Angelo Abbate  
Professor of Landscape Architecture

Matthew Arion  
Computing Consultant; Information Technology Laboratory

Debsey Avery  
Administrative Assistant, Dean's Office

Kermit Bailey  
Associate Professor of Graphic Design

Dr. Donald A. Barnes  
Professor Emeritus of Architecture

Peter Batchelor  
Professor of Architecture

Bill Bayley  
Director, Information Technology Laboratory

George Birenline  
Professor Emeritus of Art + Design

Georgia Bizios  
Professor of Architecture

Gail Peter Borden  
Assistant Professor of Architecture

Susan Brandeis  
Professor of Art + Design

Tony Brock  
Assistant Professor of Graphic Design

Robert P. Burns  
Professor of Architecture; Interim Director, School of Architecture

Pam Christie-Tabron  
Administrative Secretary, Graduate Studies

Laurie Churchman  
Assistant Professor of Graphic Design

Roger H. Clark  
Professor of Architecture

Arrenda V. Cooke  
Professor Emeritus of Industrial Design

Nilda Cosco  
Educational Specialist; Natural Learning Initiative

Chandra Cox  
Associate Professor of Art + Design; Chair, Art + Design Department

Lynn Crisp  
Library Assistant

Meredith Davis  
Professor of Graphic Design; Interim Chair, Graphic Design Department

Karen E. Devitt  
Head, Harry B. Lyon Design Library

Cone Max Diaz  
Associate Professor of Art + Design

Richard Duncan  
Interim Director, Center for Universal Design

Cheryl Eatmon  
Administrative Secretary, Industrial Design and Graphic Design

Patrick FitzGerald  
Associate Professor of Art + Design

Vincent M. Foote  
Professor of Industrial Design

Sally Haile  
Coordinator of Information Dissemination, Center for Universal Design

Jennifer Hall  
Administrative Secretary, Student Services

Frank Harmon  
Associate Professor of Architecture

Dottie Haynes  
Assistant Dean for Budget and Administration

Gloria Hinton  
Administrative Secretary, Art + Design and Landscape Architecture

Michael Holmes  
Research Associate, Laboratory Manager, Design Research and Service Laboratory

Percy Hooper  
Associate Professor of Industrial Design

Edward C. Irvine  
Visiting Assistant Professor of Graphic Design

Chris Jordan  
Director, Materials Laboratory

Charles Joyner  
Professor of Art + Design

Dennis Kempel  
Laboratory & Facilities Manager, Lezar Hall

Haig Khatchatoorian  
Professor of Industrial Design; Chair, Industrial Design Department

Rachel Kuhn  
Library Fellow

Bryan Laffitte  
Associate Professor of Industrial Design

Jack Lancaster  
Technician, Materials Laboratory

Catherine Lazorko  
Information Officer, Advancement

Glenn E. Lewis  
Professor of Industrial Design

Jean Marie Livaudais  
Director, Advancement

Austin Lowrey  
Professor Emeritus of Graphic Design

Fernando Magallanes  
Associate Professor of Landscape Architecture

Marvin J. Malecha  
Professor of Architecture, Dean

Joe McCoy  
Coordinator of Network & Hardware Services, Information Technology Laboratory

Clinton Miller  
Computing Consultant, Information Technology Laboratory

Robin C. Moore  
Professor of Landscape Architecture; Director, Natural Learning Initiative

Marva Motley  
Assistant Dean for Student Affairs

Mary E. Myers  
Assistant Professor of Landscape Architecture

Katherine Oury  
Design Specialist, Community Growth Strategy Initiative

Rex Pace  
Technical Assistance Coordinator, Center for Universal Design

Dr. Michael Pause  
Professor of Art + Design; Director, Design Fundamentals Program

Dr. J. Wayne Place  
Professor of Architecture, Director Graduate Programs

Vitaem Plume  
Assistant Professor, Art + Design

J. Patrick Rand  
Professor of Architecture

Dr. Cymbre Raub  
Associate Professor of Art + Design

Dr. Shishir Raval  
Associate Professor of Landscape Architecture

Dana Raymond  
Associate Professor of Art + Design

Wendy Redfield  
Assistant Professor of Architecture

Bob Reed  
Administrative Secretary, Architecture

Dr. John Philip Reuer  
Professor Emeritus of Architecture

Tonya Richardson  
Program Assistant, Research, Extension and Sponsored Programs

Arthur C. Rice  
Professor of Landscape Architecture

Dr. Fatih Rifki  
Associate Professor of Architecture; Director, Graduate Programs

Bobby Rock  
Graphic Designer, Center for Universal Design

Michael Rodrigues  
Budget Manager

Henry Sanoff  
Professor of Architecture

Martha Scotford  
Professor of Graphic Design

Rita Sears  
Administrative Secretary, Advancement

Achva B. Stein  
Professor of Landscape Architecture; Chair, Landscape Architecture Department

David Stein  
Urban Planner and Director, Community Growth Strategies Initiative

Dr. Robert E. Stipe  
Professor Emeritus of Landscape Architecture

Molly Story  
Coordinator of Sponsored Projects, Center for Universal Design

Duncan Stuart  
Professor Emeritus of Art + Design

Rosette Tavolacci  
Administrative Assistant, Center for Universal Design

Wayne Taylor  
Professor Emeritus of Art + Design

Dr. John O. Tector  
Associate Professor of Architecture; Associate Dean for Academic Affairs

Dr. Paul Tesar  
Professor of Architecture

James D. Tomlinson  
Director, Research, Extension and Sponsored Programs

Susan Toplikar  
Associate Professor of Art + Design

Scott Townsend  
Associate Professor of Graphic Design

Karen Tudor  
Registrar

Katie Walston  
Accounting Technician

Dr. Nancy White  
Landscape Ecologist; Community Growth Strategies Initiative

Richard R. Wilkinson  
Professor of Landscape Architecture

Jayne Yoder  
Administrative Secretary, Center for Universal Design

Leslie Young  
Coordinator of Sponsored Projects, Center for Universal Design
# CONTENTS

## DEAN'S MESSAGE

2 The practice of design meeting citizen needs

## OUR DESIGN COMMUNITY

5 Award Dinner
6 Design Guild Membership List
7 Product Fair
8 Going Up in Charlotte
8 Student Publication

## COLLEGE LIFE

28 Commencement Address
36 In Brief
   - Alumni
   - Faculty
   - Students
   - In Memoriam
   - College Notes
41 Lectures and Exhibitions

## OUR DONORS

42 Donor List

## FEATURES

10 Research, Extension and Sponsored Programs
12 Community Growth Strategies Initiative
16 Design Research and Service Laboratory
20 Natural Learning Initiative
24 The Center for Universal Design

---

**Cover Photo:** The Design Research and Service Laboratory developed a 3-D computer model concept design of a transit station for Centennial Campus at NC State University. Laboratory Director Jay Tomlinson and Ph.D. candidate Jianxin Hu created the design.

**Jean Marie Livaudais**  
ADVANCEMENT DIRECTOR

**Catherine Lazorko**  
EDITOR

**Barbara Wiedemann (MPD 1991)**  
DESIGNER

We welcome your submission of alumni news items in addition to your comments about this publication.

To receive college news electronically, send your email address to:

design@ncsu.edu

or address correspondence to:

Advancement Office  
NC State University  
College of Design, Campus Box 7701  
Raleigh, NC 27695-7701  
(919) 515-8320

---

*COLLEGE OF DESIGN NEWS*

Published twice a year with support from the Design Guild, an association of alumni and friends established to promote design education at the College of Design through private contributions and gifts.
The practice of design meeting citizen needs

There is no greater evidence of the commitment of the College of Design community to the well being of society than the diversity of work under way with research, sponsored programs and extension. The scope is impressive for the numbers of faculty and students involved and for the nature of the projects undertaken. Water quality management in the proximity of wetlands, transportation and growth management studies, urban infill studies, development planning, and advanced studies relating to space exploration only begin to indicate how the rich fabric of work under way in the college contributes to all of society.

In addition to the great variety of work the college has made a significant commitment to five major initiatives: Natural Learning, Campus Design, Universal Design, Community Growth Strategies and Design Education. The Natural Learning Initiative makes the connection between the quality of the landscape and its resource as a learning environment for children. The Campus Design Initiative encourages students and faculty to explore and conceptualize the physical environment for learning.
The Universal Design Initiative supports the important work of the Center for Universal Design in the assistance provided for people with disabilities. The Community Growth Strategies Initiative addresses the issues related to the rapid development of North Carolina communities. And a newly derived Design Education Initiative will foster a partnership with the College of Education for the introduction of design and creativity studies in K-12 education. This will be accomplished with special programs for teachers as well as aspiring teachers.

Lewis Mumford wrote in the 1950 School of Design Bulletin: “We believe in the modern movement in architecture because we conceive it, not as a breaking away from history and tradition, but as a deeper rooting of architecture in the soil of the region and the community, with a fuller utilization of the universal forces that bind humanity as a whole together. On such premises, new curriculum of the School of Design has been founded. On the technical side, we plan to raise to a higher level the traditional disciplines of the artist, the builder, the engineer, but equally essential to this process is the effort to make the young architect a good neighbor, a good citizen, a good man, alive to all his moral and social responsibilities.” He did not foresee the incredible diversity already an essential part of our college. He did understand the crucial connection between the relevancy of design studies to the issues before society. He understood that for a design education to be successful the student must be infused with the desire to do good for others.

