

# BUILDING PARTNERSHIPS TO ENHANCE GLOBAL RESEARCH

**2015 NORDP Annual Research  
Development Conference**

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# INTRODUCTIONS:

WHO AM I AND WHO ARE YOU?



- Laurel Thomas – University of South Florida
  - [lkthomas@usf.edu](mailto:lkthomas@usf.edu)
  - International Research and Global Engagement Manager
  - Manage USF database of international faculty engagement, prepare USF system country engagement briefs, and manage UCosmic®-USF partnership activities
  - Assist the Assistant Vice President of Research, Innovation and Global Affairs in duties pertaining to international research and faculty engagement
  - USF Certified Research Administrator (CRA-USF/Basic and CRA-USF/Advanced)
  - First year member of NORDP



# WHO ARE YOU?

- Higher education
  - Public
  - Private
- Industry
- Non-Profit
- U.S. Government
- International



# OBJECTIVES

- Recognize the critical nature of global engagement for researchers and institutions
- Research Development Professionals as enablers and facilitators
- Identify tools for enhancing collaboration at all levels
- Discuss best practices for constructing and strengthening partnerships in support of international engagement
- Discussion



# INTERNATIONALIZATION & RESEARCH DEVELOPMENT PROFESSIONALS



# RDPs: ENABLING RESEARCH[ERS]

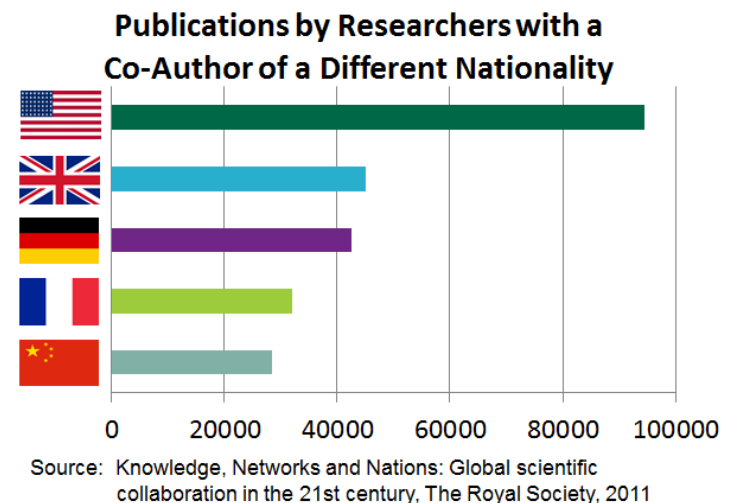
- Many different roles and responsibilities
- Strategize
  - Identify strengths
  - Set goals
  - Chart progress
- Recruit and/or evaluate researchers
  - Play to your strengths and secure buy-in
- Find & secure funding
  - Grant preparation
  - Monitor success rates
  - Manage awards, activity, and compliance
- Partnership management
  - Establish and/or leverage to create more effective collaborations
- Manage facilities and finances





# SCIENCE AS A GLOBAL ENDEAVOR

- Science is a global endeavor, and international research collaboration is necessary for accelerating scientific growth and advancement (Sooryamoorthy 2013)
- Higher education institutions, which perform the bulk of basic and applied research, have experienced significant pressure to accommodate interdisciplinary and globally-linked research teams due to the need for input from multiple disciplines in solving large and complex problems (Benzies, Hayden, and Lakhani 2012)
- The most influential research is conducted by groups of researchers who, among other characteristics, are located around the world. Publications with co-authors from more than one country generate higher impact science and discovery (Adams 2012; Frenken, Ponds, and Van Oort 2010)





# RESEARCH ECOSYSTEM

- Funding results from a [perceived] high research **capacity** and **performance** (Huang 2014)
- Research capacity, in turn, is a function of **productivity**, **impact**, and **networks** (Huang 2014)
- According to social network theory (Sociology), outcomes are associated with connections
  - The more connections one has, the more opportunities exist for future outcomes
- Networks are an integral part of the research enterprise – means of building research capacity and performance



- **Global engagement** is a person's interaction with the interconnected global ecosystem through the operation of their professional duties

