



21st Century Museum Professionals Program

Sample Application 21MP-256446-OMS-24

Wheeling Park Commission, Oglebay Good Zoo

Amount awarded by IMLS:	\$258,200
Amount of cost share:	\$282,136

The Oglebay Good Zoo, part of the Wheeling Park Commission, will develop a paid experiential workforce development program to remove affordability barriers for future zoo professionals seeking applied work experience. The zoo will partner with West Liberty University to conduct three annual virtual workshops introducing academic, career, and financial aid opportunities to regional high school guidance counselors and their students. The project will also create application guidelines and curricula to support paid stipends annually for six undergraduate students to intern at zoos across the country, five undergraduate students to participate in animal husbandry or conservation fellowships, and four post-graduate apprenticeships at the Oglebay Good Zoo. As a result of the project, students will gain the work experience necessary for obtaining entry-level positions in the zoo, aquarium, or conservation professions.

Attached are the following components excerpted from the original application.

- Narrative
- Schedule of Completion

When preparing an application for the next deadline, be sure to follow the instructions in the most recent Notice of Funding Opportunity for the grant program to which you are applying.

Project Justification

The Oglebay Good Zoo in Wheeling, W.Va., along with neighbor and academic partner West Liberty University (WLU), propose a project to address the 21st Century Museum Professional Program's ***Goal 2: recruit and train future museum professionals, including those from diverse and underrepresented backgrounds.*** In doing so, the team will simultaneously address a related issue brought forth in a 2019 study by the National Association of Colleges & Employers (Collins, 2020), namely, that students who participate in paid internships have better post-graduation hiring timelines and higher starting salaries.

Each of the three objectives in IMLS's Goal 2 will be addressed as follows:

Objective 2.1: increase the number of students from diverse and underrepresented backgrounds enrolled in graduate and undergraduate museum-related programs. Knowing that guidance counselors are key in helping high-school students focus in on a career that they would enjoy, as well as a path to get there, we will produce for high-school counselors three virtual workshops focusing on higher education, financial support options and career opportunities in the fields of zoos, aquariums and conservation. With the support of School Counselor Associations in West Virginia, Ohio, Pennsylvania, Maryland, Virginia and Kentucky, we will promote these workshops to high-school guidance counselors in those same Appalachian states, and finally conduct the workshops annually for those who are interested.

Workshops will include presentations from faculty in WLU's zoo science major, graduates from the University's program, a virtual tour of the Good Zoo, including statements from its zoo professionals, and presentations from the University's financial aid officers.

Objective 2.2: recruit future museum professionals from diverse and underrepresented backgrounds through paid internships, mentoring and fellowship opportunities. Realizing that many students with diverse and underrepresented backgrounds may be unable to afford to take an internship with no pay, we will provide financial support for professional experience at two levels: Stipends for two 6-month post-graduate apprenticeships will be awarded annually for three years, for participants to participate in applied experiential learning opportunities at the Good Zoo. Also, for undergraduate students enrolled in the zoo science major, stipends for three 10-week summer internships will be awarded annually for three years, along with the ability for the awardees to choose the zoo or aquarium of their choice to obtain professional experience. Additionally, four zoo and conservation summer fellowships will be awarded annually for 3 years to facilitate research experience to prepare undergraduate students for acquiring internship opportunities.

Post-graduate apprentices will rotate through animal care, conservation and conservation education career departments to help determine where their passion lies as they begin their career journey, and each will be required to complete a project to add to their professional portfolio of experience. These individuals will receive a one-hour professional training and mentorship session weekly in various aspects of the zoo profession, including but not limited to animal welfare, care of various zoo species, accreditation requirements, legislation and permits associated with zoos, animal nutrition, reproductive physiology and management, animal training

and enrichment, animal behavior, experimental design, interpretation, ambassador animal management and statistical analysis and reporting.

Students participating in summer fellowships at West Liberty University will conduct independent research focused on conservation and developing sustainable animal ambassador collections and will build skills in animal care that will prepare them for internships at AZA accredited institutions. Students will attend weekly networking luncheons and biweekly Student Success seminars. Through this programming students will learn essential skills like presentation design, grant writing, interview skills, and building CV's and resumes. Fellowship students will present their research and welfare projects at the West Liberty University SURE Symposium to their peers, faculty, WLU Staff and the community. They will be encouraged to publish and present their research at other regional and national conferences.

Objective 2.3: support assessment and evaluation of recruitment, training, and higher education programs to identify and share effective practices. A West Liberty University graduate student will be engaged as a research fellow to 1) assess recruitment efforts and gauge success in reaching a more diverse audience by comparing data from before and after the guidance counselor recruitment workshops; 2) job placement of zoo science graduates and 6-month apprentices based upon the experiential opportunities acquired during and immediately after their academic training; and 3) identify factors associated with why students and alumni have been unable to acquire experience to develop professionally within the zoo, aquarium or conservation professions.

