







# **NCCIH BRIDG Qualitative Research & Analysis Micro-Course**

Building Research across Inter-Disciplinary Gaps (BRIDG)

R90 and T90 Postdoctoral Training Program: Clinical Research in Complementary & Integrative Health This course is supported by funding from the National Center for Complementary & Integrative Health (NCCIH, AT008924).

# **Course Syllabus**

Instructor name	Brenna Bray, PhD
	NUNM   Associate Professor
	Helfgott Research Institute   Assistant Research Investigator
	NourishED Research Foundation   Director, Lead Pl
Contact Information	brenna.bray@nunm.edu

# Course Description

In this course, BRIDG trainees will receive an introductory overview of qualitative research including an overview of basic qualitative applications, design types, methodological and analytic approaches, data collection and management strategies, and reporting guidance. Supplemental applications will also provide more experiential opportunities for immersive engagement in qualitative research process from study design to publication.

Students will learn to: (a) undertake qualitative research in the areas of their scholarly interest, and (b) become discerning consumers of qualitative research studies in the course(s) of their own research.

# **Course Schedule & Location**

Online asynchronous course

## Required Textbook (Additional Supplementary Materials on pg. 15)

 Textbook: Barrio Minton, C.A., & Lenz, A.S. (2019). Practical Approaches to Applied Research and Program Evaluation for Helping Professionals (1st ed.). Routledge. <u>https://doi.org/10.4324/9781315108933</u>



- 2. **Publication 1:** Lim, W. M. (2024). What Is Qualitative Research? An Overview and Guidelines. Australasian Marketing Journal, 0(0). <u>https://doi.org/10.1177/14413582241264619</u>
- Publication 2: Wutich, A., Beresford, M., & Bernard, H. R. (2024). Sample Sizes for 10 Types of Qualitative Data Analysis: An Integrative Review, Empirical Guidance, and Next Steps. *International Journal of Qualitative Methods, 23*, 16094069241296206. <u>https://doi.org/10.1177/16094069241296206</u>

## Micro-Course Schedule

Module Topics	Readings	Course Objectives	
Course Overview  I. Video//PowerPoint Lecture  1. Course Overview  Module 1: Overview of Qualitative Research Designs  I. Video//PowerPoint Lecture  1. What is Qualitative Research? Qualitative vs. Quantitative Research  2. When are Qualitative Designs Indicated?  a. Understanding Experiences, Processes, & Meaning b. Development and Evaluation (Program, Intervention, Design)  i. Needs Assessments  ii. Process Evaluations  iii. Satisfaction Estimates  c. Adding Context to Quantitative Findings  d. Answering Questions about What, Why, and How  3. Strengths and Limitations of Qualitative Research  II. Exam 1 (7 Questions, 14 Points, 14% Total Grade)	Course Syllabus Barrio Minton & Lenz (2019). Ch. 7, Section 1 (Overview of Qualitative Research Designs). Ch 6, Section 3 (Types of Survey Designs). Lim, (2024). Pgs. 1 – 6 (column 1 on pg. 6).	<ul> <li>Understand course format/flow, modular topics, course- and modular objectives, and examination/grading structure.</li> <li>Develop research questions consistent with use of qualitative methodology</li> <li>Understand when qualitative methods may be appropriate for use in applied research and program evaluation endeavors</li> <li>Articulate key features of needs assessments, process assessments, and satisfaction estimation</li> <li>Identify strengths and limitations of qualitative designs</li> </ul>	
Module 2: Classic Types of Qualitative Research Designs  I. Video//PowerPoint Lecture  1. Phenomenology  2. Grounded Theory  3. Narrative Inquiry  4. Ethnography  5. Case Study  II. Exam 2 (3 Questions, 6 Points, 6% of Total Grade)	<ul> <li>Barrio Minton &amp; Lenz (2019).</li> <li>Ch. 7, Section 2 (Classic Types of Qualitative Research Designs).</li> <li>Lim, (2024).</li> <li>Pgs. 6 – 16 (scan).</li> <li>Table 4.</li> </ul>	<ul> <li>Articulate key features, uses, strengths, limitations, and resource needs of different types of qualitative research designs</li> </ul>	