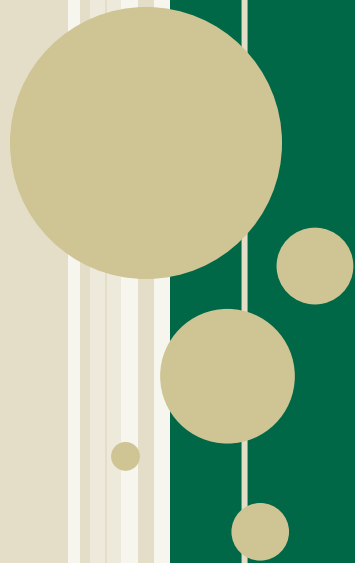


- Elevates research capacity by widening one's network of potential collaborators and contacts, nearly doubling a publication's number of citations, expanding the field's global knowledge base, and offering leverage to a wider body of learners
- Global engagement → Opportunities → Outcomes
- RDPs can facilitate these transactions



# STEP ONE FOR INTERNATIONALIZATION:

DO YOUR OWN RESEARCH –  
KNOWLEDGE IS YOUR BEST TOOL



# KNOW YOUR INSTITUTION

Publications

**16,703** ▲

Citations

**119,593**

Authors

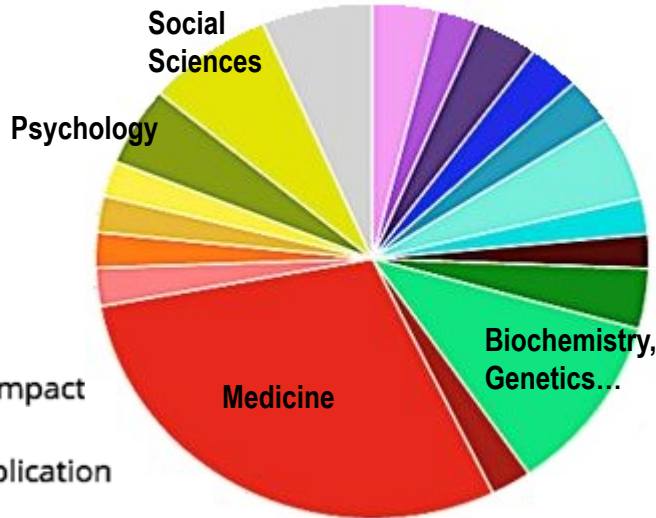
**9,439** ▲

Field-Weighted

**1.64** Citation Impact

Citations per Publication

**7.2**



Publications in Top Journal Percentiles ⚙️

Publications in top 10% journals by SNIP ⬆️



University of South Florida:

**23.7%**

United States:

27.0%

Outputs in Top Percentiles ⚙️

Publications in top 10% most cited worldwide



University of South Florida:

**22.9%**

United States:

19.6%

Data source: Elsevier Scopus data 2010-2015

- Infrastructure, administration, and areas of institutional responsibility
- System components (i.e. other campuses/affiliated institutions in the system)
- Existing research strengths and areas of emerging strengths
- Identify complementary units/offices and counterparts
- Partnerships – public, private, industry, international, governmental, academic



