

The Cincinnati Zoo & Botanical Garden announces unique opportunity for graduate level students to work in the **PLANT RESEARCH DIVISION** of the CBZG's Center for Conservation and Research of Endangered Wildlife (CREW)

Position title: Charlotte R. Schmidlapp Scholar at CREW - **Plant Research Division**

Position type: Paid, full-time, 5-month internship

This position is in the **PLANT DIVISION** of The Lindner Center for Conservation and Research of Endangered Wildlife (CREW). Through a generous grant from the Charlotte R. Schmidlapp Foundation, funding has been secured for an internship for a promising young woman scientist.

The Scholar will work under the training and supervision of a CREW senior scientist on a specific project that she will "own" over the entire 20-week course of her internship. The Scholar will be immersed in the scientific process from start to finish. In addition, the Scholar will have an opportunity to learn about many other projects being conducted by CREW's scientific team and to observe and participate in protocols unrelated to their own projects to broaden their training.

At the end of her internship, each Scholar will be expected to compile and analyze the data and then gain the experience of presenting the results of her study in a poster or paper at a professional conference in her field. Depending on the scope of the study and the outcome of the project, the results may provide the substance of a stand-alone publication of which the intern could be primary author, or it could be incorporated into a larger manuscript of which the intern could be a co-author.

Although the details of the project/area of research will depend somewhat on the chosen applicant's interests and experience, the following describes the type of work/programs within CREW's **Plant Division** that currently are priorities of CREW staff. Scholars will likely develop a project that contributes to one or more of these priority topics.

CREW Plant Research Division

There is one *Signature* Conservation Project in CREW's **Plant Division**: Exceptional plants. Exceptional plants are those species for which traditional methods of preservation (such as seed banking) and propagation (such as by seeds or cuttings) are not workable. Much of the work in CREW's **Plant Division** is focused on developing and applying in vitro propagation and cryopreservation protocols for such species. Target species include many of the most endangered species in the U.S., and recent groups of interest have included *Trillium* and *Quercus* (oak) species. Studies are ongoing in the areas of genetic diversity of the collection, improving methods of in vitro growth and cryopreservation, the basis of physiological disorders of in vitro-grown tissues (e.g., hyperhydricity), and the role of natural adaptations in determining the responses of species to in vitro propagation and to cryopreservation. The Charlotte R. Schmidlapp Scholar at CREW working in the **Plant Division** will take on a fairly independent study that is related to one of the areas/species mentioned above.

The Scholar will be expected to conduct a literature search to set the foundation for her project, draft a research proposal with detailed experimental design, present the idea to the CREW science team, conduct the study itself, compile the data, statistically analyze the data and present the conclusions in both written and oral forms. The research will likely be bench-top based. Extensive field opportunities are unlikely. If appropriate, the project could become a part of the Scholar's dissertation.

Qualifications: Applicants must be female college graduates entering or in graduate school or between graduate degrees. College degrees, training, and experience should be in an area of **laboratory-based plant science** such as: plant science, botany, plant physiology, plant development, molecular biology, or cryobiology. Basic laboratory skills are required and preference will be given to applicants with substantial laboratory experience outside of academic course labs. Experience with plant conservation and/or botanical gardens is not required but would be considered favorably.

Working Conditions: Employment is contingent upon passing a post-offer, pre-employment drug and nicotine screen and background check. While performing the duties of the job, the incumbent is regularly required to stand, walk, and utilize manual dexterity to use computer mouse and keyboard. The incumbent may be exposed to outside weather conditions and must be able to lift/move/carry up to 50 pounds without assistance. Must have and maintain a U.S. driver's license.

Compensation & Benefits: The maximum stipend for the 5-month internship is \$10,000. If the chosen applicant works less than 20 weeks, full-time, the stipend will be reduced accordingly. There are no funds for relocating but assistance with housing needs during the internship may be available. Depending on availability, the Zoo & Botanical Garden maintains an intern house that offers housing at very modest cost and is located directly across the street from the Zoo & Botanical Garden.

To apply for this position: Qualified applicants must provide a cover letter and resume, and contact information for three references in your online application.

Applications are due by March 1. The starting date is expected to be around June 4, with the internship running through the end of October. The dates are somewhat flexible, but the entire internship needs to be completed by the end of 2017.

The Center for Conservation and Research of Endangered Wildlife (CREW) at the Cincinnati Zoo & Botanical Garden is a global leader in wildlife conservation. Established in 1991 as the first institution of its kind focused on both plant and animal conservation research, CREW is dedicated to "Saving Species with Science." World renowned for its accomplishments with its four Signature Projects - endangered rhinoceroses, imperiled small cats, exceptional plants and polar bears - CREW also conducts substantial research with a few select other species. These conservation efforts, involving a diversity of scientific disciplines and multi-institutional collaborations, are expanding our understanding of species biology, enhancing reproduction, propagation, and genetic management, and ensuring a future for wildlife.