An Evaluation of
A Showcase of Promising Scientists in Natural Resources Lecture Series
and Proposal for Its Continuation

1 June 2005

Prepared by the Organizing Committee:
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Phil Guertin, John Koprowski, and Mitch McClaran (Chair)

Background:
In Spring 2005, the School of Natural Resources (SNR) hosted an invited lecture series
called the A Showcase of Promising Scientists in Natural Resources and associated directed
group discussions featuring women and minority speakers who are promising scientists
exhibiting great potential in disciplines supported by the SNR. Co-sponsors of the series
included the College of Agriculture and Life Sciences, O’Brien Diversity Fund, and Institute for
the Study of Planet Earth. Goals of the series and associated discussions were:
• Raise awareness in the SNR community to the potential barriers associated with non-diverse
  faculty as well as the benefits of a diverse faculty.
• Provide students with opportunities to make professional contacts with promising scientists
  in their chosen disciplines.
• Build a shared SNR appreciation for the benefits of a diverse faculty and foster a desire to
  increase faculty diversity when hiring opportunities arise.
• Raise aspirations and successes of women and minority students pursuing advance degrees in
  the SNR.

An Organizing Committee (see membership above) sought nominations, selected
speakers, and organized opportunities for the SNR Community to interact with each speaker.
Members Culver and Koprowski were Instructors for the Graduate Seminar course where
students discussed issues of diversity, papers written by the visiting speakers, and issues of
science and professional development with the visiting speakers.

Between late-October and early-December 2004, the Organizing Committee solicited
nominations, selected speakers, and scheduled visits by the invited speakers. To select speakers,
the Organizing Committee solicited nominations from the SNR faculty and student communities,
and from colleagues on- and off-campus. The nearly 100 nominations were first vetted within
the SNR Programs, and about 40 nominations were forwarded to the Organizing Committee. Six
speakers (see attachment 1) were selected, and all accepted our invitation. The selection criteria
included: (a) superior research accomplishments and promise in disciplines supported by the
SNR, (b) experience with formal teaching (e.g. lecturer or TA) and informal mentoring (e.g.
supporting undergraduate assistants), and (c) dynamic personality and public presence, (d)
member of an under-represented ethnic and gender group, and (e) junior scientist standing (i.e.
not tenured). The criterion of junior standing was applied because their successes were achieved
in the same contemporary social/scientific setting that our students now face, and we have very few Assistant Professors in SNR.

Formal lectures were held on Wednesdays from 3-4PM in Marley room 230. The Graduate Seminar was held from 430-530PM every Wednesday to facilitate discussions, and a group dinner off-campus immediately followed the discussions. In addition, members of the Organizing Committee occasionally attended these discussions. Each non-student member of the Organizing Committee acted as host for a single visiting speaker, and their responsibilities included: (a) developing a visit schedule that included meetings with SNR Director Pat Reid, College Dean Sander, and Provost Davis, as well as others whose interest was solicited through emails (see attachment 2); (b) advertising the talk via postings in SNR and around campus as well as emails within the SNR and among many UA Colleges and Departments; (c) pick-up and drop-off at the airport; and (d) paying for all meals including the student luncheon at Reddington Room (Student Union) held on Wednesday.

The lecture series was advertised across campus via Lo Que Pasa, The Drift Newsletter from the Department of Ecology and Evolutionary Biology (College of Science), a listserv in the Department of Hydrology and Water Resources (College of Engineering), the weekly newsletter from the Institute for the Study of Planet Earth, and the College of Agriculture and Life Sciences weekly bulletin. In addition, the series was announced on the SNR webpage (http://www.ag.arizona.edu.snr) and links to the speakers’ webpages were made available.

**Evaluation:**

Without a doubt, the Speaker Series achieved all its goals. Although thorough evaluation metrics are not available, we all agree that there is greater awareness in the SNR community of the potential barriers associated with non-diverse faculty as well as the benefits of a diverse faculty, that students had opportunities to make professional contacts with promising scientists in their chosen disciplines, that there is a greater shared SNR appreciation for the benefits of a diverse faculty and a desire to increase faculty diversity when hiring opportunities arise, and that the aspirations and likely successes of women and minority students pursuing advanced degrees in the SNR has risen.

Tangible measures of success include:

(1) attendance of 50-70 people per lecture including members of SNR faculty and student body, representatives from other departments and colleges, off-campus scientists, and occasionally Dean Sander;

(2) 6 students enrolled for the course and 3 others regularly attended;

(3) lively and candid discussions with speakers in the Graduate Seminar made significant impressions and were the stimulus for serious career and scientific discussions beyond the classroom;

(4) administrators and colleagues across campus spoke highly of the series and the speakers as a source of scientific exchange and more importantly about how our faculty led an effort to correct a problem rather than waiting for prescriptions from higher authorities, and;
(5) a very positive impression of the SNR commitment to scientific excellence and faculty diversity is now held by the administrators and colleagues of the invited speakers.