Qualitative Research and Analysis BRIDG Micro-Course Syllabus			
Module Topics	Readings	Course Objectives	
<ul> <li>Module 3: Qualitative Evaluation Process</li> <li>I. Video//PowerPoint Lecture <ol> <li>Determining Inquiry Purpose and Focus</li> <li>Identifying Key Informants and Data Sources</li> <li>Data Collection Procedures <ol> <li>Semi-Structured Interviews</li> <li>Focus Groups</li> <li>Document Review</li> <li>Sample Size Guidance for Analysis, Design, Saturation Types</li> </ol> </li> <li>Data Management Strategies</li> <li>Trustworthiness Protections <ol> <li>Credibility, Dependability, Confirmability, Transferability</li> </ol> </li> <li>Responsible Conduct in Research</li> <li>Exam 3 <ol> <li>14 Questions</li> <li>*24 Points</li> <li>24% of Total Grade</li> </ol> </li> </ol></li></ul>	<ul> <li>Barrio Minton &amp; Lenz (2019).</li> <li>Ch. 7, Section 3 (Qualitative Evaluation Process).</li> <li>Lim, (2024).</li> <li>Pgs. 16 - 20 (scan).</li> <li>Pgs. 24 - 26 (scan).</li> <li>Wutich, Beresford, &amp; Bernard (2024).</li> <li>Scan.</li> <li>Note: Tables 1 - 2, Fig. 1</li> </ul>	<ul> <li>Identify key sources of information and data collection that can be useful in qualitative analyses</li> <li>Develop procedures for conducting semi-structured interviews, focus groups, and document analysis</li> <li>Identify appropriate sample sizes for qualitative research studies based on analytic approach, design, and saturation preferences</li> <li>Develop strategies for data management</li> <li>Identify procedures for ensuring data trustworthiness</li> <li>Critique studies using qualitative methodology</li> </ul>	

Qualitative Research and Analysis BRIDG Micro-Course Syllabus			
Module Topics	Readings	Course Objectives	
<ul> <li>Module 4: Qualitative Data Analysis</li> <li>I. Video//PowerPoint Lecture <ol> <li>Thematic Analysis <ul> <li>Braun &amp; Clarke's 6 Phases of Thematic Analysis (2006): (1)</li> <li>Data familiarization; (2) Initial code generation; (3) Searching for themes; (4) Reviewing themes; (5) Defining and naming themes; (6) Producing the report.</li> </ul> </li> <li>Consensual Qualitative Analysis (CQR) <ul> <li>Hill et al.'s 3 General Steps: (1) Divide responses into domains; (2) Construct core ideas within each domain; (3) Cross-Analysis (2005, 2012, 1997).</li> </ul> </li> <li>Data Analysis Tools <ul> <li>NVIVO, Dedoose (www.dedoose.com), Microsoft Excel, Google Sheets</li> </ul> </li> <li>II. Exam IV <ul> <li>10 Questions</li> <li>20% of Total Grade</li> </ul> </li> </ol></li></ul>	<ul> <li>Barrio Minton &amp; Lenz (2019).</li> <li>Ch. 7, Section 4 (Qualitative Data Analysis).</li> <li>Lim, (2024).</li> <li>Pgs. 20- 24 (scan).</li> <li>Pgs. 26 - 30 (scan).</li> </ul>	<ul> <li>Design, plan, conduct, record, and analyze qualitative research</li> <li>Identify six key phases of thematic analysis</li> <li>Communicate benefits and strengths of consensual qualitative approaches</li> <li>Distill multi-step analytic processes to their essence.</li> <li>Identify common methods of analyzing qualitative data</li> <li>Critique studies using qualitative methodology of surveys for needs assessments, process evaluations, and satisfaction estimations</li> </ul>	

Module Topics	Readings	Course Objectives
Module 5: Reporting Findings	Barrio Minton & Lenz (2019).	Develop research questions
I. Video//PowerPoint Lecture	• Ch. 7, Section 5 (Reporting Findings).	consistent with use of qualitative
1. Reporting Priorities		methodology
a. Purpose & Focus of Inquiry	Also See Departing Cuideling Deputy anto in Madula C	Communicate findings from
b. Data Collection & Analysis Methodology	Also See Reporting Guideline Documents in Module 6.	qualitative analyses
c. Themes and Categories Derived from Data		
d. Note Frequency, Prevalence, & Weight/Intensity		
2. Reporting Tips		
a. Accurate, Even-Handed Reporting		
b. Account for your Audience		
c. Use Pluralistic Communication Strategies		
d. Time Reports		
e. Prioritize Documents and Materials		
f. Emphasize Practical Effects & Social Implications		
3. Reporting Components		
a. Cover Page (Title, Front Matter)		
b. Executive Summary (Abstract)		
c. Overview of Program and Role of Evaluation (Intro)		
d. Evaluation of Methodology (Methods)		
e. Findings & Impact (Results, Discussion)		
f. Conclusions & Recommendations (Discussion)		
g. Appendices		
II. Exam V		
6 Questions		
• 12 Points		
• 12 % of Course Grade		

