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|  | |  | | --- | | **GRADUATE STUDENT**  **TRAVEL GRANT**  **APPLICATION** | |  | |

**Travel applications must be received by deadline listed on**

[**http://snre.ifas.ufl.edu/academics/graduate/financial-support/graduate-student-travel-grants/**](http://snre.ifas.ufl.edu/academics/graduate/financial-support/graduate-student-travel-grants/)  **Email complete applications and or questions to: Ellen Bledsoe, ellen.bledsoe@ufl.edu**

Name and UFID: Melissa Moreno 0494-0864

Email: melimore86@ufl.edu

Advisor and Department: Dr. Bill Pine, SNRE

Have you ever received an SNRE travel grant? If so, when? No

(Applicants regain eligibility one year after grant was awarded)

Degree:  **X** M.S. Ph.D.

X

Expected Graduation Date (Semester/Year): Spring 2021

Travel Start Date: 01/15/2019 Travel End Date: 01/18/2019

Presentation Type: Oral Presentation **X**Poster Presentation

X

Research Type: **X**Preliminary Final

Content: Research **X**conducted for SNRE thesis/dissertation

Research conducted for other purpose

Conference Name: AFS and TWS have contracted Joint Annual Meeting 2019

Location: Reno, Nevada

Conference is (Regional/National/International): National

**Estimate Budget**

(Refer to [http://fa.ufl.edu/uds/default.asp#travel)](http://fa.ufl.edu/uds/default.asp#travel) **Total Estimated Cost: $ 1500**

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| --- | --- | --- | --- | --- | --- |
| Airfare | $ 0  (I can travel domestically for free) | Mileage\* ($0.445/mi) | $ NA | Meals ($36/day) | $ 36 X 7 = 252 |
| Registration | $ 550 | State contract car rental\*\* | $ NA | Lodging | $ 775 + tax |

\*Only if using own vehicle; includes gas allowance and wear tear on vehicle. \*\*Avis or Enterprise state rate only.

**Additional Funding**

Will your advisor be providing additional travel funds via research grants or other funds?

**X** Yes No Unsure

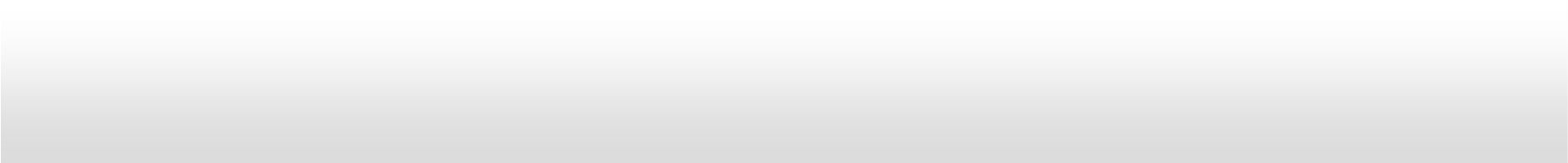
Have you received or applied for other travel grants for this trip?

Applied ,yes; received, no

(Please refer to [http://snre.ufl.edu/graduate/travel.htm)](http://snre.ufl.edu/graduate/travel.htm)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Award Type and Amount** | **Awarded** | **Funding Denied** | **Applied,**  **Decision**  **Pending** | **N/A** |
| IFAS matching (App. required)  $250 |  |  | Yes |  |
| GSC  $350 |  |  | Yes |  |
| RGP  $ |  |  | Yes |  |
| TCD  $350 |  |  |  | NA |
| IFAS Davidson  $300-domestic  $650-international |  |  |  | NA |
| Advisor’s Department department  $ |  |  | Approximately half of travel budget |  |
| Conference funding  $ |  |  |  | NA |
| Other source  $ |  |  |  | NA |

**Total Amount of Funding Already Awarded** $



For review only:

Is applicant active i

n SNRE GSC? (number of events attended) [ No, 0 attended ]

**Research Abstract:**

Please provide your abstract as it was submitted to the conference*.*

Traditional “field biology” programs designed to assess animal populations, their habitats, and how people use and modify these populations and associated environments have experienced large changes in how data are collected, managed, and stored. Technological changes including new sensor technology, data collection methods, and observing platforms (i.e. NEON) have caused rapid changes in the spatial and temporal scale of data collected. As an example, advancements in sensor technology have allowed for changes in water quality monitoring to transition from single samples at specific locations in space and time collected in the field and then processed in a lab, to real-time observations at multiple locations for multiple variables in large spatial areas which are monitored from satellites or other remotely sensed data collection platforms. Many of these programs are conceived and planned, and used by biologists, but these users with training in ecology and biology generally have limited experience with the basic data management, curation, and workflow of data generated from these platforms. @lowndes2017our highlights the results of a recent survey of program needs of NSF funded principal investigators in biological sciences. I will document how the basic elements of the Lone Cabbage Reef restoration project water quality and biological data associated with oyster populations are managed. The objective is to develop and implement a data management workflow, which starts at the data collection point and ends at the visualization/ interpretation of collected data from different data streams. These data streams include water quality data from a network of sensors that record observations hourly to counts of oyster populations on reefs that occur seasonally and are recorded on paper data sheets. I will document how these data are recorded, and then the data quality assurance/quality control procedures, data checking (anomalous values), data visualization, and data releases for analyses using multiple software tools.

**Methodology:**

Please provide a 100 word (or fewer) description of the methods used in the research in ways a non-expert of your field would understand*.*

My project is dependent on developing an efficient data workflow of complex data of two types. My method includes consulting with the University of Florida’s ARC department to model and create an efficient workflow for the project. I will use tools such as Visio for workflow modeling, R for graphics and analysis, Github for version control, and MySQL for data management. I will record this workflow using text and images/screenshots in an instructional style document.

**Essay:**

How will your presentation represent the interdisciplinary ecology program? *Please limit to approximately 250 words.*

Conferences such as these are amazing opportunities to learn about upcoming research information and ongoing projects that are happening in wildlife. I have only been able to attend a few conferences, but the knowledge learned from these sessions have still had a lasting impression on me and have influenced my understanding of ecological processes and the programs that monitor them.

Being able to network with others that are in my field is a priceless way of getting insights into my future profession. There are many professionals I keep in contact with, that I met at the 2016 SEAFWA conference in Baton Rouge, LA, which is the last conference I attended. These professionals often give me advice and tips on how to get the most of my education and the steps I should take to be a completive wildlife biologist/ data scientist.

I am passionate and motivated to present my poster at this conference. The research that I am working of is quite different, and I think it would be a valuable experience to present adaptive management workflows for ecological data to professionals that are looking for ways to make their data and findings reproducible and sharable.

My attendance will represent the interdisciplinary ecology program in showcasing that there is not just one way to be a biologist. A biologist can also have interest in data management work as well as field experiments.