Selected quotes from student evaluations of the Graduate Seminar illustrate the increased awareness of diversity issues (quotes 1 and 2), and scientific and professional skills gained from interacting with the speakers (quotes 3 - 7):

1. “My awareness of gender issues in the workplace is greater.”
2. “...[this course] increased my awareness of ... what the causes are [for lack of diversity] and how they might begin to be addressed. Also how these issues impact people.”
3. “Great both from the perspective of interacting with guests and with students/faculty.”
4. “...it was very very helpful hearing people’s tips for success on such a variety of issues from collaborations, time management, research methods, writing, etc.”
5. “Group discussions were the most enriching aspect of the class, in many ways.”
6. “I really liked the class [discussions] after each presentation. Really good to have such candid discussions with these guests sharing so much.”
7. “I can’t think of a more useful way to spend 1 hour [of my time] than in those class discussions.”

In summary, we are certain that the SNR Community is more keenly aware of the benefits of a diverse faculty and the need to increase the diversity of our current faculty. The SNR Community also recognizes the wealth of young and diverse scholars who are eminently qualified to master the responsibilities of a SNR faculty member if given the opportunity.

Costs:

Final values will not be available until Ms. Westphal returns from leave. In general, all speakers flew to Tucson and stayed 2 nights at the Marriott University Inn. These travel and lodging costs were on the order of $700-800/speaker. Meal costs included 2 breakfasts with colleagues, one formal dinner with the faculty host, a student luncheon, and a group dinner following the lecture. These meal costs were on the order of $200-300/speaker. All speakers were given a $150 stipend. The total costs per speaker in the neighborhood of $1050-1250.

Future:

All members of the Organizing Committee and all students in the associated Graduate Seminar strongly support the continuation of a similar-format speaker series next year and for many years to come. The benefits of formal interactions with young, diverse scientists have no substitute in a different forum, either on campus or at scientific meetings.

We all feel strongly that the series should not be combined with efforts by other Departments, nor should it be organized around a narrow subject or theme. The combination with other Departments would dilute the focus on Natural Resources and would likely have less support from the SNR Community. A thematic approach would undermine the representation of the many disciplines within SNR, and thereby miss an opportunity to build SNR-wide cohesion through a celebration of disciplinary diversity.
Future efforts might be scaled-back to 3-4 invited speakers rather than 6, and these could be integrated into the existing SNR Lecture Series. This would reduce costs and gain greater integration within the SNR, without eliminating the increased visibility and prestige brought to the SNR by the invited speaker series.

An Organizing Committee should continue to be responsible for the selection of speakers, advertisement, and logistics of speaker visits. This Committee should include Graduate Students and Faculty that represent the diverse disciplinary interests in SNR. The selection of speakers should include the solicitation of nominations from SNR members and their colleagues, and it should continue to include vetting within SNR Program and Graduate Student representative bodies. The selection process should commence in September with the solicitation of nominations, and conclude in November with the selection of speakers and distribution of invitations. A Committee is essential because this job is too big for one person, and the committee structure insures greater buy-in across the SNR Community.

It will be helpful to provide clearer guidance to both the invited speakers and to administrators meeting with the speakers that the series is designed to enhance communication and support development of a more diverse educational and research environment at the University, as well as to highlight outstanding science.

A Graduate Seminar should continue to be a part of the series so that formal opportunities for interactions with the speakers are available. This was one of the most rewarding elements of the Speaker Series, and it is essential that it be continued.

Such actions promise to build on the momentum created by the original Showcase Series and to capitalize on the increased awareness of diversity issues. The immediate benefits at the local programmatic level were apparent and the ultimate goal is to continue to address this important issue through further grass roots efforts.
**Attachment 1: Speaker Series Schedule**

A Showcase of Promising Scientists in Natural Resources, Spring 2005

This is a lecture series that features scientists exhibiting great potential in disciplines supported by the School of Natural Resources. Featured speakers are from groups traditionally underrepresented in natural resource science and management.

Wednesdays at 3:00-4:00 PM in Room 230, Marley Building

The series is co-sponsored by the School of Natural Resources, O'Brien Diversity Endowment, College of Agriculture and Life Sciences, and the Institute for the Study of Planet Earth.

### Speaker Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker Details</th>
<th>Talk Title</th>
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| 16 February| Enrique Vivoni  
Assistant Professor,  
Earth and Environmental Science, New Mexico Tech University | **Talk title:** Incorporating the spatial variability in climate, hydrologic and ecosystem processes into watershed simulations. |
| 9 March    | Kiona Ogle  
Post-Doctoral Fellow,  
Department of Ecology and Evolutionary Ecology, Princeton University | **Talk Title:** Bayesian melding of models and data: a potpourri of plant ecology examples |
| 23 March   | Katharine Suding  
Assistant Professor,  
Department of Ecology and Evolutionary Ecology, University of California, Irvine | **Talk Title:** Conservation, invasion, and restoration: linking species-level feedbacks to ecosystem dynamics |
| 30 March   | Christina Tague  
Assistant Professor,  
Department of Geography, San Diego State University | **Talk Title:** Characterizing spatial patterns of eco-hydrologic response to climatic variation in the western U.S. |
| 20 April   | Amanda Rodewald  
Assistant Professor,  
School of Natural Resources, Ohio State University | **Talk Title:** Importance of land uses within the landscape matrix: lessons from forested and fragmented landscapes |
| 27 April   | Maria Sepulveda  
Assistant Professor,  
Department of Forestry & Natural Resources and School of Civil Engineering, Purdue University | **Talk Title:** Evaluating effects of environmental stressors on wild populations: complexities and new approaches. |
Details about each Speaker:

**Enrique Vivoni** links GIS and eco-hydrological modeling and has interests in the area of environmental informatics. He has had leadership roles in collaborative projects including SAHRA, CUAHSI, and NEON, and is former Presidential Scholar. Personal Homepage: [http://ees.nmt.edu/vivoni/](http://ees.nmt.edu/vivoni/).

