

**Charles Phelps Taft Research Center**  
**at the University of Cincinnati**  
**Research Support Application**

---

Each section (I-V) should be placed at the start of a new page. All required materials must be included in a single document, uploaded to the electronic submissions system, no later than 5PM on the published day of the deadline. Departmental review is not required for this program.

---

**I. General Information**

- a. Name: Jennifer Malat
- b. M#: Mxxxxxxxxxx
- c. Department: Sociology
- d. Position: Professor
- e. Project title: Comprehensive Measurement of Lifetime Stress
- f. Time Period: February 2015-August 31, 2015
- g. Probable Results of a Grant (such as external funding, publications, and presentations): External funding, publications, and presentations
- h. Other Funding Applied For or Received for This Project (list source and amounts requested and awarded):
  - Pending: University of Cincinnati, CCTST Innovative Methodologic Research to Advance Clinical and Translational Studies Grant.  
\$9178.
  - If we receive this award, we will decline the Taft award. This award is for more money, because we included tablet computers in this budget, but not in the Taft budget.*
- i. If applying for a Cost-Share grant, please indicate whether or not Cost-Share is required by grant giving organization and/or the budget items are necessary for the project but not covered by grant.
  - N/A

## II. Budget

ITEM	COST	BRIEF DESCRIPTION
<b><i>Personnel Costs</i></b>		Graduate students will work as survey interviewers for the pilot data collection.
Training of Interviewers	\$225	\$15 per hour for 3 hours of training, 5 interviewers
Interviewers for Aim 2	\$2,250	\$30 per interview, 75 interviews
Fringe for Grad Students (7.6%)	\$188	
<b><i>Participant Costs</i></b>		Study participants will receive an incentive for their time and efforts.
Aim 1 Incentives	\$450	\$30 per participant, 15 participants
Aim 2 Incentives	\$2,250	\$30 per participant, 75 participants
<b><i>Other Costs</i></b>		
Supplies	\$250	Binders, folders, nametags, and other materials to train and identify research staff
<b>TOTAL</b>	<b>\$5,613</b>	

### III. Internal & External Grant History

#### MALAT

##### Ongoing Research Support

March of Dimes, Louis Muglia (Director)

5/13 – 4/23

Prematurity Research Center Ohio Collaborative

This project's primary goal is to generate innovative strategies to transform our understanding of causes of prematurity and use this knowledge to enhance obstetrical care and infant outcomes for Ohio and its residents.

Role: Investigator

*Overlap with present proposal: This grant is also related to women's health. However, it does not have funds to carry out the proposed project. This grant provides some summer salary support.*

National Science Foundation, Howard Jackson (PI)

9/14 – 8/17

Enhancing Student Success in Biology, Chemistry, and Physics by Transforming the Faculty Culture

This project has several dimensions designed to support faculty and faculty change as they carry out the widespread adoption of research-based instructional strategies into first year Biology, Chemistry, and Physics courses.

Role: Investigator

*Overlap with present proposal: None.*

##### Completed Research Support (5 years)

National Science Foundation

Howard Jackson (PI)

7/10 – 6/13

A Coherent Cross-Disciplinary Learning Initiative in STEM

The project provides a multi-part intervention designed to improve first generation college students' success in Science, Technology, Engineering, and Mathematics. Malat is involved in the project to support socioemotional adjustment of students.

Role: Investigator

Type and Dates

Domestic Travel Award, August 2012

Amount

\$632

Project Title

A Novel Approach to Race in Patient-Health Care  
Provider Interactions

Resulting Publications and Presentations

Presentation at national meetings

Type and Dates

Taft Center Fellowship, 2010-2011

Amount

n/a

Project Title

Social Factors Affecting Health Care Experiences

Resulting Publications and Presentations

Two publications; one paper under revision for  
resubmission; two conference presentations.

