# **GRANT WRITING**

# Why Write a Grant?

Opportunity to support your own research

- Data collection
- Software
- Travel
- Computing
- Human capital Students and staff
- □ Time

# Benefits of Grants

#### University

- Reputation
- Visibility
- Recruit and retain faculty and students
- Train students
- □ Indirect costs

## **FUNDING SOURCES**

- UNIVERSITY
  - Faculty development programs
- FOUNDATIONS
  - William T. Grant Foundation, Child Development Foundation
- PROFESSIONAL ORGANIZATIONS
  - ASA, PAA, NCFR
- STATE & LOCAL AGENCIES
- NATIONAL SCIENCE FOUNDATION
- NATIONAL INSTITUTES OF HEALTH
  - NICHD, NIMH, NIA

## TYPES OF SUPPORT

- Discover what the agency and foundation funds
  - Prior grants
  - Priorities

TRAINING AND DEVELOPMENT

- RESEARCH SUPPORT
- EVALUATION

# **Mechanisms NIH**

- JUNIOR INVESTIGATORS
  - F31: Predoctoral Fellowships:
    - Minorities, Disabilities
  - F32: Postdoctoral Fellowships
  - KO1: Mentored Population Research Scientist Development Award

#### Mechanisms NIH

- RO1 Research Project Grant
  - 5 years (\$500,000/year) 12 pages
- R21 Exploratory/Developmental Research Grant
  - 2 years (\$275,000) 12 pages
- RO3 Small Research Grant
  - 2 years (\$100,000) 6 pages
- R15 Academic Research Enhancement Award (AREA)
  - 3 years (\$300,000) 12 pages

# Due Dates: NIH

R01 new	Research Grants	February 5	June 5	October 5
U01 new	Research Grants - Cooperative Agreements	February 5	June 5	October 5
K series new	Research Career Development	February 12	June 12	October 12
R03, R21, R33, R21/R33, R34, R36, UH2, UH3, UH2/UH3 new	Other Research Grants and Cooperative Agreements	February 16	June 16	October 16
R15 All - new, renewal, resubmission, revision	Academic Research Enhancement Award (AREA)	February 25	June 25	October 25

## GRANT WRITING

- GOOD IDEA!!
  - Good grant writing cannot disguise a bad idea
  - But poor grant writing can kill a good idea
  - Know your strengths and weaknesses

# GOOD RESEARCH IDEAS

- SIGNFICANT RESEARCH QUESTION
  - □ Why does this matter?
  - □ Gap in the literature is not enough NOT journal article
- INNOVATIVE:
  - Bring something new to the table
- FOCUSED
- FEASIBLE

#### STEPS

- Commit
- □ Homework deadlines, page limits
- Project description
- Contact program staff
- Assemble team
- Administrative details
- Write proposal
- □ Feedback and revise!!!

#### Homework

- Read funding notices
- Review receipt dates
- Know application instructions
- Check funder's website to see what types of research they typically support

Copies of successful grant applications

# Contact a Program Official

- Before you start
- During the process
- □ After review

#### Why?

- Program priorities
- Knows what is being done
- Observes a lot of reviews and has own tips
- Also a scientist and may have some good ideas!

# GOOD GRANT WRITING

- CLEAR WRITING
- ORGANIZED
- □ Specific Aims − 3 aims on one page
- COMPONENTS:
  - Theory
  - Hypotheses
  - Data
  - Analysis plans

**FOLLOW DIRECTIONS!** 

# Starting Point

- Address a significant question
- Bring something new to the table
- □ Focused and feasible

# Sell Your Idea

- REMEMBER YOUR AUDIENCE
  - Reviewers' perspective
  - Capture interest
  - Make it easy to like your application

- BE PERSUASIVE
  - Explain WHY this is an important topic
  - What will we learn that we don't already know

# Tips: Titles matter

Payoff of project – what is the product of the research

 Counting Marriage and Divorce: Archiving Over a Century of County and State Data

 Distal Determinants of Race-Ethnic Variation in Unintended Fertility

# Tips: Be Bold

- Use bolding to showcase key statements
- Utilize every page

There is no centralized repository of county and state-level marriage and divorce counts in analysis-friendly formats. Nor does the Decennial Census provide marriage and divorce counts over time. For nearly 150 years, county-level marriage and divorce counts have been reported by county clerks and intermittently compiled by government agencies (U.S. Census Bureau & the National Center for Health Statistics [NCHS]). These counts are reported in published books and reports, annual pamphlets, and websites, containing numerous tables in paper, PDF, Excel and HTML formats. But reports with county-level data were last produced in 1988. Since then, individual investigators have taken the initiative to collect marriage and divorce counts at the county level for 2000 and 2010. Manning and Glass, both with support from the National Center for Family & Marriage Research (NCFMR), collected the marriage and divorce counts for 2010 (funded by NIH) and 2000 (funded by NSF), respectively. The disparate formats of this crucial information requires scholars to duplicate efforts to create usable datasets for studies of the temporal and spatial distribution of marriage and divorce at a high spatial resolution. Creating a centralized repository of analysis-friendly marriage and divorce data will foster innovative research to better understand and explain changes in family structure over a broad sweep of time and across the entire U.S.