Recent evidence indicates that the accessibility and equity of gaining entry-level experience in the zoo and aquarium profession is a substantial limiting factor to attracting talent to our profession (Colton, 2022). The desire to hire individuals with experience, which typically has to be acquired without compensation, to a profession that historically does not provide compensation levels that facilitate payment of living expenses and potentially student loan expenses that were required to get the academic training required for these entry-level positions is a barrier to many individuals who could develop into the leaders of our profession but are turned away due to the challenges that will be associated with following their passion (Marino, 2023).

These barriers have the potential to create a discriminatory effect, enabling those with only the appropriate financial backing to gain necessary experience (Parsons and Scarlett, 2020). In Colton's study of internship opportunities available in zoos and aquariums in 2022, only 14% of available positions provided monetary support, with only 47.6% of those opportunities providing support at a level greater than the federal minimum wage. Only 10% of the available opportunities in this study provided housing, resulting in applicants having to either have the financial backing to afford short-term housing and work without pay during the duration of the unpaid experience, or requiring the applicant to work second jobs or acquire additional sources of funding to complete these opportunities.

In many cases, experience is more highly valued than education in candidates applying for entry-level positions within the zoo and aquarium profession (Johnson, 2018). In a survey of zoos employing student interns from a zoo science undergraduate major, as well as of the undergraduate students themselves, the greatest deficit suggested by both groups was the need for more hands-on experience (Liguori, 2023). Additional deficits that were noted by the employers was the lack of development of soft skills in individuals who have not acquired hands-on experience. These soft skills include factors such as working in a team, communication, and

critical thinking. These soft skills have been identified as training needs in other studies of what managers and peers consider to be good animal keepers, with additional factors such as compassion and care for animals being heavily cited as being qualities that are more challenging to acquire through training (Bacon, et al., 2023).

Publications studying what it takes to be a good animal keeper often mention the need for having a “passion” or even a “calling” (Bunderson and Thompson, 2009). These soft skill characteristics, along with enthusiasm, a sense of responsibility, and a desire for learning and information seeking are considered critical for excelling in the zoo collection management profession. However, this same calling or sense of responsibility and the feeling of a need to sacrifice personal time to perform their jobs well -- when coupled with the physical and emotional exhaustion of the animal keeper role -- has also been linked to eventual professional burnout. This occurrence is due to compassion fatigue that is experienced more in the animal keeper profession than it is in other professions, much like is observed in the nursing and human care professions (Bemister-Bourret and Tawfik, 2023; Bunderson and Thompson, 2009).

One recent study showed that 91% of zoo and aquarium professionals have experienced burnout, and 60% stated that they have left a position in the profession for the same reason (Marino, 2023). For those seeking to enter the field of zoo science, the inner passion that is critical to success in the profession and in wildlife conservation, is often dampened by barriers associated with gaining an entry-level position and then possessing the resiliency to grow and develop within the profession. An internal struggle often ensues in trying to balance their aspirations and emotional connection with the practical reality of the work, and with the compensation and costs associated with their efforts (Allen, 2015).

When the barriers associated with developing and retaining the zoo and aquarium professionals of tomorrow are considered, it is disconcerting to think that much of the potential pool of talent has been excluded due to socio-economic factors. Adolescents who come from low-income families tend to have lower career aspirations than middle-income families, and adolescents that come from this background tend to have less exposure to career opportunities and role models or mentors and are prevented from having the opportunity to “see it to be it” (Hill et al., 2003). These factors are even further exacerbated when gender and race are incorporated. Individuals who identify as being female and those identifying as being from underrepresented backgrounds tend to be at an even greater disadvantage at gaining paid entry-level opportunities due to lack of exposure to these opportunities, perceived or actual roles as care-takers or providers, and financial backing (Hill et al., 2003).

The purpose of this proposal is to 1) attempt to expose adolescents from various backgrounds to the zoo and aquarium profession and training programs; 2) attempt to remove financial barriers to entry-level career development for multiple pre- and early career internships; and to 3) assess the impact of these opportunities on the development of future zoo and aquarium professionals who have not, as well as who have, been afforded these opportunities.

The target groups for the project are 46 (math behind this number is: 6 requested zoo apprentices + 6 matched apprentices; 1 graduate fellow; 9 requested paid undergrad internships + 9 matched paid undergrad internships; and 12 requested paid undergrad fellows + 9 matched undergrad fellows) potential future zoo and aquarium professionals, with activities targeting as many as 4,670 high-school guidance counselors; as many as 200 students currently enrolled in an undergraduate zoo science degree of study; and recent graduates from undergraduate programs

who are pursuing a career in the zoo profession. Recruitment activities will be inclusive with targeted audiences including underrepresented individuals and individuals residing in Appalachia.

