

Curriculum Vitae

June 21, 2022

Hisham Nsier, B.S.

EDUCATION:

B.S. Psychology, 2020 (3.99 GPA with distinction)

University of Colorado-Denver

Denver, Colorado

Post-Baccalaureate Courses:

Advanced Statistics, Fall 2021 (Graduate-level; Clinical psychology Ph.D. program)

Multivariate Statistics, Spring 2022 (Graduate-level; Clinical psychology Ph.D program)

University of Colorado-Denver

Denver, Colorado

AWARDS AND HONORS:

Dean's List, all semesters (2016-2020)

University of Colorado-Denver

Denver, Colorado

Best Oral Presentation Award, Pediatric Psychiatry Undergraduate Research Program & Learning Experience (August 2019)

Pediatric Mental Health Institute

Children's Hospital Colorado

Aurora, Colorado

Reference: PURPLE Program (psych.innovations@cuanschutz.edu)

Innovations Award- University of Colorado School of Medicine (2019)

Anschutz Medical Campus

Aurora, Colorado

Reference: Dylan Rakowski (Dylan.rakowski@cuanschutz.edu)

William Randolph Hearst Endowed Fellowship for Minority Students, (2017-2018)

University of Colorado-Denver

Denver, Colorado

Reference: Trishia Vasquez (trishia.vasquez@ucdenver.edu)

CURRENT RESEARCH EXPERIENCE:

Program and Clinical Research Coordinator

University of Colorado School of Medicine: (September 2019-present)

Clinical Research Coordination and Program Development:

Connections Program for High Risk Infants and Families

Program Director: Allison G. Dempsey, Ph.D.

Department of Psychiatry, University of Colorado School of Medicine

The Connections Program provides clinical behavioral health services to mothers, children, and families with high-risk pregnancies/prenatally identified congenital anomalies and/or complex medical complications in the neonatal period. The behavioral health programs offered through the Program provides assessment and intervention services. I am responsible for assisting clinical team members in tasks related to program operations, clinical and research operations, program evaluation, and quality improvement initiatives, including: entering data for various aspects of the clinical programs such as clinical research and quality improvement projects, designing and updating REDCap databases for quality improvement and clinical research projects, assisting with reporting statistics for program metrics, attending and recording minutes for team meetings, assisting with literature reviews related to program evaluation and clinical program development, development of protocol-specific systems and documents (including process flows, training manuals, manuals of operations, and case report forms), maintaining subject-level documentation and equipment/supplies needed for our clinical and research activities, coordination with regulatory bodies for study initiation and termination, contribution to publications and presentations resulting from data collected by the Program, and assisting with identifying and communicating potential issues of operational efficiency, feasibility, recruitment, and retention strategies.

Clinical Research Coordination and Program Development:

Healthy Expectations Perinatal Mental Health Program

Program Director: Jennifer J. Paul, Ph.D.

Department of Psychiatry, Children's Hospital Colorado

The Healthy Expectations Perinatal Mental Health Program supports pregnant women and women struggling with mood and anxiety issues after delivery, as well as their families. Behavioral health support offered through the Program include evaluations for psychiatric and psychosocial concerns in the perinatal period along with group therapy and medication management. I am responsible for assisting clinical team members in tasks related to program operations, clinical and research operations, program evaluation, and quality improvement initiatives, including: entering data for various aspects of the clinical programs such as clinical research and quality improvement projects, designing and updating REDCap databases for quality improvement and clinical research projects, assisting with reporting statistics for program metrics, attending and

recording minutes for team meetings, assisting with literature reviews related to program evaluation and clinical program development, development of protocol-specific systems and documents (including process flows, training manuals, manuals of operations, and case report forms), maintaining subject-level documentation and equipment/supplies needed for our clinical and research activities, coordination with regulatory bodies for study initiation and termination, contribution to publications and presentations resulting from data collected by the Program, and assisting with identifying and communicating potential issues of operational efficiency, feasibility, recruitment, and retention strategies. Recent efforts by the Program to promote diversity, equity, and inclusion have resulted in grant funding for Black Mamas Circle, a peer-support group for Black-identifying mothers ran by racially-congruent providers, as well as a monthly peer reflective consultation group for community providers who are working with Black women and their families.

Database Management:

Pathways Behavioral Health Program

Program Director: Allison Dempsey, Ph.D.

Department of Psychiatry, University of Colorado School of Medicine

The Pathways Behavioral Health Program is a new mental health initiative at UHealth, with support from the Zoma Foundation, that seeks to identify and correct psychosocial barriers to maternal mental health support during the perinatal period through program evaluation and process improvement initiatives. I am responsible for the creation and management of databases used to collect data for program evaluation and metric reporting, as well as analyzing clinical data into useful reports. Our efforts have led to a steady increase in the rate of post-partum mood and anxiety disorder screening, intervention, and case management during the perinatal period.

