#### **BIOGRAPHICAL SKETCH**

NAME: Jarrín Montaner, Olga F.

**eRA COMMONS USERNAME: OJARRIN** 

POSITION TITLE: Associate Professor & Director, Community Health and Aging Outcome Laboratory

#### **EDUCATION/TRAINING**

INSTITUTION AND LOCATION	DEGREE	Completion Date	FIELD OF STUDY
University of Connecticut, Storrs, CT	B.S.	05/2002	Nursing Science
University of Colorado, Aurora, CO	certificate	05/2004	Public Health Nursing
University of Connecticut, Storrs, CT	M.S.	05/2007	Nursing Science
University of Connecticut, Storrs, CT	certificate	05/2009	Andragogy of Nursing
University of Connecticut, Storrs, CT	Ph.D.	08/2010	Nursing Science
University of Pennsylvania, Philadelphia, PA	Postdoc	12/2015	Gerontological Nursing
University of Pennsylvania, Philadelphia, PA	Postdoc	12/2015	Outcomes Research

### A. Personal Statement

My laboratory focuses on solving problems in our public health and healthcare systems that will improve health equity and access to healthcare and social services across the lifespan. Projects include a focus on variation in outcomes associated with chronic diseases including Alzheimer's disease and other dementias. All projects explore variation by race, ethnicity, and sex, and consider potential impact of structural and systemic racism during design and interpretation of statistical analyses. The NIH/NIA R01 and R33 projects I lead focus on understanding predictors of end-of-life care quality, healthy aging, and cognitive decline associated with Alzheimer's disease and other dementias. These projects use advanced health services research methods with large national Centers for Medicare and Medicaid Services (CMS) datasets focusing on clinical aging trajectories of cognitive and functional status, geriatric syndromes, health services use, and exposure to environmental factors including air pollution and neighborhood area deprivation in both urban and rural communities. Over the past seven years I have mentored 50 graduate and undergraduate students, and early career faculty. I currently mentor one NJMS MD/PhD student and serve as chair/advisor to three PhD students and one K01 candidate (pending).

Ongoing projects that I would like to highlight include:

## R01 AG066139-01A1 (Jarrín Montaner)

09/15/20-04/30/24

NIH/NIA

R01 Upstream Approaches to Improve Late Life Care for People Living with Dementia

The long-term goal is to improve the quality of end-of-life care provided to families and people living with Alzheimer's disease and its related dementias (dementia) by generating population-level evidence on the public health impact of community-based support structures including skilled home health care. This project builds on my prior work as a K99/R00 award recipient (HS22406).

Role: PI

# R33 AG068931-01A1 (Jarrín Montaner & Lin)

05/01/21-04/30/24

NIH/NIA

Advanced Development and Utilization of Assembled Aging Trajectory Files from Multiple Datasets
The goal of this application is to develop a comprehensive and sustainable research infrastructure to support
projects that address key interdisciplinary aging research questions with proposed methodology particularly

relevant to the study of care transitions and interventions for people with Alzheimer's Disease and Related Dementias (ADRD) and other age-related chronic diseases. This project has two additional years of anticipated funding with a projected end date of 4/30/2026.

Role: Contact-PI

# **R33 AG068931-01A1-S1** (Jarrín Montaner & Lin)

09/01/21-04/30/24

NIH/NIA

Administrative supplement to support collaborations for AI/ML-readiness.

For the supplement, new work in the CMS Virtual Research Data Center (VRDC) will create Al/ML-ready datasets, workflows, and source code for data cleaning and pre-processing clinical and environmental risk data. Role: Contact-Pl

# UL1 TR003017 (Panettieri)

03/01/19-02/28/24

NIH/NCATS

New Jersey Alliance for Clinical and Translational Science (NJACTS)

Our CTSA Hub focuses on two overarching themes: the heterogeneity of disease pathogenesis and response to treatment, and the value of linking large clinical databases with interventional clinical investigations to identify cause-and-effect and predict therapeutic responses.