## JACQUEZ

### Ongoing Research Support

- 05/13-04/23 Investigator. *Prematurity Research Center Ohio Collaborative*. March of Dimes. Louis Muglia, Director
- This project's primary goal is to generate innovative strategies to transform our understanding of causes of prematurity and use this knowledge to enhance obstetrical care and infant outcomes for Ohio and its residents. This grant funds a graduate student who is mentored by Dr. Jacquez.
- 09/14-08/15 Principal Investigator. *Intervention Development with Immigrant Latinos*. UC LEAF Seed Award; University of Cincinnati
- In this project, we are partnering with the Latino Immigrant Community research Team to develop strategies to address health concerns identified through previous community-partnered research.
- 03/14-04/15 Academic Partner. *Physical Activity Infrastructure for Adams County Residents*. Physical Activity Environments Grant; Interact for Health
- The goal of this project is to determine the influence that increased physical activity infrastructure has on physical activity levels of Adams County residents.

### Completed Support (5 years)

- 01/14-12/14 Principal Investigator. *Physical and Mental Aspects of Stress and Resilience in Vulnerable Youth*. Visionary Fund Grant; American Psychological Foundation
- This project uses biomarkers, self-report methods, and visual narratives to investigate diverse experiences of stress and resilience in young people from immigrant Latino, urban African American, and rural Appalachian backgrounds.
- 03/13-03/14 Co-Principal Investigator. *Pediatric Healthcare Utilization in Cincinnati Latinos*. Clinical and Translational Science Award (CTSA) Community Health Program Grant; University of Cincinnati and Cincinnati Children's Hospital and Medical Center.
- In this project, Latina immigrant women comprise a Community Research Team, creating and administering a health assessment survey to local Latinos. My role is to provide research training and to analyze survey results.
- 07/11-06/13 Academic Principal Investigator. *LULAC Cincinnati's Vision 20-20 for Success – A Community-Academic Partnership to Reduce Latino Dropout*. Driving Dreams through Education" Grant. Awarded by Ford Motor Foundation & the National Office of the League of United Latin American Citizens.

The goal of this project is to deliver after-school wellness interventions to middle and high school Latino students with the intention of reducing their risk for high school dropout. My role is to work with the team of educators and community leaders to evaluate the effectiveness of the project.

04/12-04/13

Academic Principal Investigator. *Exploring and eradicating barriers to accessing mental health services by providing a “bridge” with the Latino community.* Clinical and Translational Science Award (CTSA) Community Health Program Grant; University of Cincinnati and Cincinnati Children’s Hospital and Medical Center.

The goal of this project is to deliver a school-based intervention addressing stress, coping, and self-esteem to Latino immigrant elementary school children. My role is to coordinate research design, protocol development, and measurement of intervention effectiveness.

01/12-06/12

Academic Principal Investigator. *Community-Based Nutrition Education in a Rural Appalachian Community.* Healthy People 2020 Community Innovation Grant; US Department of Health & Human Services.

The goal of this project was to partner with the Adams County Health and Wellness Coalition to implement and evaluate a community-developed nutrition education intervention in settings that are contextually appropriate for rural Appalachians. My role was to partner with community members on intervention development and to coordinate evaluation strategies, data analysis, and dissemination efforts.

## IV. Project Proposal

### Comprehensive Measurement of Lifetime Stress

#### BACKGROUND

In the United States, there are persistent racial inequalities in health. In particular, large gaps exist between African Americans and most other groups. Inequality in infant mortality is particularly profound. Black women are about twice as likely as white women to lose an infant before his/her first birthday. Complicating the picture, the increased risk for black mothers is greater among women with more education. Among those with less than a high school degree the ratio of black to white infant deaths is just under two to one; among those with a Master's degree or higher it is over three to one.<sup>1</sup>

Stress is among a complex web of factors that leads to unequal health. Stress comes from individual experiences, societal events, and "contagious" stress of others. Stress that occurred in childhood can predict adult health as well because it changes physiological functioning.<sup>2</sup> For example, one report from California shows that people with more than four adverse childhood experiences are more than two times more likely to have chronic obstructive pulmonary disease.<sup>3</sup> Despite well-documented link between lifetime stress and health, existing research in this area has a limited conception of stress and does not measure whether experiences are felt as stressful or resources to cope with stressors. Because black women face more disadvantages throughout their lives, **lifetime stress may explain why the infant mortality disparity** is highest among the most educated women.

