

# Ecologue

*For members of NCA EC division and friends*

A Quarterly Newsletter

Fall 2007

## Back to School

*For an innovative teaching assignment by Tema Milstein see page 2-4.*

## Photo Credits

*Tema Milstein provided photos for p.3 & 4  
Trudy Milburn supplied the others.*

## Contact Editor

[trudy.milburn@csuci.edu](mailto:trudy.milburn@csuci.edu)

## Appointment News...

*If you've been appointed to a new position, please email and let us know. See below for recent appointment.*



## In the News...

*Sustainable rooftops in Chicago..."Even the thinnest green roof can effectively absorb most rainfall events, reverse the urban heat island effect, and provide wildlife habitat. They also insulate buildings, extend the life of the roof membrane, increase property values, and vastly improve urban aesthetics."*

*More information can be found in the full article at:*

<http://www.asla.org/meetings/awards/awds02/chicagocityhall.html>



## Western States

*Signatures still needed to create an Environmental Comm interest group. Contact Julie Schutten <[Julie.Schutten@NAU.ED](mailto:Julie.Schutten@NAU.ED)> U>*

## Interdisciplinary Feature

*Tracylee Clarke writes about interdisciplinary work - see page 4-6.*

**NCA in Chicago**  
November 15 – 18  
Chicago, IL  
Hilton Chicago & Towers

*Program Now Online*  
[www.natcom.org](http://www.natcom.org)



## Phaedra Pezzullo

*Assistant Professor, Indiana University*

**1. What question do you ask when you begin an envircomm study?** I tend to begin becoming curious with something or someone who moves me or someone else: an activist, a practice, a smell, et cetera. Sometimes, it is a feeling of attraction (inspiration, intrigue, and so forth); sometimes, it is a feeling of repulsion (disgust, anger, and so forth). Overall, I am striving for a more environmentally just world; however, I do not narrowly define politics in terms of spheres of government (judicial, executive, and legislative). I believe that everyday people and places have a lot to teach us about the ways we are connected to and alienated from ourselves, each other, and Earth.

**2. What/who inspired you to research in this area?** I can't remember a time when I wasn't an environmentalist or invested in social justice. Since I

wanted to be taken seriously as more than just another girl who cares about the planet and its people, I started my undergraduate training for a B.S. in Natural Resources. Upon feeling rather convinced that scientists generally know what is bad for the environment and public health but have been unable to motivate people to do anything about it, I then began a B.A. in Social Thought and Political Economy. Through these classes and my activism with MASSPIRG, I first learned the phrase "environmental justice." Before I finished those four years, as an undergraduate auditing a summer course at UNC-CH in 1995, I met Professor J. Robert Cox who was then President of the Sierra Club (as he is again now). Although I had my doubts, Robbie persuaded me that I didn't have better plans than to study environmental communication with him; likewise, before I finished my M.A. in 1997, he persuaded me to become his first Ph.D. student.

**3. How does your research methodology help you to answer your questions better than another methodology?**

Grassroots activists that work tirelessly for environmental justice primarily have motivated my research thus far. Since most Historical archives involve Great Men doing Great Deeds and most media sources are corporate conglomerates that also

make profits from the industries polluting our world, I think ethnography is a vital approach to hearing and to learning from marginalized and emergent voices. When my research focuses on tourists, I similarly find ethnographic accounts are vital to identifying and to more fully appreciating the cultural politics of pleasure too often left out of official accounts.

**4. How long have you been researching in this area? What compels you to stick with it?**

- See answer to number 2.
- I don't know how to quit.

**5. What differentiates this research area from any other communication research?**

Environmental communication scholarship is born of both nature and culture. Environmental communication scholars respect a wide range of disciplinary approaches and topics. We don't assume humans are the preeminent species, and we can't afford to ignore what many consider mere context for human action. We aren't in it to be merely book smart or to win a debate because we can. We care about people, non-human animals, and the Earth because we don't know how to live otherwise.

6. What areas do you see as most fruitful for future research?

There are so many—I'll just name three. First, interdisciplinary research is vital for a sustainable future. The more translation and solidarity work we do with other disciplines and within our own, the better we all will be. This should include not only sciences, but also the arts. Second, global conversations are vital for a sustainable future. We need to find ways to network with and to learn from scholars and activists within North America and across all continents. Third, we need to create work that not only reflects on how people are moved (or not), but also that moves people. This requires we continue to work as activists, teachers, and scholars in ways that builds momentum for social change.



