DESIGNLIFE is ALL ABOUT INNOVATION!

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Art + Design students and faculty find a new way to "Kinect" and receive international recognition for their work.

Alums Danny Stillion and Emmanuel Thomas discuss innovation, design education, and their best ideas yet.

Turan and Linda Duda have traveled the world. Now, they want to share this experience with students through a generous gift.

Designlife is a publication of the NC State University College of Design through the Office of Marketing Communications. Designlife is made possible through funding by the Design Guild, an engaged community of College of Design alumni, friends, and enthusiasts from around the world.

Designlife is distributed to alumni, friends, and Design Guild members. We welcome your feedback about the magazine and invite submissions via email to collegeofdesign@ncsu.edu.

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It has been observed that a design professional is only called upon when every other expedient choice has been eliminated. This observation makes the point that too often the study and practice of design are considered endeavors reserved for those who have the luxury of their reflections rather than as central to the advancement of society. Only recently has design been the subject of broad interest, as leaders in industry and government have realized that innovation is the key to the competitiveness of our culture.

Innovation: Exploring the Space Ahead

In the midst of the difficulties raised by a flagging economy and increasing international competition, design thinking has emerged as a strategy for leadership. This awareness was central to the great machine age of America in the 1920s and 1930s when the profession of industrial design was born. In the midst of the worst crisis in the history of the American economy design was not only relevant, it was at the leading edge of the strategy to restore vitality. Individuals such as Norman bel Geddes became popularly known figures. Mr. Geddes's influence became so pervasive in the design of common objects that one cartoonist pundit had corporate leaders soliciting his opinion regarding the design of sugar cookies.

How then does a design college during this time demonstrate its value proposition with the force of Norman bel Geddes personality? How do we move from the status of a beautiful hood ornament on the vehicle of the University into its engine compartment as an essential operating component?

In the years following the Russian Revolution there was a burst of creativity giving birth to new ways of thinking and seeing that tested long held traditions. It was a moment of freedom of expression after a long period of repression. From this period emerged movements in art, architecture and design known as Constructivism and Suprematism. However, it wasn’t very long before such work was characterized as overly intellectual and impossible to understand. The old habits of repression soon followed. During this time the Russian painter Kazimir Malevich was asked to provide a concise explanation of the painting style Suprematism for which he was seen as the leader. His description draws upon a powerful image that emerged during his lifetime - controlled flight. He concluded that to paint as a Suprematist was to capture the spirit and the disturbance of the air that precedes an aircraft as it moves through the air. He observed that as the craft is thrust through the air, uplifted by force, it pushes ahead a mass of air that is about to be dramatically changed by the experience. He asserted that the craft, like our culture, is driven by forces that change and are changed by the context of events. Malevich goes on to conclude that the individual could only make sense of a rapidly transforming world by becoming the point around which continual movement is expected. He further concludes that the individual must counter this force with the intellectual agility to move with the ever-increasing speed of the “new arts that can only exist in a society which has a dynamic production in its consciousness…” About the same time Thomas Edison observed, “This is the age of speed – speed such as men never dreamed of before. We are annihilating distance – we are conquering not only the land and the sea but the air – we are doing in minutes what our grandfathers could not have done in days and not equipped mentally to grasp or to utilize the things which burst upon them. If modern industry and invention expected to have a market for its products… it had to show men how to think a little farther and a little faster…”

These thoughts of one hundred years ago, from very different cultures, provide a lesson for the challenges that lie ahead for the design professions. They anticipate the implications for the future of our culture that will be transformed by events not yet understood. The experiment of the Russian Revolution failed because it turned away from the creative spirit. Threatened by challenges that could not be foreseen or easily understood, behaviors were set in motion to undermine the dynamic evolution of consciousness that Kazimir Malevich insisted was essential to the vitality of a culture. On the other hand, Thomas Edison’s legacy has been celebrated. His spirit of inquiry and his example of significant research and development in an open society continues to foster the innovation and entrepreneurship that has
made the society of his decedents thrive. This is observable in places like Silicon Valley, the Research Triangle Park and in universities such as NC State where new knowledge is pursued and transferred into economic development, invigorating entire regions if not the entire nation. Words such as innovation, invention and entrepreneurship are mentioned so frequently today that it is entirely possible that such activity can be taken for granted. It must be remembered that this is a fragile endeavor. We must protect it from the fear of failure, the desire to control every aspect of it and to constrain it by the desire to moderate exploration. Those who will lead the innovation imperative must live, work, worship and play in an environment where the dynamic production of consciousness is encouraged rather than restrained. It is the responsibility of institutions such as the College of Design to instill the spirit and skills of innovation and entrepreneurship in our students and to support alumni who are pursuing the path of invention.

The spirit of exploration and risk is as critical for the most senior designer as it is expected of those who are only now entering the design professions. It is not only the agility to change and adapt to new forms of practice, techniques and understanding that characterizes this spirit, it is also the willingness to defend those courageous explorers who test even the most treasured boundaries and traditions. Individuals who enter the creative disciplines are bound together in a network where the health of the extremes is as critical as the health of the center. And, as in every healthy organism there is not a single center. For every point of definition there are points of multiple interpretations. The world of innovation is not just a world of the creative individual, and it is not only a world of teams. It is a world of teams of teams where individual and shared perspectives continually cross over each other. It is a world where inspirations emanating from a single design thinker inspire thousands of others to live and work differently. The world of creativity and innovation is a place where no matter how sincerely firm definitions are sought after, they soon dissolve with the ever-increasing speed of Thomas Edison’s insights. This is why those who study design must also study society and understand the links between the artifact, the application and the experience. This is the foundation for the designer who aspires to be an agent of change.

A leading design school must therefore embark upon an innovation and entrepreneurship initiative that brings together engineering, management and design teaching as a comprehensive strategy for ideas. It is upon us to find the ways to bring students and faculty from engineering, design and management together. Our challenge is to seek connections to every academic perspective available to us on our campus. And then, we must connect to the entrepreneurs and inventors found in society and among industrial partners. There are few federal monies awaiting the arts. The funds allocated to the National Endowment for the Arts do not even make it competitive in a single major public art auction. But there is considerable interest among industry and financial partners for the work of inventors. This is the connection that we in the design disciplines must make. This is key to the strategy for design to be accepted as an essential aspect of the working motor of the University. Those who cross the threshold between school and practice are challenged to remain venturesome, to explore the places where others have not yet been, to treasure the creativity of others and respect

This spirit of exploration and risk is as critical for the most senior designer as it is expected of those who are only now entering the design professions. It is not only the agility to change and adapt to new forms of practice, techniques and understanding that characterizes this spirit, it is also the willingness to defend those courageous explorers who test even the most treasured boundaries and traditions. Individuals who enter the creative disciplines are bound together in a network where the health of the extremes is as critical as the health of the center. And, as in every healthy organism there is not a single center. For every point of definition there are points of multiple interpretations. The world of innovation is not just a world of the creative individual, and it is not only a world of teams. It is a world of teams of teams where individual and shared perspectives continually cross over each other. It is a world where inspirations emanating from a single design thinker inspire thousands of others to live and work differently. The world of creativity and innovation is a place where no matter how sincerely firm definitions are sought after, they soon dissolve with the ever-increasing speed of Thomas Edison’s insights. This is why those who study design must also study society and understand the links between the artifact, the application and the experience. This is the foundation for the designer who aspires to be an agent of change.

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them for their exploration and to probe that space that precedes the aircraft where disturbance is obvious but not yet understood. Every time ahead is an amazing time for what is not yet known or understood. It is a time waiting for the structure of innovation, invention and entrepreneurship. It will be the ability of our culture to innovate that will keep it prosperous and in a world-leading position. This has been reaffirmed by sources as disparate as international corporate leaders, economists, academicians and politicians. This reaffirms the wisdom of the study of design in its many manifestations.

The study of the design disciplines places the individual in the game. The process and hyper-awareness of design thinking is preparation for seeing what does not yet exist. Those who have undertaken the study of design within the College of Design have not only been prepared to manipulate a set of skills but they have been instilled with the treasure of design thinking and are ready to lead society and industry in a productive and innovative fashion. Not only has the College of Design moved from the hood ornament to the engine compartment of our University, we are in the process of contributing to the redesign of the engine. I firmly believe that it is our efforts to foster the Innovation / Entrepreneurship Cluster on our campus that places us in an important leadership position.36

Marvin J. Malecha, FAIA, DPACSA
Dean
Innovation Begins
With Design

LETTER FROM THE EDITOR

This issue of DesignLife is dedicated to those who think
differently. To the ones who, when asked the proverbial
question: "How many designers does it take to change a light
bulb?" inevitably answer: "Does it have to be a light bulb?"

Chances are, if you are reading or receiving this publication,
you qualify as an innovator. Designers are, by nature
and profession, innovators. Global issues and economic
challenges require it of us now more than ever. Design is
innovation: creating something new, useful, and at times
- life changing. It is very likely that almost everyone who
has come through the College is an innovator of some
kind. The College of Design has proven its leadership as a
premier institution that teaches new ideas, design thinking
and new practices.

One of the most distinguishing aspects of the College is its
interdisciplinary program. The ability to respond to change
is critical - designers must be agile, iterative and responsive.
Within the College walls, you might find product designers
working alongside animators - or architects consulting with
typographers. The strength of this program is its breadth,
which is most conducive for producing modern designers
who will inevitably work in multidisciplinary teams when
they are hired.

Bloomsberg Businessweek reports: "Top business schools
have begun launching new design programs or revamping
old ones in an attempt to retool their offerings for a world
where design innovation often separates the winners from
the losers." Responding to the market, NC State's Poole
College of Management recently created the Consumer
Innovation Consortium through which our recent graduate,
Eric Flood (13 GD), became a finalist for Fast Company's
Innovation by Design Awards.

It is clear that design, business and technology are
interdependent. In the last decade, there has been a
significant shift in power in the marketplace from the seller
to the buyer [Bloomsberg]. Emerging technologies have made
users impatient and eager for new innovations - with higher
expectations for improved interfaces and user experiences.
The knowledge base and range of skills required of designers
has never been more broad.

Given the level of global competition today, there is a demand
for a change in thinking. The College of Design is poised to
meet this challenge.

Best to you in this new and exciting year,

Carol Fountain Nix, [Y2 MGD]
Editor
Director of Marketing Communications + Public Relations

THE NEW "INNOVATION CZAR"

Meet

Christian Hölljes

By Debi McCullough

Ask Christian Hölljes, "who is the fastest man in the world?" and he replies, "We don't
know...he never ran." Hölljes attests that the fastest man never ran because he never had
the opportunity, permission, mentorship or the inclination to try. This same sentiment
holds true for the next great entrepreneur's groundbreaking design, service, new method
or process.

"How does one foster, support, or teach to the "unknown"? Hölljes asks. That's one of the unique challenges of building a
healthy, thriving incubator at NC State. The Chancellor's Faculty Excellence Program cluster hire in Innovation + Design
has been in the pipeline for several years, led by the efforts of professors Jan Bohlmann and John McCreery from the
Poole College of Management and Haig Khachaturian and Percy Hooper from the College of Design. The Poole College
will soon add another expert with whom Hölljes will work directly to identify joint endeavors combining innovation, design,
thinking, and sustainable business management practices. Multidisciplinary project courses are important for the cluster,
helping link students to business and real-world applications. "This collaboration could lead to new joint courses taught
between the colleges as well as conferences, seminars, workshops, business incubators and accelerators, new venture
funds and business mentoring, even start-up competitions," he says.

A Man with a Vision

Hölljes' enthusiasm for entrepreneurship and creativity is infectious. He has played an integral role in creating and placing
over 40 toy products within the U.S. market alone. Many won awards and generated millions of retail dollars. Hölljes/
Newgen owns the patents for the concept behind the Smart Cycle," Fisher-Price's award-winning toy cycle that combines
aerobic activity and interactive learning. Fisher-Price and Mattel voted Hölljes the "2008 Inventor of the Year." Parents
found the products to have the perfect combination for their children - learning while playing and being active.