Those who seek the divide between theory and application miss the very essence of theory. It has no meaning without action. It is therefore no coincidence that the connection between research, sponsored programs, extension and the Ph.D. program is vital, and even inseparable. Advanced theoretical work is as dependent on the environment of application as it is on the environment of reflection. A leading design school should, must, have an intimate relationship between thought and action. Between preparation and education is the balance of a design curriculum. If a school is to lead in the design disciplines it must seek a role between striving for the far off societal aspiration and meeting the needs of even the most deprived citizen.

The College of Design is a community whose accepted focus is the practice of design. Design in this context must be understood as a process that is as fully committed to societal and environmental beauty as to the practicality of its origin. By maintaining such a philosophical posture the college community literally touches its origins.

Marvin J. Malecha, FAIA, Dean
Shaping Our World

You’re invited to join the Design Guild, a supporting entity of the College of Design involving alumni, friends, faculty, staff, and others from the design community. An envelope enclosed in this news issue makes it easy to become a member. Contributions toward membership support enrichment activities not supported by state funding, including student scholarships, professional development opportunities, guest lecturers and jurors, and special exhibitions.

Design Guild members enjoy two major events each year: the Design Guild Dinner and the Product Fair. The Design Guild appreciates design alumna Carol Nix (BGD 1991) and Mary Jester (BGD 2001) of the NIXgroup for generously providing design services for a new Design Guild brochure.

CALL FOR NOMINATIONS

Design Guild Award. The Design Guild, a volunteer organization associated with the College of Design at NC State University, is soliciting nominations for the 2002 Design Guild Award. The honor will be presented at an annual dinner set for March 16, 2002, at Exploris in Raleigh.

The Design Guild Award recognizes the significant contribution that an individual or group has made in design in the Southeast. The award brings awareness to the importance of design in the community—and the practice of good design as a sign of good citizenship. Award nominees must meet the following criteria:

- Nominees must reside in the Southeast, either currently or at one time, or produce design or influences on design that have enhanced this region. The social context of the work, as well as the public service of the recipient will be considered.

- Included are all categories of design, including but not limited to architecture, arts, graphic design, landscape architecture, art and design, and industrial design.

- The recipient need not have attended the College of Design at NC State University.

- Submittals can be in any appropriate form to demonstrate qualifications.

- Nominations will be accepted until Oct. 31.

- For more information, contact Jean Marie Livaudais at (919) 515-8320 or jean_livaudais@ncsu.edu.

SEND NOMINATIONS TO:
NC State University
College of Design
Advancement Office
Campus Box 7701
Raleigh, NC 27695-7701

Previous recipients

George Matsumoto
Duncan Stuart
Harvey Gantt
Mary Ann and Samuel Scherr
Betty Ray McCain
Betty Ray McCain, former secretary of the North Carolina Department of Cultural Resources, was presented the Design Guild Award from North Carolina State University's College of Design on March 31.

McCain served in the state post from 1993 through January 2001.

Design Guild honors supporter of state's design-rich fabric

Wilmington architect Charles Boney Jr., an executive member of the Design Guild and a College of Design alumnus, said McCain was honored for her support of architecture, historic artifacts and folklore that contribute to the design-rich fabric of historic urban centers in North Carolina.

A leader in the North Carolina Democratic Party since the 1970s, McCain has served as party chair, held numerous committee memberships and co-chaired three campaigns of former Gov. Jim Hunt. She has a long list of tributes, including public facilities recently named in her honor: the Betty Ray McCain Amphitheater in Roper and the McCain Art Gallery located at the BTI Center for the Performing Arts in Raleigh.
Our Design Community

Opportunities for giving

Private contributions in support of activities and programs in the College of Design may be given to the NC State University Foundation, and designated for the College of Design or to a specific department, scholarship or fund, such as the Design Guild Fund or the Publication Endowment (see pages 8–9). For gifts by check, an envelope is provided in this issue of news. For further information on scholarships or endowments, or for information about planned gifts such as will bequests or annuities, please contact:

Jean Marie Livaudais at 919/515-8320 or jean_livaudais@ncsu.edu

DESIGN GUILD

EXECUTIVE COMMITTEE

Philip G. Freelon,
The Freelon Group Inc., President
Charles Boney Jr. AIA, Boney Architects
H. Clymer Cease Jr. AIA,
Pearce Brinkley Cease & Lee
Michael S. Cole ASLA, ColeJenest & Stone
Turan Duda AIA, Duda/Paine Architects, LLP
William D. Moser Jr. AIA,
Moser Mayer Phoenix Associates, PA
Frank D. Thompson, AV Metro
Frank J. Werner, Adams Products Co.

MEMBERS

Dean's Circle
Richard A. Curtis, USA Today

Benefactor
Adams Products Co., Frank J. Werner*

Partner
AV Metro, Frank D. Thompson
BMS Architects, Herbert P. McKim Sr.
BCW+H, Doug Wetsmoreland
Boney Architects, Charles Boney Jr.*
Brick Association of the Carolinas, Pete Cieslak*
Brockwell Associates, Sam Brockwell
Carolinas Concrete Masonry Association,
Paul LaVene
ColeJenest & Stone, Michael Cole
David Allen Company, Robert Roberson*
Duda/Paine Architects, Turan Duda
Royce M. Earnest
The Freelon Group, Phil Freelon
Holnam Inc., Jim Barnes
Lee Brick & Tile Co., J. Rad Holton
Little & Associates, J. Kendall Gallaugher*
Dean Marvin J. Malecha*
Moser, Mayer, Phenix Associates,
William D. Moser Jr.
NC Masonry Contractors Association,
Lynn Nash*
O'Brien/Atkins, John L. Atkins III*
Odell Associates, Davis H. Liles*
Pearce Brinkley Cease & Lee,
H. Clymer Cease Jr.
John and Patricia Tector

Corporate Associate
Dixon Weinstein Architects, Ellen Weinstein
Gantt Huberman Architects,
Jeffrey A. Huberman
Alexander Isley
Isley, De Luca, Isley, Hawkins Inc., Max Isley
Henry W. Johnston Architects AIA,
Henry W. Johnston
LandDesign, Brad W. Davis*
Martha Scotford
Bill and Rita Sears
Fred M. Taylor
Constantine N. Vrettos*
Waterproofing Contractors Association Inc.,
Annette S. Boutwell

Individual
Douglas M. Bennett
Harry Ellenzweig
Charles A. Fink
Raymond H. Goodman III
William B. Hood
Jean Marie Livaudais
Susan Brehme Park
Alwyn H. Phillips III
O. Earl Pope Jr.
William M. Singer
J. Ray Sparrow
Michael Tribble*
Barbara Wiedemann
Derrick C. Williams

*Denotes Design Guild members who also support scholarships.
Visitors traveling the elevators of the Tryon Building in Charlotte carried wine glasses and shared conversation at a multi-floored reception hosted by the College of Design and the architecture firms of Jenkins-Peer Architects, LS3P Associates and WGM Design. Alumni and friends traveled to the 13th, 11th and 20th floors during the reception, which was held in conjunction with the AIA-North Carolina conference.

[Catherine Lazorko Photos]

Product Fair returns to College of Design

The Design Guild will host a Product Fair on Monday, Oct. 8, in Brooks Hall at the College of Design.

Chaired by Frank Werner, member of the Design Guild Executive Committee and marketing director for Adams Products Co., the Product Fair will allow students to talk one-on-one with representatives from allied design industries. Here they may learn about new products and innovations that designers use in everyday practice.

All Design Guild members at the Partner level or higher will have the opportunity to exhibit a booth at the College of Design for a minimal fee of $100 (to offset evening reception costs). The Design Guild welcomes new industry representatives to join the Design Guild and participate in the Product Fair.

An evening lecture by architects Marion Weiss and Michael Manfredi, Weiss/Manfredi Architects of New York, co-sponsored by Triangle AIA, will attract design professionals to the exhibit in Brooks Hall, where a pre-lecture reception will be held with Product Fair exhibitors. Exhibitors may separately sponsor lunch presentations of their products for students and professionals in classrooms. For more information on participating in the Product Fair or joining the Design Guild, please contact Jean Marie Livaudais at 919/515-8320.
Beckoned back to enhance academics and explore ideas

The Student Publication, a 35-year-old tradition of scholarship within the College of Design, may soon return—thanks to a $250,000 gift from a friend of the college and anticipated matching support from others.

The generous donor has made a challenge to alumni and friends to contribute another $250,000 in matching funds to revive the respected, and much loved, Student Publication. An endowment of $500,000 would yield an annual operating budget to support the Publication. Last spring, Dean Marvin J. Malecha, FAIA, formed a committee co-chaired by Steve Schuster, AIA (BEDA 1973), and David Ramseur, AIA (B.Arch 1968), to launch a campaign aimed at reviving the periodical for the benefit of students, faculty and the design community.

Many donors have responded generously, and commitments for half of the match already have been met.

“The outreach and influence worldwide of the Student Publication cannot be overstated,” Dean Malecha said. “It literally put the School on the map for decades.”
The Student Publication was established in 1950 to honor the memory of Matthew Nowicki, the first head of the architecture program at NC State University. The Publication quickly grew to encompass all of the disciplines. Between 1951 and 1985, issues of the Student Publication numbered 58, each with a student editor, a group of student writers and workers, and a faculty advisor.

Ramseur worked on several issues, including Forty Gardens in 1966. He recalls the rewards of working with other students and faculty on the publication project: “It was one of the few endeavors that wasn’t competitive but collaborative, and that is the way the architecture design business is today—collaborative.”

“During the time it was being published, it was recognized as a premiere student publication,” Ramseur said. “Its absence has been noticed.”

