University of Portland is pleased to host the 73rd Annual OAS Meeting, February 28, 2015

Schedule of the 2015 OAS Meeting

8:30-10:00 Coffee and Rolls
   Poster set up
10-noon Presentations
12:00-2:00 Lunch & Special Sessions
2:00-3:20 Presentations
3:20-4:20 Poster Session & Gallery Viewing
4:20-5:15 Pre-dinner Reception & Terroir Tasting
5:15-6:45 “Eat Local Dinner” (separate ticket required)
7:00-8:00 Public Lecture: Scott Burns “The Mystique of Terroir: the relationship between geology, soils, climate and wine in the Willamette Valley and the Columbia Gorge”

Public Lecture: Scott Burns
OAS Outstanding Scientist for 2014 “The Mystique of Terroir”

Scott is a Professor Emeritus of Geology and Past-Chair of the Dept. of Geology at Portland State University where he just finished his 24th year of teaching. He was also Associate Dean of the College of Liberal Arts and Sciences at P.S.U. from 1997-1999. He has been teaching for 44 years, with past positions in Switzerland, New Zealand, Washington, Colorado and Louisiana. He is a 6th generation Oregonian who grew up in Beaverton and is very happy to be "home" after a 25 year hiatus! Scott specializes in environmental and engineering geology, geomorphology, soils, terroir and Quaternary geology.

He has authored over 100 publications and has had over 25 research grants. His first book, Environmental, Groundwater and Engineering Geology: Applications from Oregon, came out January of 1998. His second book, Cataclysms on the Columbia, the Great Missoula Floods came out in October of 2009 and is co-authored by Marjorie Burns, a friend and professor at PSU.

He has BS and MS degrees from Stanford University in California, plus a Ph.D. in geology from the University of Colorado, Boulder.
Scott has won some national awards in geology: distinguished practice award from the engineering geology division of GSA in 2012, the Richard Jahns Award for engineering geology (top engineering geologist in the U.S.) from GSA and AEG in 2011, the Shoemaker Award for Public Service to the US (GSA) in 2011, and on the state level, the “Outstanding Scientist for Oregon for 2014” from the Oregon Academy of Sciences.

He actively helps local TV and radio stations and newspapers bring important geological news to the public. For the past 43 years he has been studying wine and terroir – the relationship between wine, soils, geology and climate.

Wines differ from each other based on seven different factors: the type of grape; the bedrock geology and resulting soils; the climate; the soil hydrology; the physiography of the site; the winemaker; and the vineyard management techniques. The first five of these factors make up what the French call terroir, “the taste of the place”.

All around the world the geology and soils make up an important component of the terroir of the wine. Using examples from the Willamette Valley of Oregon, terroir of the region will be discussed because it is strongly influenced by the bedrock geology and soils. The three dominant groups are the volcanic soils (the Jory Series), which developed on the Columbia River Basalts, the windblown silt soils (Laurelwood Series) and the Willakenzie Series of soils, developed on uplifted marine sedimentary rocks in the foothills of the Oregon Coast Range. The wines made from the grapes of these two soils are very different.

On March 11, 2011 at 2:46 PM local time, a magnitude 9.0 megathrust earthquake struck off the east coast of Honshu, Japan. This massive earthquake and resulting tsunami that swept onshore in Japan within 30 minutes devastated northern Honshu. On January 26, 1700 at about 9 PM local time, a great Cascadia subduction zone earthquake caused widespread destruction from northern California to western British Columbia and generated a tsunami that, as Native American groups retell, “put the canoes in the trees.” Similar to the modern example, that tsunami caused damage and deaths across the Pacific in Japan where it is known as the Orphan Tsunami of 1700 AD.

These mirror-image natural disasters separated by 311 years raise Earth science education and emergency preparedness questions of enormous human consequence. EarthScope’s Plate Boundary Observatory array of GPS receivers is measuring the compression of the “leading edge” of the North American continental margin as it stores elastic energy that will be released in the next Cascadia megathrust earthquake. The discovery of Episodic Tremor and Slip has provided new insight into the dynamics of subduction zone plate boundaries. Development of a coordinated GPS and seismic monitoring network holds great promise for Cascadia Earthquake Early Warning. In Japan, Chile, and California, considerable progress has been made in earthquake engineering as these regions approach earthquake resilience.
How can we translate and disseminate earthquake science for novice learners to advance public understanding of earthquake hazards and develop a regional commitment to build an earthquake resilient Cascadia? One pedagogical approach is to animate plate tectonic and earthquake processes by compressing time from centuries to seconds and scaling dimensions from 100s of kilometers on and beneath Earth’s surface to centimeters on a computer screen. Example animations of ghost forests as records of the 1700 earthquake, EarthScope GPS observations, and the concept of Cascadia Earthquake Early Warning will be presented.

