BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Murphy, Bridget S. (formerly Ruiz) (she/her/ella)

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

POSITION TITLE: Assistant Research Professor

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)	Completion Date MM/YYYY	FIELD OF STUDY
Jones International University Centennial, CO	BABC	12/2004	Business Communications
Northern Arizona University Flagstaff, AZ	M.Ed.	08/2007	Education: Counseling- Human Relations
Arizona State University Tempe, AZ	DBH	05/2020	Behavioral Health Management

A. Personal Statement

I have more than 3 decades of education and experience in public and behavioral health research and service. I have held positions in academic institutions, community-based, and private sector organizations. I have a doctorate in behavioral health and a master's in education. My principal expertise is in Dissemination and Implementation (D&I) research and workforce development around substance use, mental health, and related infectious diseases for culturally diverse populations in various settings. As a teen, I struggled with substance use and mental health issues and participated in treatment. This experience provided the foundation for my academic and professional direction. I use my personal experience as an evidence-based strategy to reduce stigma, communicate science through storytelling, and increase access to education, services, and support for diverse populations. Science tells us the words we use and the ways we describe people, and their families, may influence access to care and the treatment provided. I prioritize addressing stigma and including people with lived experience by using adult learning principles and strength-based approaches.

I am an early-stage investigator because I received my doctorate within the last 10 years. I have access to experienced and knowledgeable research investigators and have University of Arizona institutional support. This is demonstrated by the receipt of a career development award (CDA) in 2023. Through the CDA, I am developing interventions and strategies to implement opioid stewardship programs (OSPs) in rural healthcare organizations. This research aims to (1) examine the literature regarding OSP implementation in emergency departments and acute care settings, (2) assess publicly available information to determine rural healthcare organizations readiness and capacity to implement OSPs, (3) examine healthcare leaders perceptions of OSP implementation fit, acceptability, and training and technical assistance needs and (4) assess Arizona healthcare professionals readiness to implement OSPs.

I am also the lead for a contract with the Arizona Department of Health Services (ADHS). Through ADHS's Centers for Disease Control and Prevention's (CDC) Overdose Data to Action-State (OD2A-S) grant, I lead training and technical assistance efforts regarding opioids and stimulants. The OD2A-S team collaborates with community leaders, healthcare practitioners, and community health workers/representatives to address polysubstance use in Arizona including overdose recognition and naloxone administration training. I also serve as a faculty advisor on a project that is providing education on responsible adult cannabis use for

professionals, students, and others interested in learning more about the science backed risks and benefits of cannabis use. Taken together, I have the institutional support, requisite knowledge and experience, and access to experienced researchers to fulfill the aims of this proposed research.

- a) Staff reporter. Lived experience leads to unique educational approach. The University of Arizona Health Sciences. 2023. https://healthsciences.arizona.edu/news/stories/lived-experience-leads-unique-educational-approach
- b) Expert Insights. What is lived experience? The University of Arizona Health Sciences. 2024. https://www.youtube.com/watch?v=opZjX-wf72A
- c) **Murphy BS**, Falls N. Implementation of opioid stewardship programs (OSP) in hospitals: A narrative literature review (in press, 2024).
- d) Murphy B, Humble W, Cronin S. Cannabis conversations: Legal & behavioral health considerations for social service professionals. The University of Arizona, Comprehensive Center for Pain and Addiction. 2023. https://www.youtube.com/watch?v=x9GnrxckVRc&list=PLzU0A_0Toy0PBIGA0K8-TB-YjiMOVLmtT&index=2

