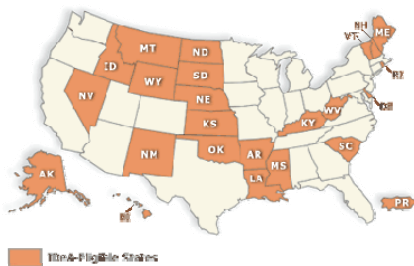


NCCR in New Hampshire



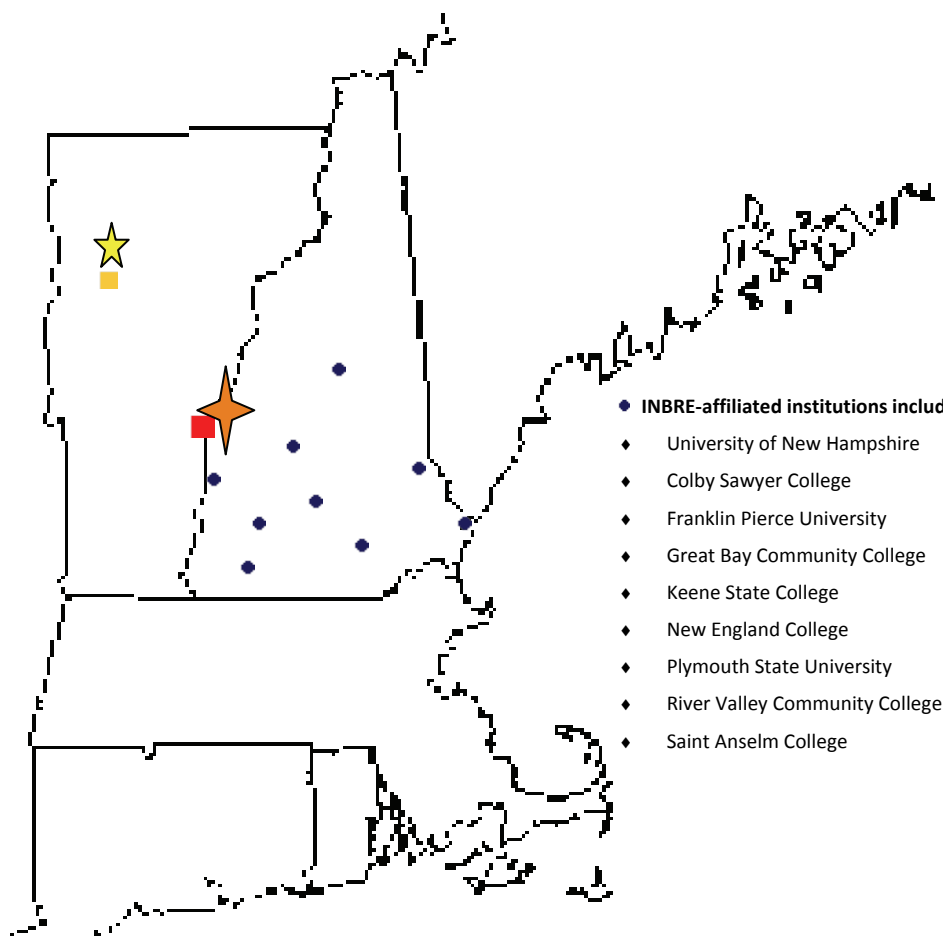
■ NIH-Eligible States

- ★ University of Vermont
 - VCI COBRE
 - Lung COBRE
 - Neuroscience COBRE

■ Vermont EPSCoR

- ★ Dartmouth Medical School and College
 - NH-INBRE
 - 'Immunology' COBRE
 - 'Lung Biology' COBRE

■ Montshire Museum of Science, VT
a SEPA Science Education Partnership Award



- ◆ INBRE-affiliated institutions include:
 - ◆ University of New Hampshire
 - ◆ Colby Sawyer College
 - ◆ Franklin Pierce University
 - ◆ Great Bay Community College
 - ◆ Keene State College
 - ◆ New England College
 - ◆ Plymouth State University
 - ◆ River Valley Community College
 - ◆ Saint Anselm College

NH-INBRE Highlights

Integrative Approaches to Biomedical Research "NH-INBRE" 2010-current

- Although the NH-INBRE began only in 2010, Fourteen Investigators at 8 New Hampshire colleges, supported by 22 Dartmouth and UNH mentors, have started working on their research projects.
- 18 Dartmouth faculty and staff (in addition to the Dartmouth mentors) are involved in project management, planning, implementation, and evaluation. That is in addition to the University of New Hampshire and 8 other colleges that are using NH-INBRE funding to employ research training coordinators and administrative support services.
- 62 New Hampshire students are working at the 10 sites in support of these NH-INBRE projects as well as other research and independent study projects in biomedical and behavioral science research.
- This summer the NH-INBRE will have 14 students participating in nursing, biomedical, and bioinformatics research. The majority of these students will be New Hampshire residents who are attending New Hampshire 2 and 4 year colleges during the academic year.
- In total, approximately 150 people will be working on NH-INBRE in Year 1.