Current Research Studies:

"Behavioral Assessment of Babies using Informatics (BABI)"

After completing the iCORPS program at the Colorado Clinical and Translational Science Institute (CCTSI), we were awarded funds via SEED grants to continue exploration of our idea of developing audiovisual behavioral informatics technology to quantify and track infants' behavioral states in intensive care settings. Through development of this technology, we hope to use machine learning to support clinical decision-making regarding antibiotic use and timing of therapeutic interventions in intensive care units. Responsibilities for this study include assisting with the conceptualization of the technology and performing interviews with providers across specialities. As this project is ongoing, we will continue to develop our technology and apply for programs that aim to connect us with stakeholders in the market.

"Implementation, feasibility, and efficacy of Computer-Assisted Cognitive Behavior Therapy (CCBT) within the Department of Psychiatry"

Responsibilities for this study include correspondence with and completing regulatory documents for the Colorado Multiple Institutional Review Board, creation and management of data collection instruments via REDCap, and management of study protocol and manual of operations (N = 60). As the study is still currently enrolling, I will be included on the manuscript when it is submitted for publication. This study aims to examine the efficacy of computer assisted cognitive-behavioral therapy (c-CBT) and the feasibility of incorporating c-CBT into the Department of Psychiatry.

“Visualizing Twin Connections: Creation and Implementation of a Three-Dimensional Anatomical Toolkit of Twin-Twin Transfusion Syndrome for Parent Education at the Colorado Fetal Care Center”

Responsibilities for this study included recruiting and consenting participants (N=20), corresponding with and completing regulatory documents for the Colorado Multiple Institutional Review Board, creation and management of data collection instruments via REDCap, management of study protocol and manual of operations, administering the study intervention (an educational toolkit for use during consultations with maternal-fetal medicine doctors), and administering the “Short Assessment of Health Literacy” instrument. This study aimed to examine the use of anatomically accurate models of fetal-placental connections during counseling sessions and its impact on parent education and retainment.

“Initial validity and feasibility of a virtual assessment approach for describing neurodevelopmental outcomes among children born with medical complication”

Responsibilities for this study included recruiting and consenting participants (N=30), collaboration with on-campus clinics for recruitment purposes, corresponding with and completing regulatory documents for the Colorado Multiple Institutional Review Board, creation, management, and administration of psychometric data collection instruments via REDCap and creation and management of study protocol and manual of operations. This study aimed to examine the validity of telehealth-based developmental assessments versus the gold-standard assessment given in-person. The COVID-19 pandemic has made it imperative to study the ways in which health behavior assessments can be adapted to telehealth.

“A feasibility study of a tool to support conversations of quality of life and goals of care among parents expecting a baby with a fetal anomaly”

Responsibilities for this study included recruiting and consenting participants (N=20), discussing the tool with them (which contains questions and thoughts to consider when having a baby staying in the NICU), making follow-up phone calls to participants, and administering surveys via REDCap. This study is currently in the manuscript writing phase, and I will be included on the manuscript when it is submitted for publication. This study aimed to examine the use of low-resource palliative care tools to assist expectant parents with the psychosocial stressors of parenting a medically-complex child.

“Feasibility and Limited Efficacy Trial of a Cognitive Behavioral Intervention to Reduce Procedural Anxiety Among Woman with High Risk Pregnancies with Scheduled Cesarean Deliveries”

Responsibilities for this study included assisting with literature reviews during the conceptualization stage, recruiting and consenting participants (N=20), corresponding with and completing regulatory documents for the Colorado Multiple Institutional Review Board, creation, management, and administration of psychometric data collection instruments via REDCap (including the “State-Trait Anxiety Scale” and “Impact of Events Scale”), and creation and management of study protocol and manual of operations. Further regulatory responsibilities included management of the clinical trial through the University of Colorado multi-institutional management system, Oncore. In 2021, we began the process to expand the study to three other hospitals around the country in preparation for a larger NIH-funded grant proposal we expect to submit in 2022. As the study is still currently enrolling, I will be included on the manuscript when it is submitted for publication. This study aimed to examine the use of a brief cognitive-behavioral exposure intervention to reduce pre- and post-operative anxiety and trauma.