Building Entrepreneurs

Hölljes isn't new to teaching. At Apple, he became a QuickTime™ team member and professor at the Future Apple University.
At Duke, he worked in conjunction with Duke professors to develop a course integrating studies in biomechanics, fine
arts and mechanical engineering. Hölljes calls his first design course "Make/Believe," where students will develop a
hypothetical company and go through the necessary steps required in order to launch it. This will be a groundbreaking
course for students who seek the professional skills required to launch their idea/business after graduating. "Design
students should learn about structuring a company, business/marketing plans, liability, partnerships, copyright
infringement, taxes and other hidden consequences," Hölljes says.

He is already thinking big — developing partners to help co-fund and mentor worthwhile ventures within the College
and the Poole College of Management, where he'll also teach. He intends to develop course structures that support the
development of major companies such as SAS, Cree, Lulu Press and Red Hat - all of which originated at NC State. "Do the
students even know they have a fire in them? Do they know if they put on those running shoes, they may be the fastest kid
in the world? It's exciting, isn't it? I hope to nurture that."

For more information about the Chancellor's Faculty Excellence program,
visit: www.ncsu.edu  Keyword: faculty excellence
Christian Hölljes, former national media specialist for Apple and president of Newgent, a company that places digital entertainment products, joins the College of Design as part of the Chancellor’s Faculty Excellence Program cluster hire in Innovation and Design.
JUSTIN TIME

FASHION INNOVATION

Justin LeBlanc Rules the Runway

Photos by Pawel Kempiński, Arte Networks
We always knew Justin LeBlanc was special – from his days as a student here at the College to his work with the infamous fashion designer, Steve McQueen. He found his calling in fashion design while pursuing a degree in architecture. From there, history has been made. Today, Justin is one of the College’s most high profile alums due to his recent participation in the hit reality show, Project Runway. After going through a grueling and intensive selection process, he learned that he was selected as one of only sixteen designers to compete in the show, which is featured on Lifetime television.

His road to the runway started with an application, which included a questionnaire, a video, and images of past work. He was informed a couple weeks later that he was a semi-finalist for the show and they asked him to come to Atlanta where he brought garments to present in two separate interviews. From there, producers selected a pool of semi-finalist designers. A few weeks later LeBlanc got the phone call that he would be on the show. He described his reaction after that phone call as “shock.” He knew this would be a game-changer and a move that could propel his career to unimaginable heights.

Under the critical eye of renowned judges in the fashion industry, Heidi Klum, Nina Garcia and Zac Posen, the competition was fierce and at times, even boiling. With so many different personalities under such stress to produce the perfect fashion collection each week, tempers flared, tears flowed, and things got thrown. When LeBlanc was asked how he managed to stay so calm in the midst of it all, he simply pointed to his hearing device, which he removed with a smile, indicating that he could easily tune out the noise. LeBlanc has had a hearing disability for most of his life and received a cochlear implant when he was 18 years old. He attributes some of his skills to his hearing disability. “Being deaf has made me a more visual person. This naturally drove me to finely crafted designs.” LeBlanc is the first deaf contestant in Project Runway’s history.

After six intense weeks of competing on the show, LeBlanc eventually became one of the top four designers, giving him the opportunity to present a collection at New York Fashion Week. It was not without drama, however. At one critical point, mentor Tim Gunn “saved” Justin using his one-time-only “Tim Gunn Save.” A “Tim Gunn Save” means that Tim Gunn can override the judges’ decision regarding who to be sent home (and eliminated from the show). Gunn decided that LeBlanc was worth saving. During the show’s final episode, the entire University cheered him on with a pre-show gathering at the Chancellor’s residence and a viewing party in Hunt Library.

One of LeBlanc’s pieces was constructed entirely of test tubes (see photo on left) as part of this final collection – a nod to NC State as well as a response to the show’s requirement to create a piece out of “unconventional material.” Chancellor Randy Woodson commented on LeBlanc’s inspired work: “If it was made with 3-D printing and test tubes, it had to be from NC State!”

Today, he can’t walk across campus without being stopped to sign an autograph or just hear from his fans how much they admire him. He has made numerous public appearances, was selected as the grand marshal for the Raleigh holiday parade, and has been featured on NPR.

In addition to teaching, LeBlanc is busy designing his 2014 fall and winter collection, an extension of the line he famously created for New York Fashion Week. This fall, amidst his duties as an assistant professor in the Art+Design department, where he leads the Art2Wear program alongside co-director, Katherine Diuguid, he is committed [for one year] to honor all public appearances stemming from the popular TV show. “This is a huge honor, but it’s a lot,” LeBlanc admits from his cozy Brooks Hall office.

If anyone can juggle everything, it’s LeBlanc. He maintains a great attitude, feeling “completely blessed” for the opportunities stemming from Project Runway – specifically his friendship with mentor, Tim Gunn, who advised LeBlanc to “stay true” to himself. LeBlanc also feels grateful to the College of Design and his students who he describes as “rewarding, immensely talented” and “constantly surprising” him with their ideas.

In spite of having buyer offers from other cities, including Atlanta and New York, LeBlanc decided to keep his show in the Carolinas, and will be presenting at Baker Motor Company Charleston Fashion Week in Charleston, SC this spring.

LeBlanc adds that he is constantly learning new things about himself and his work. For example, Project Runway showed him how cutthroat the fashion industry can be. “That’s just not me. I’m extremely new to this field – I only graduated from the College in 2009 with my bachelor’s in architecture and graduated from the School of the Art Institute of Chicago with my master’s in fashion in 2012 – that’s pretty recent. But already I know I belong within the fashion industry,” LeBlanc says.

Meanwhile, what happened to that famous test-tube dress? A buyer has now been formally determined. Dean Marvin Malecha. LeBlanc couldn’t be happier. The gown will eventually become part of the NC State collection. “Raleigh, NC State and the College are innovative, supportive and terrific places. I feel loyal and connected to all three.”
Art2Wear is a signature event at NC State University. For 12 years, the show has continued to grow, attracting student designers from varying backgrounds. It has blossomed into an event that students work towards during their entire College career. The student-organized runway show attracts an audience of 4,000, ranging from students to faculty, community and business leaders, and people working in the field of fashion and design.

The show went back to its roots in 2013, taking place underneath tents in the Court of North Carolina. Since 2008, the show has been presented in Reynolds Auditorium, and while the space is perfect for large gatherings and sporting events, it didn’t lend itself to the feeling of a true fashion show. The intimate space underneath the white tents gives a similar allure as New York Fashion Week, and gives attendees the chance to get up-close and personal to the garments, soaking in every detail.

Assistant Professors of Art + Design, Katherine Diuguid and Justin LeBlanc, serve as co-directors for Art2Wear. Committed to making Art2Wear a campus-wide promotion, LeBlanc and Diuguid added a lecture series throughout the semester leading up to the show featuring industry leaders. Beyond working with some of the world’s top names in fashion and design, both LeBlanc and Diuguid presented their own Art2Wear collections while undergraduate students in the College of Design.

"In addition to the excitement of seeing the students interpret the HyperNatural theme, there was the added dimension of seeing the students' animation, documentary and new media productions as an integral part of the show. It demonstrates the breadth of our department and definitely enhanced the vibe of the show," said Katherine Diuguid. "None of this could have happened without the dedication and hard work of the students who organized and produced the show. Art2Wear is the embodiment of collaboration. Seeing them work together created a magical event."

The theme for 2013 was HyperNatural, combining technology and nature. Large video screens featured documentary and animation clips done by Art + Design students, which greatly contributed to the show's vibe. Designers used technology available at the College, including laser cutters and woodworking and screen printing equipment. The resulting designs included collections based on celestial objects, camouflage and concealment – even materials found in dumpsters. The 2014 A2W, with the theme Accelerated Speed: Evolution, will be held on April 25 at the Stafford Commons next to the Talley Student Center on campus. Don’t miss it!
And...make it FLOAT

DesignBuild architecture students develop a floating lab as an addition to a 30-acre plus piece of land called the "hub farm," owned by Durham Public Schools, where students, teachers and the community can study agriculture and the environment.

As a group of eager students entered their studio classroom at the beginning of the first summer session, they were uncertain of what to expect. They knew they were there for DesignBuild, occurring each summer in the School of Architecture, which focuses on designing and building a project that is in the public interest of a community. Within the first ten minutes of studio, the 2013 team was given their task: 10 weeks and $25,000 to build a classroom – that floats on a pond.

This year’s client was the Durham school district’s Director of Industrial Education and the landscape architect/farm manager of “hub farm.” The floating lab would be an addition to a 30-acre plus piece of land called the “hub farm,” owned by Durham Public Schools, where students, teachers and the community can study agriculture and the environment, harvest healthy food, hike, bike and enjoy the outdoors. The floating lab would be used to study life forms in the water, creating an alternative classroom for Durham County students and a potential rental facility. DesignBuild student Rachel Gonsalves described the task as “daunting yet exciting.”

"Initially, we faced the same challenges that many groups encounter derived from varied opinions, differing schedules and colliding personalities," Rachel said. "As the weeks passed, we proceeded to bond together in ways the 15 of us never expected. Given the long hours, the summer heat, and the balance between undergraduate and graduate students (unique to this year of DesignBuild), friendships were formed between individuals who would have never had the opportunity to meet otherwise."

The biggest design challenge faced by the group was “floatability.” While the deck was constructed onsite, the upper structure and steel frame were created in the materials lab. The structure was then lifted by crane onto the pond in two parts and final assembly was done on the water. The group relied on donated materials, funding from the school district and a successful Kickstarter campaign to generate the budget requirements of the project.

From design to permitting to construction, the project met its ten-week summer session deadline. While the industrial education director was initially skeptical due to the time constraints, he was moved to tears to see what this group of talented students was able to accomplish in such a short period of time. The student designers described the project as the most valuable studio they have experienced, focusing on the realities of collaborating on design, sourcing materials, securing permits and satisfying their clients.

PROJECT LEADERS
Randall Lanou, BuildSense
Ellen Cassilly, Ellen Cassilly Architecture
Eric Mehlman, BuildSense
Teaching Assistant: Aaron Trudo
As a group of eager students entered their studio classroom at the beginning of the first summer session, they were uncertain of what to expect. They knew they were there for DesignBuild, occurring each summer in the School of Architecture, which focuses on designing and building a project that is in the public interest of a community. Within the first ten minutes of studio, the 2013 team was given their task: 10 weeks and $25,000 to build a classroom that floats on a pond.
"Our piece integrates open sourced physics-based gaming engines in Flash with our own gesture-based interactive system that utilizes the Microsoft Kinect as an input device. The installation allows/encourages viewers to interact with the projected elements by moving their hands and body in a natural way. The projected "planet" view exhibits visual/behavioral changes over time and "evolves" as human technology and industrialization advances/increases. Viewers can play with these "ecosystems" to change them in some way. The piece itself loops, and metaphorically creates a conundrum for the viewer as to man's long term relationship to the earth.

It relates to the theme XYZ[N] in that it both covers vast epochs of time as well as creates different experiences for the viewer depending on their proximity to the projection. We are interested in creating interactive systems and experiences that are intuitive and require no learned grammar. We believe that in the future, gesture-based interactive spaces and experiences will become a common way for individuals and groups to interact with media, environments and each other."

Art + Design Professor Patrick FitzGerald
Taking the LONG VIEW

Last July, a team of Art + Design students, led by Associate Professor of Art + Design, Patrick Fitzgerald, arrived in Anaheim, Calif., to receive international recognition at the ACM SIGGRAPH Awards. SIGGRAPH is widely considered the most prestigious forum for the presentation of computer graphics and interactive techniques and is the premier source for significant contribution to the computer graphics community through research, publication, teaching, and service.