**We lack a good measure of the complexity of lifetime stress.** We propose to fill this gap by creating a comprehensive survey about lifetime stress, including multiple dimensions of stress and resources to cope with stress. Survey development requires tests to ensure that 1) the resulting questions measure the intended concepts, and 2) the survey questions result in variation in responses. We propose a two-aim project that will achieve these goals. Upon completion of our proposed research, we will **publish an article** describing the Lifetime Stress Survey. Publishing evidence of the validity of the Lifetime Stress Survey will support our **application for NIH funding** to better understand how lifetime stress contributes to health disparities. The NIH will not fund a study using a new survey instrument without documentation of its effectiveness, so this survey development project is critical for federal funding.

#### TEAM

The proposed research grows out of my collaboration with Farrah Jacquez (Psychology). Our shared interest in health and our complementary perspectives from sociology and psychology led to our working together on a project related to the social causes of infant mortality. This research led to our view that the proposed survey development project is needed to move the field forward. We will both give our time to the project. In addition, Jacquez will dedicate some of her graduate assistant's time to the proposed project.

## RESEARCH DESIGN

We are ready to begin work to achieve our specific aims. We have reviewed the literature, developed a draft of the Lifetime Stress Survey, and received feedback on the survey at a workshop. Concurrent with this application, we submitted an IRB proposal for the proposed project.

**Aim #1: Test and finalize wording for the Lifetime Stress Survey.** We have already created a survey instrument with face validity (seems like the questions are good) and content validity (covers the breadth of concepts). The goal of this aim is to test that the proposed questions measure the intended concepts. Specifically, we will assess and compare the functioning of particular question designs and wording options with real participants. To achieve this, we will conduct cognitive interviews. During cognitive interviews, participants are asked questions such as, “What does this question mean to you?” and “How did you make that rating?”<sup>4</sup>

Most accounts suggest that we will reach saturation by 15 interviews. A random sample is not required for cognitive interviews.<sup>4</sup> Thus, we will recruit via social networks to achieve a purposively racially and economically diverse sample. Because we will ask a lot of time and attention from participants, each will receive a \$30 gift card.

Malat, Jacquez, and Jacquez’s graduate assistant will conduct the interviews. After 6 interviews, we will review audio recordings and notes, and meet to make revisions to the instrument. This process will be repeated again at least one additional time after 15 interviews. We expect this aim to be completed by April 1. At the conclusion of this aim we will have survey items that people interpret in a manner that reflects our theoretical constructs in a racially and economically diverse sample.

**Aim #2: Pilot test the Lifetime Stress Survey to further ensure that the resulting questions measure the intended concepts and the survey items give variation in responses.** For this Aim, we will give the Lifetime Stress Survey a sample of 75 women. For this test of instrument validity, it is not important that we have a random sample. Thus, we will recruit via announcements in targeted locations intended to recruit a racially and economically diverse sample. Malat and Jacquez will train five graduate students as survey interviewers. The interviewers will enter responses into a computer during the interviews.

We will use the data from these interviews to run statistical analysis. We will analyze survey data to investigate the variation of item responses (i.e., make sure everyone doesn’t answer the same way). We will also assess the concurrent validity (correlation with similar measures) and predictive validity (predicts expected outcome like other measures) of the instrument. At the conclusion of this aim we will have a pilot-tested, psychometrically valid Lifetime Stress Survey. We expect this aim to be completed by August 31.

We hypothesize that the Lifetime Stress Survey has unique predictive utility because it collects not only information about frequency of stressful events and subjective ratings of stress events, but also timing of stressful events, and ratings of subjective stress and support for each stressful event. By providing a

valid tool to comprehensively measure lifetime stress, we hope to pave the way for more sophisticated interventions addressing the social determinants of health disparities.

(999 words before references)

## REFERENCES

1. Williams DR, Mohammed SA. Discrimination and racial disparities in health: evidence and needed research. *Journal of behavioral medicine*. 2009;32(1):20-47.
2. Thoits PA. Stress and health: major findings and policy implications. *Journal of health and social behavior*. 2010;51 Suppl:S41-53.
3. *A Hidden Crisis: Findings on adverse childhood experiences in California*. Center for Youth Wellness;2014.
4. Cognitive interviewing methodology. In: Kristen Miller VC, Stephanie Willson, Jose Luis Padilla, ed. *Wiley series in survey methodology*. Hoboken, New Jersey: John Wiley & Sons, Inc.; 2014.



