



PORTLAND CHAPTER

ScienceWorks FOUNDER KATHIE OLSEN TO SPEAK AT THE SCHOLAR AWARDS LUNCHEON

Recently honored by the American Institute of Aeronautics and Astronautics with the 2014 Public Service Award for her consistent and visible support, Scholar Awards Luncheon keynote speaker Dr. Kathie Olsen believes that innovation comes from a firm foundation of scientific research, and she believes in the mission of ARCS Foundation. Kathie Olsen is a neuroscientist, distinguished researcher, university professor, innovator and entrepreneur. Olsen is also a member of the Metro Washington, D.C. chapter of ARCS Foundation. We are thrilled to welcome her as our keynote speaker.

Dr. Olsen was raised in Oregon and attended Cleveland High School. After earning a doctoral degree in neuroscience, she held a variety of leadership positions with the National Institutes of Health, the Department of Defense, the National Science Foundation, UNESCO and the National Aeronautics and Space Administration, before starting her own company, ScienceWorks, in Washington, D.C.

On October 23, Dr. Olsen will address ARCS Portland members and community supporters at the Scholar Awards Luncheon held at the Portland Art Museum. A more timely topic is hard to imagine: *"A Panoramic Perspective on Science Policy."* Olsen's view of U.S. science policy is wide-ranging and comprehensive—she's viewed science public policy from the viewpoints of scientist and researcher and administrator.



"There is no substitute for the hands-on experience of students participating in research ... and no better way to ensure the continuity of the field and the influx of fresh ideas."

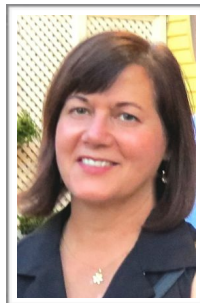
*ARCS Scholar Awards Luncheon keynote speaker, Kathie Olsen
Photo of Dr. Olsen during her third visit to Antarctica*

Have you heard of a MacArthur Fellowship, sometimes known as a "MacArthur genius grant"? Our scholar speaker is ARCS alumna Dr. Kelly Benoit-Bird, 2010 recipient of a MacArthur Fellowship, respected marine biologist, researcher, and Oregon State University professor in the College of Earth, Ocean, and Atmospheric Sciences. Her research work uses sophisticated sonar engineering to study complex ocean predator and prey relations, schooling, group processes and dynamics of marine animals. Dr. Benoit-Bird's topic will be *"Sounding Out the Secrets of Life in the Ocean."*

Please join ARCS Foundation Portland as we honor 59 ARCS scholars for the 2014–2015 academic year, supporting them in their quest for doctoral degrees from OHSU and Oregon State University. We encourage all ARCS members to attend on October 23 and warmly welcome our supporters in the community.

Don't miss the Poster Session with third-year scholars, beginning at 11:15 a.m.

FROM THE PRESIDENT



Our Portland chapter begins a new academic year feeling warm and fuzzy. We are grateful for our founders whose hard work, passion, and planning created a stellar beginning for ARCS Portland. The founders and Charter Members, pulling in dynamic new members along the way, made our first ten years successful – we are always striving to be *Light Years Ahead*. The joy and pride in our accomplishments was evident in May when the chapter formally celebrated our 10-year anniversary.

What we will do in the next ten years as a chapter?

First, we have a meaningful reminder – the 10th Anniversary Scholar Award Fund. Many members donated to create this new \$200,000 award and we can look forward to the fall of 2015 when a new Ph.D. candidate at OHSU or Oregon State University will be selected as the first beneficiary. This 10th Anniversary Scholar Award Fund in perpetuity is at the core of our mission.

We have openings for new active members. Think about who would enhance our stellar chapter. Thank you to our members who serve on a committee, invite a speaker, attend a program, put together our budget, fund a scholar, reach out to a scholar ... all the connected activities that make us vital. I look forward to sharing my time with you and our university partners, seeing what we can accomplish next.