The College of Design’s team project entitled The Long View, was one of 14 projects accepted among 114 international entries to be featured in the SIGGRAPH Art Gallery.

The Long View is a gesture-based interactive installation that offered viewers the ability to affect animated elements in a projected space by directly interacting with the graphics using Microsoft Kinect™ as an input device. The piece integrates open-sourced, physics-based gaming engines in Flash.° The result is a dynamic interface that reacts to users’ movements in real time. The premise is to increase users’ awareness of the fragile and temporary relationship to our planet.

The installation allows and encourages viewers to interact with the projected elements by moving their hands and body in a natural way. The projected “planet” view exhibits visual and behavioral changes over time and evolves as human technology and industrialization advances or increases,” Fitzgerald explained. "Viewers can play with these 'ecosystems' to change them in some way. The piece itself loops and metaphorically creates a conundrum for the viewer as to Man’s long-term relationship to the earth.”

The traveling installation has been shown in Amsterdam at the CeniKid Festival as well as at the Animate exhibition at the Greenhill Gallery in Greensboro, NC.
A NEW LANDSCAPE
Changes in the Veterinary Industry Bring Design Challenges

The role of today's veterinarian is much broader than what the public most commonly perceives. Veterinarians are involved in far more than examining Fido's hurt paw or Fluffy's lethargy. Today, more and more veterinarians are needed to treat a wide range of species, including domesticated species and more zoological species – from deer and wolves to turtles and fish.

With this change in the professional landscape, veterinary colleges across the country will be planning and determining how best to supplement their students' educations in diagnosing and treating these additional types of patients. NC State's College of Veterinary Medicine [CVM] and College of Design are tackling the problem by designing plans for a Zoological Teaching Animal Unit [ZTAU].

Within the ZTAU, veterinary students would be taught to provide proper preventative healthcare, capture, study, feed, maintain, care for, and even do clinical workups on animals not commonly seen in the traditional veterinary hospital clinic. It is meant to engage the student veterinarian in the importance of an animal's environment to their overall health and well-being.

"Though the entire idea behind a ZTAU is new, it is founded on CVM's pioneering introduction of the concept of a teaching animal unit," explains Dr. Michael Stoskopf, professor of wildlife and aquatic health. "If we succeed in creating this at NC State, it would transform the way zoological medicine is taught."

But the plans for creating a ZTAU are more complicated than one might think. A range of species, each with different environmental needs, must be housed and maintained properly to provide the learning environment needed for effective teaching. At NC State, all of this must be accomplished with the available resources on the university's Centennial Biomedical Campus. So how can you rehabilitate Timmy's turtle in the same place as the injured deer a neighbor found caught in their backyard fence?

Over the past year, researchers and graduate students in the CVM and the College of Design's landscape architecture department developed a partnership to create a blueprint for academic teaching facilities by examining the science of animal behavior, management, education and the landscape habitat in which the animals are housed. Led by Fernando Magallanes, associate professor of landscape architecture, and Stoskopf, they assessed the existing CVM campus, the appropriate selection of landscapes suitable for ZTAU use, and the development of possible design options.
How can you rehabilitate Timmy’s turtle in the same place as the injured deer a neighbor found caught in their backyard fence?

"The students from the College of Design said it was very enlightening for them to work with a ‘client’ [vet med students] and incorporate that clients’ needs, vision and opinions into the final product. That is something they are going to have to encounter working in the real world. They won’t be designing within a bubble,” Magallanes says. “Conversely, the vet med students also mentioned how impactful it was to see how their professional knowledge could be layered onto design to create a better working environment.”

In May, a Master Plan for the campus was produced which explored the details for selecting and designing the landscape to fit various species of animals and their needs, while taking into account the needs of the veterinary students and instructors. It was presented to faculty from CVM and the university’s provost Dr. Warwick Arden for feedback and analysis.

Going forward, the two colleges are going to continue to partner together to further refine specific details and strategize how the ZTAU could be implemented.

"The next round might include figuring out how the turtle rehabilitation habitat could be created, or how we could develop a specific habitat for recovering avian species,” Magallanes says. “The plans can take a long time, but we think the end-result will be something that is modeled across the world in similar situations or institutions.”

By Caroline Barnhill
Sustainability Redesigned

In the fall of 2013, Carla Davis, NC State’s Sustainability Office communications coordinator, approached the Department of Industrial Design with a request. The group had dozens of large vinyl streetlight banners, which were used in 2012 to promote the university’s 125th anniversary, sitting in storage. The Sustainability Office wanted to see if design students would be interested in thinking through innovative ways to reuse — or repurpose — the banners as part of a class project.

Timothy Buie and Percy Hooper, both associate professors of industrial design, agreed and allotted their ID 201 students two weeks to spend working on the banners.

“We had Carla come in, presenting herself as the client, and explain the project to upcycle these banners into something new and different. The students in this class are sophomores, so this was their first exposure to client-based design,” Buie says. “We spent time in class brainstorming the properties of the banners — the school spirit behind them and the emotional connection to the university — before the students started coming up with their ideas and producing prototypes.”

Both Buie and Hooper were surprised to see how engaged the students were in the project. “They were really committed to their designs. We actually had the students asking us for an extra week to work on their prototypes,” Buie explains.

Davis and employees of the University Bookstore were brought in for a presentation to view the final results and were blown away by the creativity. “I expected about 25 variations of a vinyl bag, since that is how most banners are commercially recycled. However, the students far surpassed my expectations, transforming the banners into everything from a hanging chair and a bicycle sling to tailgating gear and a clock. I could not have been more impressed with their creativity and thoroughness. If this is the work they produce as sophomores, I can’t imagine what they do as seniors,” Davis says.

The success of this project opens up the door to other collaborations between the College of Design and the Sustainability Office. “This project gave the students a sense of having someone other than a faculty member evaluate what they’re doing and give them direction. This wasn’t a project in a vacuum — they were designing for a need,” Buie says. “If we can help the university at the same time, all the better.”

See what NC State is doing with sustainability to make an impact:

- www.sustainability.ncsu.edu
- facebook.com/NCStateSustainability
- @NCStateSustain
BLAZING NEW TRAILS

Associate Professor of Landscape Architecture Kofi Boone helps Raleigh-Durham residents reclaim the American Tobacco Trail as a safe and beautiful retreat.

Kofi Boone loves unwinding at the American Tobacco Trail [ATT]. If you’ve ever visited, you’ll know why he finds the ATT so special. The 20-mile trail winds from Apex to Durham. Pretty shade canopies hug an abandoned railroad bed, historic tobacco huts and homes. “This is a stunning and tranquil place to be,” Boone says.

However, recently, simple assaults and robberies on the trail are scaring and even deterring trail users. Worse, many North Carolinians wrongly assume low-income minorities living near the Durham entrance to the popular trail are responsible for the crimes. This has created tension, blaming and anger among Durham communities, Boone says.

North Carolina Rail-Trails, Inc., a land trust helping create trails for public use on abandoned rail corridors, views this as social injustice. With Boone’s help, the group, along with representatives from NC Central University and Carrie Banks, executive director of North Carolina Rail-Trails, secured a 12-month grant from the Z. Smith Reynolds Foundation. The grant will help researchers find out why users visit the ATT and plan and host workshops with residents – including Southside and Hayti locals who many accuse of the increasing trail crime.

“Traditionally this group is excluded from these conversations,” Boone says. “Our goal is allowing people to speak on their own and include those narratives and perceptions in any decisions on improving trail safety,” Boone says.

Boone [and a student research assistant funded by the grant] will help design the process, research the community issues around the trail, crime data, trends and locations. The group already knows for instance, most trail users are there for health benefits — jogging, walking or cycling, while others use the trail as a pedestrian corridor for commuting or shopping. They also hope to find ways to better integrate the communities and the trail. The group will tap the NCRF blog, local media and the City of Durham’s Trail Safety Taskforce to share the findings.

“[We hope to make the trail a place where you can safely meet all your daily needs—shopping, eating and visiting the university, without a car],” Boone says. “Innovative project design will help achieve this.”

For trail maps and construction progress, visit www.triangletrails.org
Associate Professor of Architecture David Hill and his students couldn’t be happier. The Virtual Paul’s Cross Project they helped develop with Professor John Wall in the department of English has evolved far beyond the team ever imagined – generating local and national media coverage and bringing metaphysical poet, John Donne, virtually – to life.

VIRTUAL PAUL’S CROSS

Bringing to Life 17th Century England and Famed English Poet, John Donne

The professors, along with four College of Design graduate students, several NC State technicians and experts, British experts and a $50,000 grant from the National Endowment for the Humanities, used digital models based on archaeological research and historical records to recreate the acoustic and visual experience of two hours within a cathedral courtyard. The end result of the two-year project was a conjuring of John Donne’s sermon of Nov. 5, 1622, including ambient noise such as horses, dogs and the sounds of carriages beating on cobblestone streets. “It’s pretty amazing stuff,” admits Hill who directed the modeling of the project. “And the end result reached a broader audience than we ever predicted.”

A Cross-Disciplinary Design

The inspiration came from Wall, a John Donne scholar who led the project and approached the College looking for an expert on digital modeling. Introductions were made and the two scholars gathered at the College to “kick around ideas,” determine which experts to draw upon and “explore how to put this all together.” Hill adds that while all the modeling work and preparation happened on campus, linguistic and other experts in England and the U.S. were essential to completing the project.

For instance, British actor Ben Crystal [renowned for his original pronunciation of Shakespeare] spoke the part of John Donne. And John Schofield, chief archaeologist at St. Paul’s Cathedral, offered invaluable details the NC State researchers otherwise lacked. Sound engineers in Boston checked the authenticity of the sound recordings and projected the voice of John Donne into the digital space of the constructed model. “For our work to be as correct as possible, extreme details were essential. For instance, what color would the stone on the cathedral have been and how weathered would it look in London where everyone was burning coal to keep warm?” Hill says.
The team made a visual model of what it looked like and felt like to be in the space, then an acoustic model to understand how the space sounded. Graduate students handled the majority of the modeling work. Joshua Stephens worked as the project’s primary digital model builder, Jordan Gray led the model image making, and Craig Johnson built the Web page and Chelsea Sacks handled graphic design.

The Hunt Library presentation drew an amazed crowd, and inquiries have begun to roll in for the NC State team to pursue similar projects. Wall says the best aspect of the project was working with Hill, his graduate students, and the British and American experts whose expertise and time made the project successful.

Meanwhile the team is exploring new, larger grant proposals to model the interior of St. Paul’s Cathedral, specifically projecting choir and organ music into the space, Hill adds. “The story of the project resonates with so many and that’s been the most exciting thing to me.”

By Debbi McCullough
Heading into the 21st century, technology companies across the world were scrambling to find a replacement for the floppy drive. The floppy drive, while convenient to use, lacked storage capacity. Compact discs, while more storage-friendly, were tedious to work with. One of our alumni found an answer — and set in motion a saga of discovery, innovation — and what it means to “own your brain.”

A FLASH of Brilliance

By Caroline Barnhill

In the late '90s, Shimon Shmueli (’10 MID) was exploring the problem of disk storage and transfer in his role as a product line manager with the ThinkPad team at IBM headquarters in Research Triangle Park, NC.

"To me, innovation is all about the link between problems and solutions. It can either be looking at a problem and finding a solution to it, looking at an existing solution and finding a problem for it, or linking between existing problems and a solution," Shmueli explains.

"In terms of CD’s and floppy disks, they were both solutions to the storage problem — but neither was a great solution."

Shmueli and the team at IBM were treading carefully in creating a solution. Competitor Apple had recently debuted its new iMac™ — which was released without a floppy drive — amidst outcry from the public that it was still needed. "That got our attention," Shmueli says. "We couldn’t just do away with the floppy drive without first finding a better solution to the problem. We put many hours of research and brainstorming into it."