## V. Curriculum Vitae

### JENNIFER MALAT

Department of Sociology  
University of Cincinnati  
Cincinnati, OH 45221-0378

#### EDUCATION

PhD, Sociology, University of Michigan, 2000  
MA, Sociology, University of Michigan, 1995  
BS, Sociology, University of Minnesota, 1993, *summa cum laude*

#### PROFESSIONAL EXPERIENCE

Professor, Department of Sociology, University of Cincinnati, 2014 – present  
Associate Professor, Department of Sociology, University of Cincinnati, 2006 – 2014  
Assistant Professor, Department of Sociology, University of Cincinnati, 2000 – 2006

Director, Kunz Center for Social Research, University of Cincinnati, 2013 — present  
Director of Research, Kunz Center for Social Research, University of Cincinnati, 2011-2013

#### JOURNAL ARTICLES

- Malat, Jennifer, and Jeffrey M. Timberlake. 2013. "County-level Unemployment Change and Trends in Self-rated Health." *Sociological Focus* 46:25-46.
- Malat, Jennifer. 2013. "The Appeal and Problems of a Cultural Competence Approach to Reducing Racial Disparities." *Journal of General Internal Medicine* 28(5):605–607.
- Malat, Jennifer, Jeffrey M. Timberlake, and David R. Williams. 2011. "Obama's Political Success and the Health of Blacks, Hispanics, and Whites." *Ethnicity & Disease* 21(3):349-355.
- van Ryn, Michelle, Diana J. Burgess, John F. Dovidio, Sean M. Phelan, Somnath Saha, Jennifer Malat, Joan M. Griffin, Steven S. Fu, Sylvia Perry. 2011. "The Impact of Racism on Clinician Cognition, Behavior, and Clinical Decision-Making." *DuBois Review* 8(1):199-218.
- Malat, Jennifer, Rose Clark-Hitt, Diana Burgess, Greta Friedemann-Sanchez, and Michelle van Ryn. 2010. "White Doctors and Nurses on Racial Inequality in Health Care in the USA: Whiteness and Colour-Blind Racial Ideology." *Ethnic and Racial Studies* 33(8):1431-1450
- Malat, Jennifer, David Purcell, and Michelle van Ryn. 2010. "Factors Affecting Whites' and Blacks' Attitudes toward Race Concordance with Doctors." *Journal of the National Medical Association* 102(9):787-793.
- Clark-Hitt, Rose, Jennifer Malat, Diana Burgess, and Greta Friedemann-Sanchez. 2010. "Doctors' and Nurses' Explanations for Racial Disparities in Medical Treatment." *Journal of Healthcare for the Poor and Underserved* 21(1):386-400.
- Malat, Jennifer, Michelle van Ryn, and David Purcell. 2009. "Blacks' and Whites' Attitudes toward Race and Nativity Concordance with Doctors." *Journal of the National Medical Association* 101(8):800-807.

