



[Hampton Roads Research Partnership](#)

The Hampton Roads Research Partnership (HRRP) is a consortium of seven academic institutions, two federal research and technology laboratories, and a research institute in Hampton Roads, Virginia. It is funded by its members and the Economic Development Administration of the U.S. Department of Commerce, which supports the HRRP-University Center as part of its University Center Program.

The HRRP is an element of the [Hampton Roads Partnership](#). The focus of activity of the HRRP is the formation and operation of technology clusters. The purpose of these clusters is to stimulate interaction between local industry and the HRRP member organizations with the goal of furthering research and commercialization. The HRRP currently has three active clusters in the areas of Sensors, Modeling & Simulation, and BioScience. Participants are:



[Christopher Newport University](#)

Research Strengths

- ~High Speed Data Acquisition
- ~Integrated Circuit Design
- ~Digital Signal Processing
- ~Beowulf Supercomputers
- ~Environmental Monitoring and Restoration
- ~Science Education Delivery via WWW
- ~Laser-Based Measurements
- ~Modeling and Simulation
- ~Solid State Sensors
- ~Remote Sensing/Atmospheric Modeling

Major Facilities or Equipment Resources

- ~Laser and Photonics Lab
- ~Solid State Sensors Lab
- ~Beowulf Supercomputer



[The College of William and Mary](#)

Graduate and professional programs in business, marine science, law, education, applied science, biology, physics, chemistry, history, anthropology and American Studies.

Research Strengths

- ~Environmental and Marine Science (aquaculture, genetics, acoustics, robotics)
- ~Biotechnology and Plasma and laser processing (surface processing, surface characterization, nanotechnology)
- ~Computational modeling and simulation

~Technology assessment and commercialization studies (particularly through the Business School field studies program)

~Public policy (health-related policy research and SBIR program assessments)

Major Facilities or Equipment Resources

~Virginia Institute of Marine Science

~Computational Science Parallel Processing Center

~NMR spectrometer in Chemistry

~CATI (Public Policy) Survey Laboratory

~Lake Matoaka Environmental Field Laboratory, Microbiology equipment in Biology Dept. and at VIMS.



[Eastern Virginia Medical School](#)

Research Strengths

~Geriatrics

~Diabetes

~Contraceptive/Infertility

~Prostate Cancer

~Pediatrics

~Basic Sciences - Bio-chemistry, Microbiology/Immunology, Pathology, Physiology, Pharmacology

Major Facilities or Equipment Resources

~EVMS has significant equipment resources which may be unique to Medical and BioMedical Research.



[Hampton University](#)

School of Science Research Strengths

~State of the Art Optical Spectroscopy Labs

~Polymer Chemistry and Organic Materials

~Fiber Optic Sensor Development

~Simulation, Modeling and Numerical Analysis

~Genetic Engineering/Microbiology/Molecular Biology

~Atmospheric Science and Remote Sensing

Major Facilities or Equipment Resources

~Origins 2000 Computer

~Center for Atmospheric Sciences

~Research Center for Optical Physics

~Nuclear High Energy Physics Research Center

~Electron Microscopy Facility

School of Engineering & Technology Research Strengths

~Water Waste Treatment System Development

- ~High Temperature Gas Clean up and Catalysis Research
- ~Environmental Remediation, Fluid particle Systems for Pharmaceutical Applications
- ~Artificial Intelligence and Neural Nets
- ~Modeling and Simulation Research
- ~Explosive Detection Systems Development

Major Facilities or Equipment Resources

- ~Hewlett Packard Integrated Electronics Laboratories for Modeling and Simulation
- ~Faculty Research Laboratories that support activities in water treatment, high temperature gas clean up and catalysis
- ~A multi-function AT Coach Radar Simulation Laboratory
- ~A control tower laboratory for training Aviation



[Norfolk State University](http://www.norfolk.edu)

Research Strengths

- ~Center for Materials Research
- ~Center for Photonic Materials Research
- ~Center for Bringing Education and Science Together
- ~Center for Business and Entrepreneurship
- ~Faculty Researchers in the five schools
- ~Dozeretz National Institute for Minorities in Applied Sciences (DNIMAS) an undergraduate honors program for science and technology pursuits

