Research, Program and Proposal Development – Competing in the 21st Century

October 16, 2012
Breakout Session 1, 1:15-2:30pm

Introductions

Valorie Sterling Cook,
Research Development Associate, Social Sciences Research Institute (SSRI)

Joanna Downer,
Director of Research Development, Office of the Dean, School of Medicine (SOM)

Christine Erlien,
Research Opportunities Coordinator, Nicholas School of the Environment (NSOE)

Rick Tysor,
Executive Director, Office of Interdisciplinary Program Management (OIPM)

Gwendolyn Wright,
Administrative Director, Social Sciences Research Institute (SSRI)
Agenda

• Introduction/Overview
  – What is Research/Program/Proposal Development (RPPD)
  – Why is it needed?
  – Where is it?
• RPPD Working Group at Duke
• RPPD Models at Duke
  – UIC Model: SSRI
  – Campus School Model: NSOE and PSOE
  – School of Medicine: Central Office
• How Does RPPD Affect Grant Administrators /Research Administration?
• Questions/Discussions

The Funding Environment

• Highly Competitive, More Participants
• Future of Federal Funding
• Diversify Sponsor Base
• Increasing Interest In and Funding of Multi-Disciplinary Initiatives
  – “Competing in the Era of Big Bets, Achieving Scale in Multidisciplinary Research”
  – “The Science of Team Science”
  – NIH, NSF, NCI Initiatives; Center Grants
Funding Experience at Duke (Campus) FY02-FY11 (VPR Report)

- Multi-Investigator and Interdisciplinary Proposals and Awards Growth Significantly Greater than Single Investigator
- Single Investigator Proposal Success Rate is Much Higher than Multi-Investigator
  - How can we improve the Multi-Investigator Success Rate?

Challenges of Complex Proposals

- Tremendous Burden on PI to Lead
  - Multiple Participants, Internal and External
  - Extensive Planning, Managing, Deadlines
  - Increased Administrative Requirements
  - Industry, Foreign, or other Partners
  - Integrating, Writing in “One Voice”
- Tremendous Burden on Grant Administrator
  - Supporting Many PI’s, Pre and Post Award
  - Complicated and Intricate Proposal Requirements
  - Proposal Editing/Integration (Time and Skills)
- What Can We Do to:
  - Reduce Administrative Burden on Faculty
  - Improve the Quality and Competitive Posture
What is Research Development?

• “Research Development professionals facilitate research excellence by initiating and nurturing critical partnerships and alliances throughout the institutional enterprise” – Ann McGuigan, Jacob Levin, Alicia Knoedler, NORDP Conference May 2012

• Most Tier 1 (or wannabe) Research Universities Have Established Research/Proposal Development Groups
  – Central Groups (State Schools)
    • UNC-CH, NC State, UC-Irvine
  – School/Specific Units
    • Harvard, JHU, Northwestern, U of Del

Roles of Research Development

• Identify Opportunities and Potential Faculty Leaders and Participants
  – Targeted Dissemination of Information
  – Manage Incentive Programs
• Assist with Strategic Development of Research Programs
• Interface/Program Development with Sponsors
• Proposal Development:
  – Proposal Manager, Strategy and Review
  – Proposal Integration, Editing, Science and non-Science Writing
• Maintain Tools/Databases/Training Grant Data
• Partner with Foundations/Corporate Relations and Federal Relations Offices
Research/Program/Proposal Development Working Group at Duke

  - A&S, CFR (Campus and SOM), IASC (CISC), NSOE, OFR, OIPM, ORA, ORS, PSOE, SOM, DIBS, DGHI, NIEPS, SSRI, VPR and VPIS
- Started in Spring/Summer 2011
- Initial Goals:
  - Minimizing Faculty administrative burden
  - Increase Collaborations between Schools
  - Diversify Sponsor Base
  - Increase Graduate Student
  - Streamline the Proposal Process
  - Identify Best Practices
  - Network Opportunities
  - Identify Tools to Facilitate RPPD Activities
    - Document Sharing, Sponsor Contact Interactions, Project Management, Proposal Databases, Training Resources/Opportunities

