



Planning collaborative research projects

From Coursework to Collaboration: Training Research Methodologists Through Funded Research

UNC statistician and methodologist William “Will” Merchant prepares doctoral students for research careers by integrating them into grant-funded projects, collaborative scholarship, and the full research lifecycle.



Dr. William Merchant

Doctoral students in the University of Northern Colorado’s Applied Statistics and Research Methods (ASRM) program arrive with ambition and curiosity, eager to turn ideas into impactful scholarship. William “Will” Merchant, Ph.D., helps them do exactly that.

Through grant-funded projects, collaborative research teams, and a graduate course dedicated to writing competitive research proposals, Dr. Merchant gives doctoral students a front-row seat to how meaningful research is designed, funded, executed, and published.

For students training to become research methodologists, the experience offers something rare: the opportunity to learn research not just as theory, but as practice.

Why Grants Matter for Student Training

Dr. Merchant leads funded projects across a wide range of fields, including healthcare improvement, special education, disability studies, family studies, institutional improvement, and educational technology.

These projects are deliberately structured to give doctoral students authentic roles in the research process – from study design and data collection to quantitative and qualitative analysis and scholarly dissemination.

By working across disciplines, students expand their methodological range while contributing to research that benefits real communities and institutions.

Inside Dr. Merchant’s Grant-Writing Course

Many students identify Dr. Merchant’s grant-writing course as a turning point in their doctoral training.

The class demystifies the funding pipeline and introduces practices that make proposals both competitive and student-centered. Students learn how to:

- Interpret requests for proposals (RFPs)
- Align research aims with funder priorities
- Craft compelling evidence-based narratives
- Build realistic research budgets
- Design projects where students contribute intellectually – not just administratively

The course equips students with the skills needed to move ideas from proposal to funded project.

Decoding Your World: The Methodologist’s Lens

At the center of Dr. Merchant’s teaching philosophy is the idea that methodologists help others make sense of complexity.

As he explains:

“Being a professor, you’re generally advised to focus on one field... but that’s difficult for a statistician or methodologist because many people hire you to do different things.”

Rather than specializing in a single subject area, methodologists apply analytical tools across domains.

“I can work in geology, I can work in psychology, I can work in healthcare,” Dr. Merchant says. “I don’t need to know the specifics about how those fields work; all I need to do is find patterns in them and apply statistical methods or pattern recognition.”

To illustrate the process, Dr. Merchant uses the metaphor of a decoder ring.

Complex systems – whether schools, hospitals, or communities – can appear chaotic at first glance. But with the right methodological tools, researchers can identify patterns, structure data, and uncover insights that inform decision-making.

The key, he tells students, is beginning with purpose.

“Who wants to know? Who’s asking the question, and why? That’s actually more important than the question itself.”

How Students Collaborate on Funded Projects

Dr. Merchant integrates doctoral researchers into every stage of his projects.

Students such as Nathan Williams, Shaima Alamiri, and Alberta Johnson have contributed to institutional improvement studies, mixed-methods research in disability and special education, qualitative components of family and health projects, and survey design and publication efforts in educational technology.

These collaborations provide substantive research experience that students carry into dissertations, professional roles, and future collaborations.

Mentorship with Rigor and Care

Students describe Dr. Merchant’s advising meetings as collaborative problem-solving sessions.

He asks probing questions that encourage students to articulate their reasoning and defend methodological decisions while maintaining a supportive environment where learning happens openly and iteratively.

The result is confidence built through practice rather than abstraction.



Students collaborating on projects

Preparing Students for Publication and the Profession

Many of Dr. Merchant’s students coauthor articles and present at academic conferences alongside him.

Through these experiences, they learn how to:

- Develop publishable manuscripts
- Respond to peer-review feedback
- Communicate research findings to both scholarly and practitioner audiences

These skills accelerate students' professional visibility and prepare them for careers in academia, evaluation, and applied research.

Faculty Modeling That Inspires

Dr. Merchant's own scholarship spans research methodology, gerontology, rehabilitation counseling, and educational technology.

He also emphasizes accessible learning through [Open Educational Resources](#), including the coauthored book *Roll for Learning*, which uses educational games to make research concepts more engaging.

In addition, Dr. Merchant received an internal UNC grant supporting the development of [Five Domains of Program Development](#), an open course on research evaluation available through UNC's digital scholarship repository.

Where This Leads

Students who train under Dr. Merchant leave with more than technical expertise.

They learn how to secure funding, manage complex research projects, collaborate across disciplines, and communicate findings to diverse audiences.

Most importantly, they develop a durable scholarly identity – one grounded in curiosity, collaboration, and the confidence to lead meaningful research.