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GPHS Spring 2012 Recruitment Weekend Itinerary

Friday, March 2, 2012

- Students meet at DRI in reception area at main entrance - 8:15 am
- DRI tour and faculty meetings - 8:30-10:45 am
- Lunch and campus tour at UNR - 11:00-1:00 pm
- UNR faculty meetings - 1:00-3:30 pm
- GPHS Colloquium 4:00-5:00 pm (Wells Fargo Auditorium)
  “What does Ice Know About Climate Change” by Dr. Kendrick Taylor (DRI)
- Post-colloquium social - 5:00-6:00 pm
- Pizza dinner - 6:00-8:00 pm

Saturday, March 3, 2012

- Sagehen and Tahoe field trip, meet at DRI’s upper lot - 9:00 am
- Return to Reno - 3:00 pm
- SAIWI 9th Annual Ron Peterson Memorial African Dinner, Idlewild Park - 6:00 pm
  (student recruits meet at California Building at 5:00 to help with setup)
Murphy Gardner is a new student in the hydrogeology graduate program. He is currently assisting in research mainly focused on the groundwater systems throughout the Lake Tahoe Basin and Martis Valley areas, where he is working to develop an accurate model that can portray groundwater movement through the different geologic formations of the area. With this he hopes to be able to make some predictions for future water use and possibly gather historical information that can help answer climate change questions. He is also interested in surface-groundwater interactions, contaminant transport, water budget, and hopes to expand his interests as his research and projects develop.

Scott Fennema was born and raised in Fernley, NV. After graduating high school he went to UNR and graduated with a BS in Ecohydrology. Currently, Scott is working under Dr. Mark Walker on a project in the Navajo Nation. The project entails looking at water quality from unregulated water sources and potential use of this water by humans by relating population densities and proximity to this potential human health hazards.

Recent Publications


Kolosovich AS, Chandra S, Saito L, Davis CJ, Atwell L. In press. Short-term survival and potential grazing effects of the New Zealand mudsnail in an uninvaded western Great Basin watershed. Accepted Nov 2011 to Aquatic Invasions.
Student Association for International Water Issues

SAIWI has been busy fundraising and planning for two exciting summer trips focusing on water and sanitation issues. This May, a group of SAIWI students will travel to Panama to help construct a composting latrine and to survey an existing aqueduct system for a community to improve their water supply in quantity and quality. SAIWI will be working with the Peace Corps on this project and is hopeful for a successful and educational trip. In June, SAIWI students will partner with Project Pueblo to work on drinking water issues in the Navajo Nation. SAIWI hopes to send quite a few students on this closer-to-home trip. In order to fund these trips, SAIWI has a busy spring semester full of fundraisers. The Rock 4 Water Concert will be held on February 10 at Se7en featuring Jelly Bread, Lucas Young & the Wilderness, and Liam Kyle Cahill. The 9th Annual Ron Peterson Memorial African Dinner will be held on March 3 at the California Building in Idlewild Park. The evening will feature a silent auction, raffle, African cuisine, and entertainment. SAIWI will host events at the BuBinga Lounge and The Brew Brothers again during the spring semester, as the fall semester events at these locations were very successful. Community and student support make SAIWI successful, and we’re looking forward to seeing you at our fundraisers! SAIWI always welcomes new members and encourages anyone with questions to email us at unr.saiwi@gmail.com or visit our website at www.saiwi.org at any time.

Student Opportunity

The National Science Foundation, the International Network of Research on Coupled Human and Natural Systems (CHANS-Net) is pleased to call for applications for 2012 CHANS Fellowships.

