Mountain Regional Meeting on Upper-Division Math Pathways
Utah Valley University
Science Auditorium, SB 134
September 28-29, 2018

Objectives

Participants will:

• learn about jobs in industry, including implications for developing curricula, internships and mentorships, and undergraduate research opportunities;
• interact with representatives from industries in the Mountain Region, and learn how to create productive relationships with industry representatives to inform curricula and create industry opportunities for students;
• have the opportunity to design or revise an upper-division mathematics pathway to prepare students for careers in industry;
• Have the opportunity to become part of a TPSE-supported regional network of institutions working on upper-division pathways.

Agenda

Friday, September 28
12:00-1:00 Registration; sandwiches & mingling

PLENARY SESSION

1:00-1:45 Welcome and Introductions
Bob Palais, Math Department Chair, UVU
Jeffery Olson, Senior Vice President, UVU
Karen Saxe, Macalester College, AMS & TPSE – meeting emcee

About TPSE Math
Mark Green, UCLA & TPSE

What Are Upper-Division Pathways (UDPs) and why do they matter?
Uri Treisman, Dana Center & TPSE

1:45-2:45 Industry Panel
Michael Dorff, BYU – Moderator
Charles Cox, BioFire Diagnostics
Stephanie Fitchett, Transamerica
Marylesa Howard, Nevada National Security Site
Uwe Mayer, eBay
Eric Ringger, Zillow
2:45-3:00 \textit{Break}

3:00-4:00 \textbf{Success Stories}
\textit{Tom Barr, AMS – Moderator}
\textit{PIC Math: Elly Farnell, Colorado State}
\textit{ACME: Tyler Jarvis, BYU}
The Mathematical Biology program at the University of Utah: \textit{Bob Palais, UVU}

4:00-4:15 \textit{Break}

4:15-5:15 \textbf{Alumni Panel}
\textit{Eric Friedlander, USC & TPSE – Moderator}
\textit{Addison Adams, UVU BS ’19}
\textit{Rebecca Jones, BYU BS ’10, MS ’13}
\textit{Rachel Messick, BYU BS ’12, MS ’16}
\textit{Dylan Zwick, U of Utah MS ’08, PhD ’12}

5:45-8:30 \textit{Reception and Dinner}
Sundance Mountain Resort, 8841 North Alpine Loop Road, Sundance UT 84604

\textbf{Saturday, September 29}

\textbf{PLENARY SESSION}

9:00-9:45 \textit{What You Need to Know to Launch a UDP: Evidence from the Field}
\textit{Hal Salzman & Heather McKay, Rutgers}

9:45-9:50 \textit{Introduction to Breakouts}
\textit{Rebecca Hartzler, Dana Center}

\textbf{BREAKOUT SESSIONS}

10:00-11:00 \textbf{Industry/Academia Breakout 1}

Participants not listed below are free to attend any of the three sessions.

Expert Group A: \textit{Elly Farnell, Stephanie Fitchett, Tyler Jarvis, Eric Ringger} (facilitator: \textit{Michael Dorff}) / Room 276
Theme 1: \textit{Academia/Industry Interface}

Expert Group B: \textit{Addison Adams, Marylesa Howard, Rebecca Jones, Rachel Messick} (facilitator: \textit{Rebecca Hartzler}) / Room 279
Theme 2: \textit{UDP Mathematics Content and Structures for Industry}

Expert Group C: \textit{Uwe Mayer, Bob Palais, Tom Robbins, Dylan Zwick} (facilitator: \textit{Tom Barr}) / Room 280
Theme 3: \textit{Preparing Students for Careers in Industry}

11:00-11:15 \textit{Break}
11:15-12:15  **Industry/Academia Breakout 2**

*Participants may choose to interact with the same experts on a different theme, or with different experts on the same theme, or with different experts on a different theme.*

Expert Group A / Room 276  
Theme 2: **UDP Mathematics Content and Structures for Industry**

Expert Group B / Room 279  
Theme 3: **Preparing Students for Careers in Industry**

Expert Group C / Room 280  
Theme 1: **Academia/Industry Interface**

12:15-1:00  **Lunch** (Atrium)  
with brief introduction to Pathways Working Sessions

1:00-2:45  **Pathways Working Sessions**

2. Room 276: Clinton CC, Coconino CC, Salt Lake CC – with Rachel Messick, Stina Nyhus Torruellas

(2:00-2:45)  (Optional session: Organizational meeting for UDP Mountain Regional Network; 1 representative per participating institution) / Room 246

**PLENARY SESSION**

3:00-3:45  **Reflections from Funding Organizations**

*Karen Saxe, Moderator*  
*Elise Henson, Carnegie Corporation of New York*  
*Lee Zia, NSF (EHR/DUE)*

3:45-4:00  **Closing Remarks**

*Phillip Griffiths*