Duke University  Symposium for Research Administrators

Research/Program/Proposal Development Working Group at Duke

- Meet Monthly
- Listserv and Directory of Participants
  - Developing Shared Document Repository
- Working on a # of RPPD Initiatives
- Guest Speakers, Demos,
- Interested?
  - Contact Rick Tysor, Rick.Tysor@Duke.edu
National Organization of Research Development Professionals (NORDP)

- 1st Conference, June 2009 (30 participants)
- Officially Incorporated in 2010
  - Over 500 members, from more than 150 organizations and 7 countries
- Annual Conference
  - Over 300 attendees May 2012 (Arlington, VA)
- Information Gathering and Sharing
- Membership Dues Modest ($149/year)
  - Resources, Funding Opportunities, etc.
- Website: www.NORDP.org

Models of Research/Program/Proposal Development at Duke

- UIC Model: SSRI
- Campus School Models: NSOE & PSOE
- School of Medicine: Central Office
Models of Research/Program/Proposal Development at Duke

University Institute and Center Model:

Social Sciences Research Institute (SSRI)

Valorie Sterling Cook
Research Development Associate

Gwendolyn Wright
SSRI Administrative Director

SSRI Research Development
Mission and Vision

• Mission: To facilitate and enhance the development, submission and management of complex, interdisciplinary sponsored research contracts and grants for SSRI affiliated centers, departments and schools.

• Vision: To offer holistic and comprehensive grant support services which minimize administrative burden for faculty and stimulate increased sponsored research activities.
SSRI Research Development

**Background**

- Research Development Initiative launched in Winter of 2011
- Began as a response to the need for expanded services to relieve faculty administrative burden on increasingly complex, interdisciplinary sponsor instruments
- Match faculty to funding opportunities and to each other, to encourage collaborations and team research to expand and diversify research portfolios
- Provide capacity to support multi-investigator, interdisciplinary, international, or otherwise complex proposals
- Focus on providing a high level of customer service that increases responsiveness and productivity and builds positive relationships with principal investigators

**Scope**

- We provide services for SSRI affiliated centers, institutes, departments, and schools across campus including:
  - Seven Affiliated Centers
  - Fuqua School of Business
  - Sanford School of Public Policy
  - Duke Law School
  - Selected Departments within Arts and Sciences
SSRI Research Development

**Services Provided**

- Workshops and Training
- Specialized Proposal Support and Resources
- Funding Opportunities and Facilitation of Relationships
- Project Implementation and Management

**GRANT LIFE CYCLE**

**Specialized Proposal Support and Resources**

- Team of professionals with expertise in managing complex mechanisms such as P’s and U’s
- Proposal editing and integration
- Grant writing non-science
- Proposal management – communication, primary interface for all players
- Budget development
- Sponsor interface
- Provide templates, examples, and other guidance for proposal development on SSRI website: http://www.ssri.duke.edu
SSRI Research Development

**Workshops and Training**

- Writing Data Management Plans
- Conducting Human Subjects Research and Data Security
- Preparing NSF Doctoral Dissertation Research Improvement Grants
- We also collaborate with other University partners on topics of mutual interest

---

SSRI Research Development

**Funding Opportunities and Facilitation of Relationships**

- Targeted Funding Searches
- Bring sponsors to Duke via Funders Forum Series such as:
  - Department of Defense Minerva Initiative
  - Department of Education
- Coordinate visits with faculty to federal agencies and foundations (foundation visits done in collaboration with Duke Corporate and Foundation Relations)
SSRI Research Development

Project Implementation and Management

- Contract Negotiation (in coordination with Office of Research Support)
- Provide project management for awarded complex grants
  - International aspects
  - Program interaction with sponsors
  - Other administrative aspects beyond the typical single investigator grant