"At some point, I was looking at my desk and saw a USB cable connected to a storage device and thought to myself, ‘Why can’t all this storage fit into the actual connector?’" Shmueli continues. He immediately sent a note to the CTO of his division showing his idea — an idea that would become what is now commonly known as the USB flash drive.

Through the years, there has been much debate about who actually invented the flash drive. However, the earliest known document to date accurately describing the flash drive is an IBM Patent Disclosure filed on September 13, 1999 by Shmueli. Because of ongoing litigation, to date, no company or person owns a true patent on the flash drive in its actual form, making the technology open to being created by anyone.

"Legally, when you work for a company and come up with a great idea that is related to the business of your employer, even in the middle of the night, the employer owns your idea — and understandably so," Shmueli explains. "But that often puts the creator in a difficult situation. We all have the choice to risk it and step out on our own to develop an idea. It might sound ‘bad’ but my advice to all creators is to not rush to disclose any big idea to your company. Think through it if it is something you want to pursue on your own."

"Taking chances is the reason Silicon Valley is what it is. Employees think of a great idea, leave and then start another company. That’s how innovation spreads," Shmueli continues.

"In the grand scheme of things, one person leaving to explore a new idea is what contributes to economic prosperity, business growth and human well-being. In retrospect, when I came up with the flash drive, I should have taken the week off, driven to the Washington, D.C. trademark and patent office and done some research."

Instead, Shmueli stayed at IBM and continued working on the concept. He arranged a meeting between IBM and Israeli company M-Systems — one of the top corporations in the development of flash memory, the technology that needed to go into the flash drive. The two companies later collaborated to bring the product to market in 2000 under the name "DiskOnKey." During that time, Shmueli thought beyond a simple flash drive and came up with the concept of what he calls a “computer on a key” that would allow a user to plug a device into any computer effectively turning it into their own personal computer — with all their files and settings. M-Systems agreed to financially back Shmueli if he decided to leave IBM and start his own company. Shmueli, along with two colleagues, left IBM in late 2000 to start KeyNetica with a $1 million backing from M-Systems.
"Ideas are a dime a dozen. Having ideas is not the problem. Having great ideas is a little bigger problem, but still not that difficult for creative people. I like being a problem solver. To me, that is being an innovator."

Due to a dispute with the CEO in the middle of a second round of funding, the company closed in 2002—with all the intellectual property and technology developed regarding the "computer on a key" left to investor M-Systems. M-Systems then partnered with SanDisk Corporation (now the leading manufacturer of flash memory cards for imaging, computing, mobile, and gaming devices) and established a joint venture called UJ that continued to develop the product. In 2006, M-Systems was acquired by SanDisk for $1.5 billion. Over half of the company's revenues came from DiskOnKey.

Shmueli's idea of a full "computer on a key"—despite efforts by M-Systems and SanDisk—never became a commercial success.

"Even the best idea isn't immune to time. While this device was being developed, the rise of the smartphone started to emerge. Why do we need a computer in our pockets when that is essentially what we have in our phones?" Shmueli explains. "When I was first developing the idea, it was needed. It made sense. Today we don't have the same need for it. I still believe the essence of my idea was a good one, but there are a lot of great technologies that don't catch on because something comes along quicker."

For Shmueli, the biggest problem with coming up with the next great idea is not lack of ideas; it is lack of time. Today, as owner of successful Touch360 in Portland, Oregon, Shmueli teaches courses on user-centered innovation and design thinking—and spends his time brainstorming new ideas for his clients.

The flash drive is one technology that has not become obsolete. Even with the advent of cloud computing, the tiny drives still allow for immediacy and convenience—and new opportunities for redesigning the drives in a myriad of new forms. In the spirit of sustainability and ease of use, the BOLTgroup, led by Principal, Director of Product Innovation, Monty Montague, [80 BED] has developed a new and innovative twist on the flash drive.

While users are able to transfer large files on the drives, they often must leave their personal flash drives behind while the files transfer. The BOLTgroup has developed a solution that allows users to leave their files behind and not have to worry about getting their USB drive back. They combined the idea of a pull-tab on a bulletin board with file sharing capabilities. GIGS2GO is a credit card-sized gadget containing four tear-off USB flash drive tabs made out of recycled paper pulp, making them disposable, handy and easy to label.

This unmet need makes sharing large files as easy as "tear and share." Designers produced prototypes using shredded Kraft paper and a kitchen blender to make paper pulp sheets then molded them in plaster forms. With all the interest generated from prototypes and renderings, the BOLTgroup found a manufacturing partner to bring the GIGS2GO to market. BOLTgroup's manufacturing partner, CustomUSB, will sell the product in early 2014.
A DIFFERENT TYPE OF INNOVATION

Dr. Shelley Gruendler’s [’94 GD] path since her years at the College of Design has been anything but typical.

Apart from a short stint as a book designer in Chapel Hill, the North Carolina native hit the road and hasn’t stopped since. Her first stop was across the pond to complete her graduate work – a Masters and Doctorate in the History and Theory of Typography and Graphic Communication at the University of Reading, England. Soon after, Gruendler was on the move once again heading to Canada to continue some of the design and typography teaching she started in graduate school. “It was a hard transition for me when I moved to Canada. Vancouver was a good 20 years behind London in terms of design and typographic understanding,” Gruendler remembers. “The curriculum I was trying to teach was coming from a totally different direction from what other teachers were teaching. I figured that trying to change the system from the inside wasn’t going to work.”

It was advice Gruendler received from former College of Design graphic design professor Michael Pause that helped change the course of her career. “Michael told me: ‘Teach as you learned, not as you were taught,’ and that has never left me,” shares Gruendler. Pause remembers Gruendler as a mature, inquisitive student. “Shelley was open and generous in sharing her ideas so that everyone in the studio could learn and develop. Her passion for the success of every student she teaches is evident in her innovations in teaching.”

To Gruendler, innovation is about seeing what is not working in society and initiating change. “It’s easy to sit around and complain, but it’s hard to get out and actually change it,” Gruendler says. “Thanks to some good lessons from my days as a Girl Scout, I knew if I didn’t like something I needed to change it myself.”

As a result, Gruendler’s Type Camp was born in 2007, providing a non-traditional learning environment that changes the way students and designers think about typography and design by focusing on their passion and process – and helping them develop in creative and innovative ways. Students range from high school graduates to industry leaders. Type Camp is not only for those who wish to learn typography from the start – many renowned designers from companies such as Apple, Facebook, Twitter, Ogilvy & Mather, Dreamworks and Adobe have participated in Gruendler’s camps. “Our camps are held at locations across the world – in 13 countries on five continents. People have attended from India, Denmark, Norway, Australia, Ireland, England, Scotland, Japan, Canada, US, Brazil, New Zealand, Singapore. Our attendees’ accommodations and meals are taken care of so the only thing they have to focus on is their creativity,” Gruendler explains.

During the camps, attendees tackle projects ranging from typeface use to digital font design, hand lettering, calligraphy, and more. Gruendler emphasizes that there is no “correct” way of learning. Creating an environment based on responding to different learning types is another level of innovative thinking that Gruendler employs in her camps. “Learning to draw and interact with letterforms helps students see the nuances and complex construction of these forms, which can lead to a more professional application of type across all media – from electronic to print,” Gruendler explains.

www.typecamp.org

AUGMENTED REALITY: Hear more about Shelley’s experience here at the College and how Type Camp is informing the work of typographic professionals all over the world.
"Innovation is about seeing what is not working in society and initiating change. Creativity is as much about making choices based on what you’ve learned as it is in the act of creating itself."

"I think most designers get stumped creatively because they are limited by self-doubt and worried they are going to do it wrong," Gruendler says. "That’s why I try to have a few different instructors at the camp with varying points of view and areas of expertise. I think that students often become frustrated if they aren’t exposed to different ways of learning and different styles and approaches. Creativity is as much about making choices based on what you’ve learned as it is in the act of creating itself."

Speaking with Gruendler, it is obvious that she is as passionate about typography as she is about the process of learning and community building. From India to British Columbia, she has formed valuable business partnerships by conducting her camps at businesses such as Vancouver’s Fluevog Shoes headquarters. "It’s great for their business and great for mine. Shoes and type – who wouldn’t like that?" she exclaimed.

She credits the College’s Design Camp, which she attended in 1999, as a critical time in her growth. "Design Camp honestly changed my life. For the first time I was part of a group that understood my interests and way of thinking. I felt like I belonged to something," Gruendler says. "I try to replicate that feeling in my camps. The biggest thing our attendees have in common is their interest and love of typography and a desire to learn more. As a bonus, many campers become friends for life."

The feedback Gruendler has received has been overwhelming. Students often come to Gruendler because they are in a creative rut. Many are renowned professionals in their field who just need some new inspiration and to rekindle their creativity. Many often leave not only with new inspiration, but with a totally new direction in life. For example, after attending Type Camp, professional musician, Liz Firth (from Australia), felt a pull toward design and wound up graduating in 2010 with a degree in graphic design.

"Shelley’s approach was that we were all beginners, no matter our levels of experience. We all had something to learn. Shelley and Type Camp gave me the boost of confidence I needed. For me, it cemented my commitment to design, typography and lettering, and introduced me to new ways of thinking," Firth shares. "At camp, I developed an appreciation for beautiful lettering. When I came home, I joined the Australian Calligraphy Society and now serve as their editor, designing, laying out and sourcing stories for their quarterly magazine."

Type Camp’s success has gained the attention of some of the major players in the industry, including Adobe. Many send their designers to Type Camp for creative refueling. Adobe Type and Type Camp International are now sponsoring two scholarships to Type Camp India for Indian residents. There are also plans for more typographic education collaborations in the future. "I never thought I’d own my own business. I always knew I’d be a teacher and I had hoped that I would travel, but to realize I could combine the two? Unthinkable," Gruendler explains. "Perhaps one’s future can be far more amazing than any one can ever predict or prepare for, so why predict or prepare? I’ve become a far more interesting person living a far more interesting life than I could have ever imagined. This is due to allowing possibilities to happen, being myself, and to being surrounded by fantastically intelligent people in my field."

ABOVE: Martin Jackson, calligrapher, demonstrates blackletter at a Type Camp at the Fluevog Shoes headquarters in Vancouver, BC
RIGHT: Type Campers at the Bauhaus
Design innovation for a mobile phone or laptop isn’t hard to spot. But what about for an athlete’s jersey? Can the graphics on players’ uniforms make them feel stronger? Can the font selection for a uniform number on a football player’s jersey create a “warrior effect?”

Justin LaRosa [’10 GD], apparel designer for sportswear giant, Nike, thinks so.

By Caroline Barnhill
Justin LaRosa [10 GD] joined Nike in 2011, where he designs on-field apparel – from helmets to shoes – as well as in-store, retail clothing. He consults closely with Nike’s technicians who design the cut-and-sew lines of the garment before beginning the conceptual process of designing the graphics. Each piece is a story. Whether the public really sees everything that goes into a uniform is secondary to how the players view it. For example, LaRosa recently designed uniforms for the 2012 Army / Navy football game – an annual event he grew up attending as a child.

“People might be surprised at the amount of research that goes into sportswear design – especially athletes’ uniforms. We interview players, coaches and athletic directors to get into the mind of an athlete. Our goal is to mitigate any distractions from their clothing and gear so they can perform to the best of their ability,” LaRosa says. “It’s a huge game for both teams. The cadets for both schools are essentially on lock-down from the beginning of the semester until Christmas break, then they are all let out to go to this football game. You can’t begin to imagine the energy in the stadium,” explains LaRosa. Nike outfits both teams and LaRosa was the lead graphic designer for the Army – also known as the United States Military Academy at West Point. The game is held in Philadelphia every year in late-fall or early-winter, and athletes can expect cold weather, even heavy snow. For inspiration, LaRosa decided to dig through the archives at West Point to find the coldest land battle in Army’s history.