We will welcome 22 first-year scholars this fall, nine from OHSU and 13 from Oregon State University. Please plan to meet them at the Scholar Picnic on Sunday, September 28, and learn about their

research goals. Could there be a better perk of membership, or of being a scholar award donor? We'll have the first ever scholars from the OSU College of Science and the College of Agricultural Sciences. The incoming scholar class represents funding from ten new donors and will include the first scholar for the Fairway Fund endowed scholar award. The awards for the class of 2014 are also made possible by several repeat donors, including members and Schnitzer Steel — evidence that the donor experience is rewarding.

This fall we will also have our first scholars with funding from The Roche Foundation. All 17 ARCS Foundation chapters will receive Roche funding of \$13,000 each year for three years. We will combine these funds with our own chapter funds to support three scholars in the life sciences this fall. These scholars benefitting from The Roche Foundation will be part of our incoming class of 22. This is the first collaboration on a national level for ARCS scholar funding, so it is a milestone.

Another perk of membership is our ever improving website. Thank you to Caron Ogg who diligently updates the Portland website, as well as the national ARCS website. Please go to www.arcsfoundation.org/Portland to read about scholar Logan Berner, at the OSU College of Forestry. He was named a NASA Earth and Space Science Fellow, one of 54 selected from 410 applicants nationwide. Our website is chock full of information about scholars, our events and key accomplishments. You might even find a photo of yourself in the Media Gallery (Newsroom, Media Gallery.)

Let's get this year started.

Altha

We believe that investments in American scientists studying with Oregon's premier doctoral programs in science, medicine and engineering build a vital pipeline of intellectual capital for our businesses. Through our scholar awards, ARCS supports and nurtures these exceptional young women and men at OHSU and Oregon State University.

ACHIEVEMENT REWARDS FOR COLLEGE SCIENTISTS

WORDS OF WISDOM FROM OUR THIRD-YEAR SCHOLARS A.K.A. TWEETS OF RESEARCH



In May, we honored our third-year scholars with a celebration and asked for a Twitter description—that's 140 characters or less—of their research. Here is the capsule version of three years' of hard work:

Jeremy Glynn

Current materials try to hide from blood clots, but they can't hide forever. Our bioactive materials interact with blood to reduce clots.

Tyler Hulett

Studying how anti-cancer vaccines can help teach the body's own immune system how to fight tumors at the Providence Cancer Center

Amber Jones-Hackathorne

I use fluorescence to map protein interactions and movements

Paul Kramer

Cocaine changes the brain in just 24 hours and metabotropic glutamate receptors are important in gating those changes. @neuroscience

Jeff Luitjens

I focus on the development of a physics based critical heat flux model in an effort to improve operating margin and safety in the nuclear industry.

Sophia Polasky

What linkages exist among the condition of natural resources and the tenure of those resources, and the resilience of human social systems?

Danielle Robinson

I study myelin-making, axon-insulating Schwann cells to understand the root of their dysfunction in the inherited neuropathy Charcot-Marie-Tooth disease.

Susan Schnur

Why do long chains of submarine volcanoes form on the ocean floor, often far from tectonic plate boundaries? Radiometric dating can explain!

Garth Tormoen

I study blood clotting reactions caused by cancer cells to better understand why deadly blood clots form in patients with cancer.

Chris Vaaga

Understanding how a local interneuron neuron that releases both dopamine and GABA functions within the olfactory bulb microcircuit