NH-COBRE Highlights

Center for Molecular, Cellular, and Translational Immunology 'Immunology' COBRE 2001-current

- Total funding of over \$25.3 million dollars, including 2 ARRA supplements to date from the COBRE mechanism.
- Junior faculty (project leaders and pilot awardees) have gone on to achieve over \$10 million additional dollars in extramural, peer-reviewed funding as new principal investigators.
- COBRE-CIR faculty have attained a total of over \$17.5 million additional dollars resulting from COBRE
- Publications of COBRE-CIR faculty have increased by 24% in the most recent award phase; Over 500 articles published in peer-reviewed journals
- Supports four research Cores:
 - Education, Mentoring, and Development
 - DartLab Shared Resource (Immune Monitoring and Flow Cytometry)
 - Transgenic and Genetic Construct Shared Resource
 - DartMouse™ Speed Congenic Facility

Cellular and Molecular Mechanisms of Lung Disease

'Lung Biology' COBRE 2003-current

- Total funding of over \$23.6 million dollars, including one ARRA supplement. to date/committed from the COBRE mechanism.
- 60 total Investigators
- All junior faculty have at least one other NIH grant in addition to COBRE funding
- Supports three Research Cores:
 - Cell Biology and Drug Discovery,
 - Translational research
 - Advanced Imaging

NCCR in New Hampshire

COBRE/INBRE FACULTY SEMINAR/MEETING INTERACTIONS (FUNDED BY COBRES)

There is a framework of weekly meetings and seminars at Dartmouth Medical School to bring together COBRE and INBRE faculty. The seminars include weekly Microbiology/Immunology meetings on Mondays, Immunology and Lung Biology meetings on Wednesdays, and Microbiology/Immunology meetings on Thursdays.

LAB SAFETY TRAINING FOR COBRE AND INBRE UNDERGRADUATE STUDENTS (FUNDED BY NH-INBRE)

The NH-INBRE program has partnered with the Dartmouth College Environmental Health and Safety program to develop web-based lab safety training course to be taken by all students participating in COBRE/INBRE lab research. This safety training program will be available starting in Summer 2011 and will be offered for the duration of the NH-INBRE



NH-INBRE SUMMER UNDERGRADUATE RESEARCH FELLOWSHIP (FUNDED BY NH-INBRE)

Dartmouth College's Summer Undergraduate Research Fellowship aims to place undergraduate students in COBRE/INBRE funded labs. The SURF program is expected to host 9 undergraduate students this summer. Of those students, 7 will be working in COBRE or combination INBRE/COBRE funded labs (final decisions expected March 2011). Those faculty are; Drs. Brent Berwin, Scott Gerber, Karl Griswold, Jon Kull, Jason Moore, Yoli Sanchez, and George O'Toole.

COBRE AND INBRE STAFF COLLABORATIONS (ORGANIZED BY COBRES)

The COBRE/INBRE Staff are meeting / communicating weekly to partner on project work. We are currently summarizing the research funding and activities occurring across the

NORTH EAST CYBERINFRASTRUCTURE CONSORTIUM (FUNDED BY NH-INBRE and COBRES)

Dr. Jason Moore is a NH-INBRE / COBRE funded researcher that is using ARRA funds to build a high-speed fiber network connecting COBRE and NH-INBRE partner colleges in the State of New Hampshire. The high-speed network will greatly facilitate the interoperability of the state's computing grid. The network promises to greatly improve the abilities of COBRE and NH-INBRE schools to share large datasets and conduct high-speed computations amongst the different partners.

North East Cyberinfrastructure Consortium



THE UNIVERSITY
OF VERMONT
COLLEGE OF MEDICINE



UNIVERSITY of NEW HAMPSHIRE
Graduate School

JOINT NH-VT COBRE and IDeA INTERACTIONS

Four interacting COBRE-Quadrille—two Immunology COBREs and two Lung Biology COBREs (in each case, 1 from New Hampshire and 1 from Vermont) meet regularly with respective COBRE Principal Investigators: Drs. William R. Green and Bruce A. Stanton (DMS), Drs. Charles Irvin, and Ralph Budd (UVM), as well as COBRE Core Directors and other participating faculty. The goals are to define collaborative translational research projects and joint funding opportunities; integrate and regionalize the research cores, whenever possible; and promote the professional and scientific development of students, postdoctoral fellows, and faculty members by comprehensive mentoring.

COBRE/INBRE FACULTY MEETINGS

The COBRE/INBRE Principal Investigators (Drs. William Green, Bruce Stanton, Ronald Taylor) regularly meet to communicate project initiatives and sponsored events. The PIs have also started working with those jointly funded COBRE/INBRE researchers to explore further opportunities for research collaborations and to improve the sharing of institutional facilities.

VERMONT TO NEW HAMPSHIRE COLLABORATIONS (FUNDED BY COBRES)

The Dartmouth Immunology COBRE transgenic core facility provided direction for the establishment of the University of Vermont Immunology COBRE transgenic facility in a manner that has evolved into a highly efficient cost-effective collaboration between the two COBRE core facilities that is unique within the country. The Dartmouth and University of Vermont COBREs have established an agreement for sharing a joint proteomics core.

INBRE / COBRE CORE FACILITY FUNDING (FUNDED BY NH-INBRE and COBRES)

The NH-INBRE and COBRE projects will employ multiple research cores at Dartmouth and the University of New Hampshire. These projects are all coordinated by one staff director that receives COBRE/INBRE funding and is aware of the need to collaborate whenever possible. The second area of facilities collaboration is that a NH-INBRE funded community college will be establishing a protein purification facility that will support the Lung Biology Core Facility.

KEENE STATE COLLEGE RESEARCH (FUNDED BY NH-INBRE and COBRES)

Dr. Nora Travis and her COBRE funded lab will be using an NH-INBRE funded senior undergraduate student to conduct an independent project evaluating winter-time air quality in the City of Keene, NH. This is an example of a COBRE lab being able to support INBRE eligible research.



CAPACITY BUILDING TRAINING AND WORKSHOPS (PARTIAL NH-INBRE SUPPORT)

Saint Anselm and Keene State College sponsored 4 workshops on grant writing (February 9-11, 2011) which was open to all NH-INBRE and COBRE funded researchers. Saint Anselm College is creating a Spring 2011 workshop on developing an undergraduate research curriculum which will also be offered to COBRE/INBRE funded researchers.