“It was the Battle of the Bulge – a well known World War II battle in northern Luxembourg. The army had a bunch of young guys under General George Patton’s command taking on Adolf Hitler’s German troops. At the same time stateside, the Army’s football team was in the process of winning three back-to-back national championships. It was a great time in the history of West Point,” LaRosa says.

To capture this important time in Army history, LaRosa found old battle maps drawn in 1941 and received military permission to use the maps as a camouflage-like graphic throughout the uniform – the under-compression top, jersey numbers, helmets and footgear. Additionally, there was the opportunity to create an “intimidation effect.”

“The players saw the design as a cool new take on camo. What was so unexpected was that there ended up being some WWII vets at the game who looked closely at the design and recognized the maps,” says LaRosa. “It had real meaning to them.” Despite losing the game 17-13, the players had a real fire to fight because of the design of the uniform. Army coach Rich Ellerson, a historic military buff, loved the design and was able to use the story behind the uniforms to motivate players by sharing an important time in the school’s history.

Trips like the one LaRosa took to West Point are part of his design process for Nike. “We visit the schools to build a relationship with the coaches and athletic directors and then get our inspiration by researching the school’s history. At Nike, we want our designs to be authentic and meaningful. Using a school or team’s history is often the best way to do that,” explains LaRosa.

Design innovation for Nike, and LaRosa, is about creating peak performance – making materials lighter and the fit tighter so the uniform feels like another layer of their skin. As a graphic designer, LaRosa takes the creative process a step further by turning their clothing into something that inspires them to unleash the warrior within. While he likes helping boost Nike’s retail wear, his heart lies in creating team uniforms. LaRosa’s design of Ohio State’s uniforms uses a special material that reacts and lights up when photographed. The design of these pieces requires thinking about all kinds of scenarios for use — how they appear on television, how they react to stadium lighting, and how reflective they might be.

How does this affect the competition? Perhaps it is an example of “brand psychology.” “Put a tri-athlete in a suit designed to mimic the texture and speed of golf balls [because they can fly so far] and they will respond psychologically. They will immediately feel that they can perform better,” LaRosa explains. “It’s neat to be at a Boston Red Sox game and see fans wearing a T-shirt I designed; but there is nothing better than watching 100 football players running onto the field in one of my uniforms and having them win the game,” LaRosa says. “That’s what makes me love this job.”

**Eyeing the Numbers**

Not long after starting at Nike, LaRosa felt like he was back in the College of Design in an introductory level typography class thinking about legibility versus readability and other fundamentals of type design. “When I started at Nike, I noticed many college uniforms used really old [and honestly ugly] number stats for their jerseys. It was obvious that no ‘design-aye’ had been on them,” LaRosa says. “Sitting in a Type 1 class, I wouldn’t have necessarily thought I would use that knowledge so quickly in my career – but it was a really practical skill that I needed to know. I loved that the College of Design trains us to be ‘design thinkers’ – not just people who design for other designers,” LaRosa explains. “We are taught to go into any type of industry and use good, practical design fundamentals as a solid business strategy. I feel that is exactly what really sets the College apart from other design school programs.”

Justin LaRosa shows his College of Design pride on Nike headquarters campus grounds.
"Design is now a team sport."

Steve Schuster | Spring Commencement Address

What a great day. First, please note I'm the most unlikely commencement speaker because I'm the most unlikely successful architect to graduate from this program. Marvin listed my accomplishments. He didn't mention I was a football recruit with no portfolio. I didn't know a single architect's work nor had I read 'The Fountainhead.' Parents, I'm living proof that your son and daughter will do just fine.

I remember my first freshman design studio 44 years ago. My instructor, Fred Eichenberger, gave us vague, poorly articulated assignments. When I asked him, "What do you mean?" Fred replied, "Well, what does it mean to you?" This was exasperating, yet Fred offered me the first of many valuable lessons at the College of Design. I have spent my career figuring out "What does good design mean?" not only to me, but also to my clients and the communities where I've worked. The most valuable takeaway here is not skill acquisition. Your diploma has given you critical design thinking and problem solving abilities. Our planet desperately needs critical design thinking, which is why you'll positively affect many with your careers.

Now is a time of radical change. Design professions are transforming. Institutions, rules and traditions are being questioned or becoming less relevant. Let's start with tools. As freshmen, we were required to have an adjustable triangle and a slide rule. In the 1960's, when our graduate professor at the University of Colorado Boulder asked us to design a full block project in downtown Denver as individuals, not in groups, we rebelled and threatened to withdraw from the program. Today we work collaboratively. When we were designing the Raleigh Convention Center, there were 17 design companies on our team and three architectural firms. Design is now a team sport.

I never predicted public art would dominate my design. Or that I'd travel to China to work with fabricators making 38-foot wide stainless steel mirror-finished baseballs for the new National Baseball Stadium in Washington DC. This practice model didn't exist. You too, will experience unimaginable changes in your careers. The College of Design has prepared you to use critical design thinking to tackle all challenges ahead. Use it!

I'd be a lousy commencement speaker without offering parting advice. First, while you're young and without family or staff relying on you for financial support, take risks. Facebook founder, Mark Zuckerberg, wisely said, "The biggest risk is not taking any risk." I agree – many of my failures led to my most important work. Also, find time to engage in your communities. [If you're not shaping your community, then who will?] Finally, you're among the lucky few who've found their true passion and this will sustain you to face each day's challenges. As Teddy Roosevelt said, "The best prize that this life has to offer is the chance to work hard at work worth doing." So find work worth doing, and work hard at it. You'll be rewarded! Congratulations, and thank you.

I have spent my career figuring out "What does good design mean?" not only to me, but also to my clients and the communities where I've worked. The most valuable takeaway here is not skill acquisition. Your diploma has given you critical design thinking and problem solving abilities. Our planet desperately needs critical design thinking, which is why you'll positively affect many with your careers.
Improving Students' Critical and Creative Thinking
By Meredith Davis, Professor of Graphic Design/Director of Graduate Programs in Graphic Design

Every ten years NC State University undergoes review for reaffirmation of its accreditation by the Southern Association of Colleges and Schools. The review has two components. The Compliance Certification verifies that the university meets core requirements, comprehensive standards, and Federal regulations. The Quality Enhancement Plan [QEP] describes a carefully planned and focused course of action that addresses a well-defined topic for improving student learning.

Consistent with its Strategic Plan and with strong support from the NC State University Deans Council and the Faculty Senate, NC State chose "critical and creative thinking" as the topic of its QEP. Titled THINK, the plan is to "improve students' higher order thinking competencies, including critical evaluation, creative thinking, and reflection on their own thinking." This was a brave choice on the part of the university; other topics, such as study abroad, could be accomplished with much less impact on how and what faculty teach. There is limited understanding, on the other hand, about what is meant by "critical and creative thinking." But instead of simply satisfying accreditation demands, the campus chose to transform its culture to one well-matched to a world of rapid change and shifting disciplinary expertise.

In 1992, the US Department of Labor defined critical and creative thinking as key competencies for productive work in the twenty-first century. Roger Martin, former Dean of the Rotman School of Management, supports the idea that critical and creative thinking are keys to the future of work and prosperity. He describes a long-term statistical trend away from routine-oriented work, which requires people to do the same thing every day, and toward creativity-oriented jobs that ask people to engage in analysis and to make judgments [Martin, 2009, p. 5]

Economist Richard Florida reinforces the importance of an emerging creative class, which he defines as "[p]eople who engage in work whose function it is to create new forms...[including scientists and engineers, poets and novelist, artists and designers] [Florida, 2002, p.69]. Florida argues that global competition for creative talent will be the defining economic issue of the twenty-first century and connects the growth of communities to their ability to translate the underlying potential of the creative class to centers of innovation.

The Design Thinking course taken by College of Design freshmen is seen as a model for introducing students early to high expectations for critical and creative thinking and First-year Design Studios quickly establish attitudes of continuous improvement through peer-to-peer criticism and self-reflection. Educational research shows that freshmen in general believe that "absolute truth is only temporarily inaccessible, that knowing is limited to one's personal impressions about a topic, and that most, if not all problems are well structured with a high degree of certainty and completeness" [King and Kitchner, 1994, p.224]. In contrast to many majors within the university, design students confront ambiguous problems, have multiple opportunities to examine different points of view, and demand to explain what they believe in their very first college experiences. As a result, they advance to upper-level work with skills not easily acquired in courses that emphasize memorization. Researcher Karen Spear says, "If [first-year] students are taught to be passive seekers and transcribers of information, that is what they become. They set their sights accordingly in subsequent courses, often actively resisting attempts in upper-division courses to get them to go beyond the information we give them" [Spear, 1984, p. 6].

Because of its innovation in teaching strategies, the College of Design has taken a leadership role in the development of the QEP. Although design courses are not included in the study – the plan is to intervene in first-year writing and general education courses, as well as introductory lecture courses in engineering and science. Design faculty have been integral to plan development. Dean Marvin Malecha served on the QEP steering committee and Graphic Design professor Meredith Davis chairs the writing team that authored the details of the plan and the final document that will be submitted to SACS. Graphic Design professor Santiago Piedrafita will serve as one of four Faculty Fellows, who train participating faculty in teaching strategies for developing students' critical and creative skills.

In the coming months the university will submit its QEP for approval and will launch its first of five-year course interventions in 2014-2015. This is an opportunity for the College of Design to showcase the innovative pedagogies that result in its students' success, not only as designers, but also as citizens and scholars. [6]


Alumni Danny Stillion ['92 MS] and Emmanuel Thompson ['03 ADN] discuss their early starts, the role the College of Design had in their success, and why art and design must become a larger focus in pre-college education.

Danny: Let's start out by sharing our backgrounds.

Emmanuel: Sure. I was born in Fairmont, NC, a tiny town of about 2000. As a kid, I knew I'd work in the arts since they came naturally to me. As a high school senior, I looked into several universities but on that first visit to NC State, I knew this was the place for me. My freshman year was super hard—everyone seemed more advanced than I did. After taking a class with Associate Professor of Art + Design Patrick Fitzgerald, I knew I wanted to study digital design and animation. Seeing my artwork manipulated and put in motion was great. I never looked back.

After school, I taught art to school design at See Saw, I worked for an animation company, handled graphic design for the State of North Carolina and the Smithsonian’s National Museum of American History. I then pursued my master’s degree, working with Fitzgerald and Ben Watson to get into the mobile world on some grant work. These days, I’m doing EHRs (electronic health records) on iPad. I enjoy working in the medical field and finding new ways to work digitally.

Danny: I, too, grew up in a rural Western North Carolina town called Cullowhee. Strong art teachers guided me throughout my schooling. I even took courses at Western Carolina University while in high school. I received a track and field scholarship to Furman University, completed my bachelor’s in fine arts, then pursued a master’s of product design degree with a concentration in visual design at the College. I discovered something called HyperCard and with that, I focused on interaction design, digital design and emerged as an interaction designer. I worked a summer as a lead software designer at Isettechnologies, a small medical technologies company in Hillsborough, and focused on measuring human physical performance. After graduating, I taught interaction design, new media and videography courses at East Carolina University before joining IDEO in 1999. I’ve been doing interaction design with the consultancy ever since.

How do YOU define innovation?

Emmanuel: Innovation is not necessarily creating something completely new but observing what people do regularly, isolating the problem, and solving it. Innovation simply means making life easier.

How would you best describe your most innovative ideas/projects? What is your process and what makes you innovative?

Danny: Our best ideas come from collaboration with our clients and working within multidisciplinary teams. We spend time in the field, inspired by extreme users. We are always mindful of three design lenses: a people lens, what is desirable, a business lens, what is viable, and a technology lens, what is feasible. This helps us balance being inspired by the world, yet remain within design constraints.
Name a key instance(s) where you delivered something innovative/new to the market.