The Academy seeks nominations for the following awards. Nominations may be made by any member of the Academy. Award presentations will be made at the annual meeting. The deadline for nominations is February 2, 2015.

2015 Outstanding Scientist Award
Nominees should have made significant contributions to basic or applied research in the natural, physical, or social sciences. Nominees must have been Oregon residents during the time that they made their distinguished contributions. The letter of nomination should include a brief discussion of the nominee’s accomplishments, along with supporting letters and documents.

2015 Outstanding Educator in Science and Mathematics, Higher Education
Nominees for this award should have a demonstrated record of outstanding teaching in any of the subject areas encompassed by the Academy. Letters of nomination should clearly describe the unique contributions made by the candidate to teaching excellence in higher education science and/or mathematics classrooms.

2015 Outstanding Teacher in Science and Mathematics, K-12 Education
This award is to recognize outstanding teaching in science or mathematics at the K-12 level. Nominees should have a demonstrated record of outstanding teaching in any of the subject areas encompassed by the Academy. Letters of nomination should clearly describe the unique contributions made by the nominee to teaching excellence in science or mathematics in K-12 classrooms.

Submit all letters of nomination and supporting materials to Kevin Johnson (Pacific University) johnsonk@pacificu.edu

Invitation to the 2016 OAS Meeting
Pacific University will host the 2016 Oregon Academy of Science meeting in February 2016 on the historic Forest Grove campus. Located about 25 miles west of Portland, Forest Grove was named for a stand of oak trees still standing on the Pacific University campus. Pacific was chartered by the Oregon Territorial government in 1849, ten years prior to Oregon statehood. Still standing on campus is Old College Hall, where visitors can see scientific instruments from the early 20th century, as well as a chalkboard with remnants of an early chemistry lecture! We look forward to once again hosting the OAS meeting on our beautiful historic campus.

Call for Campus Hosts for 2017 and beyond!
The Executive Council for the Oregon Academy of Sciences is seeking campus hosts for the OAS meetings in 2017 and 2018. The campus representative serves as the Council President-Elect for the year prior to hosting, and the President when hosting the annual meeting. Those interested in hosting future OAS meetings should contact President-Elect Kevin E. Johnson (johnksonk@pacificu.edu).
Information on lodging and transportation options for 2015 OAS Meeting at University of Portland

Many of you know where the University of Portland is located, but for people coming to campus for the first time, or for anyone needing lodging, here is some information.

UP is a bit off by itself in North Portland, on Willamette Boulevard, but is served by two bus lines to the front gate. The number 44 bus and the number 35 bus run right up 6th street downtown, and then through the Rose Quarter transit center, before ending up at our front gate.

http://trimet.org/pdfs/schedulemaps/044.pdf
http://trimet.org/pdfs/schedulemaps/035.pdf

One nice downtown hotel is the Portland Marriott City Center, 520 SW Broadway Portland, OR, 97205, (866-538-9334) and it is a short walk to the bus lines. A drop further to the bus but not a bad walk, Embassy Suites Portland-Downtown, 319 SW Pine St Portland, OR, 97204, (866 539 8430).

For drivers who want economy and a nice place and don't care about being right downtown, close hotels with good prices and nice rooms are Oxford Suites Portland - Jantzen Beach, 12226 N Jantzen Dr. Portland, OR, 97217, (866-582-9492) and for somewhat more in the same area the Red Lion Hotel on the River - Jantzen Beach 909 N Hayden Island Dr. Portland, OR, 97217, (866 539 8430)

To see how any hotel relates to mass transit, input the address at the Trimet trip planner and use University of Portland as the destination, see http://trimet.org/index.htm. To see where UP is by car, go to: http://www.up.edu/admissions/default.aspx?cid=806&pid=2170. Parking will be free on campus that day. The main lot is the first right past the main entrance to the campus.

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