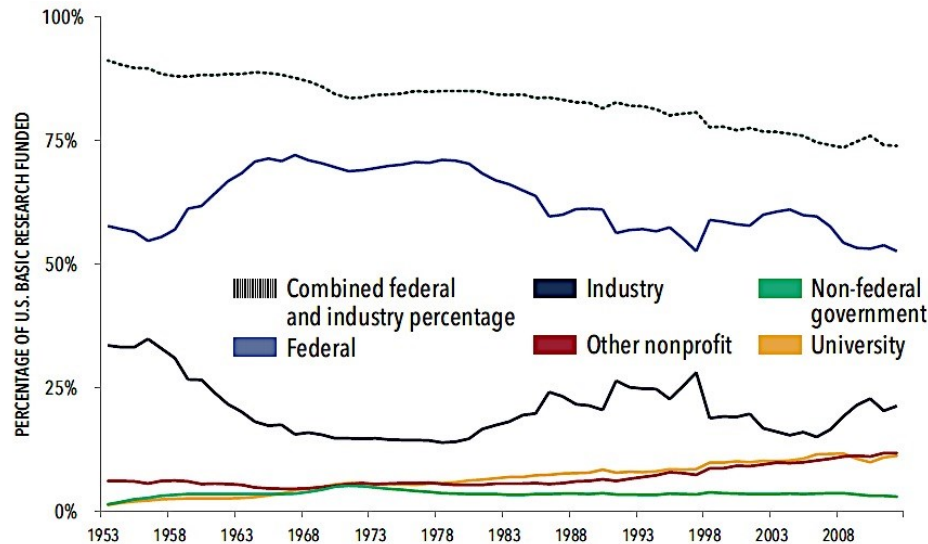
# KNOW YOUR FACULTY



Ex. of a USF faculty global footprint on UCosmic

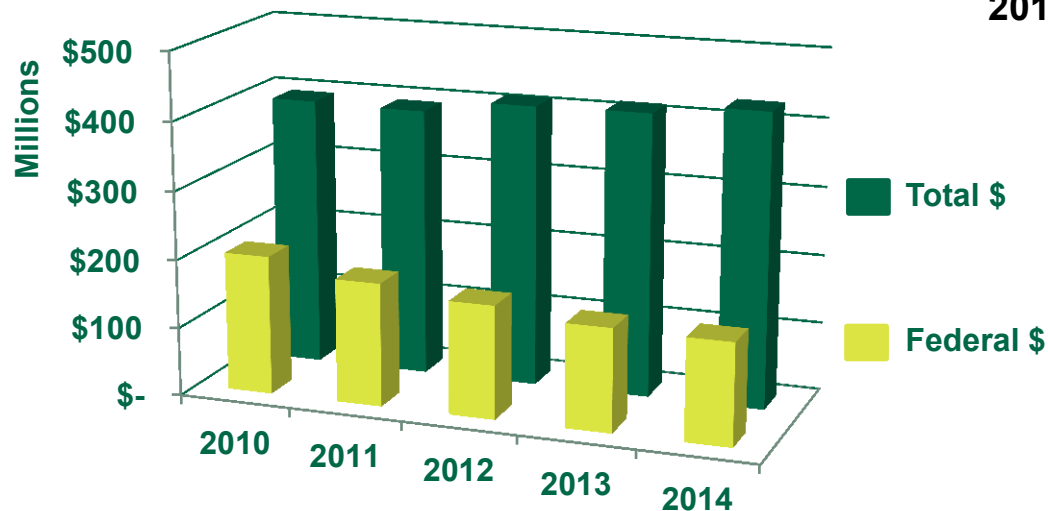
- Who is doing what, where, and with whom?
- Macro- and Micro-levels
- Global engagement
- Current research and funded research history
- Level of scholarly activity and productivity
- Educational affiliations
- Personality
- Professional strengths and weaknesses

# KNOW YOUR FUNDING SOURCES

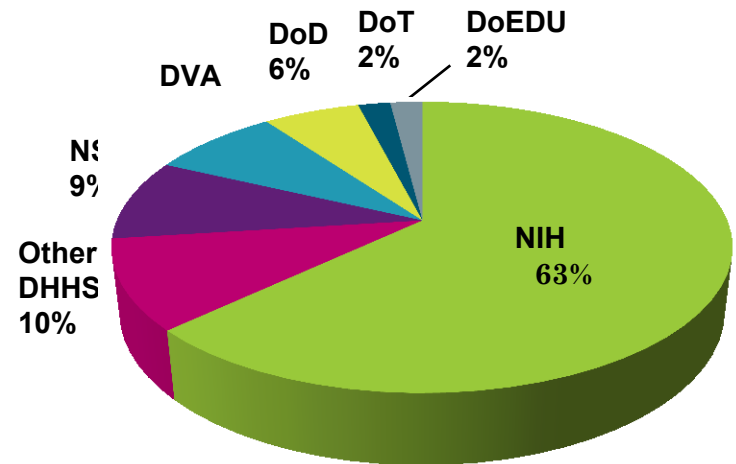


Source: National Science Foundation. National Center for Science and Engineering Statistics. 2013. National Patterns of R&D Resources: 2011-12 Data Update.

## USF 5-Year Research Funding History



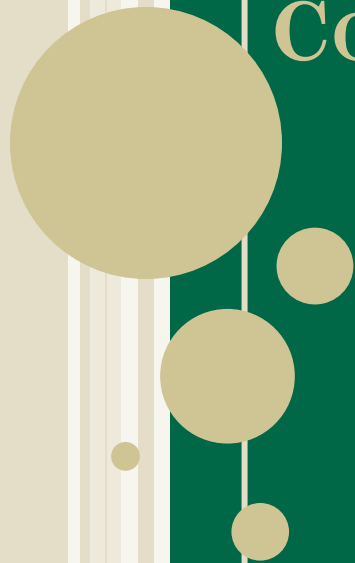
## 2014 USF Primary Sources of Federal Funding