The selected CHANS Fellows will present posters or give talks at the Fall Meeting of the American Geophysical Union (AGU) in San Francisco, Dec. 6-10, 2012. They will also have opportunities to interact with prominent CHANS scientists to learn the latest research developments and build their professional networks. Approximately 10 fellowships (up to $1,000 each) will be awarded to graduate students, postdoctoral associates, junior faculty members or other junior researchers at other institutions around the world to defray expenses associated with attending the meeting. Members of under-represented groups are especially encouraged to apply. Applications will be judged on the merit of the applicants’ abstracts, financial need, and professional backgrounds and goals. Applications are due by March 1, 2012. The selection will be made in April. More information and the application form can be found at: http://chans-net.org/opportunities/chans-fellowships

FUNdraiser!
The 9th Annual Ron Peterson Memorial African Dinner is on March 3 at the California Building in Idlewild Park.
Doors open at 6:00 pm. Tickets $40, Students $25
Includes: African Cuisine, Silent Auction, Entertainment, Cash Bar, Trip Presentations.
Director’s Corner by Laurel Saito

I am very excited to write my first column as the GPHS Program Director. I am a strong proponent of interdisciplinary research and education in water resources, so I am firmly committed to growing and strengthening the Program. I believe the GPHS has numerous strengths including 1) its interdisciplinary nature, with active faculty and courses offered in 7 departments and 4 colleges at UNR, 2 divisions from DRI, and agencies such as the USDA Agricultural Research Service, US Geological Survey, and the US Forest Service; 2) the strong interaction between DRI and UNR, which benefits both teaching and research in the Program; and 3) the number and quality of the students in the Program, which are arguably amongst the best at UNR. My vision for the GPHS is a strong, vital, interdisciplinary Program that continues to attract and retain top students from across the country, as well as the excellent cadre of faculty who participate in the Program.

One of the ways to meet this vision occurs as this newsletter comes out – the Program’s annual recruitment fair. We have a really excellent group of interested students who will be visiting us on March 2-3 and I hope you will join me in giving them a great welcome and introduction to our Program and Reno. On Friday, March 2, the students will tour the DRI and UNR campuses, meet with current faculty and students, and attend the exciting colloquium presentation by DRI’s own Dr. Kendrick Taylor entitled “What Does Ice Know About Climate Change?” At the social after the colloquium, please plan to introduce yourselves to the prospective students and share your thoughts about the program with them. On Saturday, March 3, the recruits will be treated to a snow hydrology workshop at the Sagehen Research Center. At the end of the day, they will get to see SAIWI’s infamous African Dinner at the California Building at Idlewild Park. Your participation in the recruitment fair is critical to its success! Students can help by hosting prospective students or helping to show them around DRI and UNR, and faculty are essential for meeting with the students.

I am also looking for ways to increase opportunities for our students to graduate to successful careers from the Program. The Program’s website (www.hydro.unr.edu) now has regularly updated job postings, and we are also strengthening our ties with the Nevada Water Resources Association, the professional organization for water issues in the state. As part of that, we will be having a joint dinner forum with NWRA on March 28 where the speaker will be Mr. Monte Morrison of Magma Energy who will speak about “Geothermal Power Production in Nevada.” I encourage all students to take advantage of this event to network with water professionals, especially those of you graduating soon!

Finally, over the coming months I will continue to examine strategies for administering the Program in changing budget climates. I have worked closely with Dr. Greg Pohll, the previous Director, to find ways to continue to fund the teaching and student support that are essential to keep the Program strong. Some of these changes, like sharing colloquia speakers with other seminar series, allow us to offer a more interesting and diverse series of speakers while operating on a smaller budget. I welcome your ideas and thoughts about changes as we move forward with the Program!
2012 STUDENT RESEARCH CONTEST

We would like to invite your graduate students to participate in a student research contest. The purpose of this contest is to identify and reward students performing cutting-edge research related to groundwater hydrogeology, geochemistry, or other aspects of geology relevant to the assessment and treatment of chemical contaminants in groundwater or soil. The competition is open to Masters and Doctoral students in your program. Students are required to submit a summary of their research as a white paper, written entirely by themselves, not exceeding six pages including text, tables, and figures.

The author of the top paper will receive an all-expense paid trip to the Eighth International Conference on Remediation of Chlorinated and Recalcitrant Compounds, in Monterey, CA, May 21-24, 2012. Two runners-up will receive cash awards of $500 each and three third place prizes of $300 will be awarded. Submittals are due by March 15, 2012

Contact Greg Pohll
Greg.Pohll@dri.edu for specific submittal instructions!
Being in the field of hydrologic sciences, we should all know a little about the innerworkings of the IPCC. I've heard about general conclusions of the IPCC four Assessment Reports (ARs), but I did not know how or why the organization got started, and who actually writes the ARs. Despite the fact that I have a M.S. focused on paleoclimate and paleoceanography and consider myself relatively literate in the subject of climate, I never really understood the details of how the IPCC functioned. So, I decided that I should learn. Here is what I found on their website (http://www.ipcc.ch/index.htm).