Role: Co-Lead, Hub Research Capacity for Integrating Special Populations in Research

## Citations: §mentee

2004-2005

- Rizvi F, Korst MR, Young M, Habib MH, Kra JA, Shah A, Mayer TM, Saraiya B, Jarrín OF, Mattes MD. (2023). Pilot study evaluating cross-disciplinary educational material to improve patients' knowledge of palliative radiation therapy. Journal of Cancer Education, online first. https://doi.org/10.1007/s13187-023-02283-y
- §Payongayong JV, Thomas-Hawkins C, Jarrín OF, Barberio J, Jain DJ. Effects of end-of-life communication knowledge, and perceived behavioral control on end-of-life communication behaviors among nephrology nurse practitioners. Nephrol Nurs J. 2022;49(3):213-225. PMID: 35802360
- 3. §Rahemi Z, **Jarrín OF**. (2023). Older adults in the USA with limited English proficiency have high rates of intensive end-of-life care and low rates of palliative care and advance care planning. Evidence-Based Nursing, online first. https://doi.10.1136/ebnurs-2022-103593
- 4. \*SRahemi Z, Malatyali A, Adams S, **Jarrín OF**, Demiris G, Parker V, Anaraky R, Dye C. (2022). Advance care planning among older adults with cognitive impairment. American Journal of Hospice and Palliative Medicine, online first, https://doi.org/10.1177/10499091221146255

## B. Positions, Scientific Appointments, and Honors

### **Positions and Scientific Appointments**

2022-	Associate Professor, School of Nursing, Rutgers, The State University of New Jersey
2021-	NJACTS Academy of Mentors TL1 & KL2 Preceptor
2021-	Full Member, Rutgers Cancer Institute of New Jersey
2020-	Core Member, Rutgers Global Health Institute
2020-	Director, Rutgers Minority Nursing Leadership Institute
2019-	Core Member, New Jersey Alliance for Clinical and Translational Science
2018-	Director, Community Health and Aging Outcomes Laboratory
2017-	Core Member, Institute for Health, Health Care Policy & Aging Research, Rutgers University
2016-2022	Assistant Professor, School of Nursing, Rutgers, The State University of New Jersey
2016-	Adjunct Assistant Professor, School of Nursing, University of Pennsylvania, Philadelphia
2016-	Senior Fellow, Center for Health Outcomes & Policy Research, School of Nursing, UPenn
2010-2015	Postdoctoral Fellow, Center for Health Outcomes & Policy Research, School of Nursing, UPenn
2009-2010	Instructor, University of Connecticut, School of Nursing, Storrs, CT
2007-2009	Visiting Nurse/Case Manager, VNA East, Mansfield, CT
2004-2006	Research Assistant, Center for Nursing Research/Office of Dean, UConn, Storrs, CT

Research Assistant, Center for Health/HIV Intervention and Prevention, Storrs, CT

#### **Grant Review Service:**

2022	(UK) National Institute for Health Research, Patient Safety Research Collaborations
	Competition
2022	NIH CSR Clinical Informatics and Digital Health Standing Panel (x 1)
2021-2022	NIH CSR Organization and Delivery of Health Services (ODHS) Study Section (x 2)
2021-2022	NIH National Institute of Nursing Research Initial Review Group (NRRC) (x 2)
2021	NIH CSR Health Services: Quality and Effectiveness (HSQE) Study Section (x 1)
2021	NIH NIA MSTEM: Advancing Diversity in Aging Research Through Undergraduate Education
2021	NIH CSR Healthcare and Health Disparities (HHD) Study Section (x 1)
2020-2023	The Rockefeller University Heilbrunn Nurse Scholar Awards (x 4)
2020	NIH NIA Alzheimer's Dementia & Translational Training Programs
2019-2021	NIH NIMHD Research Career Development K-awards (x 5)
2019-2020	NIH NIA NIA-C Clinical Aging Review Panel (x 3)
2019-2020	NIH CSR Health Services Organization and Delivery Study Section (x 2)
2018-2021	NIH NIA Special Emphasis Panel: Loan Repayment Program (x 4)
2018, 2021	NIH NIA Special Emphasis Panel: GEMSTAR R03 awards (x 2)
2018	NIH NIMHD Special Emphasis Panel: R13 & K-awards (x 1)
2016-2019	American Nurses Foundation, 2 <sup>nd</sup> level Review Committee (x 4)
2012-2019	American Nurses Foundation (x 8)

#### **Honors and Awards**

- 2021 Fellow, American Academy of Nursing
- 2021 Chancellor's Clinical or Health Sciences Investigator Award, Rutgers Biomedical and Health Sciences Campus, Rutgers, The State University of New Jersey
- 2020 Sigma Xi, The Scientific Research Honor Society
- 2019 Distinguished Educator, National Hartford Center of Gerontological Nursing Excellence
- 2017 Hurdis M. Griffith Faculty Research Award, Rutgers University
- 2012 Claire M. Fagin Fellow, National Hartford Centers of Gerontological Nursing Excellence
- 2011 American Nurses Foundation Scholar
- 2011 Sigma Theta Tau International, Mu Chapter Award for dissertation, University of Connecticut
- 2010 Ruth L. Kirschstein National Research Service Award Postdoctoral (T32) Trainee
- 2007 Phi Kappa Phi, Interdisciplinary Honor Society, University of Connecticut
- 2002 Sigma Theta Tau International Nursing Honor Society, Mu Chapter, University of Connecticut

