**Honors Experiential Learning Project Proposal Form**

Complete this proposal **prior** to your project’s start date and upload it in the UHP Database (<https://webapps.uc.edu/uchonorsstudent>). Create a project (“Add a new record”) in the “Tracking Project” tab and then upload your proposal document as an attachment. Your submission will be reviewed during the next [review cycle](http://www.uc.edu/honors/academics/experiences/experiencesubmission.html#deadlines).

*While the quality of the proposal is most important, strong proposals are typically 3-4 pages in length (single-spaced). Please maintain the proposal format.*

**Basic Information**  
Full Name: Emma Fox

UC Email: foxex@mail.uc.edu

College: McMicken College of Arts & Sciences

Major: Neuroscience, Spanish

Title of Project: UC Neuroscience in Spain

Thematic Area (choose only one): Community Engagement, Creative Arts, Global Studies, Leadership, OR **Research**

Expected Project Start Date: July 7th, 2014

Expected Project End Date: July 14th, 2014

**Project Information**

1. Provide a detailed abstract of your proposed honors experiential learning project.

The goal of this project proposal is to bring research happening right now in UC Neuroscience and Psychology departments to a research workshop in Spain. The conference, titled “International Workshop on Learning and Memory Consolidation,” is sponsored by the Basque Center on Cognition, Brain and Language. The location of the workshop is in Palacio Miramar in Donostia-San Sebastián, the Basque Country, which is located adjacent to the sea and just a short 5-10 minute walk from the city center. The workshop itself is from July 10th to the 12th, but for sake of travel time and project presentation preparation, I have added 5 extra days to the trip. While the workshop is the main focus of this project, an equally important factor must be considered: in order to attend the conference, I must be involved with a group that plans to present novel research at the workshop. I have found a lab through UC--the Children’s Cognitive Research Lab—that works with cognitive processes in children with Autism. A foundational and vital step in this proposal is that I am approved to work in this lab.

Explanation from here on out will be done assuming that I am accepted into the lab. I am expecting a total of 10 hours a week dedicated to lab work. Lab work would begin in spring semester, coming to a total of 160 hours (16 weeks) spent during the school year in the lab. Time spent outside of the academic calendar in lab is subject to the lab’s instructor and the progression of the research. A temporary (and subject to change) itinerary for the duration of the project and travel is as follows:

* Work in lab an average of 10 hours per week for the entirety of spring semester, totaling 160 hours logged at the end of the school year.
* Apply online to have our research work presented at the workshop.
* If necessary, spend time from end of semester (April 26th) to time of departure (July 7th) working on project, presentation, and pulling together loose ends.
* Depart from Cincinnati CVG airport July 7th at 5:30p and arrive at Bilbao, Spain BIO airport at 2:30p July 8th.
* Board a PESA service bus to San Sebastian, arrive roughly an hour and a half later.
* Check into hotel (Barcelo Costa Vasca).
* From here until the end of the conference, follow the program & present research; the official program is to be posted at the end of this upcoming April.
* On the 13th, check out of hotel and board another PESA service bus to Bilbao, Spain BIO airport.
* Depart BIO airport at 7:20a on the 13th and arrive in Cincinnati CVG airport at 2:07p that same day.

Hours spent in the lab are valuable in a multitude of ways: first, it contributes to the field of neuroscience as a whole. Second, it gives me foundational research experience in my field as a first-year student within my major. This particular research-cognitive behavior in children with autism- is close to my heart, seeing as the reason that I entered my field was to learn more about my brother’s brain as a disabled child, and others like his. Ultimately, this proposal helps me learn more about my field, work in a research lab setting, get acquainted with the format of presenting novel research to a panel of professionals in the field, and observe the work of said professionals from all over the world.

**Clearly and thoroughly address how each of the following elements will be exhibited in your work:**

1. Connection to Learning Outcomes within the Honors Thematic Area (identified above)

* *Ability to identify and apply appropriate methodologies to design research study, and collect and analyze data.*
  + When working as a part of the research team, I (along with my colleagues) will be required to design a project to present at the workshop. This will involve reading previous research journals to determine a relevant study, designing an appropriate experiment in accordance with a scientific code of ethics, and collecting the data in an efficient and accurate manner. We will be solely responsible for the credibility of the research.
    - Examples: Creating a study area (what ages of children do we study, how severe a case of autism are we testing, etc), Narrowing down a variable (are we testing retention, plasticity, or just cognition in general?)
* *Disseminate the research results and knowledge gained.*
  + At the end of the project, we will be responsible for explaining the results and purpose of our study to a group of our scientific peers at the workshop. To do this, we must fully understand every step of the research process and be able to interpret the results. Furthermore, we must be able to communicate these results to a group and explain how it effects the field of neuroscience as a whole.
    - Examples: Composing a report and/or a poster to show-case our work at the workshop

1. Connection to Goals and Academic Theories (include reference list, as appropriate)

A. As stated above, this project is essential for the foundation of my career. It not only focuses on the area of neuroscience that I want to pursue, but it allows me to be involved first-hand on a research project. Moreover, I have the opportunity to showcase the research and present to a group of professionals in my field. I gain preliminary research skills while also exploring a possible path that my career could take: research versus a medical path.

B. As part of my preparation for this proposal, I plan to take the honors seminar *Exploring Research* in the spring semester. This course will prepare me for work in a lab and provide foundational skills needed to design, carry out, and document an experiment. In addition to this course, I plan to read a recently published article titled “Intact and Impaired Memory Functions in Autism” (Bennetto, L., Pennington, B. F. and Rogers, S. J. (1996), Intact and Impaired Memory Functions in Autism. Child Development, 67: 1816–1835. doi: 10.1111/j.1467-8624.1996.tb01830.x). This will provide a strong background for current research on this topic, and possible directions that I can take in designing my own experiment for the workshop.

1. Initiative, Independence, and/or Creativity

As someone who has lived with a disabled family member for all of my life, I believe that I can bring something unique to the research group. Not only do I have experience in working with children with autism, but I have a passion in working with and understanding their unique condition. I am proposing this project so that I can explore one of my passions: understanding the disabled brain. I believe that my passion and thirst for knowledge on this particular subject makes me an eligible candidate to work in the lab and to showcase the work at an international conference.

1. Reflection

Seeing as this proposal is very science-heavy, I will keep a record of reflection throughout the process in the form of a lab journal for the experimental part. For the traveling portion of this proposal, however, I plan to keep a daily video diary of my experiences abroad. A few examples of reflection questions: What was it like working with a group of peers on an experiment? What information have I gathered from the professionals at this conference? How can I use this information later on in my career? What are the benefits of presenting my research? How has the data contributed to my field?

1. Dissemination

The dissemination of the research is built into this proposal! After carrying out research for a semester, I plan to compose some sort of presentation of the findings; whether that be in the form of a report, a poster, a powerpoint, etc. The audience is a group of neuroscience professionals from around the globe; they will be able to accurately determine if the findings are relevant, and can decide where to take the information from that point.

1. Project Advisor (list the person’s name, title, and contact information)

Dr. Heidi Kloos, associate professor in psychology at the University of Cincinnati and head of the lab, [ccrllab@ucmail.uc.edu](mailto:ccrllab@ucmail.uc.edu.).

1. Budget (if applicable)

$2,438.20 for 1st flight plus $2331.99 for second flight= $4,770.19 in airfare

$392 for duration of stay in hotel

$1,000 for meals and other transportation related expenses while in Spain

(All commercial spending money will be covered by myself)

**Grand total= $6,162.19**