Top 5-10 articles to which you refer most often in your research.

It's incredibly hard to make a short list; the longer answer is in the bibliography to my book, *Toxic Tourism*. In addition to the obvious choices of DeLuca's *Image Politics* and Peterson's *Sharing the Earth*, here are ten books that I think are worth re-reading:

Robert D. Bullard, *Confronting Environmental Racism: Voices from the Grassroots* (South End Press, 1993).

Rachel Carson, *Silent Spring* (Houghton Mifflin, 1962).

Mary Douglas, *Purity and Danger: An Analysis of Concepts of Pollution and Taboo* (Routledge, 1966).

Audre Lorde, *The Cancer Journals: Special Edition* (Aunt Lute Books, 1979/1997).

Dean MacCannell, *The Tourist: A New Theory of the Leisure Class* (University of California Press, 1976/1999).

Michael R. Reich, *Toxic Politics: Responding to Chemical Disasters* (Cornell, 1991).

Elaine Scarry, *The Body in Pain: The Making and Unmaking of the World* (Oxford, 1985).

Leslie Marmon Silko, *Ceremony* (Penguin, 1988).

Susan Sontag, *Regarding the Pain of Others* (Farrar, Straus, and Giroux, 2003).

Raymond Williams, *Problems in Materialism and Culture* (Verso, 1980).

*Prof. Pezzullo's list of EnvirComm publications*

Pezzullo, Phaedra C. (2007). *Toxic Tourism: Rhetorics of Travel, Pollution, and Environmental Justice*. Tuscaloosa, Alabama: University of Alabama Press.

Sandler, Ronald and Phaedra C. Pezzullo (Eds.). (2007). *Environmental Justice and Environmentalism: The Social Justice Challenge to the Environmental Movement*. Cambridge, MA: MIT Press.

Cultural Studies and the Environment, Revisited. (forthcoming, 2008). Phaedra C. Pezzullo, Editor of a Special Issue of the journal, *Cultural Studies*, 22.3.

Pezzullo, Phaedra C. (2006). Articulating Anti-Toxic Activism to "Sexy" Superstars: The Cultural Politics of A Civil Action and Erin Brockovich. *Environmental Communication Yearbook*, vol. 3, pp. 21-48.

Pezzullo, Phaedra C. (2004). Toxic Tours: Communicating the "Presence" of Chemical Contamination. In Stephen P. Depoe, John W. Delicath, and Marie-France Aeppli Elsenbeer (Eds.), *Communication and Public Participation in Environmental Decision-Making*. SUNY Press. pp. 235-254.

Pezzullo, Phaedra C. (2003, November). Resisting "National Breast Cancer Awareness Month": The Rhetoric of Counterpublics and their Cultural Performances. *Quarterly Journal of Speech*, Vol. 89, No. 4, pp. 345-365. Reprint: Stephen H. Browne and Charles Morris, Eds., *Readings in the Rhetoric of Social Protest*, 2nd ed. (Strata Publishing, Inc., 2006).

Pezzullo, Phaedra C. (2003, July). Touring "Cancer Alley," Louisiana: Performances of Community and Memory for Environmental Justice. *Text and Performance Quarterly*, Vol. 23, No. 3, pp. 226-252.

Pezzullo, Phaedra C. (2001, Winter). Performing Critical Interruptions: Rhetorical Invention and Narratives of the Environmental Justice Movement. *Western Journal of Communication*, 64:1, pp. 1-25.

## Next Scholarly Profile

*Steve Depoe, Associate Professor*

*University of Cincinnati*



# Teaching Resources

## *Learning in the Field: Engaging Students via Experience and Application*

by Dr. Tema Milstein

The following teaching gift involves an approach to field experiences that I've developed for an upper level undergraduate interdisciplinary course on culture, communication, and human relations with nature. The course objectives are to explore the cultural and communicative ways that humans inform, shape, and shift our relations with "the environment." As such, the course aims to grapple with human-nature relations as both actively socially constructed and as deeply and materially experienced. In conjunction with readings, exercises, discussion, interactive lectures, and independent final projects, a major element of this course are the field experiences. I've found the out-of-the-classroom individual and group field experiences engage students in both creative and critical exploration and encourage them to be active participants in their learning process both in and out of the classroom. I organize the course into three sequential arcs, each of which has a parallel field experience, to address: 1) how communication works to construct, and can be used to deconstruct and critically investigate, understandings of nature; 2) how different cultural views of perception and consciousness shape human relations with nature; and 3) how varied cultural practices and forms of activism inform or shift nature-human relations.