Qualitative Research and Analysis BRIDG Micro-Course Syllabus		
Module Topics	Readings	Course Objectives
<ul> <li>Module 6: Qualitative Analysis Guidance Documents</li> <li>Overall Quality Criteria <ul> <li>Qualitative Research Overview and Guidelines (Lim, 2024)</li> <li>Criteria for Good Qualitative Research (Ydav &amp; Drishti, 2022)</li> <li>Criteria for Good Qualitative Research (Ydav &amp; Drishti, 2022)</li> </ul> </li> <li>Determining Sample Sizes <ul> <li>Sample Sizes for 10 Types of Qualitative Data Analyses: Integrative F</li> <li>Sample Sizes for Saturation in Qualitative Research (Hennink &amp; Kaisee)</li> </ul> </li> <li>Reporting Standards <ul> <li>JARS: The APA's Journal Article Reporting Standards for Qualitative Research (To</li> <li>SRQR: Standards for Reporting Qualitative Research (O'Brien et al., 2)</li> <li>Reporting Guidelines for QR: Values-Based Approach (Braun et al., 2)</li> </ul> </li> <li>Health Care Research <ul> <li>Quality Criteria Guidelines for Qualitative Analysis in Psychology Rese</li> <li>JARS: The APA's Journal Article Reporting Standards for Qualitative In (Levitt et al., 2018; APA, 2020)</li> </ul> </li> </ul>	er, 2022) Research in Psychology (Levitt et al., 2018; APA, 2020) ong et al, 2007; Booth et al., 2014) 2014) 024) search (Vena et al., 2024)	<ul> <li>Engage with guidance documents on qualitative research conduct and reporting.</li> <li>Identify qualitative guidance documents that can support future qualitative research.</li> </ul>







## **Assignments**

All assignments must be submitted through the course platform on Moodle. Instructors will use the Gradebook function in Moodle to record grades for the class.

Assignment	Exam Questions	Exam Points	Percent of Grade	Percent of grade
Module 1 Quiz	7	14	14%	
Module 2 Quiz	3	6	6%	
Module 3 Quiz	14	24	24%	
Module 4 Quiz	10	20	20%	100%
Module 4 Quiz 2: Coding Experience	6	12	12%	
Module 5 Quiz	6	12	12%	
Module 6 Quiz	6	12	12%	
Total	52	100	100%	100%

### Late Assignment Policy:

This course is online, asynchronous, and self-paced, unless otherwise instructed by your course or program instructor. Please defer to stand NUNM/BRIDG late assignment policies.

## **Resubmission Policy:**

All students will receive unlimited opportunities to resubmit their workshop components and final examination (e.g., unlimited submissions total) to earn a passing final examination score.

## **Requirements for Passing this Course**

To pass this course, students must earn a **passing score of 80% or greater** on all module quiz/examinations and in the overall course.

## **Computer/Technology Materials Requirements**

This course is taught online via NUNM's Moodle interface; therefore, all students and faculty members are required to have a Moodle login and access their course page consistently. According to best practices, NUNM recommends that students and faculty logon to their Moodle interface and check their course page at least twice a week. However, online utilization of the Moodle course page may increase depending on activities/ assignments/participation/attendance designated in each Moodle course (this is dependent on faculty discretion).

It is also recommended that students and faculty members have consistent access to a Wi-Fi device that is compatible with the Moodle interface (Ex. Desktop, laptop, smartphone etc.). If either students or faculty feel that they will be unable to satisfy these requirements and require further assistance, please reach out to the

Academic Support Coordinators at <u>facultysupport@nunm.edu</u>. For more information on online learning best practices, please view online learning resources on the staff and faculty intranet.