From Jean Josephson, past president

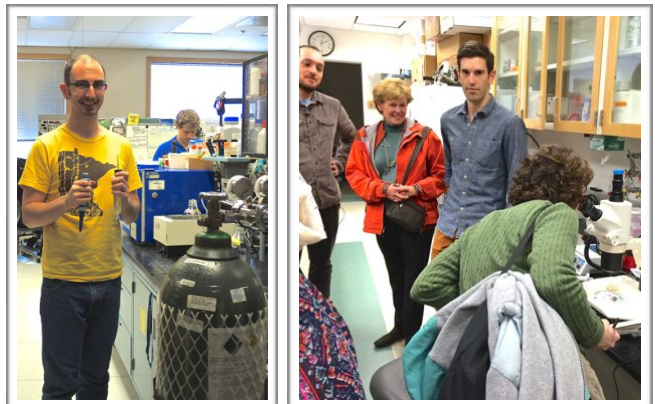
ARCS PDX advances science by awarding \$ to outstanding Americans completing PhDs @OHSU & @OSU in science, engineering, and medical research



Above: Third-year scholar Jeremy Glynn welcomes ARCS Portland members and describes his work with Goretex grafts that resist arterosclerotic clogging.

OHSU SCHOLARS OPEN THEIR LABS TO ARCS PORTLAND MEMBERS

Nine OHSU scholars opened their labs in March and April, giving members the opportunity to see the latest research in a variety of disciplines at the Marquam Hill and South Waterfront campuses.



ARCS scholar Paul Kramer greeted members en route to Benjamin Rakela's lab. We toured Benjamin's lab, looked at neurons firing in a zebra fish spinal cord and saw the tanks of specially bred zebra fish.



*Back row from left: ARCS scholars Scott Jones, Nora Hammack, Reena Clements, Helen Wu, ARCS Portland members Cheryl Hammond and Jane Gray
Front row from left: Barbara Silver, Adrienne Peterson, Joan Foley, Anne Yoo, Jean Josephson*

ACHIEVEMENT REWARDS FOR COLLEGE SCIENTISTS

JULIE DRINKWARD NAMED 2014 ARCS LIGHT



A member of ARCS Foundation since 2006, Julie Drinkward immediately joined Portland Chapter's leadership team where she served on the board for three years as co-chair of the program committee. She coordinated lecture and field trip opportunities for members and guests that covered diverse topics in scientific research while always ensuring that every detail was addressed. Julie set our program standards very high and members came to expect and appreciate excellent speakers. No task was too small or too large for Julie as she organized many of the programs we've enjoyed to date. Julie and her husband, Wayne, continually step up for worthy causes, whether in the community or with ARCS Foundation. They have taken personal interest in and support three students as they complete their PhD's. When the Recognizing Genius Scholar Awards Luncheon became the signature event for our chapter, it was Julie who encouraged Wayne and Hoffman Construction to become the premier sponsor and to show their support for the ARCS mission. In addition, Julie and Wayne hosted the Summer Party for members and their spouses in 2009. Julie's other community involvement includes OES, the Circle of Giving at OHSU, and the

High Desert Museum. All of Julie's efforts are done quietly, without fanfare. Julie is friendly and welcoming and always has a smile on her face. Perhaps because she is a mother of four, Julie is straightforward and unflappable. Her constant smile cheers us all. We are delighted to recognize Julie as the Portland Chapter ARCS Light for 2014.

www.arcsfoundation.org/portland

Are you missing out on the chapter website? Do you know how EASY it is to access the ARCS Portland chapter website?

Here's how:

Go to www.arcsfoundation.org/portland

You don't even have to log in to access important information on the website; the landing page shows the latest chapter news and shares a scholar spotlight. The white tabs on the left make it easy to explore the wealth of information about our chapter, its history, our members, our scholars, our partnerships with the universities and the community, and our signature event—the Scholar Awards Luncheon.

The website gives a comprehensive picture of our chapter, our leadership, our accomplishments and our future goals. It's helpful for new members, potential members, donors, and everyone who wants the latest information about ARCS Foundation Portland Chapter. You'll be able to see a profile of our scholars, find out more about our programs, and learn ways you can participate.

In-depth information is available on the secure portion of the site. The secure portion of the website offers access to the national library of helpful materials, such as the membership handbook, leadership structure, national meeting information as well as updates on committee work and useful handbooks. In the reporting section, there is the ability to search and filter scholars by program or school; contact a member from another chapter, or generate reports with information pertinent to your committee work.