I've found that students are eager to participate in these field experiences and, from their feedback and papers, I've noticed most of them find they learn how to apply their learning in a way they can use in their lives. An approach I've found particularly helpful in getting the students immediately engaged in the field experiences is in making a few suggestions of sites for each arc during the second week of class to get them started and then opening up the class for suggestions. Students come up with a wealth of ideas. In the end, the class votes and we go with the majority (exceptions include one year three distinct groups of desires formed for the third field experience and these groups guided themselves on these experiences – for instance, I helped one group secure a university van and they drove themselves half way across the state to visit an institute that taught primates sign language and then got to discuss and problematize the experience as a group the whole drive home). One last note: The second field experience, the individual experience in “wild nature,” is often students' favorite; I find it important to frame this field experience with readings and discussion about the meaning of “wild” and about sensitizing oneself to nature (Tom Brown and Starhawk work differently and well here), and equally important to read about and discuss perceptions and realities about safety and taking precautions (usually, students are most concerned about unsafe people they might run into – I assure them that getting as far into “wild nature” as possible depends on what they themselves feel is safely possible).



Here is how I initially lay out these assignments in the syllabus:  
 Three Field Experiences/Field Experience Reflection Papers (30% of final grade – each paper is 10%): This course includes a unique element – three explorations in the field that connect to each of the three arcs of the course. These required experiential forays provide you with an opportunity to engage your learning in the course with your own direct observations and reflections. During these field experiences, I will provide a loose framework for engaging in the site – such as through signage, creating art, silence, talking to ex-

perts, guidebooks, self reflection, etc. Bring a little notebook on the field experiences to jot down observations and ideas to inform your Field Experience Reflection Papers. We will schedule these trips well in advance, but if you absolutely cannot make it with the group for a group field experience, you are expected to figure out a way to go to the designated place on your own – after first consulting with me for guidance on framing your experience. One of the three forays will be an individual experience in “wild nature.” Except for the “wild nature” week, when you are instructed to get as far into “wild nature” as you can get, most places we will visit are in the city's environs and accessible by public transit. We will also collaborate to do carpooling. During Week 2, we will discuss and finalize the locations of the field experiences depending on ideas we have as a class. Places may include:

**Arc 1: Construction and Deconstruction of Nature**

Group field experience:

- The zoo, aquarium, or biopark
- Campus landscaping and gardens
- A nearby nature trail with signage

**Arc 2: Paradigms I: Perception**

Individual field experience:

- The “wildest nature” you can access

**Arc 3: Paradigms II: Practice and Experience**

Group field experience:

- Waterway restoration outing
- A community garden or Community Supported Agriculture farm
- A farm animal sanctuary or wildlife rescue center

For each field experience, you will write a Field Experience Reflection Paper. These papers are meant for you to creatively and critically reflect on your field experience as it relates to your own discovery process surrounding the themes in this course. Papers should put your personal reflection (your own emotional, sensory, and/or cognitive observations and interpretations within the field site) in interaction with two or more class readings from the arc of that field experience. Choose two or more class readings from that third of the course that especially help you interpret, reflect upon, and analyze your field experience. I also encourage you to grapple with other class concepts that you find yourself applying to your experience. The observations and ideas you write down in the notebook you bring on the field experiences will provide you with grounded reflections to explore in your paper. Papers must be typed, five pages, and double-spaced.

Grading criteria for the Field Experience Reflection Paper assignments:

- 1.) Originality – I expect and appreciate creative approaches to these papers;
- 2.) Depth of Critical Thinking – Use evidence to support your claims, develop your ideas in depth and explain the implications of your ideas;
- 3) Accuracy of Analysis – Use helpful concepts from readings and from class accurately and do not repeat what authors or others say, but reveal your own ideas and thoughts as you engage with class concepts to analyze your own individual experience;
- 4) Grammar/Spelling – edit carefully to show you fully respect your work and to be certain your work, in turn, receives the respect and consideration it deserves;
- 5) Organization of thoughts – your papers should exhibit a clear flow of thought. A thesis statement and a one-sentence preview of the structure of the main ideas in the paper will help here, as will a conclusion.

