FRIEDMAN FAMILY VISITING PROFESIONALS PROGRAM

Visit to Oregon State University: May 9th, 2022

This report summarizes the visit of **Dr. Ezra Jampole** from Exponent, Inc. that took place at Oregon State University on May 9th, 2022.

ITINERARY OR AGENDA

Provide the itinerary of the visit. For example:

TIME:	ACTIVITY:
9:00 AM – 10:00 AM	Main Lecture
10:00 AM – 11:00 AM	Unscheduled time/ break
11:00 AM – 12:00 PM	Lunch with graduating graduate students
12:00 PM – 1:00 PM	Meeting with Dr. Andre Barbosa
1:00 PM – 1:30 PM	Meeting with Dr. Chris Higgins/ Tour of Hinsdale Wave Research Laboratory
1:30 PM – 3:00 PM	Tour of Emerson and Richardson Hall
3:00 PM – 5:00 PM	Individual meetings with faculty
5:00 PM – 6:00 PM	Dinner with EERI Officers
6:00 PM – 7:00 PM	SEI Presentation

STUDENT CHAPTER VISIT PLANNING COMMITTEE

LEAD ORGANIZER(S): Aaron Redus, Industry Chair, james.redus@oregonstat.edu

- Amy Metz, Treasurer, metzamy@oregonstate.edu
- Lance Parson, President, parsonla@oregonstate.edu

VISITING PROFESSIONAL LECTURE OVERVIEW

This year was the first year the visit was conducted in-person post pandemic. Dr. Jampole began his presentation by introducing EERI as an organization, himself, and his affiliations and work. He presented on several different case studies of failure investigations after earthquakes and practicing engineer's standard of care, and non-earthquake failure investigations. There were approximately 50 people in attendance between both lectures. Insights in to failure investigations from the perspective of a managing engineering that specializes in risk analysis and performance of structures subjected to extreme loads were well received. Many attendees stayed for additional discussion after the lecture.

Lecture Abstract

No abstract was provided, please see the overview for the topics covered during the lectures.

Professional Bio

Dr. Jampole is a Managing Engineer in the Buildings and Structures Practice at Exponent, Inc. in New York City. He specializes in risk analysis and performance of structures subjected to extreme loads such as earthquakes, wind, and flood events. He has served as a consultant on projects assessing the origin of damage to structures following natural disasters, adjacent construction incidents, corrosion and deterioration, settlement, and long-term issues. He has substantial experience investigating the engineering standard of care for complex energy and infrastructure projects for litigation and arbitration. He also has experience designing steel, concrete, and wood framed buildings; and in nonlinear analysis and earthquake ground motion selection.

Dr. Jampole has developed strategies for improving the performance of light frame structures during severe earthquakes. He developed a sliding isolation system geared towards the properties of light frame structures, and validated its performance through numerical analysis, component testing, and full-scale shake table testing of a two-story isolated house. He also developed a ground motion intensity measure for the prediction of sliding isolation demands, and subsequent ground motion prediction equations for use in probabilistic seismic hazard analyses.

Dr. Jampole is extensively involved in the Earthquake Engineering Research Institute as co-chair of the Younger Members Committee, and through the Learning from Earthquakes Program. He has participated in post-earthquake reconnaissance investigations in Oklahoma, Mexico City, and New Zealand, including as part of EERI's Learning from Earthquake's Program Travel Study Program.

Dr. Jampole currently serves as an adjunct professor at the New Jersey Institute of Technology, where he teaches a graduate course on structural dynamics and researches high-performance concrete materials. He holds a Ph.D. and M.Sc. in Civil & Environmental Engineering from Stanford University, and a B.Sc. in Civil Engineering from Northeastern University.

SUPPLEMENTAL ACTIVITES

Meetings with Faculty

Dr. Jampole met with many of the structures faculty individually. They discussed current research being conducted at Oregon State University.

Lab Tours

Several of the faculty gave Dr. Jampole tours of the research facilities here on campus. Facilities in wood science and engineering were also discussed as part of Oregon State Universities expansion of structural research into mass timber.

Lunch with Graduate Students

A select number of graduate students were given the opportunity to have lunch with Dr. Jampole, where they discussed career plans and feedback on current research. Dr. Jampole shared his engineering experience in practice.

RESULTS, FEEDBACK AND LESSONS LEARNED

Dr. jampole gave two (2) lectures. One during a seismic design class for graduate students and one in the evening with a joint sponsorship between SEI and EERI. Students were engaged and were prompted to think

critically about the topics discussed in both lectures. Dr. Jampole went above and beyond to provide high quality of content and discussions during both of his lectures.

This was the first year that the Oregon State University EERI student chapter conducted in-person events after the pandemic, and we had all new officers. Because of these two (2) conditions the most difficult challenge was rebuilding a flourishing organization. The Friedman Family Visiting Professional Program gave us a leap forward toward achieving this goal.

- In-person visit facilitated student engagement and participation.
- A detailed description and discussion about evaluating the standard of care
- Understanding of the impacts of reconnaissance efforts on engineering practice

ACKNOWLEDGEMENTS

The Oregon State University EERI Student Chapter gratefully acknowledges the support of the Friedman Family for sponsoring the travel of Dr. Ezra Jampole through their Friedman Family Visiting Professional Program endowment.

We would also like to thank Dr. Erica Fischer, our faculty advisor, for bringing this opportunity to our attention and her service in facilitating the activities and lectures.