The IPCC was created in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Program (UNEP) as an effort by the United Nations to provide the governments of the world with a clear scientific view of what is happening to the world's climate.

**Assessment Reports:** Thousands of scientists and experts from all over the world contribute to the preparation of IPCC reports as authors, contributors, review editors and expert reviewers; none of them paid by the IPCC. Currently the IPCC has three Working Groups and a Task Force on National Greenhouse Gas Inventories. In a two-stage review process, both expert reviewers and governments are called upon to comment on scientific and technical matters. After taking into account the expert and government comments, the final drafts of the reports are presented to the Panel for acceptance of their content.

**Other Reports:** The IPCC has also published numerous documents covering a range of topics including: Renewable Energy Sources and Climate Change Mitigation (2011), land use change, emissions scenarios, and guidance documents (http://www.ipcc.ch/publications_and_data/publications_and_data.shtml).

2007 Nobel Peace Prize awarded to the IPCC and Al Gore Jr. "for their efforts to build up and disseminate greater knowledge about man-made climate change, and to lay the foundations for the measures that are needed to counteract such change". The IPCC Scholarship Programme was established with the funds received from the 2007 Nobel Peace Prize award to the IPCC. The goal of the programme is to provide new opportunities to young people in developing countries to study and contribute to the field of climate change.

**Seeking Expert reviewers!** Experts who are interested in participating in an IPCC review are invited to register as expert reviewers, after which they will be provided access to the draft chapters. For registration see <https://fod.ipcc.unibe.ch/registration/>.

**22 Years of the IPCC**

**1990:** Ist Assessment Report (AR1) led to creation of the United Nations Framework Convention on Climate Change (UNFCCC), the key international treaty to reduce global warming and cope with the consequences of climate change.

**1995:** AR2 provided key input to the Kyoto Protocol of 1997.

**2001:** At the Eighth Conference of the Parties (COP-8) in 2002, the Ministers and other heads of delegation present recognized "with concern, the findings of the IPCC Third Assessment Report, which confirms that significant cuts in global greenhouse gas emissions will be necessary to meet the ultimate objective of the Convention ...."

**2007:** COP-13 states: "findings of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change that warming of the climate system is unequivocal, and that delay in reducing emissions significantly constrains opportunities to achieve lower stabilization levels and increases the risk of more severe climate change impacts, to launch a comprehensive process to enable the full, effective and sustained implementation of the Convention through long-term cooperative action, now, up to and beyond 2012, in order to reach an agreed outcome and adopt a decision at its fifteenth session ..."

**2014:** AR5 will be published
Mervin Wright Jr.
Vice Chairman Pyramid Lake Paiute Tribe

Since 2006 I have been elected the Tribal Chairman for the Pyramid Lake Paiute Tribe. My degree in Hydrology has assisted and elevated the Tribe’s interest with water rights and the management of water on a technical level. I was selected to present Tribal issues to President Obama in 2010 (see photo), one of 12 Tribal leaders across the Country. I have contributed to the scientific and professional merits of tribal representation with Indian water rights on a local, regional, and national level. The Pyramid Lake Paiute Tribe signed the Truckee River Operating Agreement in 2008.

Jeremy Rivord, Hydrologist

After finishing at UNR I moved to the Twin Cities in Minnesota and found a job with the Minnesota Department of Natural Resources (DNR) in St. Paul, which incidentally already had two veteran hydrologists who graduated from the UNR-hydro program. I started at the DNR in a regulatory position, but for the past two years I have been working with the County Geologic Atlas (CGA) workgroup here, which is a bit more research-based and to my liking. The County Geologic Atlas group works with the Minnesota Geologic Survey to produce county-scale maps of geology and hydrogeology. In my work I typically spend the summers collecting water samples from private wells and assisting with geophysical work that’s used in characterizing local hydrogeology. Winters are spent analyzing results and writing reports. I am excited to be publishing my first set of maps this summer and look forward to beginning a project in a different part of the state. If interested (shameless plug) CGA maps are available here: http://www.dnr.state.mn.us/waters/groundwater_section/mapping/status.html. Hydrology positions at the DNR frequently open up and UNR-hydro grads have represented well, I’d be happy to provide information to interested students.