B. Positions, Scientific Appointments, and Honors

2024-current	Faculty Advisor, Team Awareness Combatting Overdose (TACO), University of Arizona
2024 Garrent	Student Club.
2023-current	Education and Workforce Development Director, Comprehensive Center for Pain and Addiction, University of Arizona, Tucson, AZ
2023-current	Faculty Lead, Mel & Enid Zuckerman College of Public Health, University of Arizona, Undergraduate certificate and minor in addiction and substance use.
2022-current	Assistant Research Professor, Comprehensive Center for Pain and Addiction, University of Arizona, Tucson, AZ
2022-current	Assistant Research Professor, Mel & Enid Zuckerman College of Public Health, University of Arizona, Center for Rural Health, Tucson, AZ
2022-current	Assistant Research Professor, Mel & Enid Zuckerman College of Public Health, University of Arizona, Health Promotion Sciences, Tucson, AZ
2020-2022	Research Program Administration Officer II, Comprehensive Center for Pain and Addiction, University of Arizona, Tucson, AZ
2020-2022	Research Program Administration Officer II, Mel & Enid Zuckerman College of Public Health, University of Arizona, Center for Rural Health, Tucson, AZ
2020-2022	Research Program Administration Officer II, Mel & Enid Zuckerman College of Public Health, University of Arizona, Health Promotion Sciences, Tucson, AZ
2017-2020	Program Coordinator, Mel & Enid Zuckerman College of Public Health, University of Arizona, Health Promotion Sciences, Tucson, AZ
2015-2017	Program and Policy Analyst, Portland State University, School of Social Work, Regional Research Institute, Portland, OR
2013-2014	Training and Technical Assistance Specialist, Danya International, Inc., Silver Spring, MD
2012-2013	Technical Expert Lead, JBS International, North Bethesda, MD
2011-2013	Senior Partner/Owner, Innovations, Quality, & Outcomes, LLC., Tucson, AZ
1999-2014	Independent Consultant, Tucson, AZ
2008-2012	Associate Research Professor & Director of Adolescent Services & Research, College of Social and Behavioral Sciences, University of Arizona, Southwest Institute for Research on Women
2004-2007	Research Specialist, Principal, College of Social and Behavioral Sciences, University of Arizona, Southwest Institute for Research on Women
2002-2005	Research Specialist, Senior, College of Social and Behavioral Sciences, University of Arizona, Southwest Institute for Research on Women
1998-2001	Research Specialist, College of Social and Behavioral Sciences, University of Arizona, Southwest Institute for Research on Women

1997-1998 1988-1997	Evaluation Coordinator, National Development and Research Institute, Tucson, AZ Multiple titles, Amity, Inc., Tucson, AZ
<u>Honors</u>	
2024	Nominated. Outstanding Organization Advisor Award. University of Arizona ASUA Clubs'
2023	Service: 20 years. University of Arizona
2022	Nominated. 5 Star Faculty Award. University of Arizona
2018	Service: 15 years. University of Arizona
2009	Honored to Recognize. Tucson Unified Schools
2007	Outstanding Volunteer. Tucson Interfaith HIV/AIDS Network
2005	Outstanding Staff Member Award. University of Arizona

C. Contributions to Science

I have categorized my contributions to science in four primary areas (1) dissemination and implementation science, (2) integrated behavioral healthcare, (3) health equity and (4) workforce development.

- 1. Dissemination & Implementation (D&I) Science. Our understanding of evidence-based treatments has improved since 1996 when I contributed to my first publication. Since then, I have led or contributed to multiple studies that examined implementation processes and outcomes of evidence-based/supported interventions. It is well established that substance use disorder treatment is effective, and we are untangling reasons why it works and under what conditions. Studies listed below highlighted the necessity of engaging participants and families, connecting with various systems for prevention/early intervention, continuity of care, and cultural considerations. We recently conducted a needs assessment with rural hospitals in Arizona on the implementation of opioid stewardship programs (OSPs). We asked rural hospitals about the types of OSP elements they implemented in either the emergency department or acute care in-patient. All rural hospitals indicated some level of OSP implementation. The most frequently cited were reviewing the prescription drug monitoring program and offering alternatives to opioids. The least frequently cited were assessing for opioid use disorder and prescribing naloxone. This study highlighted the need to support rural hospitals in the implementation of screening, intervention, and referral for opioid withdrawal, overdose risk, and opioid use disorder. My primary contributions to these studies were designing and implementing methodological approaches; data collection and analysis and writing results. I served as coordinator, project director/principal investigator (PD/PI), or co-investigator (Co-I).
 - a) Stevens SJ, Arbiter N, Mullen R, **Murphy BS.** Issues and intervention: Substance abuse treatment for adolescents using a modified therapeutic community model. In McCoy CB, Metsch LR, Inciardi JA, eds. *Intervening with Drug Involved Youth*. Sage Publications; 1996: 156-170.
 - b) **Ruiz (Murphy) B,** Korchmaros J, Greene A, Hedges K. Evidence-based substance abuse treatment for adolescents: Engagement and outcomes. *Practice Social Work in Action*. 2011; 23(4): 215-233. https://doi.org/10.1080/09503153.2011.597207
 - c) Nuño VL, Wertheim BC, **Murphy BS**, Glasser H, Wahl RA, Roe DJ. The online Nurtured Heart Approach to parenting: A randomized study to improve ADHD behaviors in children ages 6-8. *Ethical Hum Psychol Psychiatry*. 2020; 22(1): 31-48. doi: 10.1891/EHPP-D-20-00013
 - d) Brady B, SantaMaria B, Tucker K, **Murphy BS.** Opioid Stewardship Program implementation in rural and critical access hospitals in Arizona. *J. Opioid Manage*. 2024; 20(1): 1-30. doi:10.5055/jom.0842
- 2. *Integrated behavioral healthcare.* My work has consistently demonstrated the interrelatedness of substance misuse, infectious disease, and physical, mental, and social issues. Repeatedly, our group has called for integrating behavioral health services into primary healthcare settings. For example, the studies below demonstrate that adolescents who reported higher severity of trauma symptoms had higher rates of self-reported physical problems (i.e., pain) and sexual risks as compared to those who did not. We found social issues around parenting were associated with health issues. We found lower levels of parental involvement were associated with higher levels of psychological distress among adolescents recently discharged from treatment. This, in turn, was associated with sleep problems. My work has also called for the need to provide continuity of and linkages to care for people with behavioral health concerns. While our work has consistently shown reductions in substance use and related problems among participants who