Here is an example of a field experience question prompt for Arc 1 (Construction and Deconstruction of Nature) from when I taught this course at University of Washington:

Field Experience Question Prompt:

These questions are to serve merely as prompts as we explore the Hiram M. Chittenden Locks, both the boat locks and the salmon ladder. In other words, as you walk around with your notebook, if you have trouble focusing your observations, you can use these questions as guides. You can also go in your own creative direction and not use these questions, as long as your observations correspond with this arc of the course (constructing and deconstructing nature) and provide you with fruitful data for your reflection paper.

How do the texts and audio recordings at the salmon ladder construct nature?

In the Visitor's Center, how do the film, the displays, and the brochures (on the fish ladder and trees) construct nature?

What do you observe of interpersonal communication at this site and how does it illuminate cultural constructions of nature? (E.g., interactions of Locks staff and boaters going through the locks, observations of visitors' communication, observation of your own communication/experience.)

How is nature spatially mediated through the different built environments here and how might that connect to cultural views about nature?

What other communicative or cultural elements do you notice at this site that help you explore the mediating and constructive ele-

ments of communication and culture on nature?

How about in the other direction: What do you notice here of nature mediating and constructing communication and culture?



I am always in the process of trying to improve upon past assignments, and the frameworks for these field experiences are likewise a work in progress. For instance, when I teach this course this next term in New Mexico, I plan on including hands-on community service as a requirement for the 3rd field experience. I'd be very interested in hearing about others' successes and challenges with field experience assignments. If you are so inclined, please email me or, alternatively, we could also start a conversation on the ECN listserv.

Tema Oliveira Milstein  
Assistant Professor, Communication and  
Journalism, University of New Mexico  
[tema@unm.edu](mailto:tema@unm.edu)



## Voices from the Field

by Dr. Tracylee Clarke

Ecologue provides an excellent forum for those in our field to engage in scholarly con-

versations about issues of importance. To facilitate discussions on key and emerging issues in the field, Ecologue will now feature a "voices from the field" section wherein scholars from a variety of disciplines can discuss important and timely topics. Responses to a particular set of questions will be summarized with the exception of extended responses that will be considered for the "featured voice" section of the article.

Solutions to environmental problems need to come from a variety of perspectives including the sciences, social sciences and humanities. There is much discussion among scholars in our field as to the benefits of collaboration among various disciplines. Yet very real challenges associated with interdisciplinary and collaborative work exist. A realistic conversation needs to begin addressing these challenges. To initiate this conversation and learn from the experience of others, I asked a few colleagues in the field the following questions:

- **What are some of the biggest challenges to doing interdisciplinary and collaborative work in our field?**
- **What have you done in the past to overcome these challenges?**
- **What is your advice for others who are just beginning to engage in interdisciplinary collaborative work?**

The responses from colleagues were genuine, insightful and I believe extremely helpful for others engaging or contemplating collaborative scholarly work. I have summarized their thoughts and ideas below.

### Interdisciplinary Challenges

One of the biggest challenges for Communication scholars engaged in interdisciplinary work is to help other disciplines see the value of communication or what Todd Norton, from the Edward R. School of Communication at Washington State University terms "recognizability." It is often difficult for investigators from other disciplines or funding agency personnel to recognize the contribution communication can make. Lawrence J. Prelli, Professor and Chair of the Department of Communication at Horton Social Science, University of New Hampshire also spoke to this challenge. He stated, "The biggest challenge to doing interdisciplinary or collaborative work is to help our collaborators go beyond the most rudimentary views of communication to see how a communication perspective is analytically incisive on issues of concern to them. They don't often see as clearly the rhetorical dimensions of communication as a practice, preferring instead more of an

information-giving approach to problem solving." This particular challenge can be overcome by offering our colleagues in other fields as suggested by Norton, "communication-specific concepts to strengthen their work." Also, it is important to take opportunities to educate our colleagues in a non-defensive manner as to the value and complexity of communication and how a communicative approach or rhetorical analysis can contribute to a given project.