Student Opportunity

2012 Scholarship Announcement: THE NEVADA PETROLEUM SOCIETY Graduate Student Research Awards in Geosciences

Three to five grants up to $1000 each. Awards will be available in the summer of 2012. Applicants must be graduate students in good standing. Successful applicants will be expected to present their results to the Society upon degree completion. Research topics should be related directly to geology of the Great Basin, and of general interest to those interested in bedrock geology problems. Students working on lithostratigraphy, biostratigraphy, structure, geothermal systems, geophysical exploration, geochemistry of sedimentary rocks, and tectonic history are especially encouraged to apply. Application materials must be received or postmarked by February 29, 2012. To apply, send or email (PDF) a 2-page (maximum) research proposal (include results to date, bibliography, and budget), a one page vita that includes academic progress so far, and a letter of recommendation from your academic advisor (sealed if mailed or emailed direct from advisor) to: Dr. James Trexler, NPS Scholarship Chairman
Dept. of Geological Sciences & Engineering, MS 172
University of Nevada, Reno
Reno, NV 89557
trexler@unr.edu (Contact for more information)
Spring Dinner Forum
March 28, 2012, Reno, Nevada

The NWRA and the UNR GPHS will be sponsoring this year's NWRA Northern Nevada Dinner Forum on Wednesday, March 28, 2012, entitled: Geothermal Power Production in Nevada With Monte Morrison, Country Manager, USA for Alterra Power Corp. Location: Super 8 Meadow Wood Courtyard 5851 S. Virginia Street, Reno, NV. No-host bar at 6pm; dinner at 7pm; speaker at 8pm. You can download the flyer here. Online registration is available at this link, so sign up today!

2012 Truckee River Tour
May 3–4, 2012, Reno, Nevada

It's time for the 2012 Truckee River Tour! On May 3–4, the NWRA will be sponsoring the 2012 Truckee River Tour in Reno, Nevada. This year's Field Study Course will cover topics including hydrology and flow regulation, endangered species, hydropower generation, riparian habitat restoration, and flood control planning, among many other exciting topics! You can download the mail-in registration flyer here. Online registration is also available at this link, so sign up today!

2012 Tahoe Science Conference
Hosted with the Tahoe Science Consortium & Sierra Nevada College
(www.tahoescience.org and www.sierranevada.edu)
May 22 – 24, 2012, Incline Village, Nevada

"Environmental Restoration in a Changing Climate"
The date for the 2012 Tahoe Science Conference has been set! Hosted with the Tahoe Science Consortium and Sierra Nevada College, please join us in beautiful Incline Village, Nevada, overlooking the wonderous Lake Tahoe! Please click here for event information!
THE GRADUATE PROGRAM OF HYDROLOGIC SCIENCES
PRESENTS:

The Spring 2012 Colloquium Series

SEMINARS WILL BE FROM 4:00 – 5:00 IN THE WELLS FARGO AUDITORIUM (FIRST FLOOR) OF THE MATHEWSON-IGT KNOWLEDGE CENTER**

Friday, February 3, 2012*
Richard Watts, Ph.D. – Washington State University
*In Situ Chemical Oxidation (ISCO) Remediation of Contaminated Soils
Joint seminar with Civil and Environmental Engineering

Friday, February 24, 2012*
Devin Castendyk, Ph.D. – SUNY Oneonta
Lessons Learned from 23 Years of Pit Lake Prediction and Management
Joint seminar with Environmental Sciences Graduate Program

Friday, March 2, 2012*
Kendrick Taylor, Ph.D. – Desert Research Institute
What Does Ice Know About Climate Change?

