IDR AS A SURVIVAL MECHANISM

Dr. Kristin Gosselink
Associate Professor, Biological Sciences - Border
Biomedical Research Center (BBRC) Associate Dean,
College of Science
How I learned to hate my calendar...
Peer-reviewed publications since 2013


Another 4 currently in prep /submission
Grants submitted since 2013

• Total = **30**  \((1 \text{ currently in preparation})\)

• Interdisciplinary = **21**

• Funded = **6**  \((1 \text{ currently pending})\) - Nearly $6.5M, 4 as PI or Co-PI
  – All are interdisciplinary, but my role in 4 of them is based on my central research interests of neuroscience and stress.

• Training, Neuroscience, HPV/Cancer, Aging, Obesity
  – **NIH**
    • NIDA (SMART MIND, VIDA, VIDA CARTT); NIMH
    • NINR, NIA, NCI
  – **NSF**
    • LSAMP, IUSE, NRT
  – **Multiple Foundations, UT System, CPRIT, UTEP, CoS**
Benefits

• Maintain productivity (and sanity?)
  • Work with great colleagues
• Satisfy a wide range of curiosities and ideas
• Develop new research questions and avenues
SUSTAINABLE COMMUNITY-ENGAGED INTERDISCIPLINARY RESEARCH: PARTNERSHIP VERSUS PROJECT

Dr. Thenral Mangadu
Associate Professor, Public Health Sciences
Successful community partnership characteristics

• Elements of an authentic partnership (CCPH, 2017)
  • Guiding principles of partnership
  • Quality processes
  • Meaningful outcomes
  • Transformative experiences
Why do we work well together?

• “None of us are pushing a specific agenda—we just want to help our vulnerable and at risk populations in whatever way we can.”
• “We work as a team and are always open to brainstorm and feedback that can help us improve.”
• “Mutual respect, focus on outcomes, relevant research that has application to agency’s purpose and services, clear communication”
What should academicians/researchers do/avoid to promote a partnership?

- **To do:** “they need to be willing to listen and learn from CBO’s. We work in two very different worlds. If you choose to do work in our world-then let us teach you too.” “We can help you understand things that are not taught in academia and teach you how to navigate in the community and build trust. Partnership-we work together, and learn together.”

- **To avoid:** “Ivory Tower” attitude, creating layers of bureaucracy, asking for excessive staff time away from agency”
Establishing and sustaining community-engaged interdisciplinary research

**Partnership**
- Continuous
- Builds towards community, institutional and personal transformation
- Strategic planning
- Mutually decided goals and outcomes

**Project**
- One point in time
- Mostly focuses on short-term personal/department transformation
- Program planning
- Dictated by project
Thank you! Questions/Comments?
Keeping your interdisciplinary team on task across institutions and countries: A Tale of Two Projects

Dr. Gaspare M. Genna
Professor, Political Science
Director, North American Studies
“It was the best of times, it was the worst of times...”

- Charles Dickens (1859)
The Two Projects

**North American Integration**
- Fund for the Improvement of Postsecondary Education
- Social Sciences & Business
- 12 universities in 3 countries
- Journal Special Issue
  - Beyond Borders: Migration, Security, and Cooperation in North America
- Edited Volume
  - North American Integration: An Institutional Void in Migration, Security, and Development

**European Identity Project**
- Fulbright Scholars
- Humanities, Social Sciences, & Fine Arts
- 10 universities in 4 countries
- Edited Volume
  - Jürgen Habermas and the European Economic Crisis: Cosmopolitanism Reconsidered
Lessons Learned

- Disciplines have varying writing styles
  - Essays vs. Research Papers

- The process of research in one is different than others
  - Emphasis on Secondary vs. Primary Data

- Different approaches on how to handle external reviews
  - Opposition vs. Accommodation

- Scholars from outside the US have different expectations regarding publication outlets
  - The meaning behind peer review
Best Practices

• Develop common expectations with the team members at the start
  • What will happen if expectations are not met?

• Create a schedule with approximate dates of milestones
  • Flexibility only when absolutely necessary

• If you have multiple papers, use the team for the first round of peer review

• Provide a common research framework and don’t omit the details
Lessons Learned from Building a Productive Interprofessional Education Community of Practice

Dr. Celia Pechak
Associate Professor,
Physical Therapy Program

Dr. Margie Padilla
Clinical Associate Professor
School of Pharmacy
• **Mission:** To improve health outcomes of the Paso Del Norte community with particular emphasis on underserved and vulnerable populations, by fostering interprofessional cultures and competencies.

• **Vision:** Bridging borders to improve the health and wellness of the Paso Del Norte Community.