**Kiona Ogle** blends math, plant eco-physiology and systems ecology in her approach to modeling ecological systems. She has worked with some of top modelers in the country and is widely sought for special workshops and symposia. Personal Homepage: [http://www.princeton.edu/~kogle](http://www.princeton.edu/~kogle).

**Katharine Suding** is a promising scientist in grassland restoration with analytical skills in soil bio-chemistry. She has applied these talents to the Great Plains grasslands, alpine systems in Colorado, and Mediterranean systems in California. Personal Homepage: [http://sudinglab.bio.uci.edu/Suding.html](http://sudinglab.bio.uci.edu/Suding.html).

**Christina Tague** studies forest and chaparral systems through the application of GIS based hydro-ecological models and regional hydrologic ecosystem simulation. She is particularly interested in the roles of climate and land use change on water, carbon, and nitrogen fluxes. Personal Homepage: [http://geography.sdsu.edu/People/Faculty/tague.html](http://geography.sdsu.edu/People/Faculty/tague.html).

**Amanda Rodewald** brings a landscape-scale approach to the study of avian community ecology in tropical and temperate regions. She has been particularly focused on the role of land-use practices in forest and urban areas in determining the structure and function of avian communities. Personal Homepage: [http://snr.osu.edu/fac_staff/cv/rodewald.html](http://snr.osu.edu/fac_staff/cv/rodewald.html).

**Maria Sepulveda** combines her training as a Doctor of Veterinary Medicine and PhD in Animal Physiology to the study of ecotoxicology in fish and wildlife populations. She has focused on the development of molecular biomarkers for the exposure to environmental contaminants and factors affecting the rates of bioaccumulation of contaminants in aquatic organisms. Personal Homepage: [http://www.agriculture.purdue.edu/fnr/faculty/sepulveda/index.htm](http://www.agriculture.purdue.edu/fnr/faculty/sepulveda/index.htm).
## Attachment 2: Example of Visitation Schedule for an Invited Speaker

**Dr. Katie Suding**  
Assistant Professor, Department of Biology, University of California, Irvine

Host: Mitch McClaran, School of Natural Resources  
Office: 621-1673 / Home: 795-4681 / E-mail: mcclaran@u.arizona.edu

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<tr>
<th>Date</th>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td><strong>TUESDAY 22 MARCH 2005</strong></td>
<td>3:41 pm</td>
<td>Arrive on UA 6586 – Mitch McClaran to meet at airport and take to Santa Rita and to dinner</td>
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<tr>
<td><strong>WEDNESDAY 23 MARCH 2005</strong></td>
<td>8:00 – 8:50 am</td>
<td>Breakfast @ Marriott with Steve Archer, Professor, School of Natural Resources, 316 Biological Sciences East, 626-8791</td>
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<td>9:00 – 9:30 am</td>
<td>Pat Reid, Director, School of Natural Resources, 325 Biological Sciences East, 621-7257</td>
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<td>9:30 – 10:00 am</td>
<td>Dawn Browning, PhD Student, School of Natural Resources, 316 Biological Sciences East</td>
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<td>10:00 – 10:30 am</td>
<td>Eugene Sander, Dean College of Agriculture and Life Sciences, 306 Forbes, 621-7621</td>
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<td>10:30 – 11:00 am</td>
<td>Lunch – With students – Reddington - Mesa Room (626-0340)</td>
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<td>11:00 – 11:30 am</td>
<td>Travis Huxman, Asst. Professor, Ecology and Evolutionary Biology, 414 Biological Sciences West, 621-8820</td>
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<td></td>
<td>2:00 – 2:30 pm</td>
<td>Speaker preparation (AV contact: Dave Bogner – 626-4615)</td>
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<td></td>
<td>3:00 – 4:00 pm</td>
<td>Class discussion: Biological Sciences East 314</td>
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<td>4:15 – 4:30 pm</td>
<td>Transit</td>
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<td><strong>THURSDAY 24 MARCH 2005</strong></td>
<td>7:30 am</td>
<td>Breakfast</td>
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<td>8:30 – 9:00 am</td>
<td>George Davis, Provost, 512 Administration, 621-1551</td>
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<td>9:00 – 9:30 am</td>
<td>Leave for airport with Steve Archer, 316 Biological Sciences East, 626-8791</td>
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<td></td>
<td>9:30 – 10:00 am</td>
<td>Return flight: UA 6584</td>
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