## **Required Technology Skills**

Students enrolled in this course should possess the following technology skills:

- The ability to access information via the Internet.
- The ability to use Moodle and associated tools, including discussion boards, chat rooms, online testing and assignment submission features.
- The ability to use word processing software and to save in alternate formats.
- The ability to send, receive and include attachments using email.
- The ability to demonstrate etiquette (appropriate online conduct).

## **Grading Scale**

<u>Grade</u>	<u>Percentage</u>	<u>Points</u>
А	90-100	4.0
В	80-89	3.0
С	70-79	2.0
D	60-69	1.0
F	59 or less	0.0
W/WF	N/A	Not calculated

#### **Attendance and Participation Guidelines**

- This course is offered online in the asynchronous self-paced format.
- Please consult your BRIDG program instructors and research mentors regarding any timeline specifications they may have.
- A schedule of the course activities can be found in this syllabus and on Moodle.

## **Online Etiquette**

All discussion, chat, assignment, and e-mail spaces within this course are for class purposes only, unless otherwise stated. NUNM has a non-tolerance policy for non-collegial and non-professional conduct. Please be mindful that unlike in the classroom setting, communication in the online environment is documented and not easily erased or forgotten.

The following guidelines apply for all communications in any and all online NUNM/BRIDG courses:

- Avoid using ALL CAPS, sarcasm, and language that could come across as strong or offensive.
- Use proper punctuation, grammar and be sure to edit your contribution before posting.
- Read all postings before posting your responses to discussion topics so as to not unnecessarily repeat information.
- Keep chat comments brief and to the point.
- Focus on one topic at a time when chatting or posting to discussions.
- Remember that unlike in face-to-face learning environments what you say in discussions and chats is documented and available to be revisited. Choose your words and discussion topics carefully.







• E-mail should only be used for messages pertaining to the course. Please refrain from sending forwards, jokes, etc. within e-mail.

#### **Academic Integrity**

All students are required to be familiar with and adhere to the <u>Academic Integrity Policy</u>. For further information on cheating, plagiarism, misconduct, etc., please refer to the "Student Handbooks" found at <u>http://studentservices.nunm.edu/</u>. Students agree that by taking this course all required papers will be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the Usage Policy posted on the Turnitin.com site.

Students agree that by taking this course all required papers may be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the Usage Policy posted on the Turnitin.com site.

#### **Citation Requirements**

When referring to other sources of work, students are required to cite their sources. Please use the American Medical Association (AMA) standard. For citation guidelines, please refer to <u>http://nunn.libguides.com/ama.</u>

#### **Technical Support**

If students, faculty or staff require technological assistance or any other assistance as it pertains to online courses at NUNM please contact the Academic Support Coordinators at <u>facultysupport@nunm.edu</u> or <u>moodlesupport@nunm.edu</u> if your issue is specific to Moodle

#### Academic & Student Resources – Quick Guide

NUNM Library Resources: <u>https://nunm.navexone.com/content/docview/?docid=681&public=true</u>

NUNM Tutoring: https://nunm.navexone.com/content/docview/?docid=616&public=true

NUNM Attendance Policy <a href="https://nunm.navexone.com/content/docview/?docid=629&public=true">https://nunm.navexone.com/content/docview/?docid=629&public=true</a>

NUNM Completing Exams & Assignments: https://nunm.navexone.com/content/docview/?docid=650&public=true

#### NUNM Technical Help

For assistance with email, please contact the IT department: 503-552-1585 or <u>ITSupport@nunm.edu</u> For Moodle support, click the <u>Request Moodle Support</u> link on any Moodle page to review our help articles on frequently asked questions, or to contact the Moodle support team by phone, live chat, or e-mail.







## Students with Disabilities

NUNM Students with documented disabilities are encouraged to work with the Center for Academic Success <u>academicsuccess@nunm.edu</u> to access academic accommodations. <u>https://nunm.navexone.com/content/docview/?docid=612&public=true</u>

#### NUNM Commitment to a Healthy Learning Environment

NUNM is committed to providing a healthy learning and work environment free of all forms of discrimination. Specifically, NUNM prohibits discrimination on the basis of age, sex, race, national or ethnic origin, sexual orientation, marital status, gender identity and family relationship, religion or disability, or veteran's status in any of its policies, procedures or practices. NUNM prohibits sexual harassment, including sexual assault, sexual harassment, domestic and dating violence and gender-based stalking and works to support anyone experiencing these types of misconduct. All NUNM employees are required reporters of sexual misconduct unless, at the time of your report, you are being seen in a counseling session or at a patient visit at our clinic. Please contact the Dean of Students and Title IX Coordinator, 503-552-1607 with questions or concerns.