The revived publication will share many of the same qualities that made its predecessor an outstanding contribution to design scholarship, Malecha said. Student-driven, the publication is expected to convey a sense of energy to cover a range of eclectic design topics.

College leaders expect to publish the publication annually, beginning in the 2002–03 academic year, with supplemental support from the operations budget until the endowment can fully support the project. Guidance of the publication will be rotated among faculty members. The college will distribute the published piece to other design libraries in schools and colleges, and to Design Guild members. It will be offered for sale through a distribution company and at a reduced rate to alumni.

“The Student Publication brings a national and international focus to the College of Design’s engagement in important ideas,” said Schuster, who refers regularly to many of the past publications, resting in a prominent place in his own library. “I hope that many of my fellow alumni who saw the value of the Student Publication in their education will join me and the committee in supporting the endowment.”

For more information on the Publication Campaign, contact Jean Marie Livaudais at 919/515-8320.
RESEARCH, EXTENSION AND SPONSORED PROGRAMS

Designing sustainable communities

The NC State University College of Design’s Research, Extension and Sponsored Programs Office interacted through extension and research with more than 30,000 people across North Carolina last year. Since forging a partnership with the NC Cooperative Extension Service in 1999, research funding now stands at $5 million. But dollar amounts tell only part of the story. Efforts include unfunded outreach such as summer design workshops for children and training programs for professionals. This research and extension team is called upon for expertise in land use planning, watershed planning, environmental design, design of public spaces, universal design, computer modeling technology, as well as the tremendous resource at its disposal: the energetic network of design faculty and students (about 80 percent of its projects involve students).
Research, Extension and Sponsored Programs at the College of Design offers services through the following units:

- THE COMMUNITY GROWTH STRATEGIES INITIATIVE
- THE DESIGN RESEARCH AND SERVICE LABORATORY
- THE NATURAL LEARNING INITIATIVE
- THE CENTER FOR UNIVERSAL DESIGN

For more information, contact:

Jay Tomlinson, Director
Research, Extension and Sponsored Programs
919/515-7337
j_tomlinson@ncsu.edu
Community Growth Strategies Initiative

Responding to urbanization

IN THE PAST DECADE, North Carolina gained 1.4 million residents, setting the state population at more than 8 million, a 21 percent increase in people living here since 1990.

Two daily US Airways flights between Raleigh and New York were among the 11 most delayed flights in the United States during December 2000. The North Carolina airport has proposed a $1 billion expansion plan.

Apex town commissioners are considering a growth-control plan that would cap population increases at 4 percent a year.

As communities across North Carolina cope with the effects of growth, many seek assistance from the state’s Cooperative Extension program, which has formed a working relationship with the College of Design for its expertise in planning and design. The Community Growth Strategies Initiative, a design team made up of urban planner David Stein, community design specialist Kat Oury (MLA 1999), and landscape ecologist Dr. Nancy White, (MLA 1999)
They address problems like the needs of a rural college to expand without damaging its densely wooded surroundings and habitat. They offer opportunities to create new teaching environments that demonstrate alternative ways to develop and restore the land. For example, landscape architecture students and faculty held an intensive, three-day charrette with Brunswick Community College leaders and the campus community, eventually developing ideas for a new campus design, including planting and sites for future buildings. While Lenoir County, N.C., officials consider how to transform flood-damaged property in Kinston into a public park by the Adkin Branch Creek, they turn to extension specialist Kat Oury, who led a public meeting to generate feedback on the proposal.

“I utilize the charrette process to engage people on the issues—spending the day designing maps and making lists of concerns,” Oury said. “It’s interesting how adversarial views lessen once people start focusing on the physical environment and sketching their ideas on maps.”

To encourage open dialogue, Oury approaches community requests for assistance as an educator, offering technical resources such as data on land use, population or environment conditions; coordinating expert speakers; and compiling visual communication tools to convey complex topics and relationships to help the community understand the issues related to their concern. Delivered in a charrette format, people work together to find solutions. The goal is to offer information and set up processes for decision making so that clients take control of their destiny. The outcome may not always be the favored route. Stein notes: “Our goal is that when they make decisions, they make reasoned ones.”

“We hope to help counties and communities overcome the hurdles that are traditionally against land use planning,” Stein said. “We want to convince them that planning will help them.”
To achieve that aim, the group offers training and education to public officials, primarily from smaller communities with few resources, on issues related to urban planning, downtown revitalization and environmental planning.

A recent workshop targeted a younger audience. With assistance from county extension agents, the design group organized a free summer design workshop last July for students in Mecklenburg County. The middle school students designed parks for real sites in the county and received feedback from landscape architects, professional architects, and civic leaders. The departments of landscape architecture and graphic design developed the content and taught the workshop, which was held at the Mint Museum of Craft + Design.

"Here you have a group that would rarely be exposed to any of the design disciplines learning how design is an integral part of their lives and how it can improve their world," White said. "They see that design is real—not some esoteric, unreachable, abstract phenomenon."

One of the most unusual researchers within the group—and among the most successful, with more than $2 million in grants—is Dr. Nancy White. Unusual because of her combined expertise in design and science (she holds a master’s in landscape architecture and a doctorate in forestry), White finds the synthesis of disciplines a natural. Techniques to restore land processes need to become part of professional design plans and development, she says.

White’s projects include the Jumping Run Creek Shellfish Restoration Project, which investigates how activities on land contribute to shellfish contamination. The creek is one of the many streams that flow into Bogue Sound. White has spent years measuring levels of pathogens, nutrients and water flows to find tools to mitigate the causes of pollution there. Many of her projects, including Jumping Run, are funded by the NC Division of Water Quality, Clean Water Management Trust Fund and the NC Wetland Restoration Program.

Another long-term area of study has been at Carpenter Village near Cary, where White began water testing prior to construction. It is now one of the largest housing developments in the Triangle, where White can compare water quality before and after urbanization. Rain that once idled down
Kat Oury, left, and Dr. Nancy White engage communities across the state in a public process of design.

[Herman Lankford photo]

ravines and gullies in wooded forests now travels in rapid sheets over impervious surfaces like streets and parking lots. White is studying a process to direct water down through the ground instead of over it to determine the extent to which it prevents water pollution and the alteration of stream channels.

This spring, White and extension engineer Dan Line built the first bio-retention system in an urban development at Carpenter Village. The data, combined with studies of rain gardens in Chapel Hill, Wilson and Greensboro, should double the national database of information on bio-retention. The study will determine if bio-retention ponds will mitigate the effects of urbanization on water quality.

Also at Carpenter Village, the public toured a showcase home in May that White outfitted with environmentally friendly innovations. She hopes to encourage homeowners to think about conserving water by demonstrating the use of rainwater harvesting systems, rain gardens and native, drought-resistant vegetation. The projects received support and cooperation from Carpenter Village developers, which White says is an important alliance if change is ever to occur.

“We are trying to develop solutions to the problem of pollution from urbanization and land use,” White said. “We need to plan for and mitigate the damage new developments cause to our environment.”

The obvious cause of growth is gaining more people, but other effects stem from social changes, Stein says. When state residents become wealthier, they desire larger lot sizes and amenities like swimming pools. When residents are newcomers from other states, they often bring a new set of needs and increased demands on local resources. Smart growth examines all aspects of “quality livability” to integrate economic and social functions within one geography. This means that communities must provide for many residential needs, including transportation, the “walkability” of a neighborhood, and proximity to jobs, shopping and schools. But putting these factors into public planning dialogues may be an uphill battle. Americans have long accepted bad planning and design because individual rights are valued over community rights, Stein says.

“It’s an unfortunate illusion that we Americans believe we have rights at any cost,” Stein said. “In the end, if we exercise all our rights, we’ll destroy the environment on which we depend for our very lives.”

“Planning and design connect everything,” he said. “At the College of Design, we’re trying to deliver education and research to the public to help them make connections that will generate applied, workable solutions and improve lives.”

They also see that good design is not a solitary act but a public process.”
The busiest booth at the last statewide convention of architects wasn’t the one selling the granite countertops or the decorative concrete or the adjustable window blinds. By far, most participants stopped to check out the 3-D animated images projected onto a mini-IMAX screen.
Digitally synthesized classical and jazz played in synchrony with the imagery: walking through a train station, touring a kinetic residential home, flying in a Mars airship and roving over extraterrestrial landscape.

It’s no surprise that 3-D animation attracts and entertains, but the technology has a practical mission at the Design Research and Service Laboratory, which demonstrated its technology at the conference to show how it can work for designers. Jay Tomlinson (MLA 1994), laboratory director, and Michael Holmes (MLA 1997), laboratory manager, have worked since 1994 with the College of Design’s VisionDome, which was developed in Research Triangle Park by the Elumens Corp. A computer visualization tool that helps designers evaluate their concepts, the VisionDome displays ideas in 3-D animations projected inside a hemispherical dome.

“This is how we will communicate design information in the next 20 years,” Holmes said.

The laboratory is oriented toward research and teaching of advanced computer-based imaging, modeling and simulation. The communities of Cary, New Bern and Albemarle have approached the laboratory to create alternate visions of Main Streets and revitalized town centers. At public meetings, the imagery speaks volumes to citizens, often helping them to interpret complex plans. At times, it shows how conservation controls can mitigate the impacts of development.

“Many towns in North Carolina are redefining their economic bases and considering new options,” Tomlinson said. “We can help them visualize what they want their towns to become.”

In other contexts, the technology may build consensus between engineers and designers. The work of the laboratory is increasingly interdisciplinary as it focuses on research areas that benefit other disciplines on campus.

“This tool helps translate the planning vocabulary into a visual world that has more meaning. A picture truly is worth a thousand words.”