Major Facilities or Equipment Resources

- ~Seven well-equipped laboratories in the Center for Materials Research



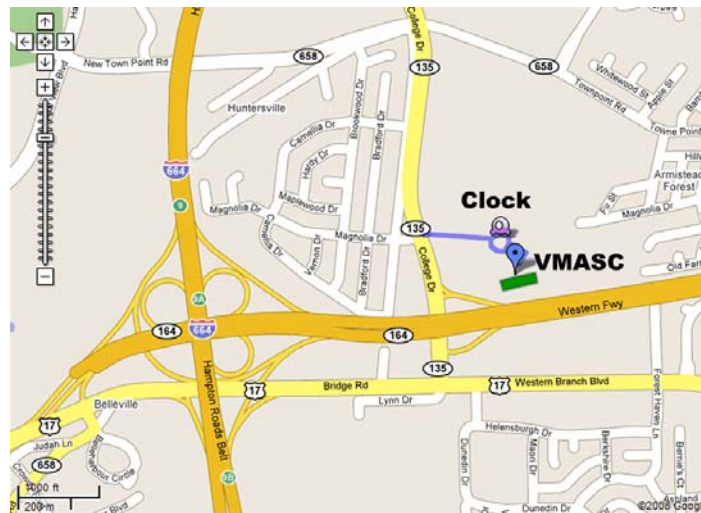
[Old Dominion University](http://www.odu.edu)

Research Strengths

- ~Engineering and related sciences including: aerospace, civil, electrical and computer, mechanical, engineering technology and management and physics.
- ~Oceanography and associated basic sciences including biology, chemistry and biochemistry, ocean, earth and atmospheric sciences, geography, and biophysics
- ~Environmental and ecological sciences including participants from above mentioned (#2) groups.
- ~Social sciences including organizational and industrial psychology, human factors and social science measurement systems
- ~The maritime industry - including participants from business, engineering, environmental, and social sciences
- ~Computational and applied sciences with emphasis on modeling and simulation including participants from Colleges of Science and Engineering.

Major Facilities or Equipment Resources

- ~Career Management Center
- ~The "Cave" Virtual Reality Facility
- ~Center for Advanced Ship Repair and Maintenance
- ~Center for Biotechnology
- ~Center for Coastal and Physical Oceanography (and associated vessels)
- ~Center for Global Business and Executive Education
- ~Center for Learning Technologies
- ~Entrepreneurial Center
- ~International Maritime, Ports & Logistics Management Institute
- ~Langley Full Scale Wind Tunnel
- ~Physical Electronics Research Institute
- ~Social Science Research Center
- ~Sun Microsystems Super Computer
- ~Technology Applications Center
- ~Teletechnet
- ~Virginia Commercial Space Flight Authority
- ~Virginia Modeling, Analysis, and Simulation Center



[NASA](#)
[Langley Research Center](#)

Research Strengths

- ~Material and Structures
- ~Aerodynamics, Aerothermodynamics & Acoustics
- ~Airborne Systems
- ~Atmospheric Sciences
- ~System, Concepts, & Analysis
- ~System Engineering

Major Facilities or Equipment Resources

- ~Combined Loads Tests (COLTS) facility
- ~National Transonic Wind Tunnel (NTF)
- ~757 Research Platform



[Thomas Jefferson
National Accelerator
Facility](#)

Research Strengths

- ~Nuclear and x-ray particle detection
- ~Laser based science and manufacturing
- ~Superconducting technology
- ~High performance computing
- ~High power of technology
- ~Data acquisition system

Major Facilities or Equipment Resources

- ~Free Electron Laser User Facility
- ~Test Lab (cryogenic testing, chemical processing)
- ~Applied Research Center



[Virginia Wesleyan College](#)

Research Strengths

- ~Enhancing civic education, including preparing K-12 for participation in e-government
- ~Integration of liberal arts and career preparation, with emphasis on technological preparedness for many careers
- ~Ethical analysis involving technological innovations
- ~Environmental sciences and biology

Major Facilities or Equipment Resources

- ~State-of-the-art instructional technology for the classroom. New teaching spaces are equipped with computers, video presenters and interfacing capabilities
- ~Through partnership with the YMCA of South Hampton Roads, VWC has access to 151 acres with 1200 feet of shoreline on the Chesapeake Bay at Camp Silver Beach on the Eastern Shore of Virginia. This resource provides a natural laboratory for environmental science and recreation/leisure studies (nationally ranked program at VWC) applications.
- ~VWC also has 124 acres of undeveloped land containing forests in different stages of succession, located on campus. This resource currently serves environmental sciences and biology classes and also provides a natural laboratory for habitat restoration and many other applications.



[National Institute of
Aerospace](#)

NIA was formed by a consortium of leading research universities. Members include: Georgia Tech, Hampton University, North Carolina A&T State University, North Carolina State University, the University of Maryland, the University of Virginia, Virginia Tech, Old Dominion University, the College of William & Mary and the AIAA Foundation.

NIA serves as a strategic partner with NASA Langley Research Center and the aerospace community to enable research creativity and expand technology development opportunities. The Institute integrates research and graduate education while creating new government/academia/industry partnerships to solve tomorrow's problems today.