**Emmanuel:** Our recently developed contextual help design feature is under review for a patent award. Typically, our designs are complex and massive. [When dealing with life or death you must cover a lot.] We wanted to help nurses and technicians learn more easily from an iPad as they go through the process. Our new feature allows users to go deeper on help if needed.

**Do you hold patents/trademarks on your work?**

**Danny:** I’ve been listed on several patents ranging from VOIP phone systems user interfaces to approaches for maximizing user interactions with high-rise elevator systems. This is rewarding; but typically as a design consultant, if our clients reduce something to practice, they get the due credit. One highlight was helping an auto manufacturer develop a range of user interface concepts for Hybrid Electric vehicles. This work yielded six patents after nine weeks of work. The auto manufacturer co-located with us, allowing us to move even faster. It was a true-shared and enjoyable experience. Our work helped their organization well beyond that project.

**What about the College helped you be more innovative? What conditions or experiences led to your ability to “think outside the box” and offer something new and innovative, rather than just fulfilling the objectives of a given project?**

**Emmanuel:** During foundations courses and in my early days at the College, professors insisted students iterate and design multiple solutions. We wondered how many variations could you create. Collaboration was also awesome. [Luckily, my open-space layout here means I can literally slide my chair over to a colleague to ask what they think.] Idea generation and collaboration dominated my school experience. Innovation comes out of your own personal way of seeing things; you learn to take ownership of your work.

**What do you see as the future for design and what is needed in order to address future problems and issues?**

**Danny:** The future for design lies in education. That we both came from rural towns and found rewarding design careers through the arts, while young, shows this. I worry school administrators are stripping the arts from experiences and teaching. Kids are learning art from motivated parents after school versus trained art teachers. To keep innovating, design education must infiltrate all schooling. We must build students’ creative confidence early on.

**What tips or advice would you like to share with students to help them be more innovative?**

**Emmanuel:** I regret not studying the great artists earlier on. Study how the great masters approached design problems and learn their processes. Also, have mentors pour knowledge into you — you’ll keep learning. 

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**The future for design lies in education. To keep innovating, design education must infiltrate all schooling. We must build students’ creative confidence early on.**

DANNY STILLION, Design Director and Associate Partner at IDEO

Danny Stillion
Design Director, Associate Partner at IDEO
After her band broke up, graphic designer Kat Robichaud got the invitation of a lifetime.

Through a connection with a casting agency, Kat Robichaud ['06 GO] was asked to audition for NBC’s hit reality show, The Voice, where singers compete for a place on teams led by musical industry giants, Christina Aguilera, Cee Lo Green, Adam Levine and Blake Shelton. She was quickly selected at the opening audition and rocked her way to the Top 10 before being eliminated in the final rounds.

Despite the flawless glitz and glamour viewers see on the weekly live shows, Kat describes filming as stressful, but also very rewarding. “Every day you have a schedule that keeps you busy from sun-up to sundown,” Kat said. “You’re working with vocal coaches. You’re working with your actual coach. You’re working with choreographers and the band and then it’s up to you during your own time to work on your song yourself and make sure that you’re confident with moving forward.”

On a live mid-November TV interview with NBC Charlotte, Robichaud says in addition to the coaches, who’ve been fighting for her, she’s had huge support from Raleigh and Charlotte. A native of Concord, NC, she attributes part of her popularity with voters to touring the South and nationally with her [appropriately named] glam rock band, “The Design,” which she joined during her time at the college. Kat believes her experiences at the College helped her learn what kind of artist she is, describing the College of Design as a “creative hub.” “It was just a great experience, because it really showed me that I could be this weird different person and it was okay. I learned to embrace certain things because every little thing about yourself, good or bad, makes you your own person. I really love that about the College of Design. It was a very nurturing environment.”

The media refer to Robichaud as “the season’s rocker girl.” In contrast to other contestants, she focused heavily on the theatrics of performing, having grown up watching musicals. She’s belted out songs including Aerosmith’s “I Don’t Want to Miss a Thing,” and Alanis Morissette’s “You Oughta Know” complete with backup dancers, standing on pianos and kicks in high heels. Despite being eliminated, Robichaud will always be remembered as the first contestant to crowd surf on The Voice. She went on the show to further her music career. “Moving forward, what I’d really love to do is to put out a new album and tour and just play a bunch of fun rock n’ roll shows, because that’s what I’ve always wanted to do.”

By Debbi McCullough

facebook.com/katrowbeashow

@katrowbeashow
PLAID IN PEDEN

As a summer design intern at Mountain Khakis, Alexa Peden (‘12 ADGN) was given the task of creating an original plaid pattern for a lightweight flannel shirt. Peden’s plaid was put into production and can now be purchased in five colors. Alexa works as an account manager and designer at High Cotton Ties in downtown Raleigh. www.mountainkhakis.com

PRIDE N’ STYLE

Charlotte Guice (‘09 ADGN) launched Oly Oxen after graduating. The company produces specialty items and apparel for universities all over the nation, including The Pack! Oly Oxen’s “State Pride Collection” is for those who enjoy a classic, unique, southern-inspired and versatile life. They continue to design new products and expand their collections. www.ollyoxen.com

ASCENDING

Angela Medlin (‘91 Environmental + Textile Fashion Design) has made her mark as a leading designer in the apparel industry with top brands such as Adidas, Levi Strauss & Co, and The North Face. She recently came on board as the design director for Eddie Bauer’s “First Ascend” line and has already made her own ascents by directing the creation of an award-winning technical outerwear collection. www.eddiebauer.com

DENIM FEVER

MEFIVER is a design and textile technology company based in Cary, NC, started by Veronica Tibbitts (’12 ADGN/Textiles) and Carly Giannone (’04 ADGN/Textiles). Using an eco-friendly digital printing technology, they have created a premier denim and fashion collection. The company was named one of the “Top 5 Most Promising Startups in the World” by Startup Open. www.mefiver.com

PAT’S PRINTS

Pat Fitzgerald, (‘11 MFA), has created a unique collection of prints as part of a series influenced by pop art, Japanese prints and abstract expressionism printed with archival ink on watercolor paper. www.patfitzgeralddesign.wordpress.com

IMPRESSsed

Jay Khalifa (’93 Product Design Engineering) runs GamiLa Design, which produces everything from sports equipment to tea sticks. The company is renowned for its award-winning and innovative product design. The Impress™ is a clever one-cup-at-a-time coffee maker and to-go mug all in one, combining immersion brewing with a micro-filter press and a triple-walled insulated cup and drinking lid. Just press and go for a great cup of java! www.impresscoffee.com

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or tweet @NCSStateDesign: #thingswelike
Fox Named University Faculty Scholar

Assistant professor of landscape architecture, Andrew Fox, was recently named part of the inaugural class of University Faculty Scholars – a new initiative created within the University to attract and retain the best faculty talent. The University Faculty Scholars is a recognition and reward program for top NC State early- and mid-career faculty. Fox is one of 24 faculty members who will receive $10,000 – in donated funds – for each of the next five years to support his academic endeavors.

Fox, who joined the University in 2009, focuses his research on sustainability strategies that deal with resource management in urban environments – and the humane element behind how people interact with those systems. Fox started the College’s Design | Build studio – a program that collaborates with University Housing and numerous campus stakeholders to create environmentally progressive places on campus. The program and its projects have been presented across the United States and recognized with numerous awards, including City of Raleigh Environmental Awards for Institutional Innovation, a Sir Walter Raleigh Award for Community Appearance, and a Tri-State ASLA [GA, NC and SC Chapters] Merit Award.

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Groovy Stuff

As part of one of professor Bong-Il Jin’s industrial design studios, he encouraged his students to enter a Groovystuff by Design contest, held by home furnishings manufacturer, Groovystuff. Students were charged with designing an environmentally friendly product that reflects the brand and can be produced using sustainable furniture manufacturing practices. Students produced miniature models and product display boards for market attendees to vote on during the High Point Market. The four student designs were voted “Most Marketable” and “Most Likely to Show a Profit” by retailers, interior designers and trade professionals attending the market.

Ami Sueki, a senior in industrial design, was named one of the four winners with her project “Goza Side Table/Chair” which was built with reclaimed wood. Sueki, along with the other winners, received a $250 cash prize along with permanent royalties for life.
Graphic Design Students Celebrate the Power of Experience Design to Transform Brands

When graphic design students Shelby Aranyi, Miranda Melton and Liz Meyers received an email blast through the College news board about participating in a user experience design contest, it immediately caught their attention.

The competition – the Brand X Challenge – was created to celebrate the power of experience design to transform brands and to introduce the discipline to the next generation of brand design thinkers. Created by experience marketing agency, George P. Johnson in partnership with industry publications Event Marketer and Event Design, teams of students across the country were invited to design a mock experiential marketing campaign using an Under Armour™ sponsorship as inspiration.

"The project began in early March and the students had about a month to develop a plan and create graphics," Melton said. "Our first approach was to understand the Under Armour™ brand. We also did a lot of research and gathered inspiration from looking at case studies of successful branded events as well as interaction design. We also researched trends in technology to ensure we were using innovative approaches to tackle the project."

The team’s mock campaign – which they named "Unleash Your Athlete" – was targeted toward elementary through high school-aged children, and would be a kickoff to the 2014 Sochi Winter Olympics that supports Team USA.

The campaign tied together a virtual snowball fight at malls across America with interactive elements like a mobile application that allows users to play augmented reality games.

Aranyi, Melton and Meyers beat out more than 60 other teams by impressing a panel of 40 judges drawn from some of the world’s top global brand marketing teams and design industry associations. The news of their win was an exciting shock to the team, who received a cash prize and coverage in Event Marketing magazine. In May they were flown to Chicago to attend the Event Marketing Summit and were recognized in an awards ceremony. [M]

By Caroline Barnhill

Logging On

CABIN DESIGN TAKES ON NEW MEANING  By Debbie McCullough

Professor of Architecture, Georgia Bizios, gave her students a different kind of assignment this semester: designing cabins for real clients and specific sites. The studio’s focus was designing small structures which allowed students to develop their ideas in greater detail. Designing a cabin for specific clients and sites both challenges and inspires students to respond to client wishes and the characteristics of the site," Bizios says. "Many students blossom and learn to behave as professionals."

The cabin design project was part of a competition hosted for a second year by Cabin Life magazine, a national publication for owners of cabins, cottages, camps and lake homes. Students designed cabins for adjacent sites on the Haw River in Pittsboro, NC with individuals or families acting as clients. Students at the University of Minnesota’s School of Architecture also competed.

Once input and feedback from the clients was in place, Bizios and Professor in Practice, Dale Mullinger of the University of Minnesota, chose ten designs to submit to the Cabin Life contest. The magazine featured the designs on their website where readers were encouraged to vote for their favorite design. Cabin Life editors featured the six most popular designs in their October 2013 issue.

First place went to College of Design student, Taylor Smith, who designed the “Floating Porch Retreat:” cabin. At her client’s request, she had to accommodate eight to ten people and keep the structure within 1,750 square feet, which proved challenging. Her design incorporated several places for sleeping inside and outdoors with bedrooms, patios and screened-in porches. Clerestory windows let in natural light and large windows in all rooms offered lovely views of the Haw River.

Brian Gaudio, also from the College, won second place for “The Cat’s Meow,” a design for a client – an anthropology professor (and her cat) seeking a cozy weekend retreat. The one-level cabin with a covered entryway maximizes natural light, has an open floor plan with vaulted ceilings, a bird bath, a wildlife pond, nature paths and special places for the cat to stroll, hide or stretch out in the sun.

Bizios plans to have students design cabins for rural North Carolina sites again next year. The challenge will once again be centered around addressing the differences between a cabin and a home and developing designs that resolve issues of client needs, structure, construction, materials and site.

