

## **McCardell Bicentennial Hall**

### *New Construction*

#### ***A Multidisciplinary Science Facility***

Four stone wings radiate from a five-story “Great Hall” atrium at the heart of this six-story building. Used for study, meeting, and informal learning, the Great Hall features dramatic exterior views to the north and west. The connection between the building and its site is reinforced through the use of slate flooring, red oak wall panels, and abundant natural light. The exterior is clad with both dressed and rough-cut Adair and Indiana limestone, interspersed with expanses of glass curtain wall.

The facility houses seven academic departments and two programs. Academic program spaces include: 5 seminar rooms, 3 classrooms, 4 lecture rooms, 3 computer classrooms, 8 generic laboratories, 22 specific-function teaching laboratories, 48 student/faculty research spaces, and numerous support and instrument labs. Major facilities include: a science library, observatory, greenhouse, animal facility, and workshops for instrument fabrication/repair, metalworking, welding and woodworking.

#### ***Focus on Sustainability***

The payback from environmental enhancements to the building was considered over a 10-15 year period, rather than the more typical 5 year period. This allowed for more unique design strategies. The building was intended, through flexible and modular design, to be just as useful to the college's future needs as well as its current needs. This means less future construction, less future waste, and less future environmental impact. In addition to utilizing state-of-the-art technologies, the design is intended to minimize maintenance and repair costs.

“Green” building features include natural and recycled building materials; and energy saving strategies such as a heat-recovery ventilation system, extensive natural lighting, motion sensitive lighting controls, high efficiency lighting, and triple-glazed windows. 125,000 Board feet of maple, cherry, oak, birch, and beech millwork was harvested and FSC (Forest Stewardship Council) certified from Vermont forests.

#### ***Coveted Award***

"Lab of the Year 2000" by Cahner's R&D Magazine is probably the most coveted facility honor in the field of science and engineering. For the first time in 2000, the award was divided into "new" and "renovated" categories due to the large number of entries; McCardell Bicentennial Hall being the winner of the new facility competition. This award "recognizes the best new and renovated laboratories that combine all aspects of the building into a superior working environment. A new and renovated laboratory should have an appropriate site, an appealing architecture, and a functional arrangement that encourages innovation and communication between its scientists, engineers, technicians, and staff members. In addition, the facility should provide for the efficient use of energy, the safety of personnel and experiments, convenient ingress and egress for both humans (including handicapped) and materials, and for humane treatment of animal test subjects."



*Photo courtesy of Payette Associates.*

<b>Completed:</b>	September 1999
<b>Total Square Footage:</b>	225,000
<b>Project Manager:</b>	Tom McGinn
<b>Project Cost:</b>	\$48,000,000
<b>Architect:</b>	Payette Associates, Boston, MA
<b>Construction Manager:</b>	Barr and Barr, Inc., Framingham, MA
<b>Awards:</b>	-Cahners <i>R&amp;D Magazine</i> , Lab of the Year -1999 Association of General Contractors of Vermont, Best Builders Award awarded to Barr & Barr, Inc.

[McCardell Bicentennial Hall fact sheet.](#)

[For more info on the sustainable design features of this and other Middlebury projects.](#)