- Malat, Jennifer. 2006. "Expanding Research on the Racial Disparity in Medical Treatment with Ideas from Sociology." *Health* 10(3):259-282.
- Malat, Jennifer, and Mary Ann Hamilton. 2006. "Preference for Same Race Providers and Perceptions of Interpersonal Discrimination in Health Care." *Journal of Health and Social Behavior* 47(June):173-187.
- Malat, Jennifer, Michelle van Ryn, and David Purcell. 2006. "Race, Socioeconomic Status, and the Perceived Importance of Positive Self-Presentation in Health Care." *Social Science & Medicine* 62(10):2479-2488.
- van Ryn, Michelle, Diana Burgess, Jennifer Malat, and Joan Griffin. 2006. "Why Are Physicians Less Likely to Recommend CABG for Black Men? Examining the Role of Physicians' Perceptions of Patients' Social and Behavioral Characteristics." *American Journal of Public Health* 96(2):351-357.
- Burgess, Diana, Michelle van Ryn, Megan Matoka, and Jennifer Malat. 2006. "Understanding the Provider Contribution to Race/Ethnicity Disparities in Pain Treatment: A Social-Cognitive Framework." *Pain Medicine* 7(2):119-134.
- Malat, Jennifer and Michelle van Ryn. 2005. "African American Preference for Same-Race Doctors: The Role of Discrimination." *Ethnicity & Disease* 15(4):739-747.
- Malat, Jennifer, Hyun Joo Oh, and Mary Ann Hamilton. 2005. "Poverty Experience, Race, and Child Health." *Public Health Reports* 120(4):442-447.
- Moore, Philip J., Amy E. Sickel, Jennifer Malat, David R. Williams, James S. Jackson, and Nancy E. Adler. 2004. "Psychosocial Factors in Medical and Psychological Treatment Avoidance: The Role of the Doctor-Patient Relationship." *Journal of Health Psychology* 9(3):421-433.
- Malat, Jennifer. 2001. "Social Distance and Patients' Rating of Healthcare Providers." *Journal of Health and Social Behavior* 42(December):360-372.
- Malat, Jennifer. 2000. "Racial Differences in Norplant Use in the United States." *Social Science & Medicine* 50(9):1297-1308.

## **EXTERNAL RESEARCH FUNDING**

- "March of Dimes Prematurity Research Center Ohio Collaborative." March of Dimes. Investigator. (Louis Muglia, Principal Investigator) May 2013 – April 2023.
- "A coherent cross-disciplinary learning initiative in STEM." National Science Foundation. Investigator. (Howard Jackson, Principal Investigator) July 2010 – June 2013. \$250,000.
- "Race/ethnicity and health care access and quality." Ohio Research Advisory Council of the Ohio Family Health Survey. Principal Investigator. September 2008 – April 2009. \$25,644.
- "Patients' racial attitudes and perceptions of clinicians." Agency for Health Care Policy and Research, U.S. Department of Health and Human Services. Principal Investigator. September 2003 – June 2005. \$99,987.
- "The effects of family and neighborhood poverty on child health." National Poverty Center, Ford School of Public Policy, University of Michigan. Principal Investigator. July 2003 – July 2004. \$19,222.

## FARRAH M. JACQUEZ

### Academic Appointment

Assistant Professor  
Department of Psychology  
University of Cincinnati  
Cincinnati, OH 45221-0376

### Contact Information

Office: 513-556-5124  
Cell: 513-375-5398  
Email: farrah.jacquez@uc.edu

### Education

2006-2008      **Postdoctoral Fellowship in Pediatric Psychology**  
Mailman Center for Child Development; University of Miami Miller School  
of Medicine; Miami, FL

2001-2006      **Doctor of Philosophy, Clinical Psychology**  
Vanderbilt University; Nashville, TN

1999-2001      **Master of Arts, Psychology**  
University of Notre Dame; Notre Dame, IN

1995-1999      **Bachelor of Arts, Psychology**  
Marshall University; Huntington, WV

### Honors and Awards

09/2013      **Ernest A. Lynton Award for the Scholarship of Engagement for Early Career Faculty**  
New England Resource Center for Higher Education and the Coalition of  
Urban & Metropolitan Universities

11/2012      **Academic-Community Research Partnership Award**  
Center for Clinical & Translational Science & Training (CCTST)  
Cincinnati, OH  
Awarded to the Adams County Health & Wellness Coalition  
Role: Academic Partner

06/2012      **Health Equity Leadership Institute (HELI) Scholar**  
National Institute on Minority Health and Health Disparities Research  
Center of Excellence at the University of Wisconsin; Madison, WI

### Publications \*Denotes mentored student

Raglin, W.\*, Jacquez, F. M. & Vaughn, L.M. (**in press**). Attributions of mental illness: an ethnically diverse community perspective. *Community Mental Health Journal*.

Jacquez, F. M., Vaughn, L. M., Pelley, T.\* & Topmiller, M.\* (**in press**). Health and healthcare experiences of Latinos in a nontraditional destination area. *Journal of Community Practice*.

Mooney, J., Jacquez, F. M., & Scott, W. (**in press**). Establishing partnerships between public health and academic partners to address infant mortality. *International Journal of Public Health*.