“Students must question their preconceptions about how we live and the project’s small scale requires synthesizing all they’ve learned so far,” she says. “Designing cabins in an architectural studio is a great learning experience.” [M]
Roger Clark Looks Back on 44 Years

Roger Clark, Distinguished Professor of Architecture, concludes 44 years of full-time teaching at the College. The recipient of over 25 prestigious awards and well-loved by his peers and students, Clark talks about his early starts, successes and retirement.

Much has probably changed since starting out as assistant professor in 1969. How did the College look and feel back then?

I'd taught for five years at the University of Virginia as an assistant professor prior to what was then the School of Design. It was smaller, and a simpler place, with fewer faculty and only three programs: architecture, landscape architecture, and product design. The College was more intimate than it is now.

Describe your biggest adjustments.

At NC State individual professors, not teams, taught studios. At UVA, I was by far the youngest professor and therefore, in their team-taught studio, sometimes felt like the assistant. I wanted to know whether I could teach, or not, therefore whether I should continue teaching, or practice. I found I could do both. I achieved this by working hard and incorporating excellent lessons learned at Virginia. A colleague and friend, the dean at the University of Washington, told me two things: Teach what you know and don't design the student's studio project. Help and guide, but don't do it for them.

Compare your students in the 70s versus now

The lack of computers drastically changed how students worked. Students weren't as worldly or traveled as our students today. Many were the first college students in their families. This made them more eager, more anxious to learn and know. Students today seem to think more about getting a job.

At what point did you know you wanted to be an architect?

I grew up in Cincinnati, OH and can't remember not wanting to be an architect. As a boy, I occupied myself by building and designing houses out of paper and cardboard for my electric train layout. When my family visited Thomas Jefferson's iconic Southern home, Monticello, I became even more fascinated.

Describe your early professional work. As undergraduate students at the University of Cincinnati, we worked every other quarter. My first job was working for the company that created Formica. I answered customer's questions on how to incorporate Formica into their designs and worked on a plastic stabilized earth house. In my second co-op year, I worked as draftsman for a mechanical engineer, then for a well-established architectural firm. Finally, I was the other employee for a sole practitioner architect. There I designed, sketched, drafted, made models and supervised construction sites. This was meaningful work.

Who do you most admire and why?

I cite a series of architects: Alvar Aalto (Finnish designer and architect), Louis Kahn (from Philadelphia) and Swedish-born Sigurd Lewerentz. Their work is modest, using traditional materials, simple, but with wonderful use of light. The spaces they created are interesting. They also design the entire site, not just the building, making the designs complete.

Describe your proudest achievements.

I feel proudest of others recognizing what I do. Buildings I've designed have won 28 awards. Michael Paice and I co-authored "Precedents in Architecture" in 1989. The book is in its fourth edition, has won an international book award and is translated into Spanish, Japanese and Chinese. I'm proud to have won an ACSA Distinguished Professorship, a national award, and to be the second NC State recipient of both the Alumni Distinguished Graduate Professorship and the Distinguished Undergraduate Professorship. Personally I'm proudest of our family; while my parents were of modest means, I successfully completed college and have a fulfilling career.

What is the best advice/wisdom you received?

The Dean at Washington always said you must work hard and work with integrity in order to do well. Moreover, decent work requires discipline, passion, dedication, and rigor. Architecture is a difficult profession, but if done well, is enormously rewarding. You can do many different things with an architectural education, besides being an architect.

Describe your ideal post-retirement day.

I hope to continue practicing. I will teach a seminar in the spring. I'll write a little. I'll enjoy spending time with my wife, children and our five grandchildren. I hope to play golf and enjoy Hurricanes hockey.

What will be the biggest takeaway from your years with the College?

The students. I still have contact with many - and my fellow faculty. They are all very interesting, bright and talented people.

By Debbi McCullough
Martha Scotford, Professor Emeritus of Graphic Design, and research assistant, Kezra Cornell ['14 MGD], spent the 2012-2013 academic year curating and organizing an exhibition of the book design work of Ernst Reichl [1900-1980], the German-American book designer prominent in New York/American publishing from the 1930s to 1970s.

The July to mid-September exhibition, hosted by the Rare Book and Manuscript Library of Columbia University in New York City, displayed over 100 books, matched with Reichl's hand-written comments about their design, plus promotional materials, and photos from his professional and family activities. Reichl's background is unusual. As cited at the exhibit, Reichl came to the U.S. in 1926 with a PhD and experience in book publishing and design in Germany. Known as a 'whole book' designer, Reichl believed in the "harmonious totality of the package" of a book, and the value of "one design vision" for all its parts. He quickly became one of America's top trade book designers, prolific and award winning.

Ernst Reichl: A Rare Glimpse Into the Prominent Book Designer's Life and Work by Professor Emeritus, Martha Scotford

Reichl designed books for leading publishers including Knopf, Doubleday & Doran and Random House. He designed books for significant authors including Gertrude Stein, Kurt Vonnegut, William Saroyan, Joyce Carol Oates and individual books [James Joyce's Ulysses [1934], for which he is best known; Austin Tappan Wright's Islandia [1942]; Bud Schulberg's The Disenchanted, [1950]; Marshall McLuhan's The Mechanical Bride, [1967]; and The Layman's Parallel Bible [1973]. His books were regularly included in the American Institute of Graphic Art's Annual 50 Books award program. He also actively promoted the profession and high standards in book publishing, by example and through writing, teaching, and exhibitions. The exhibit also showed that Reichl was a scholar and fine writer. Reichl reflected extensively on the books he designed, writing his comments on the design, content, production challenges, and how well each sold on 3 x 5" index cards inserted into the books when in his library.

Professor Scotford spoke at the closing reception to an audience that included library supporters, members of the American Printing History Association and the American Institute of Graphic Arts, and Reichl's family. Reichl's widow had donated all the materials at his death; his daughter, Ruth Reichl, a food writer and former editor of Gourmet magazine, enthusiastically helped with the research. The Columbia library will create a website based on the exhibition, and Scotford and Cornell are working on a searchable database website providing Reichl's comments on about 250 books with images, linking with the library site.\[1\]

By Martha Scotford
If you were here any time between 1975 and 2013, there is little chance that you didn’t know Bill Bayley. Virtually every student, at one time or another, needed Bill’s help, whether it was with IT problems or to check out equipment. Bill Bayley has been a instrumental member of the College of Design community. Bill retired in late 2013 after 38 years of service – and he leaves not only a legacy, but major shoes to fill.

Bill Bayley:
Making New Tracks

Dean Claude McKinney hired Bill Bayley to direct the media resource center in the fall of 1975. Bayley ran the center as a lending library for everything that students needed in order to produce their work. None of it was digital at that time; everything had to be produced manually using film, letterpress, typesetting machines, and the ever-memorable stat camera [which took up an entire room]. Bayley loved his work and always found new ways to get students involved with the technology offered by the College. As technology progressed, Bayley progressed along with it, learning the digital side of production offering workshops on digital photography and Adobe™ software. “While the technology has certainly progressed, the students haven’t changed one bit,” he says. “Students today are just as creative, talented and inquisitive as they were when I started out. At the College of Design, technology and the students’ comprehension of technology moved fast.”

Bayley graduated with a graphic design degree from the College in 1974. “I was very fond of the place from the very beginning,” he said. Bayley came back to the College after working in graphic design and artwork production for a local screen-printing company, primarily handling decals for owners of vehicle fleets and screen-printing for local manufacturers. He, like many of the students in the College, was largely self-taught in technology. Aside from his long career with the College, he says his proudest achievements are his family. He and his recently deceased wife, Dana, also a graduate of the College, enjoyed a 40-year marriage and have a daughter and a son who bring him “a lot of joy.”

Bayley now has time to pursue his hobbies. In March, to celebrate his retirement, he replaced his Honda Civic hybrid with a brand new Subaru BRZ sports car and joined a motor sports club at the Virginia International Raceway, whose membership includes being able to race 18 days a year on a 3.27 mile, 17-turn track. He hasn’t missed a month since joining. Even with his new, relaxing life, he says he will miss the College, its open environment, flexibility and energy. “The College is such an interesting place to work. I’ve enjoyed [and will now miss] the exposure to the many students over the years.”

Bill Bayley standing next to his new sports car

Bill is an institution around here. He had a big impact on my life and is a role model for how to run a service-focused department. He does indeed leave big shoes to fill, believe me! I remember Bill’s dedication to the College and the many times he went above and beyond to take care of so many things behind the scenes that no one else knew about. I believe he honed his eye for detail when he was a student here and never lost it. From setting up a projector to designing and custom building something for the labs, everything he did was exactly as it should be. We miss having him here.

Joe McCoy, Director of Information Technology
JERZY GŁÓWCZEWSKI’S Career Was Always in Flight

I am not an alumnus in the usual sense of the word. But NC State’s School of Design, as it was known at that time, certainly contributed to my graduating into the wider world of architecture and design.

I finished architecture school in Warsaw – the same school that had graduated Matthew Nowicki – in the early 1950s. It was a time of design restrictions – Socialist Realism. But the death of Stalin brought about changes, including the building of the Ten-Year Stadium in Warsaw for the World Youth Games. This put us on the map, and some designs for industrial buildings put me on the map. Since we Poles had had so much destruction during World War II, we had much to rebuild, and the nearly complete destruction of society in those years left us with less in the way of tradition. So, we innovated and were on the cutting edge of experimentation with concrete and cable. This came to the attention of the Americans, and I was brought over on a Ford Foundation grant. Dean Henry Kamphoefner found me while I was on this trip around the United States and he offered me a position at the School of Design.

In the short period I was here [1962-1965] we Poles – my friends Zenon Zielinski and Tadeusz Barucki, and I – brought another, wider world to NC State. This whirlwind tour brought us the famous city-planning project in Aswan, Egypt. The Russians had the contract for the dam, but we had the contract for the city. The Aswan City project was designed and brought to full plan here in Raleigh, with the aid of the upper-level students at the School of Design.

I was sent to Egypt to oversee the realization of the project on the ground. We made great strides in preparing the site, including a massive river-front regularization extending for miles along the Nile. The plans for the city itself, however, were never realized. The 1967 Arab-Israeli War intervened and the deterioration in international cooperation negated this magnificent opportunity. But I benefited; I made a career of designing and consulting throughout the Middle East, Africa, and the United States.†

Jerzy was born in Warsaw in late 1922. In 1939 he was able to make his way to Romania, then in 1940 to Palestine. He was at Tobruk and then chosen for flight training in Spitfires which he flew for the last year of the war. In 1947 he returned to Poland and studied at Warsaw Polytechnic, where he worked with teams both on reconstructing the city (Staszic Palace) and on new projects, including the Stadion Dziesieciolata and the KS Legia swimming pool. He was “discovered” by Kidder Smith, which led to an invitation to tour the US. Dean Henry Kamphoefner – who loved Polish architects and had brought Maciej Nowicki to Raleigh in 1948 – interviewed him and brought him to Raleigh in 1962. He was hired to run the Aswan city-planning project in Egypt, which was designed at the School of Design at NC State.

Thanks to Mark Fountain for his contribution to this article.

Send us YOUR favorite memory from your time at the College!
Email: collegedesign@ncsu.edu or tweet: #ncsuDesignHistory
For more on Jerzy Główczewski’s life, see his memoir, The Accidental Immigrant
HARRY BATES (S2 BARCH) has been selected as one of Interior Design Magazine’s 2013 Hall of Fame inductees. Bates is a partner at Bates Masi + Architects. He has been designing in New York City and eastern Long Island for 45 years. His projects include urban and suburban residences, schools, offices, hotels, restaurants, retail and furniture in the United States, Central America and the Caribbean. The firm has received 58 design awards since 2003.