SSRI Research Development

Impact/Recent Successes

- 28 interdisciplinary proposals submitted in FY 2011
- Assisted in the development and negotiation of specialized contracts and international agreements with corporate and foundation sponsors (both domestic and international totaling over $2 million)
- Increased demand for workshops (frequency and scope of topics)
SSRI Research Development

Contacts

• SSRI Administrative Director:
  Gwen Wright, 681-5930 or gwen.wright@duke.edu

• Research Development Associate:
  Valorie Sterling Cook, 681-1863 or valorie.cook@duke.edu

Models of Research/Program/Proposal Development at Duke

Campus School Model(s):
Nicholas School of the Environment (NSOE);
Pratt School of Engineering (PSOE)

Christine M. Erlien, PhD
Research Opportunities Coordinator
NSOE Research Development

Background and Scope

- Launched 5/2011
- Serves NSOE faculty
- Focus
  - Coordinating complex projects (e.g., IGERT, centers, STCs)
  - Identifying opportunities
  - Organizing, facilitating, submitting new research proposals

NSOE Research Development

Expertise and Services

Expertise
- Project coordination, Geography PhD, teaching writing

Services
- Meet with faculty to learn about their research interests
- Identify funding opportunities → review RFPs & foundations
  - Develop Excel database for each faculty member with funding opportunities that match their interests
  - Develop & save funding searches based on faculty interests
  - Search returns reviewed weekly; good matches forwarded to faculty
NSOE Research Development

**Expertise and Services**

- Support faculty leading large, multidisciplinary grants
- Participate in proposal development process
  - Grant editing, some writing
  - Verification that proposal meets RFP requirements
  - Feedback on budgets/budget justifications

**Impact**

- Faculty get support & feedback
  - Outside reader that suggests edits & raises questions → contributes to application quality
- Opportunities for collaboration suggested that faculty may not have thought of
- Submitted 2 large, multidisciplinary proposals
  - $14 million to Gulf Research Initiative (2011)
  - $12 million to NSF Sustainability Research Networks (2012)
- Supported 17 other proposals
- Foundation grant resulted in matching research funds
NSOE Research Development

Interacting with Research Administrators

• Communication
  – Give “heads up” about submission & who will lead
  – Provide solicitation
  – Discuss what each of us can expect from the other
  – Continue to touch base
    • Discuss subcontracts as they’re identified
    • Set up timeline for budget receipt/discussion/revision/input

NSOE Research Development

Contact

• Research Opportunities Coordinator:
  Christine Erlien, 681-7847 or cme13@duke.edu
Models of Research/Program/Proposal Development at Duke

Campus School Model:

Pratt School of Engineering

Sharon Shulze, PhD
Associate Dean for Research Advancement

Pratt Research Development
A slightly different model

Similar to NSOE model, with the following twists:

• Led by Associate Dean. Staff of two grant managers and a part-time staff assistant

• Support includes:
  – Development of checklist of solicitation requirements
  – Review of Letters of Intent
  – Discussion of potential partnership strategies
  – Intranet resource website (sample proposal sections, shared facilities information, budget templates, and outreach guidance)
Pratt Research Development

A slightly different model

Similar to NSOE model, with the following twists:

• Present for interaction between researchers/corporate funders

• Transition pre-award $\rightarrow$ post-award when centers are funded

• Post-award administration for the Dean's office and selected special projects (as needed)

Pratt Research Development

Contact

Sharon Shulze, PhD
Associate Dean for Research Advancement

Sharon.schulze@duke.edu
919-660-5442
Models of Research/Program/Proposal Development at Duke

School of Medicine:
Central Research Development Office

Joanna B. Downer, Ph.D.
Director of Research Development,
Office of the Dean, SOM

School of Medicine

• Department level
  – Formal internal review: Pediatrics, Radiology
  – External consultant review: Surgery
  – Others?