1. Go to www.arcsfoundation.org/portland
2. Click on Member and Scholar Log in at the top of the page.
3. Enter your user id, which is your email
4. Enter "temp123" as the password
5. Select "Portland" from the drop down box
6. Click Log In. You can update your profile and change your password.

Try it! We welcome all questions and comments and are ready to help each of you become familiar with the website and its many capabilities. Please call and I will meet with you or guide you over the phone. The goal is to help all ARCS members learn about this great resource and to harness its potential in service of our chapter's work.

Leslie Workman
503-245-7489 (b) 503-807-1483 (c)

ACHIEVEMENT REWARDS FOR COLLEGE SCIENTISTS

THANK YOU TO ALL

Dear Members,

At the May annual meeting I received a beautiful crystal bowl, etched on the bottom with the ARCS logo, my name and the years of my term as president. I will enjoy using it and keeping it as a reminder of two most remarkable years. Thank you.

The support and advice from the past presidents, and the capable participation from every member of the board made the job very satisfying. I've enjoyed the challenges, the excitement, and the friendships, immensely. And now I'm happy to be part of the past-presidents' club. I know that Aletha will continue improving and expanding the ARCS Foundation mission in our community. We are in very capable hands.

Jean
Jean Josephson

10th ANNIVERSARY PARTY PHOTO OP



ARC Foundation Portland Chapter presidents in chronological order from left: Sharon Hewitt, Ellen Richardson, Leslie Workman, Caron Ogg, Jean Josephson, Aletha Anderson

ARCS PORTLAND TAKES A FIELD TRIP TO NEWPORT



Joan Foley examines whale baleen while members, guests and ARCS scholars listen to Marine Mammal Institute scientist Jim Rice explain whale feeding mechanisms.



The scientists and crew of the Oregon State University research vessel Pacific Storm welcomed ARCS visitors aboard



From left: ARCS scholar Katarina Morowsky, President Jean Josephson, ARCS scholar Logan Berner

Our annual field trip to the Corvallis campus of Oregon State University has always been a program highlight. This spring we were invited to visit the Hatfield Marine Science Center at the coast to tour the Genetics, Pinniped, Necropsy, and Geographic Information Systems laboratories. These behind-the-scenes glimpses into the labs gave members and guests the opportunity to listen to researchers, ask questions, and learn about cutting edge oceanic and marine mammal research.

The trip to Newport included the chance to visit with ARCS scholars from OSU, and lunch in the iconic Rogue Ales Brewery. A final treat before returning to Portland was a tour of the research vessel R/V Pacific Storm. The 84' ship has carried the ship's crew and up to seven OSU researchers to the Bering Sea and as far as Costa Rica.

ACHIEVEMENT REWARDS FOR COLLEGE SCIENTISTS

10th Anniversary Celebrations Generate a Permanent Scholar Award



From left: Mary Ann Lockwood, Nancy Fischer, Cornelia Stevens, Ellen Richardson, Sharon Hewitt

Our chapter celebrated its 10-year anniversary with style and substance. Capping off a year of tributes to the chapter founders, the generous members, and the community's support, President Jean Josephson announced that another award in perpetuity has been funded. The yearlong effort raised over \$95,000. This, added to existing funds collected over the first 10 years, will generate the cash needed to support a new scholar every three years. A majority of members, including every board member, contributed to the fund. Donations ranged from \$10,000 to \$50. The award will be appropriately named *The 10th Anniversary Scholar Award*. The first scholar to be funded with this award will start in the fall of 2015-16.

Plans for the anniversary year began with composing a vision statement: We support American scientists' dreams of being light years ahead. Chapter communications echoed the phrase *Light Years Ahead* when the ARCS Foundation national board was invited to attend the kick-off celebration dinner at the Town Club during the board's meeting in Portland last October. The 10-year anniversary committee initiated a poster session at the Scholar Awards Luncheon and offered temporary tattoos with shooting star to the guests. The Founders Circle was established as a way to encourage bequests; all five founders pledged participation. In addition, the founders co-wrote a history of the chapter's steps to incorporation.