## **C. Contributions to Science** \*corresponding author

- 1. Generating methods to measure, and evidence to improve, racial/ethnic disparities among older adults. How public policy and organizational management practices affect outcomes for marginalized populations and racial/ethnic disparities is a focus of my research. As an NINR T32 Postdoctoral fellow I worked on a project exploring variation in post-operative complications and outcomes by sex, race, and ethnicity that was my first exposure to utilizing socioeconomic status calculated from U.S. Census data in models (based on Diez-Roux approach). After setting up my laboratory at Rutgers' University, I led work to develop methods to reduce racial/ethnic misclassification of patients in Medicare administrative data using self-reported race/ethnicity data collected during routine assessments in post-acute and long-term care. Our Medical Care paper (b) has been cited >80 times (Google Scholar) including multiple CMS policy documents and the June 2022 Data Brief and Response from CMS Director Brooks-LaSure (d) that replicates and reiterates findings and recommendations to use available self-reported race/ethnicity data to improve on the existing race/ethnicity data used in health services and policy research (b & c).
  - a. Brooks Carthon JM\*, **Jarrín OF**\*, Sloane D, Kutney-Lee A. Variations in postoperative complications across race, ethnicity and sex among older adults. *J. American Geriatrics Society*. 2013; 61:1499-1507. PMCID: PMC3773274.
  - b. **Jarrín OF**\*, Nyandege AN, Grafova I, Dong X, **Lin H**. Validity of race and ethnicity codes in Medicare administrative data compared to gold-standard self-reported race collected during routine home health care visits. *Medical Care*. 2020;58(1), e1-e8. PMCID: PMC6904433

- c. Grafova IB, **Jarrín OF**\*. Beyond black and white: Mapping misclassification of Medicare beneficiaries' race and ethnicity. Medical Care Research and Review. 2021; 78(5):616-626. PMID: 32633665
- d. U.S. Department of Health and Human Services (HHS) Office of Inspector General (OIG) Data Brief, June 2022, OEI-02-21-00100, Inaccuracies in Medicare's race and ethnicity data hinder the ability to assess health disparities. https://oig.hhs.gov/oei/reports/OEI-02-21-00100.pdf
- 2. Advances in research infrastructure and methods. In addition to the new (R33) infrastructure project I am co-leading, I have led or participated in multiple research infrastructure and methods that filled gaps or helped to address data limitations, for example utilizing self-reported race/ethnicity data to augment inaccurate and incomplete administrative and imputed race data. Similarly, after realizing that half of home health care patients with diagnosed dementia did not have the diagnosis recorded in their home health care admission record, we developed and validated a predictive model to fill the gap that is being utilized by one of the largest non-profit home health agencies in the country and prior to the pandemic had been slated for implementation into one of the largest home health care software products (RU Docket # 2019-141).
  - a. **Jarrín OF**, Nyandege A, Rosati R, Videon T. Identifying patients with probable delirium and dementia from routine home health care assessments. Innovation in Aging. 2019;3(S1), S121.
  - b. Lasater K, **Jarrín OF**, Aiken LH, McHugh M, Sloane D, Smith H. A methodology for studying organizational performance: A multi-state survey of front-line providers. *Medical Care*. 2019;57:742-749. PMCID: PMC6690788
  - c. Best K, **Jarrín OF**, Buttenheim AM, Bowles K, Curley MA. Innovation in creating a strategic plan for research within an academic community. *Nursing Outlook*. 2015;63:456-461. PMID: 26187085
  - d. **Jarrín OF**, Nyandege AN, Grafova I, Dong X, Lin H. Validity of race and ethnicity codes in Medicare administrative data compared to gold-standard self-reported race collected during routine home health care visits. *Medical Care*. 2020;58(1), e1-e8. PMCID: PMC6904433.
- 3. Generating evidence of the value of nurse staffing, work environments, and management. Nursing remains a common target of cost containment and nurses' participation in reforms has been limited. Since beginning my postdoctoral studies at the University of Pennsylvania in 2010, I have been part of the United States RN4CAST study team, which primarily focuses on hospital nurse work environments, nurse staffing, and patient outcomes. I served as project director of the 2016 non-responder survey and co-investigator leading development of home health care specific survey items and data analysis. I have extended this work on nurse staffing in recent paper showing the relationship between lower levels of RN staffing and higher rates of antipsychotic and sedative-hypnotic medication use in nursing homes (d).
  - a. Lasater K, **Jarrín OF**, Aiken LH, McHugh M, Sloane D, Smith H. A methodology for studying organizational performance: A multi-state survey of frontline providers. *Medical Care*. 2019;57:742-49. PMCID: PMC6690788.
  - b. Aiken LH, Sloane DM, Barnes H, Cimiotti JP, **Jarrín OF**, McHugh MD. Nurses' and patients' appraisals show patient safety in hospitals remains a concern. *Health Affairs*. 2018;37(11):1744-51. PMC6325635.
  - c. **Jarrín OF**, Flynn L, Lake ET, Aiken LH. Home health agency work environments and hospitalizations. *Medical Care*. 2014;52:877-83. PMCID: PMC4174033.
  - d. Crystal S, **Jarrín** OF, Rosenthal M, Hermida R, Angell B. National partnership to improve dementia care in nursing homes campaign: State and facility strategies, impact, and antipsychotic reduction outcomes. *Innovation in Aging*. 2020;4(3):1-13. PMCID: PMC7365953
- 4. Advancing the ontology and epistemology of nursing and health science. Philosophy of science sets the standard for identifying what constitutes scientific knowledge. If one is not aware of the standard, one may not recognize the validity of a claim of knowledge. My work in nursing ontology and epistemology focused on the way we understand the interaction of humans with their environment through patterns that emerge when simultaneously considering knowledge from biological, behavioral, socio-cultural, and physical environment domains across multiple levels (patients, providers, healthcare systems). The impact of the original working paper (2006) and published versions (2007, 2012) is reflected in over 92,000 downloads from the University of Connecticut digital repository (across 850+ institutions in 130+ countries), citations in more than 20 textbooks, numerous theses, and dissertations. This work is similar to the NIH NIA Health Disparities Research Framework (2015), and NIH NIMHD Research Framework (2019).
  - a. Jarrín OF. An integral philosophy and definition of nursing. Journal of Integral Theory and Practice.

