# BIOGRAPHICAL SKETCH

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NAME: Arthur Zacharjasz

eRA COMMONS USER NAME (credential, e.g., agency login): ZACHARJASZ

POSITION TITLE: PhD student

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

| INSTITUTION AND LOCATION | DEGREE *(if applicable)* | Start Date MM/YYYY | Completion Date MM/YYYY | FIELD OF STUDY |
|---|---|---|---|---|
| Benedictine University, Lisle, IL | BS | 08/2006 | 05/2010 | Biology |
| DePaul University, Chicago, IL | MSN | 08/2013 | 05/2015 | Nursing |
| North Park University, Chicago, IL | Post-Master's Certificate | 06/2016 | 05/2019 | Family Nurse Practitioner |
| University of Missouri, Columbia, MO | PhD | 06/2022 | Current | Nursing |

**A. Personal Statement.** My journey towards a PhD in Nursing at the University of Missouri has been profoundly influenced by my experiences during the COVID-19 pandemic, significantly changing both my personal and professional life. As a nurse practitioner, I was suddenly thrust into the forefront of the pandemic response at my critical access hospital in rural Iowa. I took on the responsibility of developing testing and treatment protocols, crafting policies on infection control, vaccination, and masking, all while diagnosing and treating patients across various departments. This role not only challenged me, but also reshaped my understanding of public health and its impact on our community.

The pandemic's personal toll hit me hard when a family friend I had known since childhood, died to COVID-19. This loss and the many more in the community pushed me to immerse myself in the latest literature related to COVID-19. I was determined to spread this knowledge throughout my community to enable informed medical decisions, despite the challenges and oftentimes thankless nature of this task. My experiences during this time taught me invaluable lessons about human behavior and the factors influencing individual decision-making. I led initiatives to combat the pandemic's challenges, such as organizing town halls in long-term care facilities and navigating the complexities of vaccine counseling amidst widespread misinformation. Treating coworkers and their families, who trusted my medical judgment yet remained skeptical of COVID-19 guidelines, enlightened me to the crucial role of social determinants of health and disparities in health and life choices.

These experiences motivated me to investigate the underlying issues of vaccine hesitancy and public health challenges through my doctoral studies. My coursework laid the groundwork for developing a conceptual model on COVID-19 vaccine hesitancy among rural populations in the U.S., focusing on ignorance, trust, and liberty as key concepts. Working on my F31 Sponsor's funded AHRQ R01 project further refined my understanding of vaccine hesitancy, particularly in long-term care settings. My dissertation aims to explore the multifaceted factors contributing to vaccine hesitancy among long-term care healthcare workers in Missouri and Iowa, aligning with the NINR's research goals to address health disparities. Developing the F31 training grant application has been instrumental in setting specific goals for enhancing my capabilities in qualitative research, advanced skills in rural public health research, and manuscript development, supporting my ambition to reform public health policy and advocate for rural communities. These goals support my vision to reform public health policy and advocate for the underserved rural communities that have become my professional and personal commitment. My research on COVID-19 vaccine hesitancy among long-term healthcare workers in rural settings aims to develop a grounded theory that can inform future public health policy and improve healthcare in the United States.

Ongoing and recently completed projects that I would like to highlight include:

Iowa Department of Health & Human Services
Zacharjasz (Project Director)
01/2024 – 12/2024
*A Quality Improvement Initiative for Burnout Reduction in Rural Healthcare Workers*

For this funded project, I wrote the proposal, identified the interventions and burnout assessment tool, developed the budget and vendor contracts, and am implementing and evaluating the interventions.

## B. Positions, Scientific Appointments and Honors

### Positions
2021-present  Director, Nurse Practitioner Occupational, Employee, & Public Health, Mahaska County Hospital,  Critical Access Hospital, Oskaloosa, Iowa
2020-2021    Nurse Practitioner, Mahaska County Hospital, Critical Access Hospital Oskaloosa, Iowa 2015-2020   ICU Code/Charge RN, Northwestern Memorial Hospital, Chicago, Illinois

### Honors
2024        PhD Student Award for Excellence, Sinclair School of Nursing, University of Missouri
2022-present  Sinclair PhD Student Fellowship, Sinclair School of Nursing, University of Missouri
2018        Illinois Nurses Foundation 40 under 40 Emerging Nurse Leaders in Illinois

