

Research Engagement & Support

Anshuman Razdan "AR" Assoc. Vice President, Research Development

Research @ UD

Think big and broadly
 Seven Strategic Initiatives



- Act collaboratively
 Within and across organizations
- Impact socially, economically & globally



Research Development Office (RDO)

Research Development is a <u>service oriented</u> approach to strategic, proactive, catalytic, and capacity-building activities designed to facilitate individual faculty members, teams of researchers, and central research administrations in attracting extramural research funding, creating relationships, and developing and implementing strategies that <u>increase institutional</u> <u>competitiveness</u>.



RDO Mission

Faculty should direct their focus on ideation and the pursuit of scholarship, the institution is responsible for the scaffolding.

From Ideation to Submission and Beyond!

- Advance the University's Research Enterprise
- Serve Faculty and Researchers in meeting their scholarly/research goals
- Leverage current strengths to build leading-edge research programs

- Facilitate development of new strengths aligned with UD's Strategic Plan
- Enable partnerships, innovation and entrepreneurship, and champion Tech Transfer
- Promote UD research and creative endeavors at local, state and federal level

Capabilities, Capacities and Aspirations

- External: Grand Challenges (high growth/societal impact areas)
 - UD SI: Nexus of Food-Water-Energy-Climate-Health-Education
 - Monitor and respond to prevailing trade winds in DC
- Internal: Align areas/ideas that will define next 5-10+ yrs of research @UD
 - Current capabilities + New (cluster) hires (P500).
- Leadership: Identify and grow UD research leaders

Moving Forward



Research Development Focus Areas

Faculty

- Seed grants
- Trainings & Workshops
- Agency (NIH, NSF)
- Mentoring
- Core Facilities/ Infra St.

Proposals

- Limited Subs
- Writers, editors
- Graphics support
- Color reviews
- DMPs, Eval. Assess
- Proposal mgmt.
- Cost shares/LOS

Opportunities

- Agencies
- Foundations
- Corporate
- Thematic

Communications

- Research branding
- Research Mag (OCM)
- Newsletter
- Web
- Events
- Project launches

Training and Workshops for Faculty



Grant Writing workshop had over 130 participants

- Grant writing
- NSF CAREER (April 19, 2018)
- NIH Primer (April 11, 2018)
- RCR
- New Faculty Orientation
- Foundation Opportunities (RO + CFR)
- COS Pivot
- Internal Seed Funding Opportunities.
- Research Admin Workshops & Training
- Faculty leadership/mentoring*



Thematic Research



- Water (Feb 2017)
- International (2 so far in 16 & 17)
- Data Sc. (May 2017)
- Opioids (Sept. 2018)
- Neuro Sc. (Fall 2018)

Workshop Feedback

- NSF CAREER (4/20/17)
 - Mentors: 44% favorably | 45% neutral | 11% unfavorably
 - Mentees: 70% favorably | 10% neutral | 20% unfavorably
- UD Research Orientation (11/7/17)
 - UD Partners and Resources (70%), faculty panel 2nd (28%)
 - 50% will submit a proposal in the next year
- Foundations Workshop (Natural Sciences 11/28/17)



Takeaways

- Mentor program strongly desired
- Provide timetable guidelines to mentees
- Start sooner in the process
- Include budget training
- Record Training

Limited Subs

- Limited subs
 - Posted 33 funding opps in 2017 (includes CFR postings)
 - Run approximately 12-15 internal competitions per year
 - Developed a larger reviewer pool to expand content expertize and transparency
 - Advertising early, increasing time between limited sub and full proposal sub
- Cost shares and LOS
 - Through SPC/CNG
 - If Okayed RO and Research Deans work out \$\$ for support

Internal Seed Grants



Internal Seed Grants

- UDRF and UDRF-SI (30K and 45K resp)
 - Strategic seed grants for quantitative research
 - Focus on early-career, T/TT faculty
 - For every 1\$ invested in last 5 years generated \$22.50
 - Both really support (in reality) SI
 - SI requires a "senior" faculty as mentor (mentoring plan)
 - UDRF reviewed by an external committee, SI by internal/Res Deans
- GUR (15K, used to be 6K)
- Other seed/pilot data grants from Institutes and Centers
 - DE INBRE, ACCEL CTR
 - UDEI, DSI*, These are part of UD SIs

5 Years of History- UDRF/SI

| June 1, 2013- December 1, 2017 | Count | Amount | Success Rates |
|--|-------|----------------|------------------|
| UDRF Proposals | 106 | \$ 3,183,850 | |
| UDRF Awards | 56 | \$ 1,582,627 | 50% |
| External Proposals Submitted by 52 UDRF Recipients | 442 | \$ 171,449,960 | |
| External Awards Received by 52 UDRF Recipients | 144 | \$ 28,653,089 | 17% |
| ROI | 2.57 | 1810% | |

For every dollar expended on UDRF, recipients brought in \$18.10 to the University.