—Jay Tomlinson, Laboratory Director
Projects at the Design Research and Service Laboratory include:

**Jet Propulsion Laboratory Airship Design Project.** Engineering and design students worked with the Jet Propulsion Laboratory to develop prototype concepts for the design of airships for the planet Mars. The aim of JPL was to develop new strategies in engineering design collaboration. Students benefited from interaction with NASA scientists and engineers.

**Adaptive Shading Technologies for Future Housing.** This National Science Foundation funded project involves visual simulations of adaptive shading and the use of this technology in a residential environment.

**Visual Sensitivity Mapping of the Blue Ridge Parkway.** New mapping techniques identify visible lands and their degree of visual exposure with respect to the Blue Ridge Parkway. Results help prioritize surrounding lands for scenic conservation and promote responsible land planning.

**Area Visualization Initiative for Cary, N.C.** The laboratory produced photo-realistic images (above) demonstrating alternative land use and design scenarios for Cary’s Town Center. Laboratory experts, including Michael Holmes, a landscape architect who specializes in analysis simulation and visualization techniques, worked with Cary’s Planning Department Zoning Division to reinvent a downtown complete with shops, restaurants, offices, apartment buildings and townhomes. Others who developed the Cary images are designers Jay Tomlinson and Jerry Hahn.
Town of Cary’s Scenic and Historic District Viewshed Analysis and Visioning Initiative. Viewshed mapping techniques helped to define scenic resources associated with the historic districts of Carpenter Crossroads and Green Level. These scenic resources will be integrated into the town’s open space plan. A series of build-out scenarios were visualized using photo-realistic imaging techniques. These images, which were used in community meetings, showed both conventional and conservation subdivisions.

A Virtual Reality System for Evaluating Human Performance during Emergency Power-Off Aircraft Landings. This virtual reality project funded by NASA and headed by faculty from the departments of psychology and computer science uses the VisionDome to simulate real flight conditions on board a Cessna 152. Part of the cockpit of the aircraft is mounted in the VisionDome and used to conduct the simulation.

“This is how we will communicate design information in the next 20 years.”

—Michael Holmes
Research Associate, Laboratory Manager
The Natural Learning Initiative

Welcoming children to Planet Earth

At Southern Pines Elementary School in the Sandhills region of North Carolina, children begged not to play outdoors in what they called the desert, a vast stretch of concrete with a few iron play structures that sizzled in the afternoon sun.

This was before the Natural Learning Initiative began working with a parent-teacher group to develop plans to naturalize their school grounds four years ago. Today the picture is a different one, says Principal Mary Scott Harrison: “We are continually striving to expand the four walls of the classroom to the outdoors and our teachers and students are loving it.”

The school’s play area, now named the Blanchie Carter Discovery Park, features a pioneer cabin built by students using 19th century tools, an edible maze created with blueberry bushes, vegetable gardens and play equipment surrounded by trees and vegetation. Similar transformations have occurred or are under way at:
An infant path offers sensory delights to crawlers (far left) while children (left to right) participate in designing outdoor play areas in separate workshops held in North Carolina and Portugal; and the simple pleasures of nature, springtime flowers, are taken in at a training session in Harnett County, N.C. The beauty of new fallen snow is observed from the windows of a Cary, N.C. child care center (right).

[Photos by Cosco and Moore]

- **Sterling Montessori Academy in Morrisville, N.C.**
- **Bright Horizons Family Solutions Children Development Center at the Research Triangle Park, N.C.**
- **Early Learning Center in Fuquay-Varina, N.C.**
- **Seth Boyden Elementary School in Maplewood, N.J.**

The Natural Learning Initiative, a research and extension program of the College of Design, was formed two years ago by Robin Moore, a landscape architecture professor who serves as director, and Nilda Cosco, an educational psychologist. Their aim is to help communities and schools create stimulating and healthy places for play, learning and environmental education. Internationally recognized for his research, Moore received the Landscape Design Award from the American Horticultural Society this year, and has been featured in many popular publications, including *The New York Times*.

The issue is gaining interest because increasing numbers of
children are losing contact with the natural world, Moore said. The initiative strives to improve the lives of children by encouraging their interaction with the outdoor environment through environmental design, action research, education and dissemination of information.

“Even though children spend upward of 10 hours a day, five days at week at child care centers, many provide no spaces for children to interact with nature,” Moore said. “And while they’re home, parents may not allow them to explore the outdoors, for safety reasons.”

An April 2001 *Time* magazine cover story that includes an interview with Moore laments social changes affecting the stature of play in childhood, including the loss of vacant lots and outdoor play spaces—not to mention time alone. Children lead busy lives with school, piano lessons, soccer practice and the constant distraction of the home computer. Taking the kids to the park and allowing them the freedom of play doesn’t just make them happy, healthy and human; it may also make them smarter. When recess time is delayed, elementary-school children grow increasingly inattentive. Academic performance suffers.

These findings strike a sad note for Moore and Cosco, whose work is clearly driven out of love and respect for children. Their “fun projects” for play space design arrive from keen listening and observation of the using audience: edible mazes, archeological dig sites, water spray and bug gardens, trike tracks, and special hiding areas where kids can tell secrets or be alone with their thoughts. Sometimes, they have to insist that grown-ups back off, like at the infant garden, where babies watch butterflies, pick flowers, run their fingers over colored stones and pebbles, and
even imitate a grasshopper. As Cosco once observed: “A little boy, about 10 months old, dressed just in diapers, notices a grasshopper and tries to pick it up. It hops into the grass. The boy, visually tracking it, toddles closer. The grasshopper leaps again. The child follows, fascinated. He again approaches too close. This time, the insect hops into the flowerbed. Delighted, the child imitates the grasshopper with his own body language.”

The most common question posed is what you do about babies eating dirt or flowers. The answer is that an adult should be present, but resist interfering with the experience, Cosco says. Part of their investigations are devoted to understanding more clearly these issues of safety. Outdoor play involves children with something more real than plastic toys fresh from the dishwasher. Nature is dynamic and surprising. And, as human beings, we all need it.

“Children are born curious, and that curiosity needs to be stimulated from the very beginning,” Moore said. “We need to allow children to explore the natural world, to welcome them to the planet.”

“Even though children spend upward of 10 hours a day, five days at week at child care centers, many provide no spaces for children to interact with nature.”

— Nilda Cosco
Educational Specialist, Natural Learning Initiative

— Robin Moore
Director, Natural Learning Initiative
The Center for Universal Design

An Initiative working for everyone

UNIVERSAL DESIGN has just made life easier for Mary Best, an 85-year-old widow who maintains her own home in northwest Raleigh.

As the American Association of Retired Persons asked to assist with a pilot project last May to make homes safer and more livable for older adults, the Center for Universal Design provided a list of inexpensive but significantly valuable modifications that volunteers could easily accomplish. In Mary Best's home, for example, they secured throw rugs to the floor, installed grab bars and a hand-held shower head in her bathroom, replaced doorknobs with lever door handles, installed new lighted rocker-type light switches as well as sockets in table and floor lamps that allow her to turn them on and off with a touch, and put a wire rack on the door of her pantry that lets her easily find her most-used cooking items. The cost for everything was less than $300.

The mission of the Center for Universal Design, an initiative of the College of Design, has broadened considerably since its formation in 1989, a year before the passage of the Americans with Disabilities Act prohibiting discrimination against people with disabilities. Its intent today is to make the practical day-to-day activities and tasks involved in living possible and safer for everyone. Under the college’s research and extension programs, this unit promotes universal design—a philosophy that makes the...
built environment as usable as possible by as many people as possible. Formerly the Center for Universal Design and recently reorganized as an Initiative, it was founded by the late Ronald L. Mace, FAIA, an internationally recognized architect, product designer, educator and inventor.

“The disability community began this ball rolling over 40 years ago, but in the past 10 years the issues of the aging population have been heard more,” said Richard Duncan, acting director of the Initiative. “Universal design principles apply to people with disabilities, people who experience the effects of aging, and people temporarily disabled or inconvenienced by circumstance.”

Key to its usefulness as a life-enhancing tool for all people, the message of universal design must be simplified and widely disseminated, Duncan said. To this end, the Initiative has produced a new interactive CD-ROM that defines the mission and sets out the principles of universal design, illustrating them with 32 examples of successful projects. The CD, developed by Leslie Young of the universal design team, describes noteworthy innovations, such as a garden featuring benches surrounded by water and an amphitheater built with seats that flip up to make room for people using wheelchairs, scooters or strollers.

This CD is one of many communication vehicles employed by the group, including publications, videos, workshops and training sessions and online studies. In 2000-01, the universal design team, consisting of acting director Duncan, research coordinator Molly Story, technical assistance coordinator Rex Pace, technical assistance specialist Michael Carter and information coordinator Sally Haille, responded to about 3,000 requests for information and technical assistance. Also for use by architects and public planners, this year they developed an illustrated technical manual that provides an overview of North Carolina State Building Code requirements for accessible multifamily housing. It was authored by Pace and Young.

One research component focuses on the evaluation of products for
functionality. Focus group results from testing of everything from fire extinguishers to can openers is printed in publications and distributed to interested parties. "We don't give a seal of approval or focus on a particular product," Duncan said. “Each guide identifies the best features of a range of products of a single type.”

Research activities involving faculty and students from the college also create new data to answer questions on topics like ideal grades for ramp slopes and creating accessibility in sports arenas. “How can a design enable all people to see the ball field—even when some are standing up and cheering?” Duncan said.

“A lot of people associate our work with problems of mobility but we also look at sensory and cognitive issues, and a whole variety of lifespan issues.”