DeJonckheere, M.\*, Vaughn, L. M., & Jacquez, F. M. (**in press**). Stress and Coping Among Immigrant Latino Youth. *Urban Education*.

Mooney, J., Jacquez, F. M., & Scott, W. (2014). Public health and academic partners and how to address infant mortality. In R. Caron & J. Merrick (Eds.) *Public health: Improving health via interpersonal professional collaborations*. New York: Nova Science.

Jacquez, F. M. (2014). Demonstrating Impact as a Community-Engaged Scholar Within a Research University. *Metropolitan Universities, 25*(2).

Vaughn, L. M., Jacquez, F. M., & McLinden, D. (2013). The use of concept mapping to identify community-driven intervention strategies for physical and mental health. *Health Promotion Practice, 14*(5), 675-685.

Jacquez, F. M., Vaughn, L. M. & Wagner, E. (2013). Youth as partners, participants, or passive recipients: A review of children and adolescents in community-based participatory research (CBPR). *American Journal of Community Psychology, 51*(1), 176-189.

Jacquez, F. M. & Ghantous, S.\* (2013). Community-partnered needs assessment: a strategy to teach college students about health disparities. *Journal of Prevention & Intervention in the Community, 41*(2), 68-74.

Jacquez, F. M. & Raglin, W.\* (2013). Family Aggregation. In Gelman, M. & Turner, J. R. (Eds.), *Encyclopedia of Behavioral Medicine*. New York, New York: Springer.

Vaughn, L. M., Wagner, E., Jacquez, F. M. (2013). Community-based participatory research in child health. *The American Journal of Maternal Child Nursing, 38*(1), 48-51.

Vaughn, L. M. & Jacquez, F. M. (2012). Characteristics of newly-immigrated, Spanish speaking Latinos who use the pediatric emergency department: preliminary findings in a secondary migration city. *Pediatric Emergency Care, 28*(4), 345-50.

Vaughn, L. M., Nabors, L., Pelley, T., Hampton, R. R., Jacquez, F. M., & Mahabee-Gittens, E. M. (2012). Obesity Screening in the Pediatric Emergency Department. *Pediatric Emergency Care, 28*(6), 548-552.

LaGrange, B., Cole, D. A., Jacquez, F. M., Ciesla, J., Dallaire, D., Pineda, A., Truss, A., Weitlauf, A., Tilghman-Osborne, C., & Felton, J. (2011). Disentangling the Prospective Relations between Cognitive Style and Depressive Symptoms. *Journal of Abnormal Psychology, 120*(3), 511-527.

Vaughn, L. M., McLinden, D., Jacquez, F. M., Slater, S., Crosby, L., & Mitchell, M. (2011). Understanding the Social Networks of Parents of Children with Sickle Cell Disease. *Journal of the Poor and Underserved, 22*(3), 1014-1029.

Valenzuela, J., Jacquez, F. M., Pendery, R., Niemes, L., Huddleston, D. & Mitchell, M. (2011). The impact of a community-based activity and nutrition program for children. *Journal of Intervention and Prevention in the Community, 39*, 182-193.

Vaughn, L. M. & Jacquez, F. M. (2011). Pediatric prevention and intervention in the community. *Journal of Prevention and Intervention in the Community, 39*, 177-181.

Vaughn, L. M., Jacquez, F., Zhao, J., & Lang, M. (2011). Partnering with students to explore the health needs of an ethnically diverse, low-resource school: an innovative large group assessment approach. *Contemporary Topics in Family and Community Health, 34*, 72-84.

Cole, D.A., Jacquez, F. M., LaGrange, B., Pineda, A., Truss, A. B., & Folmer, A. S. (2011). A longitudinal study of cognitive risks for depressive symptoms in children and young adolescents. *Journal of Early Adolescence, 31*, 782-816.

Cole, D. A., Jacquez, F. M., Truss, A. E., Pineda, A. Q., Folmer, A. S., Tilghman-Osborne, C. E., Felton, J. W., & Maxwell, M. A. (2009). Gender differences in the longitudinal structure of cognitive diatheses for depression in children and adolescents. *Journal of Clinical Psychology, 65*, 1312-26.