This project provides a resource to a large and multidisciplinary community of researchers. *Healthy People 2020* stresses the importance of the social determinants of health, including family. Our goals fit squarely within the vision of the NICHD and specifically the Population Dynamics Branch (PDB) to help understand changes shaping families, disseminate data on American families, and provide data useful for assessments of community health. Further, the project aligns with the PAR-16-149 "to support archiving and documenting existing data sets in order to enable secondary analysis of these data by the scientific community."

Our long-term goal is to ignite population science by making available new data and tools to conduct local-level research and enhance existing survey data. The objective of this proposal is to archive, document, harmonize, and disseminate nearly 150 years (1867-2010) of existing county and state-level administrative data on marriage and divorce. The <u>rationale</u> underling this project is that these resources are not available on a wide scale in a useable format (i.e. in conjunction with other county and state-level variables or in a GIS or statistical package format). Research centers with specialized knowledge and a history of targeting national audiences are ideally suited to conduct these activities, which places the NCFMR and Minnesota Population Center (MPC) in a unique position to archive and disseminate this valuable set of historical administrative data not available anywhere else. Our project will amplify the existing 2000 and 2010 countylevel marriage and divorce data on the NCFMR Data Compass website by providing the most comprehensive historical counts (1867-2010) to date. Our approach will allow users to access the newly archived data interactively through maps and State Profile infographics. By collaborating with the MPC, we will leverage their high-precision historical GIS boundary files, data extraction tools, and the largest collection of Census microdata, aggregate data, and metadata in the world (through their National Historical Geographic Information System (NHGIS) and Integrated Public Microdata Series (IPUMS) projects), as well as a combined 100,000 NHGIS and IPUMS users. We will achieve the objective of this application by pursuing the following 3 specific aims:

- Amass and archive nearly 150 years (1867-2010) of county and state-level administrative data on marriage and divorce.
- Harmonize county and state-level data spatiotemporally allowing researchers to analyze marriage and divorce behavior simultaneously across time and space.
- 3. Disseminate data via the NCFMR Data Compass and NHGIS websites, providing unprecedented access to these data with standardized machine-readable documentation, high-precision GIS boundary files, and integrated data tables, as well as providing tools and resources for county and state-level analyses and linking local-level data to existing household surveys

These data and tools will fuel researchers to develop <u>innovative</u> ways of combining and using administrative and survey data. Importantly, this effort will serve not only family scholars, but demographers, economists, geographers, historians, and public policy scholars who use geographic data as well as large household surveys. The demographic community has an established track record of demand for these resources and services and strong evidence exists of how these services foster innovative population research. This project will advance our long-term goal of **igniting population science by making available new data and tools to conduct local-level research and/or enhance existing survey data.** These efforts will increase the quality and impact of population science as evidenced by letters of support from NCHS, data providers (PSID, NLSY), and experts in family history (Drs. Coontz and Ruggles).

It is widely accepted that mass incarceration has serious collateral consequences for children's well-being, and disproportionately affects minority communities. A large and growing number of children have a parent with incarceration experience. Yet as the National Academy of Sciences concluded, the field has progressed little in identifying specific mechanisms underlying the previously observed links to poor child outcomes (Travis et al. 2014). To identify these mechanisms, our first step is to examine parental incarceration in tandem with the full range of other family disadvantages that co-vary with parents' criminal justice system involvement. In addition to family disadvantage, our proposed study focuses on parents' histories of antisocial behavior (crime, violence, drug use). If incarceration effects on child outcomes are substantially reduced after accounting for parents' antisocial behaviors and other forms of family disadvantage, this will underscore the need for a multi-pronged policy approach to parents' underlying problems (e.g., access to quality drug treatment). Effects that remain after introducing a full complement of controls will provide stronger evidence of a negative impact of incarceration itself; yet analyses are needed to isolate these specific mechanisms.