Wednesday, March 28, 2012***
Monte Morrison – Magma Energy
Geothermal Power Production in Nevada
(Dinner Forum with NWRA– Meadowwood Courtyard)

Thursday, April 12, 2012 (Davidson Math & Science Bldg Auditorium) **
Dave Bowling, Ph.D. – University of Utah
Ecological Processes Under the Snowpack
Joint seminar with Ecology, Evolution, and Conservation Biology

Friday, April 27, 2012 (Davidson Math & Science Bldg Auditorium) **
Majid Hassanizadeh, Ph.D. – Utrecht University
Henry Darcy Distinguished Lecturer
Transport of Viruses in Partially Saturated Soil and Groundwater

*An informal social will follow in the Faculty Graduate Reading Room (4th Floor)
**Last two colloquia socials will be in the foyer at the Redfield Auditorium (1st Floor) in the Davidson Math & Science Center
***Dinner Forum will be at Meadowood Courtyard (5851 S. Virginia St) at 6 pm (early registration deadline 3/9)
DISCCRS
Dissertations Initiative for the Advancement of Climate-Change Research
Climate Research and Leadership Network for New PhDs

OVERVIEW
DISCCRS (pronounced “discourse”) catalyzes interdisciplinary collegial interactions and professional development necessary for successful careers dedicated to understanding climate change and mitigating its impacts. Through its e-newsletter, website, and symposia, DISCCRS is building a global community dedicated to scientific and societal progress to address climate change.

Since 2002, more than 1,500 PhDs have registered dissertations with DISCCRS and over 170 scholars from 25 countries have benefited from the symposia. We invite scholars in the natural sciences, social sciences, humanities, mathematics, engineering, and other fields to apply for the upcoming symposium.

RESOURCES
Web Page
Visit http://disccrs.org to join the online community of new scholars. Included:
• DISCCRS registration form
• PhD Dissertation registry
• Symposium application instructions
• Climate-related news and links
• Career-development resources

Weekly E-News
Devoted to early career climate scientists, the weekly e-newsletter consolidates science and policy news, job, fellowship and research opportunities, meeting announcements, professional resources and other time-sensitive information.

SYMPOSIA
DISCCRS Symposia are built on the premise that successful interdisciplinary scholarship begins with a core area of expertise and grows with the development of broader knowledge and collegial connections across disciplines. The annual symposia catalyze the process by providing scholars with an interdisciplinary collegial network and bird’s-eye view of climate-change research across the natural and social sciences. Discussions, projects and informal activities facilitate development of communication and leadership skills and interdisciplinary collegial network. Included:
• 30 invited DISCCRS scholars present and discuss their research while developing a collegial peer network.
• Established researchers and scholars engage in a relaxed, informal setting to share knowledge and insights concerning climate change and interdisciplinary professional development.
• Program Officers from the U.S. National Science Foundation and National Aeronautics and Space Administration describe programs, the proposal review process, and successful proposal development.
• Expert professional-development trainers facilitate leadership and team building.
• Scholars hone their ability to communicate across disciplines and beyond the ivory tower.

DISCCRS VII Symposium
October 13-20, 2012
La Foret Conference Center Colorado Springs, CO

Eligibility
PhD in any discipline must be completed between: Aug. 1, 2009 - Feb. 29, 2012

An interdisciplinary committee will select 30 Symposium Scholars based on academic record, commitment to interdisciplinary research, and leadership potential. U.S. residents and international scholars seeking to connect with U.S. researchers are encouraged to apply. Travel and on-site expenses will be covered in most cases.

Program Information
http://disccrs.org

Application Deadline
February 29, 2012

Register Now
to receive E-newsletter and Register PhD Dissertation
http://disccrs.org/register

“DISCCRS far transcends the subject matter discussed. It is also about process, learning and communication.”
Anonymous, DISCCRS III Scholar

Sponsoring Societies
American Geophysical Union (AGU); American Meteorological Society (AMS); American Society of Limnology and Oceanography (ASLO); Association of American Geographers (AAG); Association of Environmental and Resource Economists (AERE); Ecological Society of America (ESA); Environmental Studies Section of the International Studies Association (ESS-ISA); Science, Technology and Environmental Politics section of the American Political Science Association (STEP/APSA); The Oceanography Society (TOS) and U.S. Society for Ecological Economics (USSEE).

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Please Post