received treatment, sustaining change over time has been difficult. Historically, treatments have been provided through episodic specialty services with little continuity. To address this issue, we are planning for integrating community health workers/representative (CHW/Rs) into healthcare settings to support people with substance use/opioid use concerns. Regarding healthcare technologies, our group recently conducted a needs assessment with community health centers and critical access hospitals in Arizona. The purpose was to assess their level of integration of the Arizona Department of Health Services (ADHS) 2018 opioid prescribing guidelines for pain into their electronic health record (EHR). We found, in comparison to larger organizations (10+ service sites), smaller organizations (1-4 services sites) had not integrated or had no plan for integrating the prescribing guidelines into their EHR. We called for additional assessment, training, and technical support for rural healthcare organizations.

My contributions to these studies included designing the project, leading the analyses, writing, developing protocols, and overseeing data collection, reviewing, commenting, and contributing to drafts. I served as the PI/PD, coordinator, collaborating partner, or doctoral student.

- a. Stevens SJ, Murphy BS, McKnight K. Traumatic stress and gender differences in relationship to substance abuse, mental health, physical health, and HIV risk behavior in a sample of adolescents enrolled in drug treatment. *Child Maltreat*. 2003; 8(1): 46-57. doi: https://doi.org/10.1177/1077559502239611
- b. Cousins J, Bootzin RR, Stevens SJ, Ruiz (Murphy) B, Haynes PL. Parental involvement, psychological distress, and sleep: A preliminary examination in adolescents with a history of substance use. *J Fam Psychol.* 2007; 21(1): 104-113. doi: 10.1037/0893-3200.21.1.104
- c. **Murphy BS**. *Improving staff effectiveness, efficiency, and knowledge of health information exchange*. Arizona State University, 2020.
- d. Clichee D, Taj EA, Horn J, Koch B, **Murphy B.** Integrating opioid prescribing guidelines into the electronic health record systems: An assessment of community health centers and critical access hospitals in Arizona. University of Arizona Center for Rural Health, 2023.
- 3. **Health equity.** Health equity is a crucial factor for understanding the intersectionality of substance use, misuse, and addiction. Cultural groups based on age, race/ethnicity, language, literacy, gender/gender identity, sexual orientation, disability, and geography shape our worldview and may influence substance use, intimate personal violence, and access to and engagement in care. Themes that persist throughout my work include trauma and setting/place. Regarding trauma, it is well-established there are differences in history, types, and doses of trauma by cultural groups. We learned women in long-term substance use disorder treatment reported differences in violence, based on relationship type, and postulated real or perceived power differentials in relationships may be a contributing factor (e.g., partner; child). Regarding setting/place, we found racial/ethnic and gender differences in substance use and other co-occurring issues among youth involved with juvenile justice who reside in urban and rural locations particularly among youth of color. We also conducted an analysis in which we examined the differences in participant characteristics, substance use, and sexual health risk in four different treatment settings and locations. We found a higher percentage of girls were in school-based programs compared to other settings. Recent work has involved developing various products and tools to ensure we address health equity among our public health workforce. More specifically, our workforce projects include land and labor acknowledgements, cultural responsiveness statements, English and Spanish versions of documents, gender neutral language, and are accessible for people with disabilities. We have developed resources for substance use care for two regions of our state specifically for American Indian/Alaska Native populations. We recognize our workforce development efforts must be responsive to the cultural and linguistic preferences of our participants to expand the diversity of the workforce. Together, this work called for greater emphasis on health equity and collaboration to increase access.

