Revised: 5/19

General Information:

Name: Chris Lorentz

Department: Biological Sciences

Type of Scholarly Activity: Sabbatical* ✓ Conference _____

Research _____ Creative Work _____

Give a Brief Description of Project (1-2 sentences): *My sabbatical primarily focused on my role as Director of the Field Station. Between conferences & workshops, networking and writing, I examined all aspects of the operation from operations and maintenance activities to the research and outreach programs.*

Date(s) of event _____ *Sabbatical Dates Fall semester 2019

Total Funding Received N/A * Sabbatical Funding: half term or full term

Detailed Report:

(Please read all 3 questions carefully. Each part below should be in a separate section.)

A. Detailed Narrative

In the Fall 2019 semester, I was on sabbatical from the Department of Biological Sciences, during which time I traveled extensively (8 out of the 15 weeks). I attended and presented at:

- four conferences (one international and three regional),
- two NSF workshops and
- a site visit to our sister school in Puerto Rico.

In addition, I conducted the following activities:

- wrote and submitted two grants,
- wrote one manuscript and a preliminary draft of a strategic plan for the Field Station;
- developed a hybrid graduate course,
- hosted several events at the Field Station, including a regional conference on FW mussels and a delegation of Russian scientists through the Rotary International Open World Program and
- elected to become the next President of the Organization of Biological Field Stations.

The goals of the sabbatical, as stated in the sabbatical application, were achieved. The activities, outlined above, helped move the Station towards its programmatic goals related to research & education, as well as address administrative operations and the long-term sustainability of the Station.

B. Benefits to Self

The benefits to myself were diverse and widespread. The travel experiences to Europe, Puerto Rico and elsewhere were beneficial from both a personal and professional experience. The cultural experiences alone were beneficial.

More importantly, the people with whom I had the chance to interact provided advice, insights and shared experiences that were relevant to my role as Director of the Field Station. Further, the time away from teaching provided the opportunity for writing: course design, grants, manuscript and strategic plan. These products will result in increased funding, recognition and long-term sustainability for the programs at the Station, which in turn benefit me directly as Director.

The NSF workshops that attended at Oregon State University were extremely beneficial in two ways. It exposed me to a new group of colleagues working in the areas of science education research and the social sciences. These disciplines provide unique insights and perspectives to the research programs at the Station and learning from them has resulted in changes to my application, interview process and summer programs that will enhance the experience for the undergraduate interns. Secondly the workshop provided ways to better assess the programs, both research and outreach, at the Station. These tools will result in greater success in achieving the desired student learning outcomes in our programs.

This sabbatical will also benefit me as a teacher, when I bring these experiences into the classroom, not to mention the renewed enthusiasm and rejuvenation for the profession, having spent a semester away from campus and students.

C. Benefits to University/Community

In a similar fashion to the Station, the University community will benefit from an increase in funding, recognition and long-term sustainability at the Station. Beyond the Department of Biological Sciences, multiple academic departments, student clubs and outside groups utilize the Station for retreats, meetings, and other events. As with any facet of the University, the stronger any given program is, the stronger the University is as whole.

For our Department and students, this sabbatical helped in several ways. The connections I have made with Field Station Directors and graduate faculty around the country and internationally will create opportunities for our undergraduate students when they are applying for graduate school and/or job openings. As I am writing letters of recommendation for our current BIO & ES students applying to REUs around the country, I personally know many of the folks who are offering such programs and running similar facilities which is likely to increase the chances of acceptance for our students.

Along these lines, I have received several applications for our own research internships at the Station from students at our sister school in Puerto Rico. Selecting a few of these students to work alongside our TMU students will enhance the experience for all involved.

Respectfully submitted January 30, 2020

C.N. Lortz

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APPENDIX

The sabbatical began with a conference in Belgium, the Organization of Biological Field Stations held at Hasselt University. This was a conference where I served as Chair of the Planning Committee. I also presented a session on STEM Outreach. After the conference, I spent a week in France, traveling to three Field Stations: Roschoff, Concarneau and Paimpont to meet with their staff and students, tour the facilities and discuss their programs.

Figure 1: The four Field Stations

I visited while in Belgium and France.

OBFS Organization of Biological Field Stations

Supporting environmental research, education, and public understanding

Upon returning from Europe, we hosted a group of Russian scientists for a week, through the Open World program, sponsored by Rotary International, with the purpose of exchange of cultural and scientific ideas. Tony Zembrodt was instrumental in bringing the group to Northern Kentucky; while Richard Harrison, Executive Director of ORSANCO and I created the schedule for the week which included visits to campus, the Field Station, the USEPA and other water-related agencies.

Figure 2:

Russian Delegation

Through the National Science Foundation (NSF), I was invited to participate in a workshop, titled UFERN: Undergraduate Field Experiences Network which consisted of 25 academic scientists from the fields of biology, geology and science education. The purpose of these workshop was to develop assessment strategies for field experiences for undergraduate students.

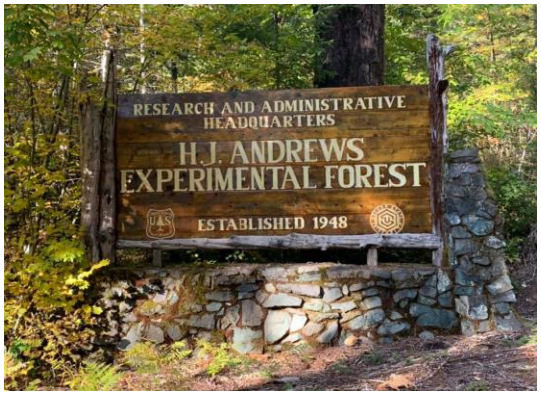

Figure 3: NSF Workshop Sites in Oregon

After the NSF workshop in October, my students and I attended and presented at the Kentucky Academy of Science Annual Meeting in Berea, where our students took 1st and 2nd prize in the Ecology Division for undergraduates. We hosted a regional conference on freshwater mussels where 65+ scientists from seven states presented their research and/or provide updates on their conservation and management efforts on behalf of freshwater ecosystems.

Figure 4: Student winners at the Kentucky Academy of Science Meeting (Berea College) and the Ohio River Valley Mollusk Group Meeting (TMU Biology Field Station).

Figure 5: Site Visit to our sister school in Puerto Rico to discuss the Field Station internships and study-abroad experiences in Marine Biology.