

## A few of the most popular BIOLOGY placements available through The Philadelphia Center:

**Academy of Natural Sciences; Dinosaur Education Intern:** The Academy of Natural Sciences in Philadelphia was founded in 1812 and its collections feature over 17,000,000 specimens in all, including the first dinosaur skeleton discovered in North America, John James Audubon's bird specimens, and 226 plant specimens collected by Lewis and Clark. Dinosaur Education Interns master both informal teaching focused in Dinosaur Hall as well as more formal classes for children in grades K-8 on topics such as dinosaurs, evolution, taxonomy, and geology. Working in Dinosaur Hall you can use a variety of hands-on activities to engage visitors and students in the process of paleontology. In the Big Dig you will educate children about the process of excavation and field work using real fossils and cast material. On the main exhibit floor you will learn how to be an informal educator using the dinosaur mounts and touchable fossils to explain issues in paleontology and natural sciences. In the Fossil Preparation Lab you will learn and apply techniques of vertebrate fossil preparation. As an educator in the lab you will explain general methods, processes and principles of paleontology. While focused on the topics visitors explore in Dinosaur Hall, this internship will also introduce you to the work of the Education Department as a whole.

**Children's Hospital of Pennsylvania; Cardiology Intern:** Since opening its doors in 1855 as the nation's first hospital devoted exclusively to the care of children, Children's Hospital of Philadelphia has fostered medical discoveries, innovations and breakthroughs, which have benefited children throughout the world. Today, the Children's Hospital of Philadelphia is ranked among the leading pediatric hospitals and research facilities in the world. Children's Hospital is committed to providing exceptional patient care, training new generations of pediatric healthcare providers and pioneering major research initiatives. The Cardiac Center at The Children's Hospital of Philadelphia is a world leader in pediatric cardiac care. This unique "hospital within a hospital" was created from our belief that excellence in individual disciplines, while essential, is not enough. It is the ongoing collaboration of a multidisciplinary team that produces the most comprehensive care for your child, the fullest support for your family and the very best outcomes for every type of congenital and acquired heart disease. Cardiology Interns work in the clinical exercise physiology lab at Children's Hospital evaluating patients with a variety of diagnoses, (cancer, asthma, cardiac abnormalities, etc.). Responsibilities include performing stress tests, conducting case studies, and more. This position also offers many opportunities to relate with a variety of departments and units throughout the hospital.

**Environmental Protection Agency; Intern:** The Environmental Protection Agency's (EPA) mission is to protect human health and to safeguard the natural environment - air, water, and land -- upon which life depends. For 30 years, the EPA has been working for a cleaner, healthier environment for the American people. Philadelphia is home to the EPA's Mid-Atlantic Regional Office, which is responsible for the execution of the Agency's programs within its states. Opportunities available for students of all backgrounds and majors to work in the federal agency responsible for

protecting the environment. Internship positions commonly include research, communication, and education activities such as preparing fact sheets or brochures on various environmental topics (e.g., watershed protection, gardening impacts, wetlands) or investigating ways to change public behavior so as to reduce environmental harm. Technical internships are also available.

**Jefferson University Sleep Disorders; Research Assistant:** Thomas Jefferson University Hospital, a member of the Jefferson Health System, is one of the Delaware Valley's oldest medical centers. With the most advanced emergency and trauma center in the area, Jefferson is among the handful of facilities in the United States to be both a Level I regional resource trauma center and a federally designated spinal cord injury center. Jefferson is nationally known for excellence in a wide range of care programs. The hospital also serves the basic health needs of the neighboring residential and business community. Research Assistant works as a Laboratory Technician in the Department of Psychiatry Research Unit that treats and evaluates patients with a variety of sleep disorders. Research Assistant will be involved in multiple projects including the investigation of new medications and analysis of data. Wonderful experience for biology or psychology majors. Student can also participate in conferences on design, theories, etc.