*Title IX NUNM Policy for Online/Distance Learning* <u>https://nunm.navexone.com/content/docview/?docid=764&public=true</u>

Additional local, regional, and national resources can be found on the NUNM Sexual Assault and Interpersonal Violence website: <u>http://studentservices.nunm.edu/sexual-assault-prevention/</u>

For more information about services available to students, please visit the NUNM Student Services Center: <a href="http://studentservices.NUNM.edu/">http://studentservices.NUNM.edu/</a>







# **Program Outcomes and Course Competencies**

The overarching objective of the T90/R90 Building Research across Inter-Disciplinary Gaps (BRIDG) Complementary and Integrative Health (CIH) Postdoctoral Clinical Research Training Program, as outlined in the program application abstract, is to prepare the next generation of clinical investigators to design and carry out competitive, rigorous CIH programs of research that are innovative, collaborative, and multi-disciplinary, thereby generating new knowledge and contributing to improving health care.

- 1. Overall Program Objective: **Provide trainees with an opportunity to gain preparation and training in <u>clinical investigation</u>**, focusing on:
  - a. <u>Designing and carrying out competitive, rigorous CIH programs of research that are innovative, collaborative, and multi-disciplinary.</u>
  - b. <u>Generating new knowledge.</u>
  - c. Improving health care.
- T2. The program objectives for the <u>**T90 component**</u> of the BRIDG program are to provide promising, competitive CIH-trained, doctoral-level clinicians [T90 fellows] with:
  - a. Didactic courses in clinical research methodology.
  - b. Specific learning modules dedicated to CIH-specific research topics.
  - c. <u>Clinical research training that includes:</u>
    - 1. Hands-on research experiences.
    - 2. Mentorship by funded investigators from the UW.
    - 3. Didactic training in clinical research methodologies.
- R2. The program objectives for **<u>R90 component</u>** of the BRIDG program are to provide promising, competitive conventionally trained researchers [R90 fellows] with:
  - a. Training and mentorship in the practices of integrative health disciplines, including naturopathy, classical Chinese medicine herbal medicine, and mind and body therapies amongst others.
  - b. Experience in CIH clinical practices and/or clerkships.
  - c. <u>CIH research training that includes:</u>
    - i. Clinical observations
    - ii. Research mentorship from funded investigators.
    - iii. Didactic training in complementary health disciplines.
  - d. <u>Opportunity to collect, [analyze, and prepare] preliminary data [that can be used in] grant</u> <u>applications</u>.
- Provide opportunities for R90 and T90 trainees to train together during weekly BRIDG Seminars, tri-annual in-person BRIDG Retreats, and <u>annual immersive Methods Workshops</u> to foster collaboration and <u>learn</u> <u>applications of research methods to CIH research</u>.
- 4. <u>Apply innovative online and distance education approaches to deliver, preserve and disseminate</u> <u>the BRIDG program training materials.</u>







- 5. Evaluate the BRIDG program on a variety of metrics of success in order to continually improve the program, which will include:
  - a. <u>The continued development of a cadre of cross-trained clinical researchers prepared to design</u> <u>and carry out competitive rigorous CIH research and contribute significant knowledge to the</u> <u>field.</u>
  - b. <u>A collaborative distance learning-oriented training model for CIH clinical research education</u>.
  - c. <u>A digital archive of the BRIDG didactic material that can be made accessible and disseminated</u> to other interested parties.

To view the Program Outcomes and Competencies for the Building Research Across Inter-Disciplinary Gaps (BRIDG) program, as outlined in the program funding application and published on NIH RePORTER, <u>click here</u>.