“Variations in Criteria for Eligibility Determination for Early Intervention Services across the United States with a Focus on Eligibility for Children with Neonatal Complications”

This policy review paper was conducted in collaboration with researchers from academic institutions around the country, including Vanderbilt University School of Medicine and the University of Nebraska Medical Center. The purpose of our review was to highlight the many variations in eligibility criteria for Early Intervention services (part of the Individuals with Disabilities Education Act) across the country as well as the impacts the differing criteria may have on the equitable access to services by children with neonatal complications. My responsibilities in this study included compiling each state/territory’s eligibility criteria from their respective websites, performing follow-up phone calls with each state’s program coordinator, and helping clean data in preparation for manuscript submission. This review paper has been accepted by the Journal of Developmental and Behavioral Pediatrics.

Member – National Network of NICU Psychologists (NNNP), Research Committee:
(January 2021-present)

Committee Chair & co-Chair: Pamela Geller, Ph.D. & Rochelle Steinwurtzel, Psy.D.

The Research Committee seeks to engage NNNP membership to discuss and expand the extant research in the field. Committee functions may include, but are not limited to: (a) reviewing and discussing current research findings from published studies and members’ current research projects; (b) conducting collaborative research projects at various stages (e.g., pilot studies, grant proposals); (c) disseminating research findings (e.g., journal articles, conference presentations); (d) collaborating with the NNNP council, committees,

and membership at-large; and (e) establishing collaborations with allied professionals or organizations in the advancement of committee goals.

Current Research Studies:

“Secondary Traumatic Stress in NICU Medical Providers”

This in-progress literature review seeks to summarize existing research regarding secondary traumatic stress in NICU healthcare providers to provide the foundation for new research studies and the development of evidence-based interventions for affected staff. My responsibilities include assisting with the review, including the conceptualization stage, literature search phase, and manuscript writing stage.

“COVID-19 Parent Visitation and Infant Interaction Policies in the NICU, and the Impact on Parent Mental Health: A Pilot Study”

This in-progress pilot study seeks to examine the effects of parent visitation policies enacted during the COVID-19 pandemic on parental mental health. My responsibilities include assisting with the study’s conceptualization and with technological tasks (i.e., assisting with database construction, developing methods to reach eligible participants).

PAST RESEARCH EXPERIENCE

Student Research Intern- PURPLE Program: (May-August 2019)

Pediatric Psychiatry Undergraduate Research Program & Learning Experience (PURPLE Program, 20 hours/week)

Pediatric Mental Health Institute, Children’s Hospital Colorado

Attended symposiums on current psychiatry and psychology research in the literature as well as didactic seminars on how to perform literature reviews (PsycINFO), compile bibliographies (Endnote), run statistics (SPSS), and generate/administer psychometric assessments (REDCap). As part of my training in human subjects research, I also completed federal, state, and institutional training (CITI, HIPAA) and can use electronic medical records (EPIC). I had the opportunity to shadow researchers and clinicians in multiple niches around the Pediatric Mental Health Institute, including Down’s Syndrome care (Sie Center), postpartum support groups (Healthy Expectations), and psychopharmacology medication management rotations. As part of the program’s capstone, I worked on an individual research project over the summer and presented my findings to an audience consisting of clinicians and researchers from the Department of Psychiatry.

Capstone Presentation:

“Twin-Twin Transfusion Syndrome and Technology: Bridging Educational Barriers”

Award received for “Best Oral Presentation”

August 12th, 2019

Pediatric Mental Health Institute, Children's Hospital Colorado

Research Assistant- Moore Lab: (May 2017- May 2019)

Division of Basic Reproductive Sciences, University of Colorado School of Medicine

Served as a research assistant on a 5-year R01 grant funded by the National Institute of Health (R01HD088590-01; PI: L.G. Moore) that examines the effect of high-altitude pregnancies on the vasodilator effects of AMP-activated protein kinases in human myometrial arteries. This is one of the first studies to examine the effects of high-altitude on pregnancies in Caucasian women (N=36). My responsibilities as research assistant included assisting in obtaining samples of myometrial tissue from the University of Colorado Hospital, preparing the tissues for analysis using chemical buffers, assisting in myography to deduce vessel tension, analysis of vessel diameter and composition using microscope-aided immunohistochemistry and immunofluorescence (using ImageJ), and statistical analyses (using Prism). As part of this experience, I had the opportunity to present our research findings at an undergraduate research symposium attended by researchers and faculty members from the University of Colorado Downtown and Medical campuses.

Capstone Presentation:

“High-altitude Increases the Vasodilation in Myometrial Arteries of Pregnant Women”

Research and Creative Activities Symposium (RACAS)

April 27th, 2018

University of Colorado, Denver

PUBLICATIONS:

Coquillet, M., **Nsier, H.**, Dempsey, A.G. (2022). Development and pilot study of a booklet to support conversations of quality of life and goals of care among parents expecting a baby with a fetal anomaly [Presentation]. *Western Medical Research Conference*.