**Philadelphia Zoological Gardens; Assistant to Pathologist:** Throughout its history, America's first zoo has played a monumental role in educating the public about exotic animals, promoting and participating in worldwide conservation efforts for endangered wildlife, and providing exceptional recreational opportunities for families. Today the Zoo is reaching new heights in all areas of its mission as a conservation, education and recreation organization. Its state-of-the-art animal exhibits and health-care facilities, award-winning education and conservation programs, recreational opportunities, guest services, scientific accomplishments and historically significant venue make the Philadelphia Zoo one of the world's most renowned zoological societies and gardens. The Zoo is also the Philadelphia region's leading family attraction, welcoming more than a million visitors a year. The Zoo uses all of its unique and compelling features to inspire people of all ages to action and leadership in support of wildlife conservation. Assistant to the Pathologist works directly with the Director of Pathology at the Zoo. Student will learn to help perform necropsies (animal autopsies) on variety of species; gain a wide variety of applied knowledge; write up necropsy reports; and review histology slides. May also work in other parts of Zoo as needed

**The Schuylkill Center for Environmental Education; Intern:** The Schuylkill Center promotes, through environmental education, the preservation and improvement of our natural environment by fostering appreciation, understanding and responsible use of the ecosystem; by disseminating information on current environmental issues; by encouraging appropriate public response to environmental problems and also to maintain the facilities of The Schuylkill Center and conserve its land for the purpose of environmental education. Internship provides overview of environmental education methods and programs, with maximum opportunity for hands-on work with children and adult visitors. The Center's Education Department is in constant need of extra hands to assist with daily projects and programs like our Watershed Education and Stewardship Workshops (conducted off-site), maintaining and organizing teaching materials, caring for bird boxes, assisting with SCEE's Bird Census' (January and June), and staffing special events like Halloween Hikes, Festival

of Insects, and the Philadelphia County Envirothon. Interns work closely with professional teaching staff. Student must take in-house seminar.

**University of PENN – biology; Biology Research Assistant:** The mission of the Department is to combine internationally recognized research programs with a commitment to the very best in undergraduate and graduate education. The department is impressively interdisciplinary with faculty research spanning areas from the characterization of global, ecosystem biology to the biophysics of energy production and utilization. This allows us to tackle important questions in biology from an environment that encourages discussion and collaboration across different disciplines. The Biology Research Assistant will work within the ecology lab with plants in greenhouse experiments, finding and sorting fungal spores, discuss experiments and ideas for experiments, interact with graduate students, attend lectures and talks. The ideal candidate will have some background in science.

**University of PENN – Smell and Taste Center; Research Assistant:** The Smell and Taste Center is a unique clinical and research organization devoted to understanding the senses of smell and taste in health and disease. It is a multidisciplinary center with members from various departments throughout the University of Pennsylvania. We have developed standardized tests for quantifying smell and taste loss that are used internationally. As a result of the application of such tests, it has been discovered, for example, that smell loss is likely the first sign of Alzheimer's disease and some other neurodegenerative diseases. Our research areas are varied, but currently include how sensory function is altered by (a) estrogen therapy in the menopause, (b) epilepsy, (c) aging, (d) neurological disorders, and (e) renal disease. Both human and rodent research is performed. Interns may have an opportunity to: Test subjects & patients; collect and analyze research data; do literature searches; aid in the writing of research reports and grant applications; develop independent projects; test transgenic mice for smell ability; participate in functional imaging studies; determine relationship of hormones to sensory processing; evaluate laterality differences in sensory function. We foster a true research experience for students. Students have the opportunity to participate in the planning, execution, and publishing of research projects. They have the opportunity to participate in our clinic, which occurs three days a month, in which we see patients with disorders of the chemical senses (e.g., loss of taste, distorted smell sensations). The opportunity to learn a range of basic and applied research skills and topics. We have wide-spread interests. For example, we not only are interested in how diseases influence the senses of taste and smell, but how the chemical senses are used in litigation (e.g., accidents in which smell function is compromised; correctional officers' use of smell for reason to enter buildings or search belongings or contraband; chemical exposure accidents that compromise smell function; etc.).

**KEYWORDS:** medicine, pre-med, doctor, biology, physicians, Medical research, neuroscience, psychology, smell, taste, dementia, aging, senses, behavior, limbic system, psychophysics, functional imaging, brain mapping.

Updated 1/09