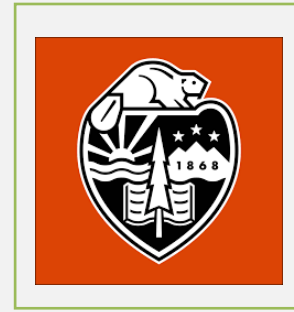


FRIEDMAN FAMILY VISITING PROFESIONALS PROGRAM

**Visit to Oregon State University: May 1st –
2nd , 2019**



This report summarizes the visit of John Hooper from Magnusson Klemencic Associates that took place at the Oregon State University on May 1st – 2nd , 2019.

ITINERARY OR AGENDA

Provide the itinerary of the visit. For example:

TIME:	ACTIVITY:
May 1 st , 2019	
6:30pm	Dinner with EERI local chapter leadership at nice local restaurant
May 2 nd , 2019	
6:00am	Run with faculty member
8:00am	Faculty meeting #1
8:30am	Faculty meeting #2
9:00am	Faculty meeting #3
9:30am	Tour of O.H. Hinsdale Wave Research Laboratory, led by both Wave Lab director and students conducting research in lab.
11:30am	Meeting with EERI local chapter leadership over coffee
12:00pm	Presentation, open to all Oregon State students
1:30pm	Lunch with small group of Oregon State students
3:00pm	Faculty meeting #4
3:30pm	Seen off by EERI local chapter representative, departure to airport

STUDENT CHAPTER VISIT PLANNING COMMITTEE

LEAD ORGANIZER(S):

- Annabel Shephard, Secretary, shephara@oregonstate.edu
- Amanda Slawinski, Vice President, slawinsa@oregonstate.edu
- Walker Maddalozzo, Industry Outreach Coordinator, maddalow@oregonstate.edu
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- Zhongliang Xie, Education Outreach Coordinator, xiezho@oregonstate.edu
- Erica Fischer, Faculty Advisor, erica.fischer@oregonstate.edu

VISITING PROFESSIONAL LECTURE OVERVIEW

John Hooper presented on the Rainier Square Redevelopment. Specifically on the addition of a new high-rise structure to the square, designed by his firm, that is currently being constructed in downtown Seattle. This

building presented a few new challenges including a never before built concrete-steel composite system. The new system, which is not included in the code, required rigorous testing and new techniques. The process of being reviewed by industry and academics was explained. Another interesting challenge that was presented was an issue of Vortex Shedding due to the sharp square layout of the building, which the architect would not compromise on. Participants were extremely engaged with the discussion and as a result participated in a discussion of more than forty minutes following the presentation.

Lecture Abstract

The primary topic covered in the lecture was the addition of a new mixed-use 58-story tower to Rainier Square in Seattle, Washington. Within the discussion of the tower, Hooper covered the approval process from both academia and industry, implementation of a new concrete-steel composite core wall referred to as a "sandwich panel system", as well as the major challenges of the process of design and construction.

Professional Bio

Hooper has 37 years of experience in engineering. Most of that experience is in building design with an emphasis on Performance-Based Seismic Design. Hooper has taken the lead as a project manager on countless unique projects, including the design of massive laboratories for genetic research and state-of-the-art facilities for research on infectious diseases, medicine, and other biosciences. These facilities often have sensitive equipment and as a result he has designed structures to meet vibration performance standards as low as 2,000 micro-in per second.

Hooper is nationally recognized for his contributions to design standards for seismic engineering. He continues to play a key role in code development and research, actively serving on several code committees. Hooper's expertise in seismic design and eagerness to engage in conversation with the next generation of engineers, makes the leadership at EERI very excited to host him here at OSU.

SUPPLEMENTAL ACTIVITIES

Faculty Meetings

The Oregon State University's EERI chapter coordinated four faculty meetings for Hooper's visit to campus. All faculty members, which included Michael Scott, Lauren Farnen, Judy Liu, and Barbara Simpson, were from the School of Civil and Construction Engineering. Each faculty member engaged in a half hour discussion on topics relevant to their and Hooper's shared passion.

Tour of the O.H. Hinsdale Wave Research Laboratory

The director of the O.H. Hinsdale Wave Research Laboratory, Pedro Lomonaco, as well as several students who have research in the wave lab, gave Hooper an extensive tour of the facilities. The lab includes a one-direction wave flume and a multi-directional wave basin, in addition to several non-wave science related structural engineering tests.

Student Interactions (Lunch with students, coffee with EERI local chapter leadership)

Hooper met with a group of undergraduate and graduate students for lunch over a couple of famous Corvallis, Oregon pizza pies. All the students shared with Hooper an interest in seismic design and structural engineering. Additionally, Hooper met with the EERI local chapter leadership team for one final time over coffee. The discussion strayed to career and life advice, which the team, at this moment in their lives, appreciated greatly.

RESULTS, FEEDBACK AND LESSONS LEARNED

- No major challenges were faced during the process apart from the general effort exerted in coordination of all faculty, students, and professionals. In terms of lessons learned, we certainly know now to budget for more time for questions. We had not anticipated the degree to which students would want to engage with the speaker following the presentation. The discussion portion lasted well beyond a half an hour. We will budget for this better in the future. Potentially even initiate some sort of round-table discussion.
- Given the practicality of Oregon State University's Civil Engineering program, meaning the majority of our students go directly into local industry, hosting speaker meetings focused on topics such as construction management and planning, structural design, foundation design, implementation of new systems, life safety (all of which Hooper touched on) are topics we hope to cover more in the future. Additionally, engineers who can speak to topics of sustainability would be quite welcome.
- Our goals for the future are to host similar events. Our students benefit from the introduction of new perspectives delivered through such good speakers as Hooper and we hope to offer them more of such opportunities in the future.

ACKNOWLEDGEMENTS

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

LIST OF ATTACHMENTS

Included at the end of this report are various attachments to supplement the information included above. A list of the attachments is included below:

- Item 1, Event Flyer
- Item 2, Photo from Presentation

EERI Speaker Meeting Series

John D. Hooper

Friedman Family Fellow Lecture

Thursday, May 2nd

12:00pm - 1:30pm

Kearney Hall, Room 205

It is an honor for us to welcome John Hooper, of Magnusson Klemencic Associates, to Oregon State University. Hooper is nationally recognized for his contributions to seismic engineering design standards and currently serves as the Director of Earthquake Engineering for his firm. With 30+ years of building design experience, Hooper has worked on countless unique projects.

Do not miss out on this rare opportunity to learn from an expert!



Oregon State
University