Cooke, D.L., **Nsier, H.**, Kelleher, J., Dempsey, J., Dempsey, A.G. (2022). Perinatal distress associated with neonatal conditions: anxiety and depression. *Journal of Investigative Medicine*, 70(1), 252-252

Geller, P. A., Nelson, A. L., Hanson, S. G., Sodowick, L. B., **Nsier, H.**, Shivers, S., Patterson, C. A, & Maye, M. (2021). NICU policy shifts during uncertain times. *Neonatology Today*, 16(11), 81-84.

<https://neonatologytoday.net/newsletters/nt-nov21.pdf>

Dempsey, A.G., **Nsier, H.**, et. al. (2020). Variations in Criteria for Eligibility

Determination for Early Intervention Services across the United States with a Focus on Eligibility for Children with Neonatal Complications. *Journal of Developmental and Behavioral Pediatrics*. Online First.

Lorca, R. A., Lane, S. L., Bales, E. S., **Nsier, H.**, Yi, H., Donnelly, M. A., ... Moore, L. G.

(2019). High Altitude Reduces NO-Dependent Myometrial Artery Vasodilator Response During Pregnancy. *Hypertension*, 73(6), 1319–1326. doi: 10.1161/hypertensionaha.119.12641

Lorca, R. A., **Nsier, H.**, Bales, E. S., Coates, S. L., Julian, C.G., Moore, L. G. (2018). High-

Altitude Increases the Vasodilator Effect of AMPK in Myometrial Arteries from Pregnant Women [Abstract]. *Reproductive Sciences*.

PRESENTATIONS AND SEMINARS:

“A feasibility study of a tool to support conversations of quality of life and goals of care among parents expecting a baby with a fetal anomaly”

Western Society for Pediatric Research Annual Conference

January 20th, 2022

Carmel-by-the-sea, California, USA

“Innovation Corps: Using Customer Discovery Interviews for Advancing Research”

Clinical Health Psychology Post-Doctoral Fellowship Didactic Program

June 17th, 2021

University of Colorado School of Medicine

“National Network of NICU Psychologists Retreat Series Kickoff”

December 1st, 2020

University of Colorado School of Medicine

“Twin-Twin Transfusion Syndrome and Technology: Bridging Educational Barriers”

Award received for “Best Oral Presentation”

August 12th, 2019

Pediatric Mental Health Institute, Children’s Hospital Colorado

“High-altitude Increases the Vasodilation in Myometrial Arteries of Pregnant Women”

Research and Creative Activities Symposium (RACAS)

April 27th, 2018

University of Colorado, Denver

TEACHING EXPERIENCE:

Teaching Assistant- University of Colorado, Denver

Honors General Biology I (Fall 2017)

Honors General Biology II (Spring 2018)

Organic Chemistry II (Fall 2018, Fall 2019)

Organic Chemistry I (Spring 2019)

Introductory Statistics (Fall 2019)

COMMUNITY OUTREACH:

The Boys & Girls Club of Denver (2018-2020)

Helped create, design, and implement various after-school programs at multiple Boys & Girls Clubs across the Denver-Metro area. The scope of these programs focused on encouraging healthy behaviors amongst children, many of whom live in low-income areas and are at risk of negative psychosocial effects. Examples include cooking classes demonstrating how to make low-effort and healthy snacks, seminars on the importance of a balanced diet, and physical exercise games. We received funding from the University of Colorado School of Medicine to implement our programs (Innovations Award).

The GrowHaus – Indoor Urban Farm (2017-2018)

Assisted in packaging and delivering food boxes containing fresh produce to residents of Globeville, a neighborhood of Denver. Residents of Globeville experience severe negative health effects due to its status as a food desert, its physical location near the corridors of two major interstate highways, and from economic downturn due to the ethno-cultural gentrification of Denver.

RELEVANT COURSEWORK:

- Statistics and Research Methods
- Research Methods in Psychology
- Advanced Statistics (Graduate-level)
- Multivariate Statistics (Graduate-level)
- Health Psychology
- Neuropsychopharmacology
- Behavioral Neuroscience
- Consciousness, Agency and the Self
- Abnormal Psychology

- Race & Ethnicity in the U.S.
- Culture, Racism and Alienation

OTHER SKILLS:

Bilingual Arabic Language Fluency (written and spoken)

SOFTWARE SKILLS:

REDCap

EPIC

SPSS

EndNote, Zotero, Mendely

Microsoft Office

Sitefinity Website Design