As North Carolina's older population increases (its 65-plus population grew 17.5 percent since 1990, compared to 10.1 percent for the United States), making homes safer and more workable for older adults becomes a priority. Poses Duncan: “What do you do for people whose homes don’t work for them anymore?”

Universal design offers a variety of solutions. With design direction from the Center for Universal Design, Habitat for Humanity is now converting its standard floor plans into universal plans for houses under construction in Chatham and Orange counties in the Triangle. Projects like these please universal designers most, Duncan says, because they reaffirm their fundamental belief.

“We see this as an everybody issue.”

A technical manual illustrating building code requirements for accessible multifamily housing is one of many communication vehicles developed by the Center for Universal Design to promote accessible design.

Universal designers arrived at this conceptual design of a tub and shower area with moveable floor panels that can be extended across a sunken tub for a convenient curbless shower. In the configuration shown here, the panels form a seat for bathing.
PRINCIPLES OF UNIVERSAL DESIGN

1. Equitable use. The design is useful and marketable to people with diverse abilities.

2. Flexibility in use. The design accommodates a wide range of individual preferences and abilities.

3. Simple and intuitive use. Use of the design is easy to understand, regardless of the user’s experience, knowledge, language skills or current concentration level.

4. Perceptible information. The design communicates necessary information effectively to the user, regardless of ambient condition or the user’s sensory abilities.

5. Tolerance for error. The design minimizes hazards and the adverse consequences of accidental or unintended actions.

6. Low physical effort. The design can be used efficiently and comfortably and with a minimum of fatigue.

7. Size and space for approach and use. Appropriate size and space is provided for approach, reach, manipulation and use, regardless of user’s body size, posture or mobility.

"A lot of people associate our work with problems of mobility but we also look at sensory and cognitive issues, and a whole variety of lifespan issues.”

—Richard Duncan
Interim Director,
Center for Universal Design
Commencement Address

Noted psychologist and behavioral scientist, Abraham Maslow wrote:

“We fear our highest possibilities. We are generally afraid to become that which we can glimpse in our most perfect moments, under conditions of great courage.

We enjoy and even thrill to the god-like possibilities we see in ourselves in such peak moments, and yet we simultaneously shiver with weakness, awe, and fear before these very same possibilities.

Obviously the most beautiful fate, the most wonderful good fortune, that can happen to any human being, is to be paid for doing these very same things one passionately loves to do.”

—Abraham Maslow

This thesis by Maslow came following a classroom incident when he was intently lecturing on his favorite description of self-actualized people. The students had appeared lethargic and blank faced, inattentive to his impassioned description. He stopped lecturing and challenged:

“How many of you plan to become psychologists?” A few hands shot up.

“How many of you plan to become psychologists—another Freud?” No hands.

“Why not?” he demanded.

“If you don’t want to be great psychologist, why bother going into the field at all?”
“Who do you think will be the great leaders ... 30 years from now, here in this room?”

A question you graduates might ponder. Who do you think will be the great leaders in architecture, landscape architecture, industrial design and graphic design, 30 years from now, if not you, here in this room? We’ll return to Maslow a little later.

In the 14 minutes or so that we have left together I’ll discuss three things:

- How beginnings mask true potential
- Where learning and instinct lead us
- A personal motivation experience

As to beginnings, we have nearly complete instructions for how to build and run a human body. Scientists all over the world have deciphered the entire human genome, written down the contents and distributed them on the Internet. At the same time, we have analogies for almost everything in nature. The eye is a camera; the heart is a pump; the brain is an array of wires and switches.

The most remarkable event in nature, for which we have no analogy at all, is the development of a human body from an undifferentiated blob, called a fertilized egg. Everyone in this auditorium came from this undifferentiated origin. Looking around, it’s quite remarkable that no two of us are alike. But when we humans begin, we are all alike.

Monet used that expression to explain his transformation as an artist. Monet said: “When I began I was like everyone else.”

The diversity of this class entering the College of Design can be deceptive. Students are accepted from all walks of life, large cities, rural towns, from differing cultural, and religious and economic origins. You began as an amorphous group. Here you were nurtured and infused with a foundation of experiences, abilities and values that begins to distinguish you as design thinkers.

Today, the university recognizes your learning and certifies you in your respective disciplines. You now leave the sheltered confines of the College of Design, battle tested from progressive academic challenge, prepared to demonstrate your ability. The learning and instincts you’ve accumulated will become to the degree that you are motivated to apply them. Early motivations surface quickly; find a job; produce income for food, shelter, security; become self supporting; earn respect and recognition for your ability.

With your educational background, work ethic and skill base, it is unlikely that these early needs will take long to satisfy. No need to get over anxious.

As you grow, gain experience and increase confidence, the urge for greater achievement rises. Maslow chronicled this phenomenon as the natural progression of human behavior.

“‘When I began

I was like everyone else.’

—Monet

These feelings encourage initiative and cause us to stretch, to reach out, beyond where we have already been.

Let’s move beyond the abstract. I’d like to share part of my experiences...
with the ebb and flow of motivation and how I was led into the world design.

“When I began I was like everyone else”

Like a number of you graduates, I came from a small town, first in my family to go away to college. With a bachelor’s degree in electrical engineering, I got my first job in a high tech corporate conglomerate, Westinghouse. Within the first three years it offered everything I needed: work experience, steady income, professional recognition and the ability to start a family—everything I might have hoped for on graduation day. Life did not plateau there. Needs and wants have a way of ever expanding, driving us on. Job opportunities in Westinghouse led me through an array of technologies in many industries.

The experience I wish to share was later in my career as a general manager in a little known furniture division of the corporation. Throughout my career, I had fit well as an electrical engineer in an electric conglomerate. I had experienced the early commercialization of integrated circuits, played a role in low light level television that had broadcast pictures from the moon, oversaw the world’s tallest elevators in Sears Tower, and longest escalators in Dupont Circle.

Nearing the peak of my career I would be managing the making of office furniture. I was less than excited about the prospect. Making things worse, it wasn’t even a good furniture company.

My family, which was settled and enjoying the culture of the city in suburban New York, would need to uproot and move to southwestern Michigan. Three months into, my instinct was to close the doors and board up the windows. The world did not need this furniture.

For political and financial reasons, this was not an option. I needed to learn—learn about this world of sticks, glue, and fabrics, plastic and metal bending. I needed to apply my experience and instincts and to find motivation to make something happen. The learning process went from tedious to fascinating.

This was industrial grade business furniture. Why did business buy it? How did they choose a supplier? It was a $2 billion market. Something was going on. With progressive immersion, my curiosity grew.

Interim conclusions were reached to redirect parts of the business.

Customers had to buy furniture to house their workers, a necessity. This must mean that price, flexibility and technology were most important in the purchase decision. Business improved, so maybe we were right.

Meanwhile, competition was puzzle-ment. So many producers—all making the same stuff—with the same machines, the same suppliers, shipping products that did the same thing—tables, desks and chairs. Finally, a new dimension surfaced. It had not occurred to me before. I began meeting leading architects and visiting with design firms and more sophisticated buyers.

The dimension I had failed to recognize because it was new to me was DESIGN. It was abstract to me. The difference was in design! How could I have missed it?

The light came on: furniture with a design difference. I cannot mark the moment it happened nor can I label the motivation that swelled up inside. What was envisioned, and we were about to undertake, held no promise of corporate reward or recognition. Quite the opposite. There would be powerful resistance.

Furniture was not a favored piece of the corporate portfolio, and Wall Street
would never applaud a move in that direction. A much safer path was to let it be. It was a nice mid-size division, growing, making money, competing favorably. Corporate heroes are not made taking unnecessary risks or forcing the system. No one at corporate would champion a big bold move in high design furniture. It made no corporate sense. To those of us operating the business, it made total sense. Here was something worth doing, a chance of a lifetime. The industry conditions were favorable. We needed to do this. Our ultimate target was to create the best-recognized brand in office furniture design in the world.

Knoll International.

An industry icon.

Before approaching Knoll, we needed more to bring to the table. Two large preemptive acquisitions were made for a metal manufacturer and a high-end wood producer. Our market reach was extended in the process. We were now ready! From meetings and discussions with her, Florence Knoll had become my role model. Founder of Knoll Associates but long ago retired, she had built the company by formula. In her seventies, she was still spirited and passionate about furniture design.

Applying her education at Cranbrook Academy under Eliel Saarinen, she used instinct to have products developed, working with the finest modern designers of the period in the tradition of the Bauhaus. She retained Eero Saarinen, Isamu Noguchi, Harry Bertoia, and later added Mies van der Rohe. For graphics and advertising she hired Herbert Matter, who created classics published in *The New Yorker*.

Drawing from the Bauhaus, Florence acquired a license to provide designs by Marcel Breuer, including the classic Wassily chair. Knoll was the cornerstone of our plan. Acquire Knoll, put the four companies together, and we would have one of a kind, not just another furniture company with tables, desks, and chairs. The new Knoll would again lead the way—not with superior designs alone—but with resources and reach to make it the finest in the world. A trophy worth reaching for. The deal got done. To signal our intentions and to assure a strong beginning. We retained Frank Gehry under an exclusive three-year contract to design what has become a new classic in wood furniture design, The Gehry Bent Wood Collection. We were on our way. As design graduates, you have something I never had—knowledge of the power and importance of good design in our lives. It took me, an electrical engineer, the better part of a lifetime to figure it out.

