



American Studies Program

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Dr. Louis Pitelka
CW CESU Office
Appalachian Laboratory, UMCES
301 Braddock Rd.
Frostburg, MD 21532

Dear Dr. Pitelka:

With the enclosed material, the College of William & Mary seeks to become a member of the Chesapeake Watershed Cooperative Ecosystem Study Unit. We have reviewed the general CESU descriptive materials and the CW CESU Cooperative and Joint Venture Agreement, and will abide by all of the responsibilities and expectations of partner institutions.

As the following pages make clear, the College brings strong credentials for conducting multi-disciplinary research and providing technical assistance for the enhancement and management of cultural and natural resources. We can make a unique contribution to the Chesapeake Watershed CESU that will complement and strengthen the network already in place.

I look forward to hearing from you.

Yours truly,

Richard Lowry
Acting Director
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The College of William & Mary application for CESU membership

1) Contact Person

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2) Relevant Programs

The College maintains nationally recognized programs in American Studies, History, Anthropology, Biology, and Marine Sciences. The College also hosts several centers appropriate to this partnership: the American Indian Resource Center, the Omohundro Institute of Early American History and Culture, the Center for Archaeological Research, the William and Mary Archaeological Conservation Center, the Center for Human Biology, the National Institute of American History and Democracy, the Center for Conservation Biology and the Virginia Institute for Marine Sciences. Many of these institutes, programs, and departments routinely collaborate in research and teaching; many of the faculty, and all of them in American Studies, are jointly appointed and cross-list courses between units. The result is a dynamic and innovative environment that is fundamentally interdisciplinary and adaptive to new challenges. Dr. Richard Lowry, American Studies Program, is the Chair and Technical Representative for the CESU member application with Dr. Heather Huyck, National Park Service, working with him.

The College of William & Mary in Williamsburg, Virginia, chartered in 1693, is a state-assisted liberal arts university. With 7,500 students of whom approximately 5,500 are undergraduates, the College has Schools of Arts and Sciences, Business Administration, Education, Law, and Marine Science.*¹ The College has 569 faculty in arts and sciences, marine science, education, business administration and law; 93 percent of the faculty teaching undergraduate courses have attained terminal degrees. With a \$366 million endowment, the 2002-2003 annual budget is \$172 million.

William & Mary has particularly strong expertise in cultural resources including American Studies, American History (Nationally ranked #2 in Colonial History), Cultural Anthropology (including American Indian Research Center) and Women's Studies. It also has strong expertise in natural resources, specifically the Virginia Institute for Marine Sciences (VIMS) and the Environmental Science and Policy Program. The concept of becoming a member of the CW CESU has strong support from the incoming College Provost, Dr. Geoffrey Feiss, as well as from the American Studies Program and the History Department.

¹ Relevant programs at the College of William & Mary include American Studies+#, Anthropology+#, Applied Science+#, , Biochemistry (minor only), Biological Psychology*, Biology+, Black Studies*, Business Administration+^, Chemistry, Economics, Education (certification)+#, English, Environmental Science/Studies*, Geology, Government, History+#, International Studies, Law^, Linguistics*, Marine Science +#, Public Policy+, Sociology, Women's Studies* . Programs grant the following degrees: *Interdisciplinary Studies Degree, +Master's Degree Program, #Doctoral Degree Program and ^Professional Degree Program.

The National Park Service and College of William & Mary currently have a five year cooperative agreement which entails having a NPS employee located on the campus, teaching both College students and NPS employees and working on various joint projects, including developing the Early American Sites Network of Contact/Colonial sites and developing a distance learning course for NPS employees in Cultural Resource preservation and interpretation. The NPS has two other Cooperative Agreements with the College, one in natural resources and one in cultural resources (primarily archeology).

The College of William & Mary partners closely with Colonial Williamsburg Foundation and hosts the Omohundro Institute for Early American History and Culture. The college sponsors the National Institute of American History and Democracy which provides various programs. Finally, the College of William & Mary is involved with a 3 year Teaching American History Grant with the Williamsburg James City County Schools and the National Park Service which includes running graduate level institutes for grant participants (both teachers and NPS employees).