The proposed project builds on a prospective 10 year study, the Toledo Adolescent Relationships Study (TARS), a population based sample (n=1,321) of individuals interviewed first as adolescents, and which included a separate parent/guardian interview. Individuals were interviewed four more times as they transitioned to adulthood. A key strength of our life course lens is that we have prospectively collected detailed data on the patterns and seriousness of individuals' criminal offending from adolescence to adulthood along with measures of other potential influences on their children's well-being. Funding from the National Institute of Justice and the National Science Foundation support a sixth survey data collection starting in 2017 allowing us to collect data during the peak incarceration years (30-34). This sixth survey will also elicit new information on parenting strategies, family dynamics and the well-being of children born to our respondents, but budget cuts preclude analyses of these data. Funding from NICHD will enable us to a) conduct prospective analyses of incarceration effects on child well-being relying on all six waves of data, and b) collect new data that will enhance the scientific rigor of these analyses. New data collection includes: (1) official records searches documenting arrest and confinement histories for both biological parents, addressing self-report limitations, and providing data on the timing and form of criminal justice contact (jail vs. prison); (2) long form birth certificates for all children born to respondents, providing objective data on maternal and child health at birth to supplement parent reports of child well-being; and (3) in-depth interviews with a subset of respondents, caregivers, and adolescents (n=145) who have experienced parental incarceration. Interviews will triangulate results from quantitative analyses, and provide respondents' and other family members' perspectives on the impact of incarceration and other disadvantages on family dynamics and child well-being. Mixed-method analyses will focus on three aims:

- 1) Relative Influence of Parental Incarceration and Antisocial Behavior. Focusing on the oldest child and approximately 1,056 respondents who are parents, we assess the effect of incarceration on self-reports of child well-being (conduct problems, academic performance, emotional and physical health) in analyses that account for the impact of distinct trajectories of parental antisocial behavior (violence, criminal activity, substance use) across the full study period. Based on new data, we assess: a) differential impact of maternal and paternal experiences, b) impact of lower levels of criminal justice contact (e.g., no contact, arrest only, incarceration), and c) whether child disadvantages are present early or become amplified with development. In-depth interviews will provide a different lens on the relative salience of these parental factors, and highlight distinct perspectives of parents, adolescents, and caregivers who have custody during parental incarceration.
- 2) Impact of Network Encapsulation. We move beyond the traditional emphasis on a focal parent's incarceration by incorporating respondent reports of antisocial behavior and incarceration experiences of the other biological parent, intimate partners, grandparents (including official records of grandparents' incarceration experiences) and other relatives who constitute the child's broader social network. Analyses will determine whether variability in crime and incarceration exposure across the child's full network explains additional variation in well-being outcomes, once we account for parents' behavioral profiles and incarceration histories. In-depth interviews will point to specific disadvantages of 'network encapsulation,' and conversely, family and individual strengths associated with better functioning within these highly disadvantaged family contexts.
- 3) Incarceration-Specific Effects. Relying on complex models that capitalize on prospective data, we examine effects of justice system contact on child well-being that are significant, net of parental antisocial behavior and broader family context. The prospective analyses will identify pathways via models that examine within-individual changes in: (a) material circumstances, (b) social relationships (e.g., conflict, reduced support from family and friends), (c) stress/stigma processes, and (d) parenting practices. In-depth interviews will refine our understanding of family dynamics and changes under varying levels of criminal justice contact.

## Think Live a Reviewer

NIH Reviewers asked to write (and score) on five review criteria

- Significance
- Innovation
- Approach
- Investigator
- Research environment
- □ Focus on the significance of the application

Not the significance of subject area

Not your own professional significance.

## **TIPS**

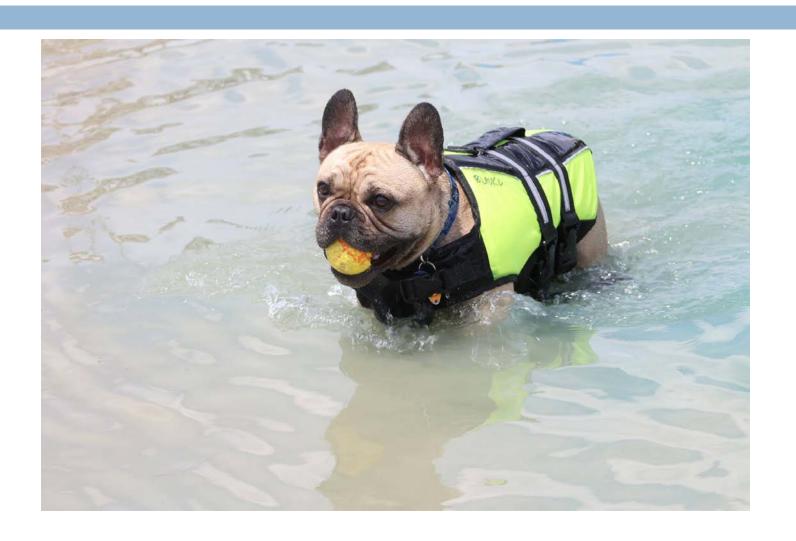
- □ Find a successful grant application
- Study abstracts of successful projects
- Write specific aims or three page summary
- Speak to program officer
- Share your work
- Seek help from experienced colleagues

## Be Persistant

You have to play to win!

If you don't first succeed, learn from your reviews and try again.





# GOOD LUCK!