My contributions to these studies include study design, management, analysis, manuscript development, submission, revision, and finalization. I served as coordinator, evaluator, or PD/PI.

a. **Ruiz (Murphy) BS,** Stevens SJ, McKnight K, Godley S, Shane P. Treatment issues and outcomes for juvenile justice involved youth from rural and nonrural areas. *Prison J.* 2005; 85(1): 97-121. doi: https://doi.org/10.1177/0032885504274295

- b. Stevens SJ, Haynes PL, **Ruiz (Murphy) BS,** Bootzin RR. Effects of a behavioral sleep medicine intervention on trauma symptoms in adolescents recently treated for substance abuse. *Subst Abus.* 2007; 28(2): 21-31. doi: 10.1300/J465v28n02 04
- c. **Murphy BS,** Branson CE, Francis J, et. al. Integrating adolescent substance abuse treatment with HIV services: Evidence-based models and baseline descriptions. *J Evidence-Based Social Work.* 2014; 11(5): 445-459. doi: 10.1080/15433714.2012.760968
- d. Mendivil E, **Murphy BS**, Brady B. AzMAT Mentors Program Provider Collaboration Quick Guide 5: Wellness and well-being for healthcare providers. The University of Arizona Center for Rural Health: Tucson, AZ, June 2023.
- 4. Workforce development. I have provided and/or led the development and implementation of training and technical assistance (TTA) for personnel in public and behavioral healthcare, school- and communitybased organizations, and justice settings throughout the United States. TTA efforts have included leading conferences, grantee site visits, live and recorded webinars, undergraduate and graduate teaching, developing guides, manuals, other practice-based tools, newsletters, blog posts, and websites. While at Portland State University, I was the day-to-day contact for a multi-site implementation project to increase use of screening, brief intervention, and referral to treatment (SBIRT). It was implemented with young people involved with the juvenile justice system and their caregivers. We trained justice and behavioral health personnel on the implementation of SBIRT using a variety of methods including all-site learning collaboratives, site-specific check-in's, development of a manual (in English and Spanish) and audiorecorded step-by-step implementation processes. I was the lead on sub-contract for a Health Resources and Services Administration grant to address rural opioid use/misuse in three rural Arizona counties. Over two years we provided 6 training courses reaching more than 250 healthcare administrators, providers, students, and other health and behavioral health roles. Many offered continuing education or continuing medical education credits. Training topics included treating opioid use disorder in the emergency department, implementing the prescribing guidelines, and addressing systematic racism and substance use disorder in which we offered anti-racists strategies to improve access to quality care. Results showed improvements in participants' ability to offer screening, interventions, and treatments and some positive change in their intent to implement the knowledge presented. Our work has been sustained through the Western Region Public Health Training Center and continues to be accessed. We also developed a one-toone mentoring program that paired experienced medications for addiction treatment providers with less experienced providers. The purpose was to increase the capacity for providing these treatments in Arizona. Fifty less experienced providers participated. Of which, most were nurse practitioners (78%). Follow-up results showed confidence to provide treatment improved. Some providers (34%) reported rarely providing medication induction. We hypothesized that providers may still be reluctant to provide treatment and need ongoing mentoring and/or they are experiencing organizational/systemic barriers. My contributions to these studies include curriculum and intervention development, project management, report writing and dissemination. I served as manager or PD/PI on these projects.
 - a. **Murphy BS**, Mendivil E, Glenn M, Horn JN. *AzRORI Programmatic Activities Final Report*. University of Arizona Comprehensive Pain and Addiction Center, August 2022.
 - b. Mendivil E, **Murphy BS**, Brady B. AzMAT Mentors Program Provider Collaboration Quick Guide 3: Reducing substance use disorder stigma. The University of Arizona Center for Rural Health: Tucson, AZ, August 2022. https://crh.arizona.edu/sites/default/files/2022-09/20220922 ProviderFlyer Stigma Tool-3.pdf
 - c. Brady B, **Murphy B**, Clichee D, et al. AzMAT Mentors Program Annual Report FY 2022-2023. The University of Arizona, Center for Rural Health. Tucson AZ. https://crh.arizona.edu/sites/default/files/2023-09/230928_SOR_CRH_AzMAT-Mentors_AnnualReport_Yr4_FINAL.pdf
 - d. **Murphy BS**, Opioid Stewardship Programs: An organizational strategy for addressing pain and addiction. The University of Arizona, Mel & Enid Zuckerman College of Public Health Western Region Public Health Training Center. 2023. https://moodle.publichealth.arizona.edu/enrol/index.php?id=517