• **Aspiration Statement:** To be a nationally recognized model of highly effective interprofessional education that is driven by a shared passion to served underserved and/or vulnerable populations.
Current Active Members & Partners

- Rocio Alvarenga – Occupational Therapy
- Carla Campbell – Public Health
- Carla Ellis – Nursing
- Jana Gainok – Nursing (Co-Advocate)
- Vicki Howe – Pharmacy
- Patricia Lara – Speech-Language Pathology
- Chu-ling Lo – Rehabilitation Counseling
- Margie Padilla – Pharmacy (Co-Advocate)
- Celia Pechak – Physical Therapy (Co-Advocate)
- Connie Summers – Speech-Language Pathology
- Arlette Werthmann – Social Work
- Lynn Fuhrman – Paul Foster School of Medicine
3-Hour Case-Based Interprofessional Education Trainings

- Spring (2017 onward)
  - Transgender client in an acute care setting

- Summer (2018 onward)
  - Refugee client in detention

- Fall (2017 onward)
  - Client experiencing homelessness – transitioning from hospital to shelter

At each training: Students from 6-8 disciplines ~120-220 students
What We Have Done Well

• Implemented trainings that have gotten overwhelmingly positive feedback from students & faculty

• Created a training “template” that has supported sustainability
  – Pre-test on Qualtrics
  – 20 minute overview of topic (2 of 3 on video)
  – Small group discussions (each team with 8-10 students)
  – Large group discussion
  – Profession-specific group reflections
  – Post-test and evaluation
Our Recommendations

• Define a mission & vision EARLY that your group members all truly care about

• Build shared leadership & accountability (e.g., co-advocate structure)

• Publish & present your work

• Accept that developing interprofessional education may be a messy process

• Believe it gets easier with time (it has!)
Deep Knowledge Integration through Convergent Learning

Dr. Deana Pennington
Associate Professor, Geological Sciences
Challenges of Convergence

National Academy of Sciences (2015) Enhancing the Effectiveness of Team Science

1. High diversity
2. Deep knowledge integration
3. Large size
4. Goal misalignment
5. Permeable boundaries
6. Geographic dispersion
7. Task interdependence
Deep Knowledge Integration across Disciplinary Perspectives

Ad hoc dialogue
No structure
No progress

Formal presentations
Firm structure
Little understanding

How NOT to do this

Use a lightly structured, participatory process
Convergent Learning

Start: vague, ill-structured problem definition
Shared problem formulation unfolds through time

Divergent thinking activities
“Brainstorming”
Exposure individual perspectives
Learn across perspectives

Convergent thinking activities
Collaboratively evaluate alternatives

Synthesis thinking activities
Co-create, negotiate, & integrate using external representations
(diagrams, charts, etc.)

Pennington et al. (in review)
Synthesis Thinking Activities

- Facilitate participation and turn-taking
- Redefine problems from a variety of perspectives
- Explicitly include critical reflection on what has been said
- Expose differences in vocabulary and concepts
- Externalize individual mental models through visuals
- Co-create shared problem models through visuals
- Iterate, iterate, iterate!

Pennington et al. (in review)
Generate a cognitive system - it takes time!

Emergence:
Shared vision; Aligned research goals; New integrated conceptual frameworks

Components:
People with diverse perspectives
Collaboration tools
Relevant technical resources

Interactions:
Participatory, inclusive, and empowering leadership
Ability to learn each others perspectives
Development of common ground
Adaptability & flexibility

Context/Environment
Sociopolitical, Organizational/Institutional Factors
Physical, Social & Technologic Factors
Intrapersonal Factors

Scale

Within-team structure & function

Other products:
Social ties
Collaboration skill
Material artifacts

11/9/2018

Modified from Pennington (2011)
References


Interdisciplinary Research in the Social Sciences: Strengthening Research Methods to Enhance the Usefulness of Policy Recommendations

Dr. David Knight
Assistant Professor, Center for Education Research and Policy Studies, Department of Educational Leadership and Foundations
• Education policy research with local and national impact

• Funding from the William T. Grant Foundation, the Spencer Foundation, and the National Science Foundation
Collaboration with the American Institutes for Research (AIR) to study dual-credit education

https://www.utep.edu/education/acerp/resources/dual-credit.html
1. The Challenge

- Bring together researchers with diverse methodological training to answer 6 wide-ranging research questions
  - Enrollment trends, HB 505, naïve estimates and causal effects, advising practices, rigor, and cost
- First study of its kind to comprehensively address Texas’s most pressing concerns about dual credit education programs at scale
- Has potential to make Texas a thought leader in how to effectively scale dual credit education programs
2. Benefits of Multiple-Methods Research

- Findings went beyond determining whether the reform “works” (Enrollment trends, HB 505, causal effects, advising practices, academic rigor, and cost-Benefit)

3. Question Moving Forward

- What forms of qualitative research are valued?
- How can multiple-methods studies focus more on processes?
- What will be the roles of “what works” research and “continuous improvement” research moving forward?