The ultimate beneficiaries of this project are anticipated to be: 1) students being mentored and receiving advice from high-school guidance counselors; 2) 30 undergraduate students and recent graduates of undergraduate programs pursuing entry-level experience in an accredited zoo or aquarium; 3) one graduate student who would be supported to study the success of this project; 4) 15 undergraduate students interested in pursuing zoo and conservation-related research; 5) Oglebay Good Zoo and partnering facility West Liberty University, both of which will have the opportunity to include recent graduates or current students into our professional setting to learn from their perspectives and tell their stories to solicit sustainable support for the program; 6) the zoo and aquarium profession as a whole by having the opportunity to welcome future professionals that may have otherwise faced barriers to employment into the profession; 7) the animals who may benefit from the care of these future professionals; and 8) the communities where these future zoo and aquarium professionals may be employed and provide services in the future.

Work Plan

Upon notification of potential funding, the Zoo team will develop the logistics for the interns' daily responsibilities and for their weekly trainings/mentorship sessions with Zoo professionals. The Zoo team and WLU partners will plan and produce the proposed high-school guidance counselor workshops and begin promoting the first workshop to the various state School Counselor Associations.

Next, the WLU team will develop application guidelines for the funded undergraduate internships and undergraduate fellowships, then inform the University's zoo science majors about these opportunities. The Zoo team will advertise the 6-month apprenticeships via various jobs boards, including those of the Association for Zoos & Aquariums, Texas A&M University and Diversity.com, and to students at regional colleges and universities via Handshake. Both teams will review the applications, interview candidates and make selections. Those applicants who are chosen and accept the positions will then be prepared for orientation activities and the start of their experiences.

During year one of the project, Zoo and WLU teams will develop the graduate research fellow's responsibilities as well as the research goals necessary to meet IMLS grant objectives. The University then will advertise the graduate fellowship position, review resumes, interview and select an applicant who will initiate employment and studies for the second year of the project.

Once hired in year two, the graduate research fellow will conduct surveys, in various forms, of participating guidance counselors, project-supported interns and recent West Liberty University Zoo Science alumni to determine results, including 1) the impact of the project on the counselors' knowledge of opportunities within the zoo and aquarium profession; and 2) the impact of the participation in paid internships or inability to participate in paid internships on students' ability to acquire employment within the profession.

Collected data will be analyzed to determine the impact of the guidance counselor workshops on recruitment of a more diverse audience of students to the zoo science major and to the profession.

Risks - 1) any turnover of positions associated with the individuals planning and implementing the project. Care will be taken in documenting the planning process to ensure smooth continuation of the project in the event that any turnover would occur; 2) an interruption of in-person training as occurred during the COVID-19 pandemic where applied skill training that is planned would need to be modified to facilitate completion on the anticipated timeline. Again, the project-planning process will include contingencies in the event of such an interruption.

Planning, implementation, and management – These activities will be conducted by Zoo management team members including the zoo director, animal curators, animal wellbeing curator and curator of conservation education; as well as by the West Liberty University Zoo Science faculty including the department co-chair, assistant professors, instructors and related staff. Evaluation activities will be performed and managed by the proposed fellowship student, the zoo director, and University faculty. Management of finances and reporting will be managed by the zoo director.

Resources requested from the funding agency include partial financial support for the proposed post-graduate and undergraduate internship as well as undergraduate fellowship stipends and graduate student fellowships, as well as some intern, fellow, and personnel professional development support to encourage intern and fellow networking and to facilitate up to date skill sets in the training/mentorship components of the 6-month internship sessions.

Matching resources will include provision of a matching 6-month internship throughout the duration of the project; free housing, utilities and one meal per day for the 6-month interns; partial funding of the summer undergraduate internship and fellowship programs; equipment provided to student fellows to facilitate research; partial funding of payroll associated with development and implementation of guidance counselor workshops and the training/mentorship components of the 6-month internship; and indirect expenses associated with the project.

Tracking - Progress toward achieving project goals will be tracked via quarterly meetings including the applicant and partner institution to review activity reports and adjust approaches as necessary, and to ensure that all individuals are completing project activities for which they are accountable.

Project Results

Intended results include the following: 1) 46 future zoo and aquarium professionals will have received equitable, inclusive and accessible early-career experiential training that they may not have received – nor been able to pursue -- had their experiences not come with stipends;

2) an increase in understanding of the impact that paid professional experiences, as well as the lack thereof, have for recent college graduates in obtaining meaningful professional employment in the field; and

3) an increase in awareness among thousands of Appalachian high-school students about the various available opportunities for training toward careers in the zoos and aquariums profession.