# STEP TWO FOR INTERNATIONALIZATION:

GET THE BALL ROLLING – START  
THE CONVERSATION & FACILITATE  
COLLABORATION





# SECURE SUPPORT AND RESEARCHER BUY-IN

- Expand your professional network within your institution
  - Identify what other units have to assist both you and your researcher in your internationalization efforts
    - International Office, Central Research Office, Alumni Office
- Share knowledge
  - Funding agency ups and downs
  - Finding funding
  - Best practices for grant writing and incentivizing faculty
    - Workshops, newsletters, web repositories, listservs
- Leverage resources to offer researcher opportunities
  - Make the case for deepening global engagement and different ways to do so
  - Include both faculty and students in efforts
  - Show that there are resources available for them



# CREATE A COMMUNITY OF PRACTICE

- The international research ecosystem is dynamic and diverse
- Identifying key stakeholders and providing opportunities for interaction and knowledge-sharing is critical



# BRIDGE THE DIVIDE

- Cooperation is essential for promoting and sustaining an active international research portfolio
- Cultivate an environment where healthy communication within and across units is routine
- Providing opportunities for interaction and knowledge-sharing is critical
  - Workshops, community of practice, newsletters
- Develop a set of common strategic and planning goals shared by collaborators which is connected to the research/unit mission and utilizes strengths of each (participant/unit)
- Be clear on responsibilities and projected outcomes of collaboration



# DEVELOP EFFECTIVE COMMUNICATION

- Collaborative efforts become effective if there is agreement on division of labor, shared decision-making, and collective responsibility (Sooryamoorthy 2013)
  - Address this at the grant-proposal stage and be as clear as possible
  - A lack of transparency can cause irreparable damages to research relationships
- Ensure parity with the flow of resources
  - Education, intellectual property, technology transfer, data access and ownership
- Establish general rules and principals to abide by in case of conflict
- Be sensitive to and aware of cultural differences when it comes to forming relationships



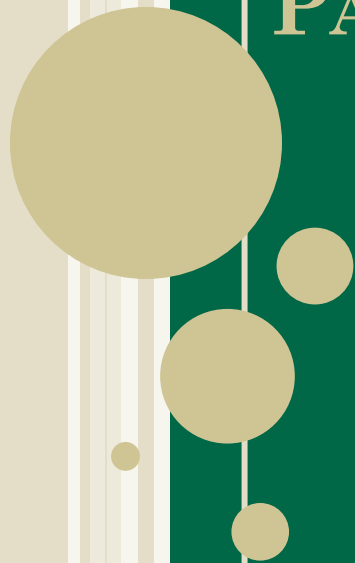
# FACILITATING GLOBAL COLLABORATION

- Create a **community of practice** to facilitate knowledge-sharing and networking
- Establish/identify **internal funding opportunities** supported by collaborating units/institutions
- Offer joint **educational workshops** for students and faculty targeting available research opportunities
- Enfranchise faculty and students in activities with **international visitors/partners**
- Engage **senior leadership** for networking abroad and opportunity seeking



# STEP THREE FOR INTERNATIONALIZATION:

ENHANCE GLOBAL ENGAGEMENT  
THROUGH LEVERAGING  
PARTNERSHIPS



# TAP YOUR RESOURCES

- For HEIs, formal and informal partnerships should be utilized to support international collaboration efforts
  - Informal partnerships may include:
    - Inter-office/unit collaborations
    - Faculty service/teaching/research collaborations
  - Formal partnerships may include:
    - Institutional global partnership agreements
    - Industry partners
- Leverage partnerships to create and strengthen opportunities for global engagement
  - Recognize that there may be a need to start small
  - Utilize and support the most **productive partnerships** while opening new avenues for future endeavors





# INTERNATIONAL OFFICE

- Best utilized when it is already regularly collaborating with other units through:
  - Formal partnership agreements
  - International Student Services – graduate students; J-1 scholars
  - Education Abroad – programs, research field schools
  - Area-specific Centers and Institutes
- Resources for supporting the research enterprise
  - Country-specific cultural knowledge and sensitivities
  - Funding – internal and external opportunities
  - Tools for finding collaborators
  - Risk analysis
  - Connections for export control, technology transfer, and intellectual property rights
- Faculty + Student linkages



# FORMAL PARTNERSHIP AGREEMENTS

- Generally more institutional resources are devoted to productive formalized partnerships
- **International Collaboration**
  - General agreement showing a willingness between two institutions for future academic/research collaboration
- **Memorandum of Understanding**
  - Specialized agreement supporting a particular research and/or academic opportunity
- **Student Exchange**
  - Specific type of student exchange agreement requiring commitment and articulation of terms
- Check with your International Office for a list of existing agreements and institutional sponsors

