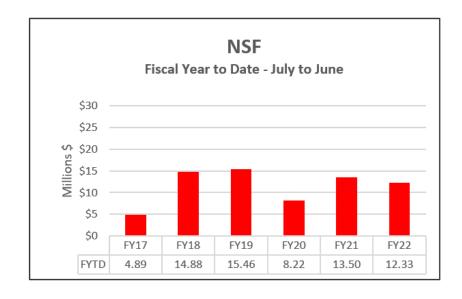
FY22 External Awards

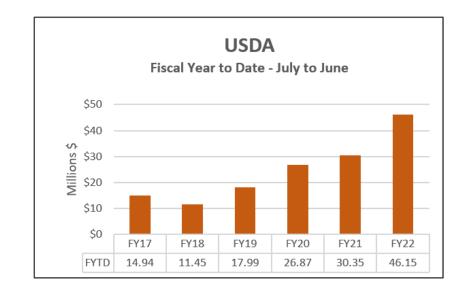


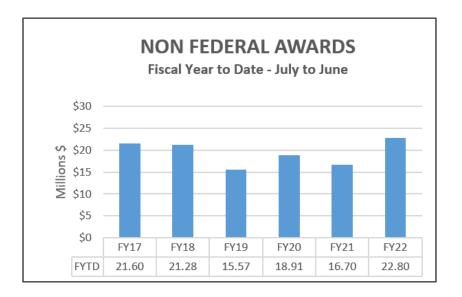


Areas











Some key strengths:



Power Systems

Development and wide-spread adoption of sustainable, renewable energy sources is a key global need to halt climate change and ensure a productive future. At the University of Vermont, we have a strong focus on power systems and smart grids, and are working with local and national industries and federal agencies (DOE, NASA etc.) to address the many challenges that arise during large-scale implementation of sustainable energy systems.









Hamid Ossareh, Mads R. Almassalkhi, Samuel Chevalier, Amrit Pandey



Center for Behavioral Health

The Vermont Center on Behavior and Health (VCBH), led by Director Stephen T. Higgins, PhD, is an interdisciplinary research center committed to investigating relationships between personal behavior patterns (i.e., lifestyle) and risk for chronic disease and premature death. Our work has historically focused on health disparities for the most vulnerable populations, particularly among the socioeconomically disadvantaged where these risk factors are overrepresented.



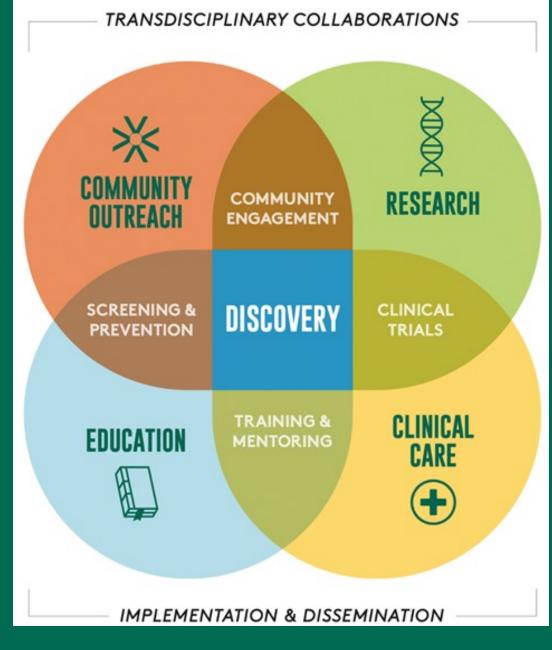
Food Systems Research Center

To make progress on issues like climate change, the economic crisis on farms, and food insecurity, it's time for us to approach things differently. One-size-fits-all solutions based on narrowly focused research won't take us far—only an integrated, indepth analysis can lead to meaningful change. UVM's Food Systems Research Center (FSRC) is the first USDA-funded research station to study the interconnectedness of all parts of a regional food system, from farm practices to food access.



UVM Cancer Center

The University of Vermont Cancer Center is Vermont's only not-for-profit comprehensive clinical and research cancer center. Founded in 1974, the organization is located within the University of Vermont (UVM) College of Medicine and enjoys a clinical partnership with the University of Vermont Medical Center. The mission of the University of Vermont Cancer Center is to reduce the burden of cancer in Vermont, northeastern New York and across northern New England, through research, outstanding clinical care, community outreach and education. Working together, affiliated members, clinicians, scientists, and community stakeholders will be leaders in facilitating transdisciplinary discovery and achieving cancer health equity in northern New England. The Cancer Center is a research institute, a clinical care facility, an educational entity and a community organization all in one. Our four pillars - research, clinical care, education, and community outreach supports the mission of the Center -- to reduce the burden on cancer in the catchment area.