Additional information on the R90/T90 BRIDG Program Goals, Outcomes, and Directives can be found in the following locations:

- National Center for Complementary and Integrative Health (NCCIH):
  - NCCIH BRIDG R90 Program Overview
  - o NCCIH BRIDG T90 Program Overview
- National University of Natural Medicine (NUNM):
  - o NUNM BRIDG Program Overview
  - NCCIH BRIDG R90 Program Overview
  - NCCIH BRIDG RT0 Program Overview
- University of Washington (UW):
  - NCCIH BRIDG Program Overview
  - NCCIH BRIDG R90 Program Overview
  - NCCIH BRIDG T90 Program Overview

# **Student Learning Objectives (R90 Program)**

#### **1.** Develop clinical research skills expertise

- a. Design and carry out competitive, rigorous CIH programs of research that are innovative, collaborative, and multi-disciplinary, generate new knowledge, and contribute to health care.
  - **1a. 1** Identify appropriate uses and methodologies for mixed-methods and qualitative analyses, including needs assessments, program evaluations, and contextualizing quantitative or existing data.
  - 1a. 2 Differentiate between several different types of classical qualitative research designs including phenomenology, grounded theory, narrative inquiry, ethnography, and case studies in terms of their best-suited applications, strengths, limitations, caveats, and common uses in clinical research and program evaluation. Identify best applications and practices for each classical design type.
  - **1a. 3** Design a qualitative inquiry purpose and focus that is innovative, collaborative and multidisciplinary, and that can generate new knowledge and contribute to health care.
  - **1a. 4** Identify key informants and data sources for qualitative inquiries.







- 1a. 5 Differentiate between different types of data collection procedures including semi-structured interviews, focus groups, and document review in terms of their best-suited applications, strengths, sample sizes required for saturation, limitations, caveats, and typical uses in research.
- **1a. 6** Demonstrate an understanding of- and respect for- the importance of data management systems.
  - **1a.6.i.** Propose data management strategies that are ethically and legally responsible and viable.
  - **1a.6.ii.** Evaluate data management strategies for ethical and legal viability.
- **1a. 7** Demonstrate an understanding of- and respect for- the importance of trustworthiness protections in qualitative research.

*1a.7.i.* Propose strategies to ensure trustworthiness protections in qualitative research studies. *1a.7.ii.* Evaluate studies for trustworthiness protections.

b. Critically appraise various types of literature, including intervention, observation, systematic review, and case studies.

**1b. 1** Interpret data presented in different types of graphs, tables, and figures

- **1b. 2** Determine whether conclusions match data presented.
- c. Describe and apply all aspects of study design, including articulating appropriate questions, generating hypotheses, choosing appropriate design and methods, selecting outcomes, designing data management and analytic strategies.
  - **1c. 1** Explain study design, methods, and data to classmates
  - **1c. 2** Analyze study strengths, limitations, weaknesses, and implications to research, clinical practice, and public health.
  - **1c. 3** Evaluate and discuss the quality and validity of research studies based on rigor, potential impact, novelty, and innovation. .
- d. Effectively present data in written, oral, and poster format for varied audiences.

**1d. 1** Present data orally and visually to classmates.

- **1d. 2** Provide three written analyses of primary PubMed indexed articles.
- e. Effectively communicate methods, data and results of research in written, oral and visual formats for varied audiences.

**1e. 1** Critique the ethical considerations and potential biases in clinical research studies. See also outcomes 1d.1-2 above.

- 2. Overall Program Objective: <u>Provide trainees with an opportunity to gain preparation and training in</u> <u>clinical investigation</u>, focusing on:
  - a. <u>Designing and carrying out competitive, rigorous CIH programs of research that are innovative,</u> <u>collaborative, and multi-disciplinary.</u>
  - b. Generating new knowledge.
  - c. Improving health care.
- 2. Gain a working knowledge of the basic aspects of integrative medicine and health
  - a. Describe integrative medicine modalities and their clinical application.
    - 2a. 1 See objectives 1a.3.
  - b. Explain processes by which social, behavioral, economic and policy factors, including nutritional behaviors and practices, influence individual and community health.





**2b. 1** Discuss the potential impact of research findings on the research landscape, clinical guidelines patient care, and public health.

c. Describe etiology, progression and treatment of some common diseases/conditions. *See objective 1a.3.* 

## 3. Scientific integrity: Be a steward of ethical research practice

d. Demonstrate an understanding of ethical issues in human subjects research, including the need for inclusion and diversity in research study planning, oversight and participation.

*3.d. 1 Identify "gaps" in the field and propose future research questions that address these gaps. See objectives* **1c. 5, 1e.1,** and **2a, 3-5** above.