A second challenge to doing interdisciplinary or collaborative work lies in understanding the technical discourses of other disciplines. Prelli said, as communication scholars we need to "understand sufficiently well the technical discourses of those with whom we collaborate; otherwise, we quickly can become excluded from the conversation." One way to do this is to, according to Prelli, "immerse ourselves in the relevant principles of the sciences, provided that we always maintain rhetorical perspective." One way he has immersed himself in the relevant principles of science is to gain advanced training in the Natural Resource Sciences. He took various courses in environmental policy, ecology, terrestrial ecosystems, advanced regression analysis, remote sensing, GIS, even aerial photography and photogrammetry. He has this to say about his experience, "I took these and other courses along with other NR graduate students. It was a steep climb -- beefing up my chemistry here, getting a grasp on a principle of physics there -- but my goal was to acquire a breadth of perspective. To complete that breadth of perspective, I did both lab work and fieldwork along with other graduate and undergraduate students. Through these studies I was positioned to collaborate with a natural resource professor both on her own disciplinary terms as well as on my own disciplinary terms, both in writing and in teaching. It is not always a happy collaboration; occasional disciplinary clashes, but the combination of coursework, scholarship, and teaching helped structure and deepen my understanding of disciplines and approaches that constitute much of the discourse on natural resource problems."

Speaking of her experience on interdisciplinary research teams, Danielle Endres, Assistant professor in the Department of Communication at the University of Utah states that some of the biggest challenges faced by the teams she has been engaged in are "getting to the point where we understand what each other does and our field-specific processes for research, and finding research projects that make sense for all of us, can yield work that will be publishable (i.e., venues available for publication, publications will help tenure cases, etc.), and are fundable with major grant agencies." What it takes to over-

come these challenges according to Endres is a level of openness about your work and a committed willingness to engage other perspectives. “Feeling committed to the principle of this type of work makes it easier to engage in the many conversations needed to work through differences in our fields of research, and to know that getting to the point of developing a research project takes time, patience, and openness. It is also important to be willing to take risks and put yourself and your research out there for colleagues in other fields to better understand, challenge, and discuss your work.”

A final challenge articulated by those I spoke with was the lack of structure to support interdisciplinary work. At many institutions, support mechanisms for rewarding collaborative and interdisciplinary research are not yet in place. One way to address this suggests Endres is for “junior faculty to work closely with their Retention, Promotion and Tenure (RPT) committees, department chairs, and mentors when engaging in interdisciplinary collaborative work. It is important to check in with these folks to gauge reactions to interdisciplinary work in one’s department, get advice, and potentially inform them about what it means (and why it is valuable) for you to do this type of work.”

### Interdisciplinary Advice

For those who are beginning to or contemplating engaging in collaborative interdisciplinary work, our respondents have given thoughtful advice and guidance. A good way to begin is to develop networks and connections with others engaging in similar research. “Find a group of scholars that are knowledgeable in their fields but also adequately flexible enough to see your contribution”, advises Norton. Prelli also suggested this. He stated, “try to make connections with people at your university who are addressing environmental issues within public foray. This will provide exposure to the range of interests that are likely to come into clash over any resource-related and how people try to manage them. And, if opportunity arises, teach an environmental communication course with an environmental policy or management specialist at your university.”

Prelli suggest that although it is not necessary to pursue additional degrees in Natural resources, communication scholars can seek background training by taking or sitting in on courses offered by other disciplines or through extended education. This will not only help you understand where other disciplines are coming from but you will be able to see connections between your work and the work of scholars in other fields.

Finally, Endres asks those contemplating interdisciplinary work to seriously

consider their level of commitment. She said, “It is important to feel committed to the process. It takes more time and work than you might think to make interdisciplinary projects work. Carefully consider the time commitment, the tradeoffs you may have to make, the expected end products, and how that all fits into your overall research/teaching/public engagement trajectory.”

By understanding your own level of commitment, seeking other scholars who value collaborative work and taking steps to understand other disciplines, many challenges to interdisciplinary work can be avoided.

### Featured Voice

Our featured voice for this article is that of Markus J. Peterson, Professor in the Department of Wildlife and Fisheries Sciences at Texas A&M University.