Gund Institute for Environment

Research isn't enough to solve our environmental problems — we need action, too. The Gund Institute for Environment mobilizes scholars and decision makers to understand and tackle critical environmental challenges. Driven by the belief that research should inspire action, we work in partnership with stakeholders from government, business and broader society. We focus our research on five interconnected themes, each of which is essential to creating a sustainable future for people and the planet:

- Climate solutions
- Health and well-being
- Sustainable agriculture
- Resilient communities
- Equity and justice





The Translational Global Infectious Diseases Research Center (TGIR)

The TGIR will leverage UVM's substantial existing strengths in global infectious diseases research, complex systems and computational modeling. Bringing investigators from these disparate disciplines together will result in synergies that foster novel, collaborative research. A team of experienced directors and scientific advisers lead the effort, supported by two new facilities, the "Mathematical and Computational Predictive Modeling" and "Human and Population Research" cores. The TGIR will develop four junior faculty under the mentorship of scientific advisers from three UVM colleges and five departments.





Complex Systems Center

Who we are:

• A postdisciplinary team of faculty and students working at the University of Vermont's College of Engineering and Mathematical Sciences on real-world, data-rich, and meaningful complex systems problems of all kinds.

What we do:

• Describe, Explain, Create, Share.

Our ethos:

• Serious Play.

Our mission:

• To help people and their communities overcome, revitalize, and flourish at all scales through research and education about complex systems.





New Initiatives:

- Water Institute
- Center of Excellence for Climate Change Impact measurement
- Agroecology
- Integrative and Planetary Health
- Natural Areas core research facility



Key Corporate Partners

















Key Startup













Overall Vision

Key Strategies

- Better grant administrative systems
- Invest in research development
- License for growth
- Clustered approach to startups
- Create independence zones
- Partner, partner, partner

Outcomes

- Total extramural support has grown from \$140 million (2019) to \$270 million (2023 projected)
- Fully networked research administration
- Integrated research development and government affairs
- "Buy In" by the lead researchers



Questions?

Kirk Dombrowski (Kirk.Dombrowski@uvm.edu)

Jeralyn Haraldsen, Director, Office of Research Development (<u>Jeralyn.Haraldsen@uvm.edu</u>)

Brian Prindle, Executive Director, Research Integrity and Administration (Brian.Prindle@uvm.edu)

Lana Metayer, Director, Sponsored Projects Administration (<u>Lana.Metayer@uvm.edu</u>)

Corine Farewell, Director, UVM Innovations (Corine.Farewell@uvm.edu)

https://www.uvm.edu/ovpr/who-we-are



Understanding Aberdeen's Research Ambition and Associated Priorities

Dr. Liz Rattray Director, Research & Innovation



Outline

 What kind of research environment and culture is Aberdeen trying to create (and why?)

What are our priorities?

• What impact is Aberdeen trying to make on the world with its research?



Research at University of Aberdeen

Fundamental component of foundational purpose

"Open to all and dedicated to the pursuit of truth in the service of others"



Why is research important to us?

- It improves the world and society around us
- It provides innovative solutions to society's difficult problems
- It advances knowledge and understanding
- It improves our education and skills programmes
- It improves our reputation (regionally, nationally and internationally)
- It contributes to formation of partnerships
- It contributes to league tables and onwards to student recruitment
- It helps us innovate and develop as an institution



Aberdeen 2040 - Research

Ambition and fundamental principles:

- "globally excellent and locally relevant"
- "research will have impact on our world"
- "will inform our curriculum"
- "engage with the challenges of the future."
- Impactful
- Interdisciplinary







Aberdeen 2040 - Research

Setting ambition:

"We will deliver internationally excellent research with impact"

Commitments for research ambition under each theme:

- Inclusive
- Interdisciplinary
- International
- Sustainable

Targets – measurable and benchmarked Leadership and owners

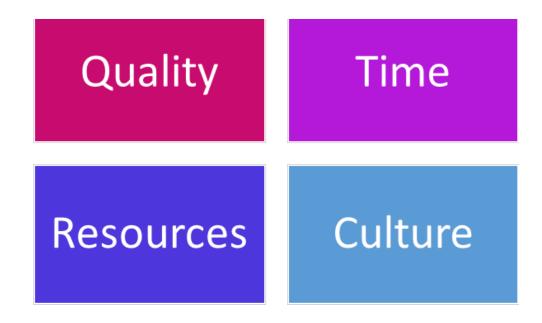






Approach to Research Environment at the University of Aberdeen

- Create an environment where researchers will thrive
- Focus on core elements required for a thriving research environment



- Focus on quality
- Healthy portfolio of research income & financial support
- Time to focus
- Open, inclusive and ambitious research culture



