Centers and Institutes

The Office of Research provides support and oversight for a number of multidisciplinary research centers and institutes across The Ohio State University campus. These centers fall into two categories: academic and core facilities.

Academic Centers

Byrd Polar and Climate Research Center bpcrc.osu.edu

The Byrd Polar and Climate Research Center (BPCRC), named in honor of Admiral Richard E. Byrd, America's most famous polar explorer, is recognized internationally as a leader in polar, alpine and climate research. Research at the BPCRC focuses on the role of cold regions in the Earth's overall climate system. It encompasses geological sciences, geochemistry, glaciology, paleoclimatology, meteorology, remote sensing, ocean dynamics and the history of polar exploration. In addition, BPCRC maintains the Byrd Postdoctoral Fellowship Program, provides research opportunities and support for a number of graduate and undergraduate students, offers frequent seminars and lectures and maintains a public education outreach program.

Center for Emergent Materials cem.osu.edu

The Center for Emergent Materials (CEM) is part of a network of Materials Research Science and Engineering Centers (MRSECs) funded by the National Science Foundation. The center engages teams of researchers from multiple disciplines to work on scientific problems too complex for a single researcher to solve. The CEM performs integrated research on emergent materials and phenomena in magneto electronics to create new paradigms in computing and information storage. Collaborators include universities, government laboratories and industry, both in the U.S. and abroad. In addition, the CEM strives to develop scientists and engineers well-prepared to contribute to and lead research, development and commercialization in materialsrelated fields.

Center for Lake Erie Area Research ohioseagrant.osu.edu

The Center for Lake Erie Area Research (CLEAR), home of the Ohio Sea Grant, studies issues related to water quality, fisheries and sustainable development along the Lake



Erie coastline. The center is housed at Stone Laboratory on Lake Erie's Gibraltar Island. Stone Laboratory is the oldest freshwater biological field station in the U.S. and the center of Ohio State's teaching and research on Lake Erie. Stone Lab offers lab facilities, field work equipment, research vessels and housing for researchers studying Lake Erie. Together, the Ohio Sea Grant and Stone Lab provide the science behind informed policy and management decisions on science education, the Lake Erie ecosystem and its economic impact on the region.

Center for RNA Biology

<u>rna.osu.edu</u>

RNA research is an interdisciplinary endeavor that spans biology, medicine, agriculture, mathematics, physics and chemistry. Ohio State's Center for RNA Biology houses the single largest group of RNA experts in the country–more than 200 faculty, staff, students and postdocs. The center's mission is to advance life sciences research and education at the university by building on existing strengths in RNA biology, developing synergies through interdisciplinary initiatives and outreach, recruiting and retaining outstanding faculty and attracting the best graduate and postdoctoral researchers.

Global Water Institute

globalwater.osu.edu

The Global Water Institute (GWI) provides sustainable systems solutions for communities facing water resource challenges. Sustainable systems solutions are economically viable, environmentally sound, socially acceptable, userdriven and technically maintainable. The GWI integrates research, education and extension to tackle specific water resource issues with global applications. Many of the GWI initiatives are directed at the nexus of water, energy, food and health. Focus areas include improving sustainable water, sanitation and hygiene access in developing countries; delivering new systems solutions for harmful algal blooms; and developing new approaches for resilient coastal communities.

Infectious Diseases Institute go.osu.edu/IDI

The Infectious Diseases Institute (IDI) harnesses Ohio State's history of excellence in infectious disease and microbiology research, education and outreach to address the compelling challenge of infectious disease to human, animal, plant and environmental health. Such a holistic approach builds upon multidisciplinary research networks that span 13 colleges, the Research Institute at Nationwide Children's Hospital and the Ohio Agricultural Research and Development Center (OARDC) in Wooster. The institute supports and broadens existing strengths of thematic programs, seeks new opportunities and facilitates synergistic interactions among

researchers by granting seed funding, supporting team science proposals, recruiting faculty, promoting internal and external partnerships, offering educational and outreach programs and providing strategic leadership.

Institute for Materials Research imr.osu.edu

The Institute for Materials Research (IMR) is the gateway to Ohio State's materials-allied research enterprise. The IMR supports a community of multidisciplinary materials researchers, capabilities, focus groups and centers that eliminate traditional discipline-driven boundaries at the research level. IMR provides seed funding, infrastructure support and development, management of major research facilities, faculty recruitment, promotion of industry partnerships, educational and outreach programs and strategic leadership. Signature research areas include photovoltaics, magnetoelectronics, biomaterials and biosensors, computational materials and polymers.

Core Facilities

Campus Chemical Instrument Center ccic.ohio-state.edu

The Campus Chemical Instrument Center (CCIC) provides state-of-the-art research facilities to the Ohio State research community in the areas of nuclear magnetic resonance, mass spectrometry and proteomics. It serves as a statewide hub for researchers at all Ohio universities, offering outstanding data collection and processing capabilities.

Campus Microscopy and Imaging Facility <u>cmif.osu.edu</u>

The Campus Microscopy and Imaging Facility (CMIF) offers a full range of microscopy, including live-cell confocal, confocal, multiphoton, light, scanning electron and transmission electron microscopy. The CMIF serves university faculty, staff and students, as well as researchers outside the university, enabling acquisition of microscopic images required for publication in top-tier research journals.

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