The year culminated at the annual meeting in May at Waverley Country Club, with praise for ARCS Foundation, our leaders, and the partnerships within the community. Both OHSU President Joe Robertson and Oregon State University President Ed Ray offered toasts to our accomplishments. Light Years Ahead balloons, 121 members and guests, and the spirit of celebration for continued success made it an anniversary party to remember.



Thank you to everyone who contributed to the 10th Anniversary Scholar Award Fund, creating a legacy from our chapter's first ten years.

\$5,000 and above

Julie and Wayne Drinkward
Liz and Gregg Christiansen
Vicki and Tom Griffin
Sharon and Henry Hewitt
Barbara Wilkinson and Peter Rapp

Up to \$4,999

Diane and Dick Alexander
Kathleen and Bob Ames
Aletha and Chris Anderson
Jamie and Mike Anderson
Muffy and Bill Beeler
Susan and Larry Black
Sally and Clifford Canepa
Ann Carter and Tom Palmer
Nancy and James Dalton
Nancy and Fritz Delbrueck
Nancy and John Dennis
Marcia and Alan Director
Sally and Cecil Drinkward
Ann and Ron Emmerson
Sandy and Wayne Ericksen
Nancy and Dodd Fischer

Sally and Jerry Fisher
Patricia Fisher and Joe Robertson
Joan Foley and Per Jarnberg
Julie and Tony Furnary
Barbara and Jerry Giesy
Sheila and Mike Goodwin
Jane and Joe Gray
Laurie and Gary Griff
Hilary and Price Gripekoven
Missy Vaux Hall
Janis and Bob Harrison
Julie and Bill Headley
Judith Holmes
Lynnette and Done Houghton
Beth and Jerry Hulsman
Anne and Peter Jarvis
Kate Joseph and Tom Murray
Jean and Rich Josephson
Jill Josselyn
Kris and Michael Kern
Bobby Jo and Rupert Koblegarde
Marilyn and John Lindgren
Elisabeth and Peter Lyon
Jennifer and Owen McCarty
Sue and Bernie McGrath
Laurie and Gilbert Meigs
Morgan Stanley
Jan and Mark Nichols

Cherie Nomura
Caron and Larry Ogg
Frances and Howard Page
Patty Pedersen
Adrienne and Lee Peterson
Diane Polscer and Robert Carson
Lynn and Steve Pratt
Ed Ray
Lee and Ron Ragen
Urmila and Dilip Ratnam
Barbie and Burke Rice
Ellen and Mark Richardson
Marilyn and Bob Ridgley
Dianne Rodway and John Becker
Deanne and Dick Rubinstein
Barbara Sage and Walt Krumbholz
Barbara and Phil Silver
Susan and Bill Smith
Cornie and Bill Stevens
Gretchen and Jeff Sturm
Susan and George Swindells
Shelley and Joe Voboril
Barbara and Bass Wagner
Anne and Scott Weaver
Jean and Rick Wills
Leslie and Mark Workman
Anne and Jung Yoo

ACHIEVEMENT REWARDS FOR COLLEGE SCIENTISTS

Peak Experience: Cutting Edge Science in the Wasatch

Calling all ARCS Portland members! The 2014 ARCS Foundation National Annual Meeting is scheduled September 17–20 in Salt Lake City. Members from ARCS Foundation's 17 chapters will stay at the elegant Grand America Hotel, located in the vibrant heart of a city that combines old and new in one of the nation's most accessible downtown areas.