### Professional Memberships
2023-present  American Public Health Association
2023-present  Graduate Nursing Student Academy (GNSA), American Association of Colleges of Nursing
                2023-2025      GNSA Liaison for the University of Missouri-Columbia
2022-present  National Rural Health Association
2022-present  National Association of County and City Health Officials
2022-present  Iowa Public Health Association
                Advocacy Committee
2018-present  American Nurses Association
                Political Action Committee
2014-present  Sigma Theta Tau International Nursing Honor Society


## C. Contributions to Science

**1. Conceptual Framework of COVID-19 Vaccine Hesitancy in Rural US Populations:** As part of my PhD studies, I took *N9100 State of the Science* and *N9120 Philosophical and Theoretical Basis for Research* courses in Fall 2022. Based on the content that I learned in these two courses, I synthesized research into a conceptual framework addressing COVID-19 vaccine hesitancy in rural U.S. populations. Developing this framework aided me in understanding vaccine hesitancy in rural populations and spurred my interest in improving public health outreach in these communities. Based on this framework, I created and submitted an abstract, developed and presented a scholarly poster at a campus-based research week and at the Midwest Nursing Research Society. I gained valuable hands-on research skills related to synthesizing literature, thinking conceptually, and disseminating scholarly artifacts at a professional conference.

> a. **Zacharjasz, A.** (2023). *A Conceptual Framework of COVID-19 Vaccine Hesitancy and Rural US Populations* [poster presentation]. Midwest Nursing Research Society Annual Research Conference, Des Moines, IA, March 29 – April 1, 2023.

> b. **Zacharjasz, A.** (2023). *A Conceptual Framework of COVID-19 Vaccine Hesitancy and Rural US Populations* [poster presentation]. Show Me Research Week 2023, University of Missouri, Columbia, MO, April 18, 2023.

**2. Psychometric Analysis of Health Literacy:** As part of my PhD studies, I took the *N8002 Psychometrics* course and completed a secondary psychometric analysis of the structure of health literacy for scales 8 (finding health information) and 9 (understanding health information) of the Health Literacy Questionnaire using data sourced from a validated, real-world, and open-source dataset consisting of 1,058 German participants ≥ 18

years old. I gained valuable research skills related to secondary analysis of a quantitative data set, using R statistical software to conduct psychometric analysis, interpretation of the results of psychometric analysis, and gained additional experience disseminating scholarly artifacts at a professional conference. My analysis of the Health Literacy Questionnaire data from a German population provided insights into health literacy as a social determinant of health. An abstract is currently *In Press* for the *Western Journal of Nursing Research*.

    a. **Zacharjasz, A.** & Chesnut, S. (2024). *Secondary Psychometric Analyses of a Health Literacy Questionnaire Data Set from a German Population.* [Poster presentation]. Midwest Nursing Research Society Annual Research Conference, Minneapolis, MN, February 28 – March 2, 2024.

    b. **Zacharjasz, A.** & Chesnut, S. (2024). *Examining the Multidimensionality of Health Literacy: Secondary Psychometric Analyses.* [Poster presentation]. 2024 Public Health Conference of Iowa, Iowa Department of Health and Human Services, Des Moines, IA, March 26-27, 2024.

**3. Vaccine Hesitance in Long Term Care:** I completed my first research practicum with Dr. Amy Vogelsmeier, my F31 application Sponsor. For this practicum, I attended weekly interdisciplinary research team meetings for her AHRQ funded grant entitled "Developing Improved Guidelines for Nursing Home-Associated Viral Respiratory Infections: Learning From the COVID-19 Experience," reviewed qualitative interview data from the study, conducted a review of the research literature on vaccine hesitancy in long term care, and created a literature matrix. As a result of this practicum, I was able to become current on the COVID-19 vaccine hesitancy literature in LTC workers, gain experience working with an interdisciplinary research team, and continue developing my writing and analytical skills working directly with Dr. Vogelsmeier.

**4. Peer Review Experience for *The Journal of School Nursing*:** Serving as a manuscript reviewer for the journal enhanced my skills in critical evaluation and the publication process.