3) Key personnel

College-Wide

Dr. Geoff Feiss, Provost, College of William & Mary; Geology
Dr. David H. Finifter, Dean, Research and Graduate Studies Arts and Sciences; Public Policy
Dr. Hans C. Von Baeyer, Director, Graduate Center, Arts and Sciences; Physics
Courtney Carpenter, Associate Provost of Instructional Technology
Gene Roche, Director of Academic Information Services, Clinical Associate Professor in School Educational Technology, School of Education

Arts and Sciences

Barbara Watkinson, Acting Dean, Faculty of Arts and Sciences

American Studies (BA, MA, PhD; 57 graduate students)

Dr. Richard Lowry, Acting Director & Technical representative for William & Mary; American cultural history; joint appointment in English and Black Studies
Dr. Kim Phillips, African American Studies; joint appointment in History and Black Studies
Dr. Chandos Brown, American intellectual and cultural history; joint appointment in History
Ms. Barbara Carson, American material culture
Dr. Grey Gundaker, African American Material Culture, education; joint appointment in Anthropology and Black Studies
Dr. Heather Huyck, cultural resource management, colonial history (also NPS).

Anthropology (BA, MA, PhD; 27 graduate students)

Dr. Tomoko Hamada, Chair, cultural anthropology
Dr. Michael Blakey, African American Studies; joint appointment in American Studies
Dr. Kathleen Bragdon, ethnohistory, American Indians
Dr. Marley Brown, Archeology, Colonial Williamsburg
Ms. Ywone Edwards-Ingram, African American Studies
Dr. Audrey Horning, 17th century archaeology
Dr. Danielle Moretti-Langholtz, Virginia Indians
Dr. Martin Gallivan, Archaeology, political economy
Dr. Norm Barka, Historical Archaeology

Institute for Historical Biology

Michael Blakey, Director

Center for Archaeological Research

Mr. Denis Blanton, Director, staff (10 persons)

Biology (BA, MA; 29 graduate students)

Dr. John Swaddle, evolutionary behavioral ecology of birds

Keck Environmental Laboratory

Dr. Randy Chambers, Director, environmental science, biogeochemistry

Center for Conservation Biology

Dr. Brian Watts Director, avian community ecology

Dr. Mitchell Byrd, Director Emeritus, population ecology of raptors

Chemistry (BA, MA, MSc; 5 graduate students)

Dr. Gary W. Rice: trace metals and halogenated organic compounds in polluted environments

Geology (BA)

Dr. Heather MacDonald, Chair, Carbonate sedimentology, stratigraphy

Dr. Greg Hancock, environmental geology

Economics (BA)

Dr. Robert Hicks, environmental economics

Dr. Sarah Stafford, environmental economics and policy

Environmental Science and Policy Studies (BA)

Dr. J. Timmons Roberts, Director; joint appointed Sociology; environmental sociology

History (BA, MA, PhD; 54 graduate students)

Dr. James McCord, Chair/British

Dr. James Axtell, Colonial, American Indians, ethnohistory

Dr. Nwando Achebe, African

Dr. Kris Lane, Spanish Colonial

Dr. Ron Schechter, French Colonial

Dr. James Whittenburg, American Colonial; Material Culture

Dr. Cary Carson, Colonial Williamsburg; NPS Jamestown Archeological Assessment.

Dr. Cindy Hahamovitch, American labor; 19th Century Social

Dr. Scott Nelson, American social

Dr. Carol Sheriff, 19th Century American

Dr. Mel Ely, African America

National Institute of American History and Democracy

Dr. James Whittenburg, Director. Mr. Rhys Isaac, Colonial, Dr. Carl Lounsbury, American Architecture

Omohundro Institute for Early American History and Culture

Dr. Ronald Hoffman, Director, Colonial

Dr. Chris Grasso, editor, *William & Mary Quarterly*, early national

Women's Studies (BA)

Dr. Leisa Meyer, American history; joint appointed American Studies and History

School of Business Administration (BBA, MBA; 149 graduate students)

Dr. Dan Rahtz, Ecotourism

Marshall-Wythe School of Law (JD, LL.M; 550 students)

Dr. Lynda Butler, environmental law and policy

Dr. Ronald Rosenberg, land use law environmental law

Dr. Linda Malone, environmental law

Dr. Charles Koch, administrative law, energy law, regulated industries.

Virginia Institute of Marine Science (VIMS) (MS, PhD; 120 graduate students)

Dr. Iris C. Anderson, shallow ecosystem cycling

Dr. Herbert M. Austin, fish recruitment processes

Dr. James E. Bauer, dissolved organic matter cycling in marine environments.

Dr. Eugene M. Bureson, marine diseases.