With your special knowledge my appeal to you is:

Do not hide within your cloistered discipline comforted in your knowledge. Recognize that design needs to have far greater influence in the world for greatest service to humankind. Power in our society is concentrated in politics, public corporations, financial markets and the media. We need more designers in the top ranks of those fields. You’re needed as key players, power brokers in your own right, as designers. Work in your discipline, but be prepared over time to reach beyond and move mountains.

Who do you think will be the great leaders in your professions 30 years from now, if not you here in this room?

Good luck to each of you.
Scott Allen (M.Arch. 1998) has joined the firm 2WR Andras of Columbus, Ga., as a design principal.

Dawn Barrett (MPD 1990) in January 2001 was named dean of the Rhode Island School of Design in Providence. Prior to her appointment, she was head of the Department of Design at the Jan van Eyck Akademie, a post-graduate research center for fine art, design and theory in Maastricht, The Netherlands. Previously she was an assistant professor in RISD’s graphic design department. As an independent designer, Barrett’s commissions have included consulting, design management, and communication design assignments for Duke University, The Hague, the Royal Danish Post, and others.

Jim Binkley, FAIA, (B.Arch. 1969) has been selected to the College of Fellows of the American Institute of Architects. Binkley, architect for the U.S. Postal Service in Arlington, Va., is described as a “leader and promoter of excellent public architecture and sustainable design” by the national AIA.

Wes Chapman (BEDA 1975, M.Arch. 1980) has become the director of strategic facilities development and evaluation for the state of Minnesota.

Amy E. DeDominicis (M.Arch. 1995) has been promoted to the position of associate at The Miller/Hull Partnership in Seattle.

Randall Deutsch (M.Arch. 1985) has formed Deutsch Wrx Inc., a full-service design firm outside Chicago in suburban Winnetka. A former vice president of the AIA Chicago chapter, Deutsch won the AIA’s 1999–2000 Young Architect Award.

Don Dvore, FAIA, (B.Arch. 1965) has been selected to the College of Fellows of the American Institute of Architects. A principal at Spillis Candela DMJM, Dvore has specialized in justice facilities for the past 27 years, leading design teams in the creation of more than 19 million square feet of award-winning public buildings. This distinguished body of work encompasses 56 courthouses, 26 detention facilities, and 12 law enforcement facilities located throughout the country and abroad.

A sketch of my own

Charles H. Boney Sr., FAIA, (B.Arch. 1950) of Wilmington, N.C., produced several sketches during a spring 2001 trip to the Mediterranean, including this one of Pompeii featured above. Sent to Dean Marvin Malecha, FAIA, Charlie wrote: “I admired your beautiful rendering at Christmas. I put your card in the back of my mind and decided that on my trip I was going to send you a sketch of my own…” The dean now challenges other alumni to send in sketches from vacations and ventures. A few may make a future appearance in the alumni news. Send to: NC State University College of Design; Campus Box 7701; Raleigh, N.C. 27695 or email design@ncsu.edu.

Scott Ferebee (B.Arch. 1948) of Charlotte, N.C., received the NC State University Watauga Medal for distinguished service to the university. Ferebee is a former president and CEO of the FWA Architectural Group. The Watauga Medal is the highest nonacademic honor bestowed by the university. Ferebee has served as president of NC State’s Alumni Association and president of the Design Foundation. He was instrumental in founding the College of Architecture at UNC-Charlotte.

Chris Ford (M.Arch. 1998) continues as a member of the design team for Perry West, the widely published apartment towers in New York City’s West Village. He has been with Richard Meier and Partners for three years. This building is Richard Meier’s first new building in Manhattan.

Jonathan M. Gerler (BEGD 1996) works for Diliberto Inc. in Baltimore as a print and web designer. The agency currently spearheads a new campaign for Best Western. He writes and performs under the stage name DJ FM, and some of his songs were used as background music on MTV’s Real World and in a Playstation 2 title still under development. Visit his website at www.djfm.com.

Elizabeth Lundberg Morisette (BEDN 1994) will present an exhibition of her woven works titled “Wallflowers” at the Carroll County Arts Council Gallery in Westminster, Md., from July to September 2001.

Michael Nicklas, FAIA, (B.Arch. 1972) has been selected to the College of Fellows of the American Institute of Architects. Nicklas is president of Innovative Design Inc. in Raleigh.

Kat Oury (MLA 1999), a community design specialist with the College of Design’s Research, Extension and Sponsored Programs, was selected to participate in the Natural Resources Leadership Institute. The institute offers workshops in environment issues, dispute resolution, leadership and collaborative problem solving.

Jeffrey Resetco (M.Arch. 1998) has been promoted to associate at Gruzen Samton Architects, Planners & Interior Designers in New York City.

William Singer (M.Arch. 1988) has been promoted to senior associate at Gruzen Samton Architects, Planners & Interior Designers in New York City.

Madeline Sutter (BLA 1999) of Oriental, N.C., was installed as the chair of the American Society of Landscape Architects Professional Interest Group for Residential Landscape Design. Sutter created Trees for Oriental, a program for the care and maintenance of public trees.

Scott Wolf (BEDA 1984) has been promoted to the position of principal at The Miller/Hull Partnership in Seattle.

Lisa Wollman-Bolick (MPD 1990), an advertising and design instructor at James Sprunt Community College in Kenansville, N.C., was honored with the college’s top two faculty awards: the Faculty Council Award, which is awarded by a vote of all full-time faculty members, and the David H. Carlton Award for Excellence in Teaching, which carries a $1,000 honorarium.

Design @ Work: 
The Process Behind Products

An exhibition showing through Oct. 7 at the North Carolina Mint Museum of Craft + Design in Charlotte, illustrates the creative process of the industrial designer. The exhibition features the work of the following Charlotte-based design firms and College of Design alumni: Axiom (Richard Turner, BEDP 1981), BOLT (Monty Montague, BEDP 1980; John Baker, BEDV 1981, and Andy Kiser, BAD 1999), Design/Joe Sonderman Inc. (Jack Sawyer, BID 1999) and Tolleson/Design. Furniture, industrial and consumer products are illustrated from start to finish in stages of design development and production. Concept sketches, CAD renderings, models and other collateral materials accompany the finished products. The exhibition itself serves as a design example as Design/Joe Sonderman created the presentation and makes the process of its development visible within the show itself.
Members of the College of Design community were recognized for excellence and contributions to design by the American Institute of Architects-North Carolina at its June 2001 conference in Charlotte. Alumni were honored in nearly all awards categories.

Associate Professor of Architecture Frank Harmon, FAIA, who attended NC State University from 1959 to 1961, won an Honor Award for the Iron Studio at Penland. He also won a Merit Award for the Walter B. Jones Center for the Sounds at Pocosin Lakes National Wildlife Refuge in Columbia, N.C. Harmon has won eight AIA North Carolina design awards in the past five years.

Pearce Brinkley Cease + Lee, PA, received an Honor Award for Carolina Business Interiors Showroom at the Research Triangle Park. The firm includes Design alumni Irvin A. Pearce, AIA (B.Arch 1968), Douglas Brinkley (BEDA 1974), Clymer Cease, AIA (BEDA 1974), and Jeff Lee, AIA (BEDA 1975).

Another NC State University School of Architecture faculty member, Roger Clark, FAIA, and Cannon Architects took home an Honor Award for Our Lady of Lourdes School and Parish School Offices in Raleigh. The design also received a Merit Award from the Brick Association of the Carolinas. Roger Cannon (M.Arch 1979) and Susan Cannon (BEDA 1978) were last year's top winners when they garnered two Honor Awards.

The Freelon Group, which is founded by Philip G. Freelon, AIA (B.Arch 1975), won the 2001 Firm Award. The 32-member firm with offices in the Research Triangle Park and Charlotte, N.C., also won a Merit Award for the new 842,400 square foot parking deck at the Raleigh-Durham International Airport.

William O'Brien, FAIA (B.Arch 1962), and John L. Atkins III, FAIA (B.Arch 1965), of O'Brien/Atkins Associates PA, received the Merit Award for the Magic Wings Butterfly Conservatory at Durham's Museum of Life and Science.

Macon S. Smith, FAIA (B.Arch.Eng. 1941), received the William Henley Deitrick Medal for Service, given for extraordinary service to the chapter, profession or community. The retired Raleigh architect donated his offices at the historic Raleigh Water Tower to be used as the state chapter's headquarters upon his retirement in 1963.
Herbert McKim honored. A two-term mayor of Wrightsville Beach and architect for major additions and renovations at the state’s three aquariums has been awarded the highest honor of the North Carolina Chapter of the American Institute of Architects.

Herbert P. McKim, FAIA, (B.Arch 1950) president of BMS Architects in Wilmington was presented the F. Carter Williams Gold Medal that recognizes a distinguished career or extraordinary accomplishments as an architect. The honor is named for the late Raleigh architect F. Carter Williams, FAIA. An endowment established by the Williams family in 1998 supports the Gold Medal award.

“His enthusiasm for architecture is as bright as any first year student,” said Dean Marvin J. Malecha, FAIA. “I have come to rely on his counsel and support. His eyes are firmly set on to the future while bringing the legacy of the modern in North Carolina with him.”

Born in Robersonville, McKim, 73, began his architectural firm as Ballard and McKim Architects in 1955 after he and Frank Ballard completed their internships with Leslie N. Boney Architects. BMS Architects has grown into a 25-person firm practicing primarily in eastern North Carolina.

McKim is best known for his design work in the fields of education and institutional projects. Chief among his noted works of the past 50 years are the William L. Kenan Laboratories, UNC-Chapel Hill; Cox and Dabney halls, North Carolina State University; Wahl Coates Elementary Lab School, East Carolina University; renovations and additions at North Carolina aquariums at Roanoke Island, Pine Knoll Shores and Fort Fisher; and the N.C. Legislative Office Building in Raleigh.
Robin Moore received the 2001 Landscape Design Award from the American Horticultural Society. He was interviewed in an April 30, 2001, Time magazine article, “What Ever Happened to PLAY?” that explores the social changes affecting the stature of play in childhood.