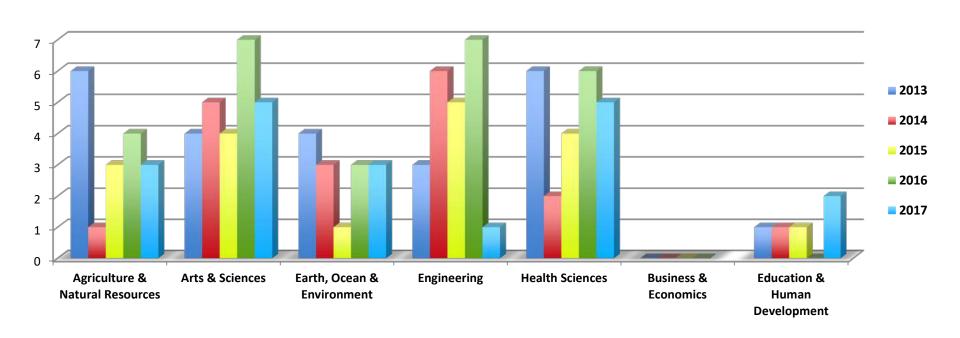
Untenured, tenure track faculty \$35,000

| June 1, 2013- December 1, 2017 | Count | Amount | Success Rates |
|---|-------|----------------|------------------|
| UDRF-SI Proposals | 77 | \$ 2,199,142 | |
| UDRF-SI Awards | 19 | \$ 565,132 | 26% |
| External Proposals Submitted by 19 UDRF-SI Recipients | 427 | \$ 125,746,789 | |
| External Awards Received by 19 UDRF-SI Recipients | 88 | \$ 19,663,546 | 16% |
| ROI | 4.63 | 3479% | |
| | | | |

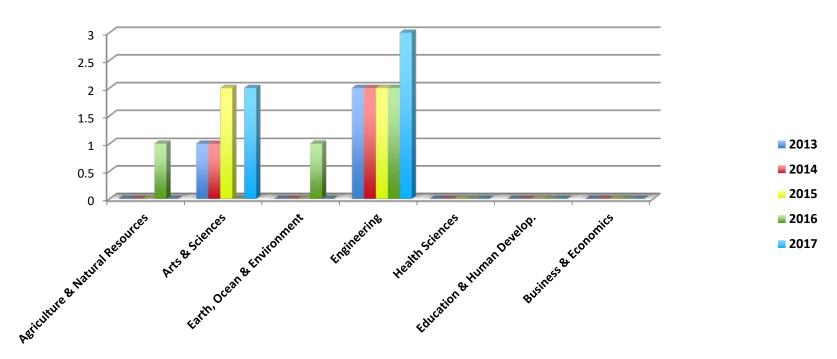
For every dollar expended on UDRF-SI, recipients brought in \$34.79 to the University.

Untenured, tenure track faculty plus tenured faculty mentor \$45,000

UDRF Awards



UDRF SI Awards

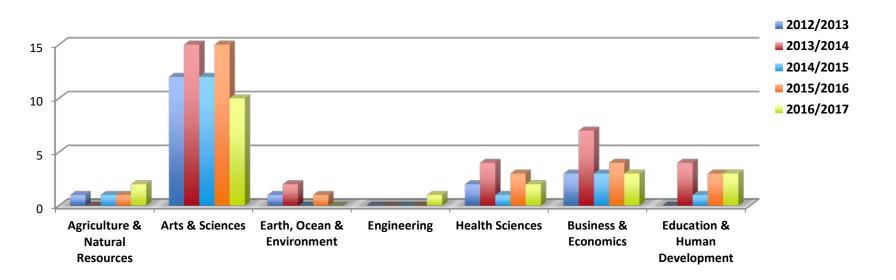


5 Years of History- GUR

| June 1, 2013- December 1, 2017 | Count | Amount | Success Rates |
|--|-------|----------------|----------------------|
| GUR Proposals | 137 | \$ 1,273,317 | |
| GUR Awards | 116 | \$ 741,140 | 58% |
| External Proposals Submitted by GUR Recipients | 391 | \$ 117,589,527 | |
| External Proposals Awards by GUR Recipients | 116 | \$ 19,614,231 | 17% |
| ROI | 0.89 | 2646% | |
| | | | |
| For every dollar expended on GUR, recipients brought i | | | |
| University. | | | |

- Untenured, tenure track faculty \$6,000
- Changed to \$15,000 in 2017-2018 (not reflected here)
- 3 Large grants ~\$7M