Dr. Rick Berquist, Res. Assoc. of Geology: geologic mapping

Dr. Deborah A. Bronk, nutrient dynamics in surface waters of coastal and estuarine systems

Dr. Rebecca M. Duckhut, biogeochemical processes of contaminants; organic pollutants

Dr. Robert Hale, anthropogenic compounds in the aquatic environment.

Dr. Scott Hardaway., shoreline change stabilization and management

Dr. Kirk J. Havens, Assistant Director, Center for Coastal Resources Management

Dr. Carlton H. Hershner, Jr. Director, Center for Coastal Resources Management

Dr. Howard Kator, ecology of autochthonous bacteria and virus in estuarine waters

Dr. James E. Kirkley, marine resource economics

Dr. Mark W. Luckenbach, recruitment dynamics; oyster reef restoration and habitat evaluation

Dr. Roger L. Mann, Acting Director for Research and Advisory Services, Physiological ecology

Dr. John D. Milliman, river and ocean sediment, high-resolution seismic profiling

Dr. Michael C. Newman, ecotoxicology; quantitative methods for ecological risk assessment

Dr. Robert J. Orth, biology and ecology of seagrasses; seagrass restoration and conservation

Dr. James E. Perry, III, vascular plants; digital multispectral video systems

Dr. William G. Reay, Director, Chesapeake Bay National Estuarine Research Reserve, hydrology

Dr. Linda C. Schaffner, benthic ecological processes of estuarine and coastal environments

Dr. Dennis L. Taylor, coastal and ocean resource management and policy

Dr. Michael A. Unger, chemical and physical behavior of aquatic pollutants

Dr. Lyle Varnell, Asst. Director for Advisory Services, habitat and fisheries management

Dr. Harry V. Wang, coastal and estuarine physical processes and transport properties

Dr. Richard L. Wetzel, ecosystem cycling; ecosystem simulation modelling and systems analysis

4) Facilities

The Swem Library has over a million volumes, as well as manuscript and archival collections and electronic databases. (<http://www.swem.wm.edu/>.)

The Millennium Classroom provides facilities for fully interactive digital videoconferencing.

The Keck Lab provides instructional and research support for environmental programs on the William and Mary campus and at the Virginia Institute of Marine Science in a 5,500-square-foot facility located by Lake Matoaka within the Chesapeake Bay watershed. The lab houses a 24-seat teaching lab, a wet lab, a mud room for processing field-collected samples, a dry lab for analytical work, a walk-in cold room, a GIS computer room a conference room with videoconferencing capabilities, and administrative offices. (<http://www.wm.edu/environment/KeckLab.html>)

William and Mary Center for Archaeological Research provides cultural resource research services for public and private agencies and organizations, including cultural resource management studies, archaeological testing and excavation, material culture analysis, historical research and interpretation, and GIS applications. The Center's facilities include offices, laboratories, and collection storage with access to specialized computer and materials testing equipment.

William and Mary Archaeological Conservation Center is staffed and equipped to perform complete conservation of organic and inorganic materials, retreatment of previously conserved items, and consultation on the proper storage and handling of conserved artifacts. The Conservation Center contains equipment for electrolytic reduction, airbrasive units, vacuum impregnation chambers, and complete radiographic and photographic capabilities.

American Indian Resource Center: With access to archives, museum collections, computer and technology resources, the AIRC facilitates collaborative work involving the Virginia Indian community and scholars. One such project is the Virginia Indian Oral History Project.

The Omohundro Institute of Early American History and Culture researches the colonial, Revolutionary, and early national periods of American history as well as the related histories of the British Isles, Europe, West Africa, and the Caribbean. The Institute oversees a distinguished book publication program, sponsors in-residence fellowships, hosts colloquia and conferences, and publishes the preeminent journal for early America, the *William & Mary Quarterly*.

VIMS: All departments, centers, and field laboratories maintain state-of-the-art equipment and facilities for conducting high quality field and laboratory research and education, including advanced Geographic Information Systems (GIS) laboratories, high speed computer network and internet links, conference facilities, small vessels operations, and distance learning resources.

