

2019 PNW NEXT Program - University of Portland; Portland, OR

April 11, 2019 Thursday

6:30 pm **Informal Gathering** – [Stormbreaker Brewing in St Johns](#) (8409 N Lombard St.)

Join us when you can after 6:30 for dinner, a drink, or just good company ☺

April 12, 2019 Friday - [Hall of Fame Room in the Chiles Center](#) <http://campusmap.up.edu/>

8:00am **Registration** – Coffee and light breakfast will be available

8:05 **Introduction of New and Old Fellows**

8:10 **Session I: Mathematical Sciences and the Public: Tabletop Activity**

Presenter: Corban Harwood, George Fox U

8:40 **Session II: (Re)creating Good Rapport in the Classroom**

Organizer: Elizabeth Gillaspy, U of Montana - Missoula

9:15 **Session III: OER in the Classroom and Edfinity**

Presenter: Tien Chih, Montana State U - Billings

10:00 **Break** – Coffee and snacks provided

10:15 **Session IV: From Research to Practice and Back Again: Cycles of Reflective Practice in the College Mathematics Classroom**

Organizers: Emilie Hancock, Central Washington U and Leanne Merrill, Western Oregon U

11:20 **Session V: Developing and Maintaining a Scholarly Program in the Modern Mathematical World**

Presenters: Aaron Wootton and Hannah Callender Highlander, U Portland

12:00pm **Break for lunch** – [Location TBA](#)

1:30 **Session VI: Mentoring Program**

Presenters: Kate Kearney and Kat Shultis, Gonzaga U

2:15 **What's Next for NExT?**

2:30 **Adjourn**

3:00 – 5:30 **Minicourses** – Register for these via the section meeting website

5:45 **NExT Dinner** – [Location TBA](#)

8:00 **Public Talk by Carlos Castillo-Chavez, Arizona State U**

Abstracts

Session I: Mathematical Sciences and the Public: Tabletop activity, Corban Harwood, George Fox U

Abstract: As a table group, you will discuss some of the current issues in how the mathematical sciences interact with and are perceived by the public and then share ideas with the group as a whole. The two main issues to be addressed are the erosion of accountability and justice through widespread data-based decision-making such as hiring/firing/arrest/sentencing algorithms (following up on Cathy O'Neal's "Weapons of Math Destruction" and JMM talk); and the Calculus bottleneck of STEM majors between the exponential growth of HS Calculus and the diminishing returns in actual advanced placement and continuation in STEM majors (following up on the MAA/NCTM Report). Each discussion topic will be initiated by a prompt describing an example issue, followed by guided questions/activities.

Session II: (Re)creating Good Rapport in the Classroom, Elizabeth Gillaspay, U Montana – Missoula

Panelists: TBD

Abstract: A good rapport in the classroom is crucial for so many things: productive groupwork, constructive criticism, even just learning math! However, it's not trivial to achieve, and it's even more difficult to rebuild a supportive classroom environment once a good rapport has been spoiled. This panel discussion will share strategies for (re)building a good rapport in the classroom.

Session III: OER in the classroom and Edfinity, Tien Chih, Montana State U - Billings

Abstract: As educational costs rise across the nation, the cost associated with course materials represent a greater and greater barrier to learning, particularly for low income and first generation students. In this presentation, the author details his efforts to reduce the costs associated with an Introduction to Statistics course, including choices of course material, homework systems and supplemental tools. The author will then describe implementation of OER's in other courses, and other ongoing efforts to reduce student cost. This will then be followed by an open discussion by NeXT members regarding their own efforts using OER materials.

Session IV: From Research to Practice and Back Again: Cycles of Reflective Practice in the College Mathematics Classroom, Emilie Hancock, Central Washington U and Leanne Merrill, Western Oregon U

Presenters: Tevian Dray, Oregon State U; Stuart Boersma, Central Washington U; Kate Kearney, Gonzaga U; Steve Klee, Seattle U

Abstract: There is plentiful research in the theories and methods of mathematics education, but translating existing research into teaching practice requires intentional adaptation in a local context. This session seeks to share cycles of reflective practice for implementing evidence-based learning science strategies into mathematics classrooms.

Session V: Developing and Maintaining a Scholarly Program in the Modern Mathematical World, Aaron Wootton and Hannah Callender Highlander, U Portland

Abstract: One thing we all have in common is that as mathematicians working at institutions of higher education, we are expected to be active scholars. Scholarly work in academia has typically been measured through traditional means: published research articles and scholarly presentations. Though

still important measurements of scholarly aptitude, in this day and age there are many other meaningful ways that mathematicians can thrive in their scholarly work.

In this session, we will discuss tools and techniques for developing and sustaining a robust research program. This will include ways to start or revive your work in those traditional measurements of scholarly work, but will also include a discussion on other avenues of scholarly development. We encourage members to bring stories about their own scholarly development and in particular: what worked, what didn't, and what scholarly projects you have worked on that may fall outside of traditional academic work.

Session VI: Mentoring Program, Kate Kearney and Kat Shultis, Gonzaga U

Abstract: At last year's meeting, we began a discussion of creating a more robust mentoring program in our section. This session aims to continue that discussion and formulate a consensus of the goals and possible structure of such a program.