These results will meet the project's goals of providing career development access to individuals who have historically faced financial barriers to entry in the zoo profession or who have not come from backgrounds where they would have been exposed to opportunities for education, educational support, and finally careers in zoos or aquariums.

We anticipate changes knowledge, skills, behaviors and/or attitudes among individuals in all target groups as follows:

- 1) Up to 45 project interns will obtain hands-on knowledge and skills that are required of zoo professionals, thus increasing their confidence and ability to secure a position in the field more easily than would be the case had they not been able to afford taking a non-paid internship;
- 2) Through the project fellowship, one graduate student in zoo and aquarium science will develop the knowledge and skills in animal care, experimental design, and data analysis techniques needed to complete their graduate degree program and access the zoo profession;
- 3) Hundreds of Up to 4,670 high-school guidance counselors participating in the project webinars will develop the knowledge and skills to better mentor students interested in animals and who may have an interest in the zoo and aquarium profession, through up-to-date information about appropriate high-school courses, higher-education options and financial aid opportunities, and career paths. This result could potentially benefit thousands of Appalachian high-school students who are interested in animals but unaware of how to turn that interest into a professional career.

Products

Four product types will result, namely the following: 1) three virtual workshops on zoo training programs and zoo careers for regional (5-states) high- school guidance counselors; could be used by other counselors or state school counselor associations in the five project states or others after the project; 2) 46 future zoo and aquarium professionals will be able to create resumes including paid-internship opportunities as they begin their career; 3) a graduate thesis assessing barriers to employment and the efficacy of paid internships amongst previous zoo science major graduates and individuals participating in this project – information that could benefit not only the Good Zoo but many other zoo, aquariums and museums as well as the profession itself; 4) digital training and mentorship materials provided to 6-month paid internship sessions that could be utilized by other facilities in training and mentoring interns.

Sustaining Project Benefits for this project are as follows: 1) making it known that outreach to high-school guidance counselors improves enrollment in training programs for the zoo and aquarium profession in a manner that sustains the operation of these programs; 2) making it known that the success of the paid internship programs in the job placement of future professionals in a manner that can: a) generate philanthropic support for continuation of the program; b) provide opportunities for increased efficiency and/or guest satisfaction at Oglebay Good Zoo to economically support additional paid internship opportunities from institutional operating expenses; and c) provide evidence of paid internship programs as a potential recruitment tool to generate additional operating expenses that could be utilized to support additional paid summer internships sustainably.

Schedule of Completion – Year One (2024-2025)

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Hiring and Orientation of 1 st cohort 6-month Apprentices (Oglebay)												
Apprentice Training Sessions (1 st cohort) (Oglebay)												
Recruitment, hiring, and orientation of 2 nd cohort 6-month Apprentices (Oglebay)												
Apprentice Training Sessions (2 nd cohort) (Oglebay)												
Recruitment, hiring, and orientation of Year 2 1 st cohort 6-month Apprentices (Oglebay)												
Planning Meetings for 1 st Guidance Counselor Webinar (Both)												
Promotion of Guidance Counselor Webinar (Both)												
Conduct 1 st Guidance Counselor Webinar and Review Response (Both)												
Recruit Graduate Fellow (WLU)												
Select and Notify Graduate Fellow (WLU)												
Promote WLU Summer Internship and Undergraduate Fellow Opportunities and Develop Proposed Research Projects and Training Opportunities (WLU)												
Select Students Receiving Stipends for Summer Internships/Fellowships (WLU)												
Conduct Summer Fellowship Research/Trainings/Student Presentations (WLU)												

Schedule of Completion – Year 2 (2025-2026)

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	
Apprentice Training Sessions (1 st cohort Year 2)													
Recruitment, hiring, and orientation of 2 nd cohort 6-month Apprentices (Oglebay)													
Apprentice Training Sessions (2 nd cohort Year 2) (Oglebay)													
Recruitment, hiring, and orientation of Year 3 1 st cohort 6-month Apprentices (Oglebay)													
Planning Meetings for 2 nd Guidance Counselor Webinar (Both)													
Promotion of 2 nd Guidance Counselor Webinar (Both)													
Conduct 2nd Guidance Counselor Webinar and Review Response (Both)													
Graduate Fellow Orientation, Assessment Project Planning and Design													
Graduate Fellow Collects Initial Data from Recent WLU Alumni; Apprenticeship and Summer Internship/Fellowship Participants; and from Guidance Counselors													
Promote WLU Summer Internship and Undergraduate Fellow Opportunities and Develop Proposed Research Projects and Training Opportunities (WLU)													
Select Students Receiving Stipends for Summer Internships/Fellowships (WLU)													
Conduct Summer Fellowship Research/Trainings/Student Presentations (WLU)													