*Before I address the specific questions about interdisciplinary collaboration, it might be helpful for me to outline my perspective and biases related to this topic. First, nearly all research I conduct is collaborative and a large proportion of these studies are inter- or cross-disciplinary. I find interdisciplinary, collaborative research interesting, productive, and fulfilling. These facts are bound to influence my answers to the three questions posed. I also warn that to handle this topic adequately would require an entire article at a minimum, not just these few notes, so I am bound to be leaving out important issues.*

### Challenges

*In my experience, there are three major categories of interrelated institutional impediments to collaborative, interdisciplinary grantsmanship and research: (1) “trained incapacity” based in disciplinary education, (2) university organization and structure, and (3) differences in publication standards among disciplines.*

*Trained Incapacity: In general, academic institutions train graduate students to work within their own discipline and to judge quality based on their discipline’s standards; students also are trained to view quality standards of other disciplines as suspect at best. For example, while a postpositivist measure of quality might be just fine in animal ecology, this epistemological approach might be less adequate for rhetorical criticism and the evaluation of quality therein. I have found that it is difficult for most faculty members to move beyond their own discipline-based quality standards; I view this dysfunction as a classic case of “trained incapacity”. All who wish to collaborate effectively across academic disciplines must overcome their trained incapacity to some extent. I expect all the impediments to interdisciplinary collaboration discussed below devolve from this trained incapacity.*

*Organizational/Structural Impediments: The departmental and spatial organization of most universities is centered on academic disciplines (including their intellectual methodologies) rather than research topics or questions. Numerous methodologies can effectively be brought to bear on the same important question. Typically, the richness of answers discovered by such interdisciplinary projects is far greater than would have been obtained without such collaboration. Unfortunately, factors as mundane as parking restrictions or lack of a mass transit on large campuses can result in substantive obstacles to even holding a meeting, let alone maintaining a successful collaboration. More serious institutional obstacles include issues such as arguments regarding how to allocate indirect cost returns among the departments of principle investigators and allocation of credit during publication (see below).*



*Differences in Publication Standards: Differences in publication standards among academic disciplines—as well as within disciplines, but among universities—are huge impediments to interdisciplinary, collaborative research. These differences seem to fall into three classes:*

- 1. Sole v. Multi-authored Journal Articles.—Refereed journal articles with several authors are the norm in the natural sciences and promote collaboration or at least research teams. In many disciplines in the liberal arts and social sciences, however, tenure and promotion committees expect to see sole authored publications—thus greatly discouraging collaboration. After all, why would a natural scientist want to collaborate with a communication scholar who plans to publish their communal data under only her name? Realistically, multiple authors on journal articles as well as books are necessary for effective collaboration.*
- 2. Disciplinary or Journal-based Chauvinism.—In some disciplines in the social sciences, only sole authored (see 1 above) articles in only 2–3 specific refereed journals count toward tenure and promotion at many R1 universities. All other publications essentially are simply hobbies of the faculty members in these departments and have*

nothing to do with professional development. It is nearly impossible to collaborate with faculty members in these departments unless the already are full professors and/or are willing to thumb their nose at their peers.

3. *Journal Articles v. Books.*—In most natural sciences, refereed journal articles are the key to the realm. Conversely, in many of the liberal arts, books are much more important keys to tenure and promotion. This problem in addition to multiple v. sole authorship (see 1, above) can be a nearly impossible obstacle to negotiate in some cases. As credit allocation in academia is based largely on publication of research results, these problems must be successfully negotiated if a group of researchers is to be successful interdisciplinary collaborators.

### Overcoming Challenges

Despite this formidable list of obstacles, I find interdisciplinary collaboration to be tremendously rewarding. Luckily, I work in a department that includes molecular biologists, ecologists, evolutionary biologists, systematists, ethologists, sociologists, communication scholars, and educators. Disciplinary chauvinism does not thrive in such an environment, so I am free to publish in high quality refereed journals whatever the discipline. Additionally, multiple authorships on journal articles are considered a plus, particularly if graduate students are lead author. With that said, significant obstacles in interdisciplinary collaboration remain.