Wayne Place (M.Arch 1975) was inducted into the Academy of Outstanding Faculty Engaged in Extension. Among his 2000–01 activities was providing continuing education seminars and workshops on using natural light to illuminate building interiors. In May 2001, he traveled to a conference in Italy to present a paper on computer-aided optimization of structures, a summary of design activities on the Shaw Wellness Center, which involves Mark Williard and Associates and Synergetics Inc.

Shishir R. Raval, in collaboration with his students, worked on two funded projects. The first dealt with systematic landscape analysis and development alternatives for the 159 Acres site owned by NC State University. The work was presented to the Raleigh City Council in March 2001. The other project, offered a master plan for an urban rail-to-trail project between the North Carolina communities of Dunn and Erwin.

Dana Raymond exhibited his sculpture works, “Radial Horsepower” and “In-line Horsepower” at the North Carolina Sculpture Symposium at East Carolina University in Greenville.

Georgia Bizios was elevated to Fellowship in the American Institute of Architects. She has developed new courses in architecture for the University of Minnesota and Duke University’s continuing education program.

Susan Brandeis completed work in November 2000 on a commissioned project by Gateway Village, LLC/Bank of America in Charlotte. The project consists of a 9-by-27-foot textile wall constructed in seven panels. In January 2001 her work was exhibited at the Hoffman Gallery of the Oregon College of Art and Craft in Portland.

Tony Brock received $5,000 under a University Faculty Research and Professional Development grant to explore visual strategies in broadcast distance learning. He also received $10,000 with Meredith Davis under a DELTA grant for innovative approaches to the development of online coursework.

Chandra Cox illustrated the book Christmas Makes Me Think, to be published in fall 2001. Her work was exhibited in several forums last year, including the University of Iowa, Arizona State University in Tempe, Winston-Salem Delta Fine Arts Center, the Durham Arts Guild and the African American Arts Festival in Greensboro, N.C.

Meredith Davis continued her work on modeling and diagramming in middle school science under a $30,000 grant from the Kenan Institute for Engineering, Technology and Science. She held workshops for teachers and designers in Milwaukee; Madison; Bloomfield Hills, Mich.; Verona, Mich.; Atlanta and Raleigh.

Lope Max Díaz is preparing for a one-artist show in fall 2001 at Galeria Botello in Hato Rey, Puerto Rico. He exhibited last year in several venues, including the Lee Hansley Gallery in Raleigh, the Institute of Puerto Rican Culture in Puerto Rico, and the Green Hill Center for North Carolina Art in Greensboro.

Austin Lowrey received emeritus status in spring 2001 following an application procedure initiated by the Department of Graphic Design. He retired at the end of the 1999–2000 year and now lives in Los Angeles where he is pursuing a creative life.

Marvin J. Malecha, FAIA, was appointed co-chair of the American Institute of Architects Case Study Work Group. He also was invited as a speaker and studio critic to Ion Mincu University School of Architecture and Urbanism in Bucharest, Romania, in July 2001.
Art Rice chaired an accreditation team to review the landscape architecture program at Texas Tech University. He also coordinated and led a design charrette at Brunswick Community College.

Henry Sanoff received the Association of Collegiate Schools of Architecture (ACSA) Distinguished Professor Award, the highest achievement award bestowed by this body. His research continues in several areas after receiving a $14,950 grant from the National Center for Educational Facilities (NCEF). He also received a $14,950 grant from Adams Group Architects for pre-design services for the state of Minnesota.

Martha Scotford spent the last year on a Fulbright to India, teaching at four Indian universities and surviving a 7.8 earthquake.

Achva Benzinberg Stein was awarded a Fulbright grant to study at the Spreewald Bioserve near Berlin. This is Stein’s second Fulbright award; her first in 1980 allowed her to travel to India to research landscape design requirements for arid zones.

Susan Toplikar was named the Alumni Association Distinguished Undergraduate Professor for 2000–02.

Henry Sanoff

Industrial Design students exhibited their model “cars of the future” at the 2001 North Carolina International Expo March 1–4 at the Raleigh Convention Center. The cars were created under the direction of assistant professor Bong-Il Jin. The students whose cars were featured are John Barnes, Marion Bobo (BID 2001), Brian Wismann, Ryan Davis (BID 2001), Chung-Chang Lo, Michael Patton and Richard Suehr (MID 2001).

Industrial design student Marion Bobo received an honorable mention in the 2000 Motor Trend International Design Contest.

Graphic Design students for the fourth year won the national merit scholarship of the American Center for Design. Geoff Halber was awarded the nationally juried scholarship on the basis of his portfolio and an essay. A double major in English and graphic design, Halber wrote about the connections between the written and visual word.

Anna Marich (BEDA 2001) won one of the two RTKL Fellowships, carrying a $5,000 award. Marich, an incoming B.Arch. student, also took first place in the 2001 Habitat for Humanity House Design Competition. Erik Van Mehlman (M.Arch 1999) of Raleigh was awarded first runner-up in the competition. Marich works for Cannon Architects during the school year, and Van Mehlman is employed at Maurer Architecture. The winning designs will be built.

Jeremie Michael McGowan (BAD 2001) received a Fulbright Fellowship Award for study in Finland during summer 2001. McGowan also won the 2000/01 Art + Design Faculty Book Award for outstanding academic achievement and the College of Design Dean’s Award. He received an Emerging Artist Grant from Artspace, where he exhibited his work from April–July 2001.

Industrial design graduate student Claudia Beatriz Rebola (MID 2001) of Argentina was named a USIA Fulbright Scholar.

Graphic design student James Thompson (BEDG 2001) led a project to involve Broughton High School students in the design of a website titled "A Community of Makers." It was funded through a special grant from Wake County Schools.

Anna Marich

Jérémie Michael McGowan of Wilmington, N.C., and Anne Brownley Raines of Eden, N.C., received the Dean’s Award for outstanding college citizenship while maintaining an exemplary academic record at the May 2001 awards ceremony. They are pictured here with Dean Marvin J. Malecha.
College hosts lecturers.
Public lectures in 2000-01 included architects Glenn Murcutt (pictured in a student workshop on birdhouse design), James Cutler, Adam Gross, David Miller, Patricia Patkau; artist Mary Miss; digital designer Victoria Vesna; graphic designer Rick Valicenti; and landscape architects Richard Haag and Anne Whiston Spirn.

Administrative Changes.
Professor Robert Burns, FAIA, has been appointed director of the School of Architecture. He succeeds Fatih Rifki, who has been appointed director of the Office of Graduate Programs. Dr. Wayne Place, former director of graduate programs, has decided to return to teaching. Burns, a past president of the Association of Collegiate Schools of Architecture and an ACSA Distinguished Professor, served as head of the architecture department on two earlier occasions. The School of Architecture will continue an international search for a permanent director. In the Department of Art + Design, Professor Charles Joyner will return to teaching while Associate Professor Chandra Cox will assume the role of chair. In the area of Research, Extension and Sponsored Programs, Jay Tomlinson has accepted the position of director.

Charrettes held across N.C. With assistance from faculty, landscape architecture students conduct community participation activities to help understand issues before developing design ideas. In 2000-01, the department held charrettes across North Carolina, including Brunswick Community College, the city of Albemarle, the town of Rowland and the county of Carteret. Design students worked with Harnett County officials to turn an abandoned railroad track into a multiuse recreation trail that stretches 5.3 miles from the former mill town of Erwin to the city of Dunn. The project required students to develop a master plan alternative, site designs and a report for the rails to trails community revitalization project.

Design assists 4-H. The departments of graphic design and landscape architecture held in July 2001 a three-week summer design program for seventh and eighth grade members of 4-H in Mecklenburg County. The college’s extension unit initiated the program, graduate students assisted with student instruction and Charlotte alumni provided project feedback to participants. Alumni who participated include Sylvia L. Cobb (BEDL 1984), Mary Ellen George (M.Arch. 2001), Edgar B. “Monty” Montague (BEDP 1980), Gaurav A. Gupte (M.Arch. 2000) and Brian C. Sigmon (BEDL 1973).
**Faculty and staff honored.** The College of Design recognized excellence among faculty and staff at an awards luncheon on April 25 in the Rotunda of Brooks Hall. Presented Awards of Excellence were Dottie Haynes, assistant dean for administration, and Cheryl Eatmon, administrative secretary for the departments of graphic design and industrial design. Meredith Davis, interim chair of graphic design, was awarded Outstanding Teacher, a distinction made by students from across the college. Davis also was selected by a university committee to receive a monetary award; hers was one of four awarded from evaluations of 19 professors with the “outstanding” designation. Two professors of industrial design also were recognized: Bryan Laffitte as Distinguished Alumni Undergraduate Professor, and Vincent Foote as a nominee for the Board of Governors Award for excellence in teaching.

Karen E. DeWitt has been appointed the new head of the Harry B. Lyons Design Library. During her four-year tenure as architecture librarian at Texas Tech University, DeWitt oversaw the expansion of the facility from a reference room the university’s first branch library. She earned a master’s degree in library and information science from the University of Illinois at Urbana-Champaign, where she was elected to Beta Phi Mu. As a National Merit Scholar, she made the dean’s list for four years while completing a dual degree program at Cornell University, receiving two bachelor’s degrees in history of art and painting.

New textile program covers it all.