• Office of the Dean, School of Medicine
  – Office for Faculty Development
    • Grant writing, lab management workshops and seminars
  – Office for Faculty Mentoring
    • “Path to Independence” for first Rs (2011)
    • “K Club” for K applicants (2012)
  – Research Development
Background and Scope

• Launched 10/2009, expanded 3/2011
  – “Facilitate development of complex grant applications at the School of Medicine”
  – Serve all School of Medicine faculty
  – Pre-award only

• Original focus on complex, multiple project, multiple core research grants
  – i.e., NIH “P” and “U” mechanisms

• Expansion summer ‘12 to R-type grants for Bridge Funding recipients and two faculty per dept., selected by Chair.

Expertise and Services

• Science Ph.D.s with backgrounds in media relations, science writing, and scientific editing.

• Provide advice, team-building, timeline development.

• Manage proposal development.

• Ensure plan and science stay true to RFA/RFP.

• Provide customized templates of various sections.

• Ensure the team thinks about and prepares the “boring stuff”.

• Edit and critically review all components.

• In short, we do whatever needs to be done, whenever it needs to be done . . .

BUT
School of Medicine Research Development

Impact on Research Administrators

• You are the experts on budgets and SPS!
  – We partner with the PI’s grants manager, grant specialist, or business manager.
  – We ensure financial/grants staff is included early and kept informed.

• We can relieve some burden:
  – Answer questions and make connections.
  – Compile and provide critical review of biosketches, resources pages, and letters of support.
  – Review budget justifications for consistency with research plan and each other.
  – Ensure SPS-required components are submitted to the PI or grants person on time.
  – Aid printing, compilation, page numbering, sending

---

School of Medicine Research Development
Activity: March 1, 2009 - Sept. 25, 2012

<table>
<thead>
<tr>
<th>Cal. Year</th>
<th>Complex</th>
<th>Complex</th>
<th>Individual</th>
<th>Awards (of those)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>soup-to-nuts</td>
<td>edited</td>
<td>edited</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>3 (ARRA)</td>
<td></td>
<td></td>
<td>1 (~$15 M/5yr, no indirects)</td>
</tr>
<tr>
<td>2010</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>1 (~$1.8 M TC over 3 yrs)</td>
</tr>
<tr>
<td>2011</td>
<td>14</td>
<td>2</td>
<td>0</td>
<td>3 (~$30.6 M TC over the next 5 years)</td>
</tr>
<tr>
<td>2012 to date</td>
<td>7 + 5 deferring +2 in process</td>
<td>1 in process</td>
<td>28 + 6 in process</td>
<td>2 R01s awarded; others TBD</td>
</tr>
</tbody>
</table>
School of Medicine Research Development

**Impact**

- Help faculty and their teams feel supported.
- Create broader, more inclusive research teams.
- Involve administrative/financial team earlier in the process.
- Help teams avoid making the same “mistakes”.
- Enable a higher quality application given time constraints.
  - fresh(er) eyes for review
- Ensure the final product meets the “Five Cs”:
  - Clear
  - Concise
  - Compelling
  - Complete
  - Consistent

---

**Contacts**

- **Director:**
  Joanna Downer, 681-8272 or joanna.downer@duke.edu

- **Research Development Associate:**
  Jeni Reininga-Craven, 684-6989 or jennifer.reininga@duke.edu
How Does RPPD Affect/Impact Grant Managers/Research Administration?

• Pre-Award: Partnering with RPPD People/Teams
  – RPPD Role is Tailored Based on PI’s Need and Complexity of Proposal
  – Hold a Proposal Meeting, Roles and Schedule Defined
  – RDA may serve as:
    • Proposal Manager/co-manager
    • Proposal Integrator and Editor
    • Responsive to the Solicitation
  – Grants/Contracts Administrator:
    • SPS
    • Budget/Justification (or teaming)
    • Subcontractor Interface (or teaming)
    • Other Support; Bios; etc.

• Post-Award:
  – PI and Grants/Contracts Administrator Manage All Aspects of Post Award Activities
  – Feedback to RPPD Regarding Sponsor Interactions Can Be Incorporated In Future Proposals, Sponsor Discussions and Negotiations

• Possible Alternative Career Path
  – Research Development Associate
  – Director/Coordinator of Research Development
  – Hybrid/Developing Positions
Questions/Discussion