A&S Strategic Research Planning Initiative – Continued Divisional Research Discussion for Sciences (March 29, 2024)

Introductions around the room

Introducing meeting purpose and charge

After the focus groups, faculty survey, town halls a month ago, we are coming back together today to talk about what everyone cares about. The Dean wants to invest in things that can bring us together collectively. Investing in current faculty and programs to make research even better at UVA. The steering committee has been looking closely at survey results, and comments from faculty.

Sciences – investments in post-docs,

Infrastructure improvements – pre-award and post-award support.

The Dean is interested in swift action in these areas.

Charge to committee: 1) Operations – barriers in day-to-day research. 2) Raising stature of research at UVA – new dean wants to have visible impact. Concern of top-down approaches in the past. Asking faculty to identify areas in their work that would benefit from investment. What are those things? Interdisciplinary programs, astronomy, etc. How will recommendations be made to the dean? What are the shared values of research in the sciences? Articulating values can bring people together with initiatives. This is also about getting donor support. What are the reasons or "becauses" for going in a specific direction with investments? Faculty want to do high-end research and these values can help motivate investment as departments have great ideas that fit with those values.

Values that allow lots of people to participate, allow disciplinary research to be supported

Discussion

- "Nature of nature"
- "Enabling science" - getting more people into science – ways that are exciting to people – empower people to produce discovery
- "basic research" - we don't need more money earmarked for special projects – we need sustained money for basic research on longer time spans
- Faculty trying to navigate the charge – how do we make our work fit into this charge?
- Training for graduate students is important – will make doing science easier
- Need to show some high impact of investments within 5 years.
- Seed funding and research infrastructure are the big things

- Bigger pots of money should go to a few important areas ex: Environmental Institute, Center for Global….
- Resilience Grand Challenge had a huge impact on Envi Sci
- Internal opportunities are as good as external grants
- Values: early / mid career – start-up funds, mid-career support essential
- Financial research administration is the limiting factor – unclear reporting, too much effort to see where the money went in a budget – no easy way to find out how much money a lab has at any given time – not being able to see funds causes overspends and having to scramble after – wasting time
- Astronomy is a great subject to engage the public
- "Strength in public appeal"
- 2025 is 100 years since quantum physics started – really exciting for physicists!
- Quantum physics is an important area of research
- Continuing support for excellent faculty who stumble – lose grant for whatever reason – substantial amount of money to help colleagues – there is no buffer here like in some places – allows faculty to take some risks
- Previous VPR FEST (Funding for Excellence in Science and Technology) big grants of $250k which was great
- Sustaining post-docs through grants is tough when grants don't come through
- Impact – astronomy identified the interdisciplinary institute as an approach that many people can tie into – cross-disciplinary
- "Common approaches in the sciences" ex: physical processes – bridging scales
- Scales set the boundaries of research – theme allows for the inclusion of many disciplines
- "Origins" theme very marketable for funding
- Enabling faculty work-life balance – many universities have a "work-life balance office" to help with needs like childcare, spring breaks etc. Safety around the university, gun violence, car accidents, etc. Finding new primary care physicians, help with moving, etc. This would help everybody and make UVA a more attractive place to come
- $25 million is a seed investment – summer funding would be a near win
- Doing an institute well would be a much larger figure – extended phase of investment
- Interdisciplinary research especially benefits from big investment – really hard to achieve without it
- "Society of fellows" idea – cohorts with course buyouts, ways to meet people throughout the university

- What motivates the scientists at UVA? Ex: biology at A&S – desire to do basic research out of curiosity. Not being pushed for outcomes like disease cures, etc.
- Astronomy – NRAO right on UVA grounds – have extraordinary collaboration and synergy that could be amplified
- UVA is unique for history of survey astronomy – astronomy is moving towards being dedicated field level approach to big questions with data. Datasets are open to the public. Requires training to work with existing and analyzed datasets available for those big questions. Ways to engage with citizen scientists.
- Astronomy at UVA is unique – realizing as a department that they want to engage with people more – results produced go on the news – faculty doing big work, but aren't currently well connected with the rest of the university.
- Scales – so many axis from quantum to cosmos, to brain and lifespans, environmental health, powers of 10 idea

- Values identified in conversation:
- Search for Truth, "nature of nature"
- Efficiency
- Growth
- Rewarding Risk-taking
- Research that's discovery oriented
- Faculty are whole people
- Public engagement, relevance to the public
- Crossing Scales