GUR Awards





Grant Proposal Development (Pilot)

- Any faculty (T, TT, CT*, RF) who has not been a PI for last 5 years is eligible to apply
- Application through faculty's home college Research/Deputy Dean
- RO has pre-procured external services of grant writers, editors, graphics editors
 - Agency specific and program/scale specific
 - NIH, NSF, USDA, NASA, Dept of Ed, DOE,
 - Based on availability Finite resources
- Cost** split by the College and RO
- Launched now and effective May 1, 2018
- * CT Faculty should have research as part of their expectation
- ** If faculty "wastes" the resources then cost borne by the college
- http://www1.udel.edu/research/preparing/proposalguide.html

NIH and NSF CAREER Proposal Academy

- NIH launch in Summer 2018, NSF CAREER in Fall 2018
- A Structured plan to help faculty take ideas to proposal submission
- Features:
 - Research ideas to opportunity identification to specific aims
 - Mentoring by pairing with a successful faculty
 - Grant proposal development tools (writers/editors, graphics)
 - Connection to other resources for DMP, Education and Community Outreach
 - Mock review and feedback
 - Full proposal submission in summer 2019 (Graduation)
- NIH = RO + ACCEL CTRE + DE INBRE
- NSF = RO + UD ADVANCE Program

Research Information Management

- Fed Sponsors: Unfunded mandate for archival, curation and public access to research data
 - Public Access Plan: Today's Data, Tomorrow's Discoveries: Increasing Access to the Results of Research Funded by the National Science Foundation
 - Compliance/Regulatory Issues, implementing DMPs
- A Pre-taskforce committee created:
 - Co-Sponsored by RO, IT and Libraries but faculty driven
 - Define and prioritize <u>scope</u> for a tiered service model
 - Charis: Michael O'Neal and Monica McCormick (Lib)
 - Scope will lead to a full task force to inform University Leadership

UD Data Sc. Institute

- May 2017 Symposium Over 130 attendees
- Vision outlined in Data Science White paper (available on the web)
- UniDel Proposal approved in Fall 2017 to launch DSI (All 7 Colleges support)
- Launch committee formed and charged
- Founding Director: Dr. Cathy Wu
- Expected formal launch Sept 2018
- Many details still being worked out
- Ancillary to UD DSI
 - Professional MS in Data Sc. to be launched in Fall 2018.
 - Cluster hire in Data Sc. (8-10 in next 2-3 years) + \mathbb{N} in departments

Substance/Opioid Abuse

- Should **UD** aspire to become an **impactful leader** among its peers to make a significant contribution to science and society?
- Does UD, as an institution, have the breadth and depth to support and/or grow research and scholarship in this area in a scalable way? From Cells to Communities.
- Is *treating* this Comprehensively as an inter/multi-disciplinary topic, which can draw from every college, the right/unique approach?.
- What intellectual leadership do we have and what do we need to acquire, if indeed this is an area of investment for UD?
- Should we engage partners from Health Care, State Agencies, other institutions to model DE as a petri-dish experiment?





Substance/Opioid Abuse Symposium From Cells to Communities

- Brain storming meeting in Jan 2018
- Action Plan:
 - Formed a planning committee for a Statewide workshop for CCA
 - Chair: Greg Hicks (Chair, PT).
 - Jointly driven by RO, ACCEL CTR and INBRE
 - Formulate a vision and a working plan for a Research Initiative
 - Opportunities:
 - NIH (300M increase for NIDA, 100M for NIMH)
 - Corporate and Private Endowment
 - State
 - Cluster hiring





- Future: Seed Funding for Large Center Initiatives NSF ERC, STC; NIH PXX
- Twice a year, transparent competitive process with internal and external review
- 500-1M per project over 2-3 year span to:
 - Develop the idea (smaller successes) to a competitive force
 - Establish a killer collaboration team within and outside UD
 - Timeline for data, pub, other milestones
 - Focused strategy to achieve targets
 - Project coordination (proposal development is a project in itself)
- Award: UD as a village to help launch with trainer wheels
- Leadership development

Research Communications (RO + OCM)



IN THIS ISSUE

- 1. In the Spotlight
- 2. News Briefs
- Coming Events
 Recent Award Recipients
- 5. Funding Opportunities
- For Research Administrators





#UDel professor Rodrigo Vargas wins @NSF Faculty Early Career Award to investigate blue carbon @UDcanr.ow.lv/Kf1m30q5N2n









Contact

- If you are lonely and need a companion to see the Program manager in DC
- If you want to brainstorm about a big idea and you can only brainstorm:
 - At a golf course
 - Over Happy Hour on Main St.
 - Soaking the sun on the Green
 - Hanging out at the UD Creamery
 - Email <u>Razdan@Udel.edu</u>