Examples of Institutional Levers to Support Research

- Research strategy
- Research Centres
- Academic collaborations

- R&I support
- Impact officers
- Pump-prime funds
- Matched funding

Quality

Time

- Workload Review Group
- School research leave scheme

Resources

Culture

- Promotions Review group
- Research Centres
- Seminar series
- ECR Concordat



An Open Research Culture

- Signatories to DORA
- Founding member of the UK Research Reproducibility Network
- Commitment to open access and open research culture
- Committed to responsible use of metrics
- AURA Aberdeen University Research Archive (AURA) open access repository



Committed to Helping Researchers Thrive

- Concordat for the development of early career researchers
- Research culture task and finish group
- Research Centre review
- Pump prime & matched funding schemes to support
- Research leave policy
- Mentoring & supportive internal peer review
- Training and development
- EDI assessment



An Enabling Research Infrastructure

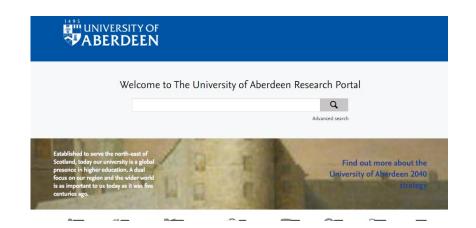
- Dedicated Research & Innovation directorate to support business development support; horizon scanning; advice
- Deans for Research and School Directors of Research
- Grants Academy tailored support for development of funding bids
- Internal peer review and triage panels
- Pump prime funds & matched funding schemes to support strategic developments
- Research Award Management System
- Ethics System





Approach to Impact

- Embedded in foundational purpose "in the service of others"
- Recognition that the worlds grand challenges need interdisciplinary solutions
- Embedded co-production ensure stakeholders are involved in our research
- Promote external roles to help shape the agenda
- Actively share impact with our partners
- Integrated Impact team and Public Engagement with Research Unit
- External Relations/Comms support
- PURE portal: https://abdn.pure.elsevier.com/





Interdisciplinarity – Core to Aberdeen 2040

- "we will address five interdisciplinary challenges of our time."
- "These urgent and wide-ranging problems require complex solutions, which draw on both theoretical and applied knowledge."

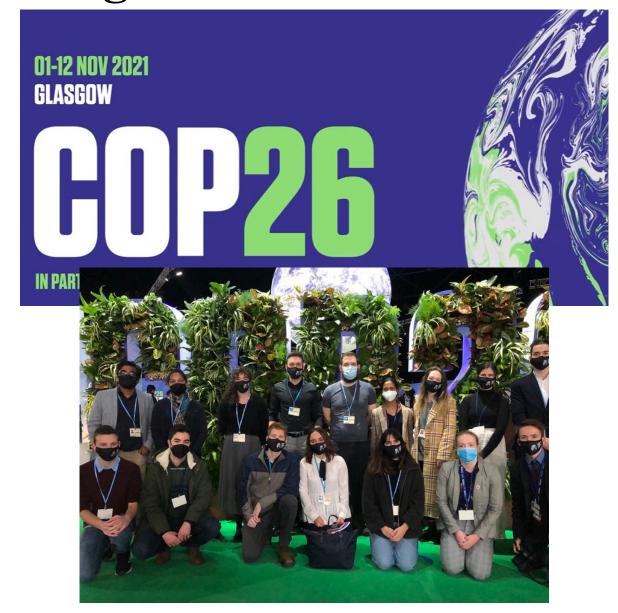
Priorities

- Energy Transition
- Environment and Biodiversity
- Health, Nutrition and Wellbeing
- Data and Artificial Intelligence
- Social Inclusion and Cultural Diversity



Influencing the Agenda

- Observers at COP (26/27)
- Mock COP
- Herald Research Project of the Year – CoolFarm Tool – reduction of greenhouse gas emissions
- Herald Award Finalists for influence on COP agenda





Sharing our Impact

Dedicated Website: https://www.abdn.ac.uk/research/impact/

Examples of top rated impact:

- Reduction of global greenhouse gas emissions (Environmental Science)
- Minimum pricing for alcohol in Scotland (Public Health)
- Museums and history digital sharing
 Anthropology
- Influence of theology in dementia (Divinity)



The University of Aberdeen is where great minds make an impact through world-leading research renowned for innovation, collaboration and international reach. Find out how our interdisciplinary, award-winning research makes an impact locally and second the world.



What happens to our faith when we can't remember?

Our research has re-framed dementia as part of the spiritual life of the community, leading to significant changes in the UK and globally.

Read more about our theological research



Work led by the University has transformed understanding, engaged communities and supported national heritage objectives.

Read more about the Picts



Research led by the University of Aberdeen has provided vital evidence towards using groundwater resources efficiently and stainably.



An innovative new material developed at the University of Aberdeen has the potential to significantly enhance the success rate of spinal fusion surgery.



