

Section NExT – Wisconsin Fall Conference 2021

Virtual in Zoom (Central Time Zone)

Saturday, October 23, 2021



9:00 – 9:30 am: Conference Log-In, Social Time, and (self-provided) Refreshments

9:30 – 10:00 am: Section NExT – Wisconsin Welcome Address and Introductions

Wesley Hough, University of Wisconsin - Whitewater

10:00 – 10:55 am: Finding Your Direction in Undergraduate Research

Lara Pudwell, Valparaiso University

Mentoring undergraduates in mathematics research involves many considerations: What are characteristics of a good problem for students? What is an appropriate amount of guidance to provide? What are some unexpected snags a new mentor is likely to encounter? We'll also discuss a variety of positive research outcomes, beyond proving new theorems, that can be used to define a successful research experience for students.

10:55 – 11:05 am: Break

11:05 – 12:00 pm: Follow-Up Discussion to Keynote Presentation

12:00 – 1:00 pm: Break for Lunch

1:00 – 1:25 pm: A Preliminary Study of the Effect of Belongness Intervention on Student Performance

Xue (Shirley) Gong, University of Wisconsin - Stout

In this talk, the speaker will talk about an ongoing SOTL project that uses an intervention to help students who might not feel like they belonged in a mathematics course develop a sense of belonging. This intervention has been used in several lower-level mathematics and physics classes, where survey data and student grades are used to compare control groups and treatment groups.

1:30 – 1:55 pm: Upside Down with Determinants

Robert Walker, University of Wisconsin - Madison

The talk title is some wordplay on an article by Sheldon Axler -- we will deduce a property of square matrices, distinct from the transpose, that preserves the determinant. Time permitting, we will illustrate and suggest two ways of proving this novel identity. At the risk of sounding like Paul Rudd in *Ant Man*, I hope this talk will be awesome!

1:55 – 2:05 pm: Break

2:05 – 2:30 pm: Math 200 – Mathematics: Form and Function

Wesley Hough, University of Wisconsin - Whitewater

In Spring 2020, the UWW Math Department piloted a new one-credit "introduction to the math major" course to help students learn about degree requirements, preview expectations in upper-level mathematics courses, and explore potential career opportunities in the mathematical sciences. In this talk, we'll discuss the features and activities in this course, student feedback, and how we used the course to strengthen relationships with our alumni.

2:30 – 3:00 pm: Member Discussion: Direction of Section NExT – Wisconsin

3:00 pm: Adjournment