

Narrative Report
Organization for Tropical Studies (OTS)/Duke University
OTS NAPIRE 2010 Mentor Workshop
Dr. Wendy Townsend-NAPIRE Coordinator

Introduction

The OTS NAPIRE summer undergraduate research experience program was developed to offer a quality field research experience to students from minorities that are under represented in the scientific disciplines, in this case, Native American and Pacific Islanders. Sponsored by NSF, the NAPIRE course is part of the Louis Stokes Alliance for Minority Participation, and recruits its participants from affiliated universities and colleges. The program seeks to introduce the LSAMP students to research and the tropics, by teaming them with experienced Research Mentors, who will guide them during the research design, data collection, analysis, and write up phases. The NAPIRE experience promotes student ownership of the research, and includes workshops on statistics, writing and presentations.

Students also have Home Mentors who have the responsibility to guide the application process and help the students integrate their experience in their academic career. In the past, the Home Mentors' knowledge about their students has been under-utilized, although in a workshop (2008) some of them contributed to our understanding of cultural differences between our target students and other college students.

The main objective of OTS NAPIRE 21010 Mentor Workshop is to enable the communication between Research Mentors, Home Mentors, and NAPIRE students. Although not all the mentors could be present, we communicated with the students to begin the discussion of the research that is possible given the location and the time constraints of the program. We have found that students that arrive with an idea, make quicker progress towards completion of their research paper. So the Mentor workshop was designed for communication, between the Research and Home Mentors attending, and mentors and students in their home states.

Workshop Goals:

- To provide a platform for home and research mentors to discuss the interests, capabilities and any other pertinent information about the NAPIRE 2010 students and program.

- To acquaint the NAPIRE Home Mentors with the living and working conditions of Las Cruces Biological Station, so they can advise students about, food, sleeping arrangements, topography, laboratory space, and communication capabilities.
- To acquaint new Research Mentors with the geographical and ecological potential of Las Cruces Biological Station and its facilities and enable their guidance of the student research.
- To develop and discuss research ideas between NAPIRE Home Mentors, Research Mentors and students (virtually).
- To provide a platform for experienced LSAMP mentors to discuss the interests, capabilities and any other pertinent information about the NAPIRE target students and program.
- To discuss ideas to improve the outreach of the NAPIRE program.

Participants

Home mentors of 9 students were invited to the workshop, all of whom are active in the LSAMP programs at their institutions. The Research mentors invited will guide 11 of the students.

Name	Position	Affiliation
Fara Williams	Grant Coordinator, LSAMP	Oklahoma State University
Judith Gipp	LSAMP Coordinator	Haskell Indian Nations University
Dr. Jacquelyn R. Bolman	Director, Indian Natural Resource, Science and Engineering Program (INRSEP)	California State University Humboldt
Ty A. Smith	Director of Native American Cultural Center	Colorado State University
Mary Mandelski	Co-LSAMP Program Manager	Fort Lewis College
Dr. Velinda Locklear Woriak	Associate Professor	University North Carolina, Pembroke
Frank Camacho	Research Mentor	University Guam
Tahzay Jones	Research Mentor	National Park Service Hawaii
Kristen Conway-Gomez	Research Mentor	California State University Pamoona
Nichole Gottdenker	Research Mentor	University of Georgia
Dr. Wendy R. Townsend	NAPIRE Coordinator	OTS
Vivian Mendez	Undergraduate Coordinator	OTS
Dr. Rakan (Zak) Zahawi	Las Cruces Station Director	OTS

Program:

April 2010

Thursday 15	Arrival San Jose, Costa Rica, PM Visits- OTS, Orientation, Pizza Party
Friday 16	Travel by Road to Las Cruces, Beach Route Evening: Orientation to Las Cruces Nighttime: - Group meeting Designing time
Saturday 17	Orientation tour of Garden, Station and virtual connections with research mentors, home mentors, students
Sunday 18	AM Walk to Melissa's Meadow - Virtual connections Meetings with local collaborators Introduction to Research at Las Cruces Zak Zalawi
Monday 19	Travel to San Jose, - stop for visit at Brunca Indian Territory, Farewell Dinner
Tuesday 20	Leave Costa Rica for US

Workshop content:

1. Travel activities – Beach visit, crocodile viewing, visit to Brunca Indian village
2. Group discussions
3. Virtual Communications between mentors and students
4. Introduction to Las Cruces gardens and station
5. Farewell Dinner- San Jose
6. Evaluation

