The Office of Health and Medical Education Scholarship welcomes:

**Visiting Professor**

**Dr. Meredith Young**

Institute of Health Sciences Education
McGill University

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**Numbers are numbers are numbers, aren’t they?**

**Styles of reasoning and multiplicative meaning making in interdisciplinary quantitative research**

**Tuesday, December 13, 2022**

**12:00-1:30pm**

**O1509 Health Sciences Centre**

**RSVP to** [ohmes@ucalgary.ca](mailto:ohmes@ucalgary.ca) **by December 9. Lunch provided.**

We spend a significant amount of teaching (and learning) energy on how to collect, analyze, and interpret quantitative data in the ‘right’ way. We teach courses, guide students, and review manuscripts with an eye to ensuring only the most sound and defensible findings find their way into the literature, and consequently, the public eye. But what happens when different notions of ‘right’ co-exist, but might not be recognized? Many national calls espouse the benefits of interdisciplinary research to solve complex and pressing societal issues, but what happens when multiple disciplinary standards of ‘right’ differ? Quantitative approaches to research share similar surface characteristics – numbers are numbers are numbers. However, these surface similarities (i.e. the use of quantification and numbers) potentially overshadow important foundational differences in purpose, use, and interpretations of quantitative data. Through participant-focused discussion, this session will discuss a few different quantitative traditions at play in one applied setting (i.e., Health Sciences Education Research), engage with different lineages of quantitative work and a few troublesome terms, describe how different styles of reasoning can legitimately contribute to quantitative research in applied settings, and spark a discussion of how to better recognize, teach, support, and foster multiplicative meaning making based on numbers.
Biography

MEREDITH YOUNG, PhD, is an Associate Professor in the Institute of Health Sciences Education at McGill University. She earned her PhD in cognitive psychology from McMaster University studying how individuals (both individuals with and without medical expertise) think through a variety of complex problems in medicine. More specifically, she studied the intersection of more intuitive decision-making and more structured, rule-based reasoning.

Her current work examines how problems get solved in Health Professions Education, and the assumptions that underpin what we think makes a good solution. She explores this topic in three main areas: 1) issues related to reasoning or decision making in health, 2) issues of validity and assessment in Health Professions Education (HPE), 3) issues related to the ways we conduct research in Health Professions Education. Her work aims to make our understandings of key concepts in HPE more explicit in order to support productive dialogue to better support teaching, assessment, and scholarly practices. For example, key constructs such as clinical reasoning can be represented in a variety of ways - from diagnostic accuracy, situational awareness, judgment, to critical thinking - and each of these conceptualizations align with different teaching, assessment, and scholarly practices. In order to better support educational, assessment, and scholarly practices, complex concepts and underlying assumptions must be clarified and critically examined in order to support productive and constructive academic dialogue.

Professor Young was trained in experimental cognitive psychology and quantitative approaches to research but works with a variety of methodological approaches with a little help from her friends.

Biography and photo from IHSE website.