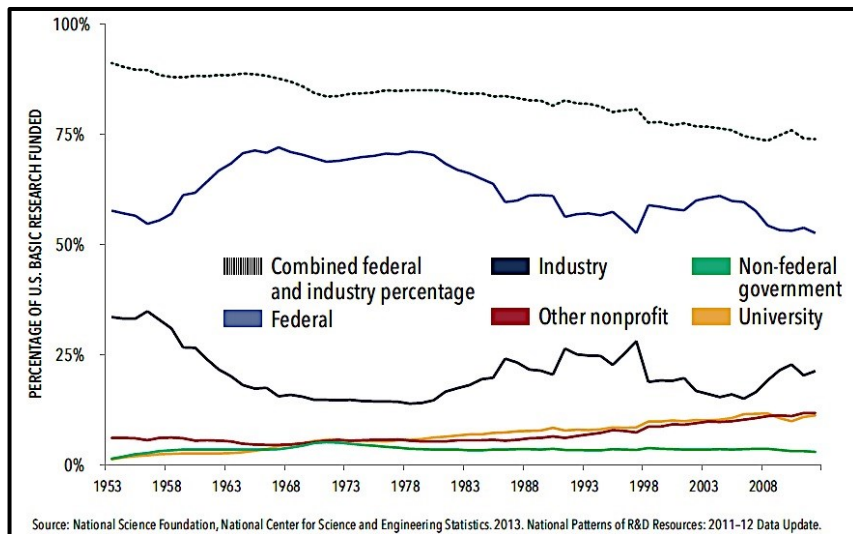
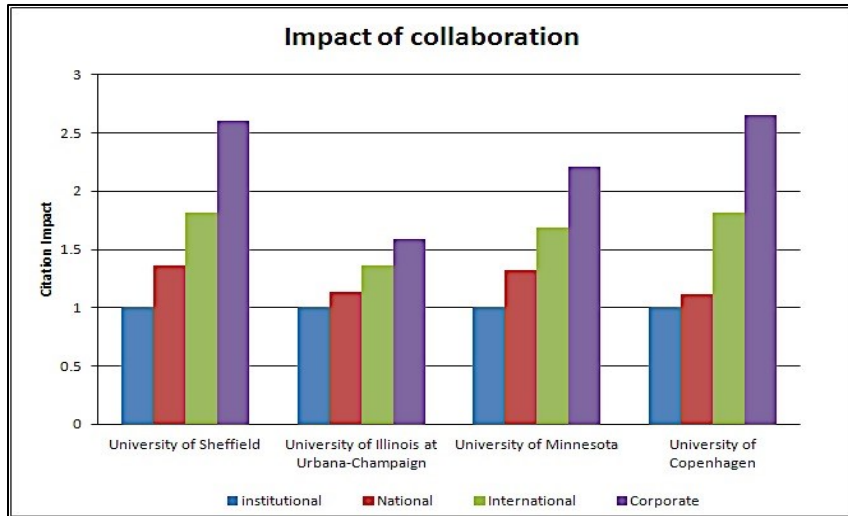


# ALUMNI/SCHOLAR/STUDENT PARTNERSHIPS

- International alumni
  - Foreign graduate students who receive a degree and research experience while studying abroad and return home are an important resource
    - Industry connections
    - Human resource connections
    - Research connections
    - Funding
- J-1 student scholars and foreign Visiting Scholars
  - Opportunities for ongoing and future collaboration
  - Links to existing formal partnership agreements
- Immersion research education
  - Partnering with foreign collaborators to provide cross-cultural learning, researching, and mentoring (Anderson et al. 2012)



# INDUSTRY PARTNERSHIPS



- On average, university-industry publications have over twice the citation impact as within-institution collaboration (Elsevier Scopus 2006-2010)
- These collaborations play a critical role in contributing to national economies
- Industry funding tends to mirror federal funding
- Key for medical, biotechnology, and engineering disciplines
- Opportunities for computer science and information technologies