- 2007;2(4):79-101.
- b. **Jarrín OF**. Results from the Nurse Manifest 2003 Study: Nurses' perspectives on nursing. *Advances in Nursing Science*. 2006;29(2):E74-E85. PMID: 16717487.
- c. **Jarrín OF**. A philosophical inquiry of nursing metalanguage. Doctoral Dissertation. Major Advisor: E. Carol Polifroni. University of Connecticut, 2010;192; 3464377.
- d. **Jarrín OF**. The integrality of situated caring in nursing and the environment. *Advances in Nursing Science*. 2012;35(1):14-24. PMCID: PMC3402335.
- 5. Generating evidence for new and classic models of home health care. My current research focuses on the generation of evidence to support health care system redesign and decision making by patients and caregivers, providers and clinicians, health systems leaders, and policy makers. My team recently found, using national Medicare data and fully risk-adjusted models, that people living with dementia who received three or more episodes of skilled home health had better survival outcomes compared to those who received fewer episodes or no skilled health care.
  - a. **Jarrín OF**, Flynn L, Lake ET, Aiken LH. Home health agency work environments and hospitalizations. *Medical Care*. 2014;52(10):877-83. PMCID: PMC4174033
  - b. **Jarrín OF**, Kang Y, Aiken L. Pathway to better patient care and nurse workforce outcomes in home care. *Nursing Outlook*. 2017;65:671-678. PMCID: PMC5712278
  - c. Smith JM, Lin H, Thomas-Hawkins C, Tsui J, **Jarrín OF**. Timing of home health care initiation and 30-day rehospitalizations among Medicare beneficiaries with diabetes by race and ethnicity. *Int J Environ Res Public Health*. 2021;18(6):3196. PMCID: PMC8197411
  - d. Smith JM, **Jarrín OF**, Lin H, Tsui J, §Dharamdasani T, Thomas-Hawkins C. Racial disparities in post-acute home health care referral and utilization among older adults with diabetes. *Int J Environ Res Public Health*. 2021;18(6):3196. PMCID: PMC8003472

Complete List of Published Work in MyBibliography <a href="https://www.ncbi.nlm.nih.gov/sites/myncbi/1Xaa-BoFdgK53/bibliography/49047094/public/?sortby=pubDate&sdirection=descending">https://www.ncbi.nlm.nih.gov/sites/myncbi/1Xaa-BoFdgK53/bibliography/49047094/public/?sortby=pubDate&sdirection=descending</a>