A new degree program combining design with textile technology, the Anni Albers Scholars Program, was initiated last spring semester with 16 students. Students receive two degrees in five years: a bachelor of science degree in textile technology from the College of Textiles and a bachelor of art + design degree from the College of Design.

Program leaders say graduates will be highly sought after by the textile industry with their unique combination of design skills and textile technological knowledge. The first of its kind in the country, the degree is offered jointly by the College of Design and the world’s largest university-based textile school, NC State’s College of Textiles, which produces more than half of the textile graduates in the United States each year.

“By integrating technical textile background with strong design, we will produce a design professional who can walk out on the mill floor and manipulate machinery as well as oversee aesthetic decisions and product development,” said Susan Brandeis, professor of art + design and co-developer of the new curriculum.

“Graduates will go into product development, looking for new materials, new fabric structures and new ways of using materials.”

**A painting named “Wolf.”**

A painting by landscape architecture senior Shawn A. Hatley (pictured above) was selected to become part of the university’s permanent collection. Art exhibition organizers selected works from several College of Design students for exhibition at Peele Hall and Talley Student Center. The venture is intended to integrate student art into campus buildings.

The goals of the program are to display student talent and quality teaching, and to draw attention to the arts at NC State University.

Other design students whose works of art were selected include Tracy Spencer, a sophomore majoring in art + design and history; Aaron Swinehart, a graphic design senior; and Jérémie Michael McGowan, an art + design senior.
George W. Qualls, FAIA, (B.Arch. 1950) one of the first graduates from the College of Design, died on May 11. He was 77. Qualls attended Harvard University, where he received a master's degree in 1952. He made his way to Philadelphia, recruited by former Harvard planning professor G. Holmes Perkins in his re-making of the University of Pennsylvania's School of Fine Arts. Qualls continued as a professor of architecture at Penn into the 1990s. Qualls designed several memorable Philadelphia buildings including the Police Administration Building, known as the Roundhouse for its circular shape, the Wyndham Philadelphia at Franklin Plaza and the SmithKline office building.

Alvis Owen George Jr. (B.Arch. 1953) of Asheboro, N.C., died on Feb. 16. He served in the U.S. Air Force and Reserves. He was employed as director of design with J. Hyatt Hammond Associates and was a key designer of the master plan for the North Carolina Zoological Park. He was director of architecture for Black and Veatch.

Richard Theodore Mitchell (B.Arch. 1953) died on Dec. 30, 2000, at the age of 73. He retired as a partner of Hayes-Howell Professional Assoc. Architects, AIA. He served with the U.S. Army's 82nd Airborne and was active in the community of Southern Pines, N.C. A gentle, loving man, he had a never-ending excitement and curiosity of life's many wonders.
Lectures

September 17
Carlos Jiminez

October 8
Marion Weiss/
Michael Manfredi

November TBA
David Leatherbarrow

March 4, 2002
Vincent James

April 8, 2002
Will Bruder

HARWELL HAMILTON HARRIS ANNUAL LECTURE

April 2002 TBA
W.G. Clark

All lectures will be held at 6 pm in Kamphoefner Auditorium
at NC State University. Information: 919/515-8350
Guests are encouraged to verify time and location prior to each lecture.
Design Guild members at the Partner level may contact the
Office of Advancement for reserve seats: 919/515-8320.

Exhibitions

August 16–30
The Gallery of Art & Design
NC State University Talley Student Center

Paintings by 19 students from a Department of Art + Design
class co-taught by associate professors Chandra Cox and
Susan Toplikar. Information: 919/515-3503

OUR THANKS College of Design lectures and exhibitions are sponsored in part by
Design Guild Dean's Circle and Benefactor members Richard Curtis and Adams Products Co.
COLLEGE OF DESIGN DONORS

2000–2001

$100,000 AND MORE
Randall L. and Susan P. Ward

$25,000–49,999
Betty J. Trent

$10,000–24,999
Fannie Mae Federal National Mortgage Association
Kenan Institute for Engineering, Technology & Science
Odell Associates Inc.
Mrs. Nan Van Every

$5,000–9,999
Adams Products Co.
Brick Association of the Carolinas
Joel Clancy
Richard A. Curtis
FreemanWhite Architects Inc.
HagerSmith Design PA
Jenkins-Peer Architects PA
NC Architectural Foundation Inc.
O’Brien Atkins Associates PA
Peterson Associates PA

$2,500–4,999
American Furniture Manufacturing Association
C. T. Wilson Construction Co.
Gannett Foundation
Georgia/Carolinas PCI
Dean Marvin J. Malecha
Triangle Brick Co.
John G. Wick

$1,000–2,499
BCW+H
BMS Architects PC
Boney Architects PLLC
Robert P. Burns
Clancy & Thrys Construction Co.
ColeJenest & Stone PA
Construction Specifications Institute
Cort Architectural Group PA
Duda/Paine Architects LLP
Royce M. Earnest
Flad & Associates
Vincent M. Foote
The Freelon Group Inc.
Holnam Inc.
JCDecaux USA Inc.
Elizabeth B. Lee
Lee Brick & Tile Company Inc.
McClure Hopkins Architects
Eugene R. Montezinos
NC Masonry Contractors Association Inc.
Pearce Brinkley Cease & Lee PA
J. Norman Pease Jr.
Dr. J. Wayne Place
J. Patrick Rand
Ready Mixed Concrete Co.
Arthur R. Rice
Stephen H. Robertson
Steven Schuster, AIA Clearscapes PA
Martha Scotford
Dr. John O. and Patricia M. Tector
James D. Tominson
Constantine N. Vrettos
WGM Design Inc.
Alice Poe and F. Carter Williams Fund
$500–999
H. Clymer Cease, Jr.
Dixon Weinstein Architects PA
Gantt Huberman Architects
Luanne P. Howard
IBM
Isley De Luca Isley Hawkins
Alexander Isley Inc.
Jefferson-Pilot Foundation
Land Design Inc.
Alwyn H. Phillips III
The Toro Co.
Michael A. Weeks

$100–249
Jim H. Ashe Jr.
Bank of America Foundation
C. Timothy Barkley
W. Ricks Batchelor
James L. Beam Jr.
Betsy J. Beaman
Grovia A. Belanger
Rebecca G. Bennett
BJAC
Suzanne Schmidt Blair
Alan D. Bolzan
Charles H. Boney Jr.
William R. Burgin
Lydia D. Burns
Eric R. Calhoun
Thomas D. Callaway Jr.
Carolina Steel Corp.
Dr. Joan W. Chase
D. Michael Chreitzberg
Arthur R. Cosgwell, Architect
Clariant Corp.
Sharon Cole
John E. Cort
R. M. Craun, Jr.
Dr. E. Vincent Crist III
John A. Daughtridge Jr.
David J. Davenport
Sarah Duncan Drake
C. R. Duncan, Jr.
Bertram Ellentuck
Robert Everett Evans
John D. Everette
Jerry D. Fink
David A. Flannery
William L. Flournoy Jr.
Robert L. Fouts
Donna W. Francis
John B. Fryday
Stephanie C. Garner
Raymond J. Gibbs Jr.
Joseph P. Godfrey
D. Matthew Hales
Hall Davenport Associates PA
Keith M. Hargrove
Susan M. Hatchell
Dorothy M. Haynes
Bruce W. Hendricks
Sherold D. Hollingsworth

Taimi T. Anderson
James E. Baker
Douglas M. Bennett
Charles W. Brown Jr.
Fred C. Brunk Jr.
Rufus G. Coulter
Ellenzweig Associates Inc.
Scott Garner
Raymond H. Goodman III
Carson H. Grantham Jr.
Greenways Inc.
Dixon B. Hanna
William B. Hood
Rebecca T. Kalsbeek
Richard E. Kent
Jean Marie Livaudais
The LSV Partnership PA
Stephen Mays Architecture Inc.
Alfonso W. Merino
Tristan A. Merino
Charles A. Musser Jr.
Susan Brehme Park
O. Earl Pope Jr.
Nicholas J. Pyros
Ray Sparrow Construction Co.
Deborah D. Roach
William M. Singer
Site Solutions Inc.
Michael Tribble
KH Webb Architects LLC
Barbara Wiedemann
Timothy F. Winstead
Thank you! The College of Design gratefully acknowledges the individuals, firms, companies and foundations that made tax-deductible contributions to benefit the NC State University College of Design, its departments, programs and units from July 1, 2000, through June 30, 2001. While space limitations only allow listing those donors who contributed $100 or more, we appreciate the generous support of all of the college’s alumni and friends.

Please accept our deepest apologies for any errors or omissions.
Students produce CD-ROM featuring College of Design. An interactive CD-ROM available to a select audience highlights the disciplines and admissions procedures of the College of Design for prospective students. Produced from the perspective of attending students, the CD is a project of Design Center, a graphic design practicum course. It showcases student work, features videos of student interviews, offers student interpretations of design and provides an overview of the institution's resources and history. * All of the graphic design students involved in the creation of the CD—including its concept, research and photography—graduated in May 2001. They are Adam Bagerski, Patrick Burt, Tammy Baird and Tyler Walters. Baird and Walters designed and scripted the CD. Tony Brock, assistant professor of graphic design, served as the faculty advisor overseeing the project. * ALUMNI RECEIVING THE CD-ROM ARE ENCOURAGED TO VIEW IT AND SHARE IT WITH THEIR LOCAL MIDDLE SCHOOL OR HIGH SCHOOL. WE WELCOME YOUR COMMENTS. *

Please send them to design@ncsu.edu or call Catherine Lazorko, information officer, at 919/515-8311.