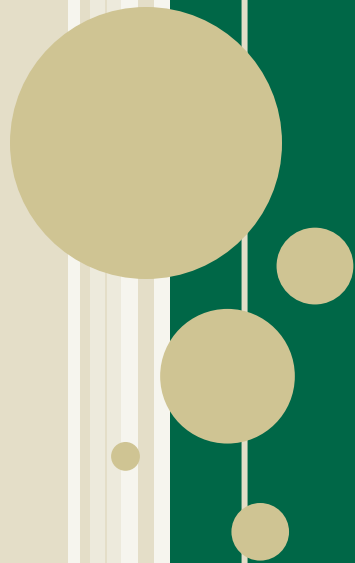
# LEVERAGING PARTNERSHIPS

- Make the connection between formal partnership agreements (public and private) and opportunities for faculty and student research
- Conduct regular visits between partner institutions and include representatives from all units involved
- Don't underestimate the value of international student, alumni, and scholar relationships in current and future research endeavors
- Utilize the knowledge and resources of centralized Research and International Offices
- Look for collaborative funding opportunities which could include existing relationships
- Promote sustainable partnerships



# TOOLS AND BEST PRACTICES FOR INTERNATIONALIZATION:

## THE EXPERIENCE OF USF WORLD



# TOOLS AND BEST PRACTICES

- Technology – strategy
  - Metrics
  - Mapping
  - Funding
- Communication – raising awareness and securing buy-in
  - Newsletters/Publications
  - Listserv
  - Global Discovery Hub
- Education – feasibility
  - Cross-training in research administration
  - Workshops – Fulbright, grant writing, grant preparation for specific agencies/opportunities
- Funding/Incentivizing – sustainability
  - Travel grants to support international research
  - Funds (requires matching) for deepening strategic global partnerships
  - Global faculty spotlight
  - Proposal submission and award recognition





# TECHNOLOGY

- Metrics – Thompson-Reuter; Elsevier; Academic Analytics
  - Can be used to identify institutional research strengths as well as areas of emerging growth
  - Also used to find potential collaborators
- Mapping – UCosmic®
  - Used to visualize an institution's global footprint
    - Partnership agreements
    - Faculty and staff activity
    - Language and [geographic] area expertise
    - Student Mobility
  - Can be utilized to identify potential institutional collaborators already engaged globally
- Communication



# COMMUNICATION AND EDUCATION

- Global Engagement Brief
  - Institutional footprint for a particular country
  - Can be customized for inquiring parties (i.e. community economic development councils wanting to attract foreign business)
- Workshops and Cross-training
  - Faculty Fulbright resource
  - Cross-training in research administration
  - Encourage staff/administration to complete webinars, classes, and workshops on resources for finding international funding (i.e. Horizon2020), grant preparation, research opportunities, effective communication, etc.
- Media
  - International research and funding newsletter
  - Events for faculty and staff designed to raise awareness of our services
- Global Discovery Hub
  - Online repository of resources for students and faculty wanting to conduct research abroad
    - Includes the UCosmic® global engagement database, international funding resources, foreign travel resources, partnership agreement information, global internship opportunities, and research development resources

# Global Discovery Database



# FUNDING/INCENTIVIZING

- Travel grants to support international research
- Travel grants to support international conference presentations
- Partnership grants to support research and scholar exchange
- Internal funding assistance for international events
- Monthly global faculty spotlight highlighting an internationally related achievement
- Recognition for international proposal submissions and awards
- Annual Fulbright recognition



CONCLUSION:

YOU HAVE THE POWER...IF YOU  
WORK TOGETHER



- The research enterprise is dependent on research capacity and performance for innovation and growth
- Globalization is refocusing research to emphasize an interconnected world of transactional networks
- Collaboration between international, academic, and industry partners results in research with the highest impact
- RDPs are uniquely positioned to bridge the gap within institutions with traditionally decentralized units and enhance overall global engagement
  - Start the conversation if it doesn't already exist
  - Enhance cooperation and collaboration internally and externally
  - Leverage partnerships



The left side of the slide features a series of vertical stripes in shades of beige and cream, with a thin white line separating them from the dark green background. Below these stripes, there are several overlapping circles of varying sizes in a light beige color.

FINIS

DISCUSSION?!



# RESOURCES

- Adams, Jonathan. 2012. Collaborations: The Fourth Age of Research. *Nature* 497(7451): 557-560.
- Anderson, K.H., M.L. Friedemann, A. Büscher, J. Sansoni, and D. Hodnicki. 2012. Immersion Research Education: Students as Catalysts in International Collaboration Research. *International Nursing Review* 59(4): 502-510.
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- Huang, Jun Song. 2014. Building Research Collaboration Networks – An Interpersonal Perspective for Research Capacity Building. *Journal of Research Administration* 45(2): 89-112.
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