5) Relevant experience in research, technical assistance and education

Arts and Sciences The Center for Archaeological Research performs cultural resource management studies for federal, state, and local governmental agencies, environmental and engineering firms, and planners and developers, providing assistance in identifying cultural resources, determining their nature and extent, evaluating their eligibility for the National Register of Historic Places, and data recovery efforts. This assistance includes archaeological surveys and excavations, historical research, preparation of cultural resource planning overviews, and preparation of cultural resource reports for inclusion in Environmental Impact Statements (EIS). Since established in 1988, the Archaeological Conservation Center has received over \$13.2 million in contract awards for research projects. These include: Virginia Department of Transportation, Virginia Power Company, Dewberry & Davis, National Science Foundation, National Park Service, The Nature Conservancy, U.S Army Corps of Engineers, Naval Facilities Engineering Command, Virginia Institute of Marine Sciences, Virginia Natural Gas and the

Virginia Department of Historic Resources. The American Indian Resources Center oversees such current projects as developing an extensive digital archives focusing on Virginia Indians and the Virginia Indian Oral History Project. Graduate education in American Studies, Anthropology, History, Biology, Geology, Women's Studies available at MA/PhD.

VIMS The College of William and Mary's watershed-related research, monitoring, and technical assistance scales the entire 64,000 square mile Chesapeake Bay watershed to its component intermittent streams and small coastal bays. VIMS monitoring programs for aquatic living resources and estuarine habitats support research and management efforts. In general, approximately 60% of VIMS' externally funded projects are Virginia/Bay watershed related and management oriented. Ongoing and recently completed projects address habitat restoration targeting, watershed preservation, protected habitat networks, shoreline situations, essential fish habitat, models to evaluate loadings in small watersheds, ecological risk assessments associated with restoration strategies, development of land management programs to support coastal management goals; and monitoring programs for tributary nutrient reduction strategies, develop ecological and economic indicators for integrated assessments of aquatic ecosystems for the Chesapeake Bay watershed, and federal lands shoreline management plans (Fort Eustis, Little Creek Naval Amphibious Base and the National Park Service's Jamestown Island). Technical assistance is provided through grants and contracts, and an on-demand service to local, state and federal agencies charged with regulatory oversight of Virginia's natural resources. For example, environmental assessments are provided for all projects which require Section 404 permits of the federal Clean Water Act. VIMS also works closely with the Chesapeake Bay Program and the Virginia General Assembly.

Graduate education opportunities consistent with membership in the CESU Network objectives exist through all five Departments of VIMS, The College of William and Mary's Environmental Science & Policy Cluster and the Keck Environmental Center. Outreach education programs are maintained through the Center for Coastal Resources Management, the Center for Conservation Biology and the National Estuarine Research Reserve System which is administered in Virginia by VIMS.

6) Current formal and informal relationships with Federal land management, environmental and research agencies.

The College has three existing Cooperative Agreements with the National Park Service, two in cultural resources and one in natural resources. W&M/VIMS currently holds Memorandums of Understanding with the US Geological Survey, the National Oceanic and Atmospheric Administration, and the National Marine Fisheries Service for the Cooperative Marine Education and Research program. Agreements exist between VIMS and NASA, the Department of the Army, the National Park Service, and the US Army Corps of Engineers. VIMS also has working relationships with the EPA, the National Marine Fisheries Service, Smithsonian Institution, the US Fish and Wildlife Service and Department of Defense.

7) Services to be provided to the participating Federal agency(s) and Federal employee(s)

William and Mary will provide research, technical assistance and educational services as mutually beneficial and agreed-to by the CESU partners. W&M will furnish office and laboratory space, library access, and IT and clerical support at no charge for cooperating CESU agencies and employees. W&M will also provide spaces for qualified NPS personnel in appropriate graduate courses, in some cases with waived tuition. The College will also supply technical and pedagogical support for developing courses of mutual benefit.

8) Assessed Overhead Rate

W&M's Main Campus current negotiated F&A rate is 45% MTDC and VIMS' current rate is 47.78% MTDC. However, the institution has agreed to accept a reduced rate of 15% of total costs funded through membership in the CW CESU.

9) Administrative support

Awards made to members of the Chesapeake Bay Watershed CESU by external agencies will be managed either by the Main Campus Office of Grants and Research Administration or by VIMS' Office of Sponsored Programs (OSP). Both offices have handled awards from a wide variety of funding agencies including federal, state, private, and international entities and have participated in establishing and administering numerous inter-agency agreements and consortia arrangements including developing, awarding, and monitoring a number of subcontract and sub-recipient awards during the university's last fiscal year. Support for collaborative and multi-entity research programs is considered part of both offices' normal administrative function, and no supplemental costs are assessed for those activities.

10) Other commitments

Participation in CESU-relevant research will be a factor used in assigning graduate research assistantships and awarding post-doctoral fellowships, commensurate with the scope of the projects. Coordination of technical assistance from VIMS faculty will be provided by the Director for Research and Advisory Services as a VIMS contribution to the CW CESU.