Award-winning Impact

Queens Anniversary Awards

- Highest honour for UK universities for recognition of research excellence & impact
 - Soil Science
 - Health Services Research
 - Medical Imaging





Summary

- Research core to the mission of the University of Aberdeen
- Create the strategy and set the ambition
- Research culture/environment and impact are key
- Needs to be championed from the highest levels of management
- Needs to be valued and supported at all levels of the institution
- Needs to be resourced and nurtured
- But ultimately research has the potential to change the world



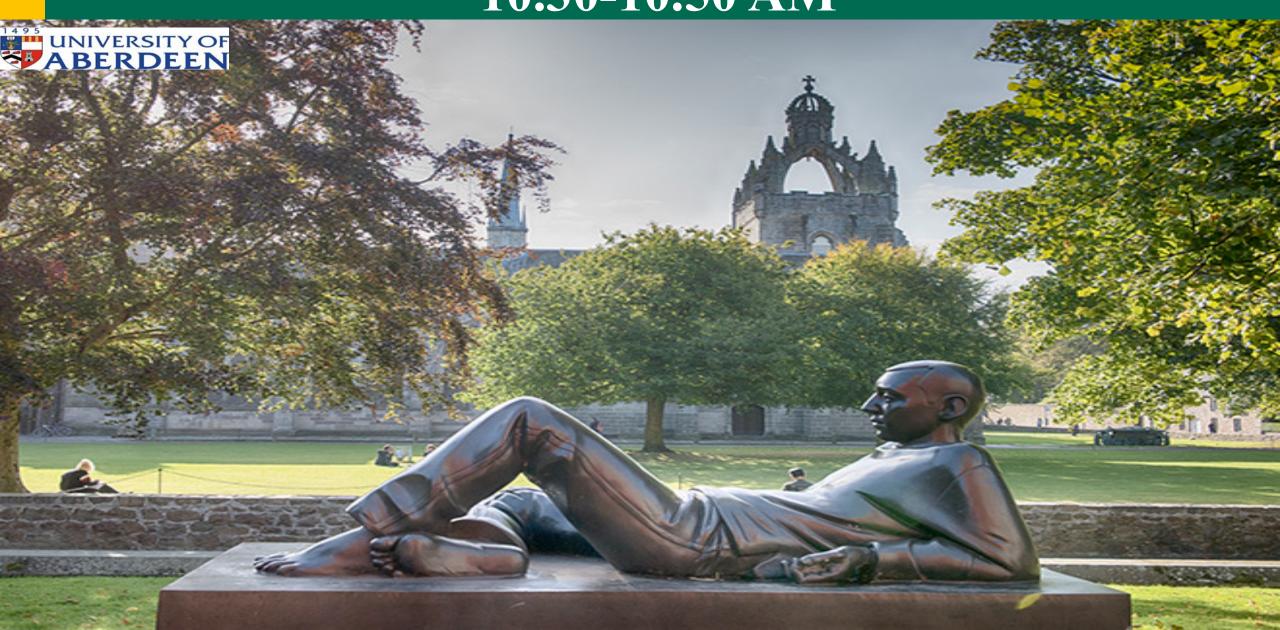
ABERDEEN 2040

Questions & Discussion





BREAK 10.30-10.50 AM



DAY 2: Research Culture and Strategy (Breakout Groups, 10.50-12.30pm)

- 1. A brief contextual discussion on the research cultures at UVM and Aberdeen
- 2. What are the strengths and challenges of the research culture (e.g., the ease of interdisciplinary collaboration and the career paths of researchers) at UVM and Aberdeen?
- 3. How clear are UVM and Aberdeen about research priorities?
- 4. What helps and what hinders the delivery of impactful research at UVM and Aberdeen?
- 5. What, if anything, might leaders at UVM and Aberdeen need to do differently to enable future research success?

*Followed by report backs and plenary discussion (what can we learn from each other?)

Lunch (12.30-1.30pm)





Day 2: Role-Based Leadership Exchanges – Leadership Role-Based Pods (Breakout Groups, 1.30-3.30pm)

- *An opportunity for leaders in similar roles at UVM and Aberdeen to learn from each other. The questions to guide these exchanges might be:
- 1. What are you trying to achieve with your college /school /department /administrative unit?
- 2. What progress are you making? (Research; fiscal stability; academic, diversity and inclusive excellence, etc.)
- 3. What are the challenges, constraints, and dilemmas that you are facing?
- 4. What are you learning about leadership and its impact on institutions' success with their initiatives?





University of Aberdeen and the University of Vermont Leadership Exchange Program Dinner: 6.00-8.00 pm.







Dinner Remarks

- 1. Prof. Patricia Prelock Provost & Senior Vice President
- 2. Debbie Dyker, Director of People