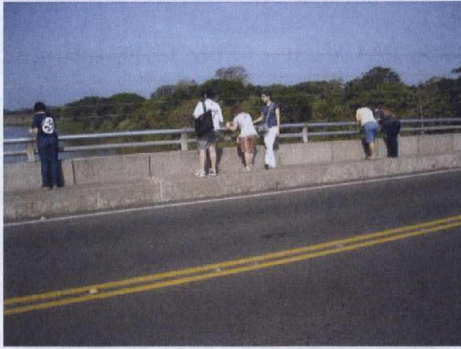
Travel Activities

Travel to Las Cruces provided a chance for the Mentors to see some of Costa Rica. We traveled on the new highway that runs on the Pacific Ocean side of Costa Rica, making for lovely stops in several places along the way.



The bus was an excellent time for Mentors to get to know one another. We made an effort to team up the Research mentors with their student's Home Mentor for the bus ride.





We stopped at the bridge to view the huge Caiman.



Selecting the right rubber boots can be a daunting experience. But Home Mentors understood the need for risk management in the program.



On the way back from Las Cruces to San Jose, we stopped to visit the Brunka Women's Museum.

Group meeting

Upon Arrival, Mentors were given an introductory packet which included an “mental task” for them to think about sharing with us later.

MENTAL TASK – For HOME Mentors to have ready for Friday night discussion

1. Describe some experience you have had in your work mentoring Native American and Pacific Islander students that made you understand them better.

MENTAL TASK For Research Mentors

1. What makes you want to do research?

FIRST MENTAL Task Research and Home Mentors

Think of word that:

Describe NA y PI Undergraduate students self image

Describe NA y PI Undergraduate students motivation

Describe NA y PI Undergraduate students perception of their opportunities.

Although we had already met, in fact traveled from San Jose together, we began our meeting with formal introductions. These allowed us to understand the roles of each of the participants in the meeting, and in the LSAMP and NAPIRE programs. Each participant was asked to share more of their background, including observations and experiences with research and the Native American and Pacific Islander students. Various Home and Research mentors are from NA tribes, and

Later we began by discussing perceived differences between the NAPIRE target students and other college students.

“Native students do not voice opinions and concerns so many research mentors are at a loss in how to communicate with them. In addition, minority faculty need to be reminded that all students are different, coming from multiple cultures with various hardships and obstacles.”

The observations volunteered in the meeting can be summarized with the following:

- Shy about showing successes, have you talked to a professor
- Very family oriented and may find it difficult to leave home
- Non-traditional, often come to school later.
- Often are primary care takers of a family making participation in a program such as NAPIRE very difficult
- Low self esteem/ first generation in College
- Need encouragement to apply for career enrichment opportunities
- May be their till questioning identity

One mentor offered that he felt it is important to explain to the students that little successes, can mean an increase in responsibility, and with accomplishments, doors are opened.

Two Home mentors with past NAPIRE students shared their impressions about the changes they saw in their students from the experience:

- Improved math skills, more interest?
- Helped them focus on a career, discipline
- More self esteem

Both stated their students came back transformed, with a clearer vision of why they are in school. Both had their students present their work in various meetings, local and national.

An important point that came out of this group discussion is the need to form a community, where the students feel a part. The Home mentors stated that this is a very important part of helping the students adapt to being away from their own community. Facebook was a suggested social medium to help form the community.

The second task of the group discussions was to build a communication and interview guide for our talks with the students. Together we build the following list of topics to be used during our contact with the students, based on what we would expect in a successful student. This list was left on the board in front of us while we were conversing with the students to prod us with questions.

1. Maturity
2. Previous research
3. Personality –
where they grew up,
have students send pictures
Curiosity
4. Career goals, training
What does the student want to get out of the NAPIRE experience
5. Physical limitations
Expectations
6. Research mentor expectation of students and vice versa
7. Academic Experience- at their institution
Ex. Did they tell anyone about being accepted?
How is it going in your program at your institution
8. Family support?
9. Feedback mechanisms?



Group meeting. NAPIRE 2010 workshop

Virtual Communications between students and mentors

Communications required a complicated schedule to join Home Mentors, Research Mentors (at Las Cruces and at their home) with students via internet conferencing. First we called the missing home mentor to discuss the student's capabilities, and then in another call we joined with the student. The Research Mentor and Home Mentor Teams present at Las Cruces called their students together, starting the communication process. Each meeting was met with the promise of continuing communications before we meet in Costa Rica. These communications straddled two days and included 2 research mentors not on station. Research mentors made a commitment to contact those students and home mentors that were not able to be present.