Some of my collaborators in the liberal arts have addressed their departments' expectations by ensuring they produced a core set of publications that met disciplinary measures of quality (e.g., sole authored articles in the correct journals, sole authored books). Simultaneously, they work collaboratively with interdisciplinary research teams. As time progressed, I have noted that as my colleagues' ability to fund numerous graduate students as well as the students' research projects became obvious and valued, their departments became somewhat more open minded regarding research outlets, multiple authorships, etc. It also did not hurt that the indirect cost returns from the grants obtained funded much of the departments' expenses.

One way I have negotiated impediments to interdisciplinary collaboration was to develop a core group of collaborators with known skills and personalities. When one has a record of accomplishment with a group, it is much easier to anticipate how to deal with institutional and disciplinary impediments. I think the best way to explain how to develop this core group of collaborators is to use a metaphor based on the ecological principle of "source-sink dynamics". Some potential collaborators are sources of energy, knowledge, organizational ability, and skill. Others serve to use up the groups' energy, knowledge, organizational ability, and skill. If everyone in the team is a source, the total capacity of the group is

much greater than the sum of the parts. It is sheer bliss to work with such groups! If there is even one sink in the group, the total capacity is far less than the sum of the parts because this person must be carried by everyone else in the group. The group becomes dysfunctional. Look for sources. Avoid sinks at all costs.

One way to avoid sinks is to seek out those who are eager to bring their own disciplinary expertise to the table, but are willing to (1) be open minded regarding measures of quality used by other disciplines and (2) learn enough about the other disciplines represented in the group to communicate effectively. Avoid those trained in other disciplines who wish to become you. Someone trained in ecology, for example, who wishes to become an expert in social survey design is by definition a sink as group members with this skill set will have to train him/her much as if s/he were a graduate student. Everyone should bring something useful to the group.

Lastly, it seems to me that most people who are effective at collaborating across disciplines are comfortable with taking substantive professional risks. In sum, interdisciplinary collaborators must deal with numerous unknowns, unfamiliar literature, unfamiliar epistemological approaches, different axiological perspectives, and sometimes-fuzzy understanding of apparently key concepts in other disciplines. Collaborative, interdisciplinary research is not for the risk averse.

### Suggestions for the Novice

Based on the last sections, it is obvious that those wishing to begin collaborative interdisciplinary projects should be comfortable with professional risks, willing to address the incapacities associated with their own training, seek out collaborators that are sources (not sinks), devise ways to ensure they can meet departmental expectations of quality while still conducting collaborative, interdisciplinary projects, etc. This begs the question, however, of exactly how one with few interdisciplinary contacts can accomplish these goals.

My advice is to find someone in your discipline (or one closely related), with a strong record of interdisciplinary collaboration and grab onto his/her coattails. Seriously, there is nothing like a model. Some professors with these skills bring their graduate students along for the ride during graduate school. These students are fortunate indeed.

Those who already have entered the workforce also can use this model. If one gains entry into a core group of collaborators, s/he will note that the team negotiates, seemingly without much effort, obstacles that would stymie a group of novices. This mentoring process is critical. I think the best way to gain entry to such a group (they often operate across universities, not just departments) is to become well acquainted with one or more group members in disciplines similar to yours and demonstrate that you have the energy,

knowledge, and skills that will make you a source, rather than a sink, for the group.



Interdisciplinary work can be challenging but it can also be very rewarding. For those of you considering collaborative work, it is important to have a realistic idea of the challenges and opportunities before you. Hopefully the insight shared by these scholars in the field will help you in your work. Thank you to Drs. Peterson, Prelli, Endres and Norton for their willingness to share such valuable insight.

### Next Issue Discussion Question:

Often in collaborative work, we interact with resource specialists from government agencies. This provides unique opportunities and unique challenges. What are those opportunities and challenges? What advice would you give others who also work with government personnel?

Please submit answers, thoughts and ideas to [Tracylee.clarke@csuci.edu](mailto:Tracylee.clarke@csuci.edu) (no longer than 500 words). If you would like to have your answers given prominence in our "Featured Voice" section, please send an extended response (no longer than 1000 words) and indicate your interest as such.

## Scholarly Appointments

Christine Feurt completed her Ph.D. from Antioch University New England and has crafted a dual (Pracademic) position as faculty member of the Environmental Studies Department at the University of New England and Coastal Training Program Coordinator for the Wells National Estuarine Research Reserve in Maine.