Photo courtesy of Steve Garwood, Love Communications

Meeting highlights include:

- opening reception at the University of Utah's Huntsman Cancer Institute overlooking Salt Lake Valley
- an opportunity to attend the Mormon Tabernacle Choir rehearsal in the Tabernacle on Temple Square
- keynote address by Governor Gary Herbert, whose challenge to Utah businesses resulted in the "STEM Utah: Curiosity Unleashed," media campaign to increase interest in science, technology, engineering and math (STEM) education
- presentations by University of Utah scientists, Dr. Chris Johnson, founding director of the Scientific Computing and Imaging Institute, and Dr. Nassir Marrouche, creator of the Comprehensive Arrhythmia Research and Management Center
- dinner at The Leonardo Science and Technology Museum
- a visit to the Natural History Museum of Utah Rio Tinto Center, an architectural marvel and a case study in "green" design

Workshops and fun optional tours will round out the National Annual Meeting. Hotel registration is encouraged by August 22, event registration closes on September 1. Check the website for detailed registration information.

Did You Know That There Are Many Ways To Join The Founders Circle?

The **Founders Circle** is a recognition group for those who have included ARCS Foundation Portland Chapter in their estate plans. Anyone can take part in the Founder's Circle; you don't have to be an ARCS member to include ARCS in your estate planning. Usually when we hear the term "estate plan" we think of wills. Including a charitable gift to ARCS in your will is a wonderful way to join the Founders Circle, but there are others.

One of the easiest ways to add a charitable gift to your estate plan is by including ARCS as a beneficiary of an existing IRA or insurance policy. Often "beneficiary designation" forms are available on-line; your financial planner or insurance agent can also help you with this.

Many times there are tax advantages to including a charitable organization as a partial recipient of an IRA or insurance policy—it may mean more of your other assets are available for family members instead of taxes.

If you'd like to consider this as a way to join the Founders Circle, you'll want to start by consulting your financial planner and/or estate attorney. They'll work with you to make sure you're meeting all of your financial goals. Then you can inform President Aletha Anderson or Fund Development Chair Marcia Director about your decision, and they'll be delighted to add you to our Founders Circle. We'd love to include you!

Sarah Panetta

IN MEMORIAM:

ARCS Foundation Portland member and Oregon State University first lady Beth Ray died on March 21 in Corvallis.



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www.arcsfoundation.org/portland

<https://twitter.com/ARCSpdx>

<https://www.facebook.com/ARCSPortland>



Awarded the James L. Fisher Award for Distinguished Service to Education by the Council for Advancement and Support in Education (CASE)

ACHIEVEMENT REWARDS FOR COLLEGE SCIENTISTS FOUNDATION, INC.

MARK YOUR CALENDAR NOW FOR OUR 2014 EVENTS

- Sept. 17–20** National Annual Meeting in Salt Lake City, all members welcome
- Sept. 24** 1:00–3:00 p.m. Scott Ashford, OSU Dean of Engineering, will discuss engineering for earthquakes
- Sept. 28** 4:00–6:00 p.m. Scholar Picnic
- Oct. 23** 11:15–1:15 p.m. Scholar Awards Luncheon at Portland Art Museum, keynote speaker, Dr. Kathie Olsen
- Nov. 13** 1:00–3:00 p.m. Jessica Castle, OHSU endocrinologist and diabetes specialist, will describe advanced treatments for diabetes



2014–2015 Officers and Directors

- President: **Aletha Anderson**
- Past President (ex officio): **Jean Josephson**
- Treasurer: **Anne S. Jarvis**
- Secretary: **Julie Branford**
- VP Communications: **Urmila Ratnam**
- VP Fund Development: **Marcia Director**
- VP Governance: **Ellen Richardson**
- VP Member Relations: **Lee Ragen**
- VP Programs: **Julia Furnary**
- VP Scholar Relations: **Deborah Stock**
- VP University Relations: **Joan Foley**
- Members-at-large: **Julie Drinkward, Lynnette Houghton, Jennifer McCarty**

ARCS® Foundation advances science and technology in the United States by providing financial awards to academically outstanding U.S. citizens studying to complete degrees in science, engineering and medical research.