The conferences between students and mentors were exciting and enjoyed by mentors and students alike. Initial questions were related to getting to know the student, their prior experience and their potential research interests. Referral to the interview points on the board in front of us helped stimulate the questions and the guide direction of the conversation. Some students were very excited to know they would be doing things they were learning about in class. Students were encouraged to seek out other professors and on three occasions another scientist was identified on campus to guide the students' research question building and to form part of the mentoring team.

Introduction to Las Cruces Gardens and Station

The visit to Las Cruces Biological station provided the opportunity for the mentors to explore the station grounds. This was particularly important for the research mentors who were able to hone their ideas to fit within the possibilities of the station. Home mentors were able to see the conditions under which the students will be living and working. The walk along water trail showed them an immediate practicality for their rubber boots. A guided trip to Melissa's meadow introduced the mentors to the station's restoration projects and their results. (These photos courtesy of Matthew Cullen)



Farewell Dinner

Upon our return to San Jose, and after the shopping trip, we enjoyed a farewell dinner at "Antojos".



Workshop Outcomes

- New Research Mentors have a better idea of how much effort, physical, mental or reading time a student might be expected to contribute.
- LSAMP Mentors have a better idea of how much effort, physical, mental or reading time a student might be expected to contribute and thus guide students in their decisions to apply to NAPIRE.
- Possible research questions were proposed, considered, modified through contacts begun during the workshop.
- Home mentors are able to advise their students about the conveniences and communication available at Las Cruces.
- New activities were proposed which reflect the actual interests of potential NAPIRE students.
- NAPIRE staff garnered ideas for modernization and increasing relevance of the course and teaching methods, as well as improving recruitment strategies.
- Students and mentors began their communications, starting on the road to feeling comfortable with each other and building a research idea.

Workshop Evaluations

The feedback form participating mentors was positive; on the whole Research Mentors and Home Mentors enjoyed the experience and found it valuable for guiding their students.

Specific comments included:

“It was wonderfully insightful”

“I feel that this was a very inclusive group and that people made a huge effort to watch out for each other, consider their feelings, and develop relationships.”

“This program presents a wonderful opportunity for students and faculty. I, myself, am interested in returning as a research mentor, but for now am motivated to strive to ensure that my student, Daniel Locklear, is as well prepared physically, mentally, spiritually, and emotionally as possible.”

“Thank you for a very informative, helpful and well-run workshop. I now have a much stronger grasp of what to plan for and feel much more comfortable going into June”.

“I want to thank you for this amazing opportunity to meet the people with whom Cassandra will be working and explore the environment where she will be spending the

summer. I have lots of information and tips to offer Cassandra, and I am excited about her working with Nicole. In addition to knowing more about how to help Cassandra prepare for her trip, I also have a better feel for how I can promote the NAPIRE program and (hopefully) assist OTS in recruiting more participants from Oklahoma.”

“I appreciate the opportunity to not only get to know you but also to learn from you.”

“I think it was incredibly valuable because it allowed the researchers the ability to plan and prepare for the students as they come down instead of scrambling once they arrive. Also by having the chance to interact with the students, we have more of an idea of what the students are capable of doing. In addition, the Home mentors now have an idea of what the station is like and what the students that they are recommending/supporting are going to be facing, enabling them to prepare the students to arrive and make their time more productive and enjoyable.”

“I actually think the NAPIRE program is wonderful (thus far). Part of me feels that it fills a very important role in the development of the students who get to participate.”

“I’m interested now to see how the students interact with their mentors as the summer progresses.”

“You have a wonderful program and inviting the mentors was such a bonus. Thank you for including us.”

Suggested Improvements: to the workshop

“Include a list of the station personnel and their responsibilities, so that when we arrived I knew who to be looking for and could prepare to ask them questions. Also the schedule changed a lot and I wasn’t completely sure what it was. I know that I missed the tour of the gardens because I was speaking with one of the station personnel and didn’t realize the tour was scheduled then.”

“Make a schedule of the summer NAPIRE program available”

More time would have been useful,
Group conversations should start earlier



Group picture of participants in the NAPIRE 2010 workshop. From left: back row Tahzay Jones, Ty Smith, Velinda Worix, Judith Gipp, Nicole Gottdenker, Mathew Callen (Nicole's husband) 2nd row: Jaquelyn Bolman, Mary Mandelski. Front row: Fara Williams, Frank Camacho, Kristen Conway-Gomez, Zak Zahawi, seated: Wendy Townsend