### 4. Demonstrate professional growth

- a. Identify key integrative medicine researchers in the field as well as potential collaborators and mentors. *See objectives* **1a. 3, 2b.1** *above.*
- d. Stay abreast of current findings and develop processes to facilitate life-long learning.

See objectives **1a. 3, 2b.1** above. **4d. 1** Discuss how to stay abreast of literature post NUNM **4d. 2** Identify apps that help organize research literature

- 1. Develop preparation and training in clinical investigation, focusing on:
  - a. <u>Designing and carrying out competitive, rigorous CIH programs of research that are innovative,</u> <u>collaborative, and multi-disciplinary.</u>
  - b. Generating new knowledge.
  - c. Improving health care.

T3. The program objectives for the <u>T90 component</u> of the BRIDG program are to provide promising, competitive CIH-trained, doctoral-level clinicians [T90 fellows] with:

- d. Didactic courses in *clinical research methodology*.
- e. Specific learning modules dedicated to CIH-specific research topics.
- f. <u>Clinical research training that includes:</u>
  - 1. Hands-on research experiences.
  - 2. Mentorship by funded investigators from the UW.
  - 3. Didactic training in clinical research methodologies.
- R3. The program objectives for **<u>R90 component</u>** of the BRIDG program are to provide promising, competitive conventionally trained researchers [R90 fellows] with:
  - a. Training and mentorship in the practices of integrative health disciplines, including naturopathy, classical Chinese medicine herbal medicine, and mind and body therapies amongst others.
  - b. Experience in CIH clinical practices and/or clerkships.
  - c. <u>CIH research training that includes:</u>
    - i. Clinical observations
    - ii. <u>Research mentorship from funded investigators</u>.
    - iii. Didactic training in complementary health disciplines.
  - d. <u>Opportunity to collect, [analyze, and prepare] preliminary data [that can be used in] grant</u> <u>applications</u>.







- Provide opportunities for R90 and T90 trainees to train together during weekly BRIDG Seminars, tri-annual in-person BRIDG Retreats, and <u>annual immersive Methods Workshops</u> to foster collaboration and <u>learn</u> <u>applications of research methods to CIH research</u>.
- 7. <u>Apply innovative online and distance education approaches to deliver, preserve and disseminate</u> the BRIDG program training materials.
- 8. Evaluate the BRIDG program on a variety of metrics of success in order to continually improve the program, which will include:
  - a. <u>The continued development of a cadre of cross-trained clinical researchers prepared to design</u> and carry out competitive rigorous CIH research and contribute significant knowledge to the <u>field.</u>
  - b. A collaborative distance learning-oriented training model for CIH clinical research education.
  - c. <u>A digital archive of the BRIDG didactic material that can be made accessible and disseminated</u> to other interested parties.

## **Required Textbooks, Articles & Other Information Resources**

 Barrio Minton, C.A., & Lenz, A.S. (2019). Practical Approaches to Applied Research and Program Evaluation for Helping Professionals (1st ed.). Routledge. <u>https://doi.org/10.4324/9781315108933</u>

#### **Recommended Textbooks, Articles & Other Information Resources**

- Overall Quality Criteria
  - o Criteria for Good QR (Ydav & Drishti, 2022)
  - o <u>QR Overview and Guidelines (Lim, 2024)</u>
- Determining Sample Sizes
  - o Sample Sizes for 10 Types of Qualitative Data Analyses: Integrative Review (Wutich et al., 2024)
  - o <u>Sample Sizes for Saturation in Qualitative Research (Hennink & Kaiser, 2022)</u>
- Reporting Standards
  - JARS: The APA's Journal Article Reporting Standards for qualitative research in Psychology (Levitt et al., 2018; APA, 2020)
  - o <u>COREQ: COnsolidated criteria for REporting Qualitative Research (Tong et al, 2007; Booth et al., 2014)</u>
  - o <u>SRQR: Standards for Reporting Qualitative Research (O'Brien et al., 2014)</u>
  - o <u>Reporting Guidelines for QR: Values-Based Approach (Braun et al., 2024)</u>
- Psychology Research
  - Quality Criteria Guidelines for QA in Psychology Research (Vena et al., 2024)
  - JARS: The APA's Journal Article Reporting Standards for qualitative meta-analytic, and missed-methods research in Psychology (Levitt et al., 2018; APA, 2020)