AMANDA KING (‘97 MD) is a senior graphic designer at M Creative in Winston-Salem, where she has been for 16 years. Amanda is also the programming and events chair on the newly-formed AIGA Triad NC chapter board and will be participating on an advisory board for High Point University’s School of Art and Design.

JESSICA JOHNSON MOORE (‘99 BEDA) was nominated for the 2013 Martha Stewart: American Made awards. Her clothing line, Little Grey Line, is children’s clothing made entirely from repurposed dress shirts. The unique features of each shirt are incorporated into one-of-a-kind children’s garments. Moore was also a featured designer at the 5th Annual Redress Raleigh Eco-Fashion Show. She was an adjunct professor in architecture from 2005-2011. www.littlegreylinemoo.com

Let us know what you’re up to!
Send us your DesignNote:
www.design.ncsu.edu/DesignNote

VINCENT PETRARCA (’94 BEDA, ’99 BARCH) and Katherine Hogan were recipients of this year’s prestigious Residential Architect magazine’s 2013 Rising Star Leadership award. The partners in the Raleigh-based Tonic Design and Tonic Construction firm also received a Merit Award from the North Carolina Chapter of the American Institute of Architects [AIA NC] for the design and construction of the “Crabill Modern” house [shown on the right] in Hillsborough, NC. Petrarca is pursuing his masters degree in architecture at the College while teaching as an adjunct professor.

JEREMY SHELLBORN (‘80 MGID), now associate professor of visual communications at the University of Kansas, was the recipient of the 27th Byron T. Shutz Award for Excellence in Teaching. Shellborn’s study focuses on applied professional design practice, and cognition and culture as they relate to design artifacts. Shellborn explores strategies for designing experiences and artifacts that facilitate engagement, understanding and learning.

DOUGLAS BRINKLEY (’74 BEDA) has been named a USGBC 2013 LEED Fellow at the Greenbuild International Conference and Expo in Philadelphia. Brinkley has spent more than 20 years working on green design. He co-founded North Carolina’s first USGBC Chapter and has been essential in creating energy and water conservation legislation, both at the state and national level. He is among 51 of the world’s most distinguished green building professionals to be selected this year. His work includes five LEED Platinum certified projects, the first LEED-certified building in the UNC System and the first LEED-certified multi-building community college campus in the country.

JESSICA ROUSH (‘10 ADN/TEXTILES) designed a winning t-shirt for National Public Radio [NPR]. Her design was selected out of 150 submissions to the nation-wide contest. Her design will be sold as the official NPR t-shirt. Roush currently works as a textile designer for Kohl’s department stores and lives in Milwaukee.

HENRY MENZIES (‘80 BARCH) has been practicing architecture in Boston and New York with a focus on church design. Some of his work includes St. Augustine in Bridgeport, CT, St. Aloysius Church in New Canaan, CT, and the Chapel of the Heights school in Potomac, MD. His work and writings can be found at www.hmenzies.com.

Elevated to fellowship in 2013 were MICHAEL COLE (’79 BEDA) by the American Society of Landscape Architects and TURAN DUDA (’76 BEDA), MICHAEL STEVENSON (’77 BEDA, ’86 BARCH), and KEVIN UTSEY (’79 BEDA, ’84 MARCH) by the American Institute of Architects.

KRISTIE KIM (‘14 DS) is one of 12 illustrator winners being honored at the 30th annual L. Ron Hubbard Achievement awards in April. Kim’s victory comes with seeing her art published in a best-selling science fiction/fantasy anthology series, $500 prize money, and a week-long Hollywood workshop taught by blue-ribbon contest judges including Cliff Nielsen, [named for his Chronicles of Narnia artwork.] Kim says she likes “creating characters but giving them expression to make it seem as though they are moving.” She’s thankful to her design professors in design studies for helping her achieve this award.
DANA DAVIS BAYLEY
Dana Bayley [76 ED], passed away on January 22, 2013 at Hospice House in Raleigh, one week shy of her 61st birthday, after a continuing battle with brain tumors. Bayley, wife of recently retired College of Design Information Technology Director, William Bayley, was born in Raleigh and enrolled in the College in 1972, later graduating with her bachelor’s degree of Environmental Design. As a graduate assistant, Bayley worked on The North Carolina Courthouse Study, a survey of the state’s county courthouses for the N.C. Administrative Office of the Courts. She designed 100 Courthouses, the final two-volume report. She also designed Carolina Dwelling, volume 26 of The Student Publication of the School of Design. Both publications shared an Award of Merit given by the American Association for State and Local History. Carolina Dwelling became the largest selling volume of The Student Publication ever, requiring three additional printings.

Dana was an active Design Guild volunteer and was honored with the College’s Wings on Wings Award in 2004. Her husband, Bill, a daughter, a son, a mother, brothers, and two grandchildren survive her.

Bill Bayley wrote this obituary along with contributions from friends on Dana Bayley’s Caring Bridge page.

DANA AND BILL BAYLEY (Photo by KC Ramsey)

LUCA HARRELL
Luca Daniel Russetto Harrell, age 21, son of Stephen and Daniella Harrell, died Wednesday, October 2nd. Luca was a senior at the College. To his peers, Luca was a phenomenal talent, respected for his endless creativity and enthusiasm as well as for his desire to help others realize their potential. To his friends, he was a sweet spirit, a generous listener, and an open heart. To his family, he was a precious and sensitive soul, full of love and life. In addition to his parents, he is survived by his brother, Jonathan Harrell, and his paternal grandparents, Ralph and Rosalind Harrell of Cedar Grove. [News & Observer]

CHARLES M. SAPPFIELD
Charles M. Sappenfield, former College of Design faculty member and the founding dean of Ball State University’s College of Architecture and Planning, passed away on Monday, September 30, 2013 in Fort Myers, Florida. The Charlotte Observer reports Sappenfield was born March 17, 1930 in Columbia, South Carolina. He interrupted his studies with the [then] School of Design’s architecture program to work briefly as a designer with Pace Associates Architects, joined the U.S. Army where he served in Heidelberg, Germany, then returned to the School to graduate with a bachelor’s of architecture. Sappenfield taught architecture here and worked as a designer for JB King Architect in Asheville, NC, and eventually founded the firm, Sappenfield, Weigman, Hall Architects while teaching at Clemson University. Colleagues say “Charlie” used as a favorite saying: “good design is good business.” Sappenfield is survived by his son, daughter-in-law, three grandchildren, and daughter.

JUDY HARMON
Judy Harmon, an inspiring artist and strong community leader and friend of the College, passed away on January 10, 2013, surrounded by family and friends. Judy was known for her artistic sense of landscape design – a honed skill that is her legacy in nature. Judy attended Sullins College in Bristol, Va. before transferring to UNC where she studied art education. She then moved to Washington DC, enrolled in American University to study interior design, and taught elementary school. Her stepfather, a prominent Greensboro architect, introduced her to a young architect intern working for him, who would become her future husband – Frank Harmon. They married and moved to New York City where she continued her art studies at the New School. In 1973, the Harmon moved to England, where Judy taught at the American School in London and discovered a love of plants and gardening. In 1979, she and Frank left England for Auburn, Ala., and later moved to Raleigh. Judy enrolled in the horticulture program at NC State University, but transferred to the College of Design after being encouraged by professors to further her artistic skills. She received a masters degree in landscape architecture.

While still a student, Judy built a house and garden for her family on Brooks Avenue near the School of Horticulture. Her house and garden became a laboratory for plants, design, color, and texture, and she began championing the movement for sustainable design approaches. After retirement, Judy focused her energy on the Master Plan Committee at the JC Raulston Arboretum at NC State. She also served on the Board of Directors of Trees Across Raleigh, a non-profit organization dedicated to planting trees in public areas throughout the city.

Judy found value in everyone’s contributions, serving as an adviser to students, architects, and designers. She was that way with her friends, who remember feeling better about themselves for being with her. Judy has been described as having an instinctive sense of place, and enjoyed being where she was and with whom she shared the experience. She is survived by her husband, Frank Harmon, her daughter, Laura Harmon of Brooklyn, New York, and her son, William Harmon of London.

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Design Guild President Kenneth Tyler (L) on stage with 2013 Clancy & Theys award recipients Tim Clancy and Tiek Clancy, and Dean Marvin Malocha (center R).

Chancellor Randy Woodson addresses guests at the Project Runway preview party honoring professor and alum, Justin LeBlanc, at the chancellor’s residence.

Dr. Shelley Gruendler ('73 GD) surrounded by students after her lecture. Lots of swag provided!

John Atkins ('65 BARCH), Lloyd Walter ('60 BARCH) and Steve Schuster ('70 BEDA) celebrate the induction of Deans Kamphoefner and McKinney into the Raleigh Hall of Fame.

Art2Wear Director, Katherine D'iguide ('05 ID, '11 MAD) and A2W Consultant, Raymond Nadeau, toast the event’s success at the after-party.

Ellie Torre ('90 MARCH) and Walt Teague ('89 MARCH) at the AIA Wilmington event.

Barb Wiedemann ('91 MGD) treated the Leader's Council to a tour of the Porsche: Seducing Speed show she curated at the NC Museum of Art.

Jane Matthews, Jen Sisak ('74 MARCH) and Masaki Furukawa enjoy the Alumni & Friends reception in Wilmington.

Joshua Stephens ('11 BEDA, '13 MARCH) enjoys the panoramic view of Denver at the alumni reception hosted by Fentress Architects during the AIA National conference.
How We Give

After rigorously studying all the world's great architecture for six years, Turan Duda wanted nothing more than the chance to see it with his own eyes. After completing his Masters in Architecture at Yale, Turan received the school's prestigious Winchester Traveling Fellowship. This award gave him and his wife, Linda, the opportunity to travel anywhere outside the United States, expanding his knowledge outside of the classroom and leaving a lasting impact on his career and his life. Since then, Turan and Linda Duda have traveled the world, bringing their kids on an annual adventure to all the great cities, focused on enriching their cultural knowledge, comprehension and perspective. Now that their children are grown, Turan and Linda want to give the same educational experience of travel to deserving students in the College. In 2013 the couple pledged a new gift for aspiring NC State architects — the opportunity to broaden their minds through travel.

The Turan and Linda Duda Travel Fellowship will offer a promising architecture student $5,000-$10,000 to travel outside of the United States immediately following graduation. Duda Fellows will be selected through a nomination and application process established by the faculty of the School of Architecture. Upon returning, the Duda Fellow will give a presentation to other students in the College, sharing what he or she gained from the travel opportunity. "If you are really really lucky, you will have great teachers — in school and in life. Being a lifelong student and teacher, I felt strongly that it was important to share what we have with others, supporting a student to explore and expand their world." Turan said.

Turan and Linda give to the College because they feel the College gave so much to them. "I tell people that the College of Design lived up to its promise, and the promise started on the first day of class. I remember Professor Vince Foote walked into the classroom and told us they were going to prepare us for life and not just the profession. They taught us to think. What they were really saying, is that with a design education you can become anything and choose any field. The lessons I learned, I draw upon even today."

Turan and Linda have been contributors and volunteers of the College for many years. Turan is a member of the Design Guild Board of Directors and previously served as its President.
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Density in Place: Design Works
The NC State College of Design 2014 Urban Design Conference will explore, discuss, and reconsider density, including appropriate densities for the region. Evidence-based case studies and design best practices will examine density in the context of downtown, suburbs, and metro landscapes. Topics will include placemaking, environmental impact, neighborhood transition, infill, affordable housing, transit-oriented development, context-sensitive design, entrepreneurial initiatives, green infrastructure, and resilient design.

Confirmed speakers to date:
Ignacio Burster-Ossa, FASLA, Principal, WRT
Julie Campbell, author, Made for Walking: Density and Neighborhood Design
John M. Kave, Chairman and CEO, Kane Realty Corporation
Joseph Kott, PhD, AICP, PTP, President, Kott Planning Consultants, LLC
Mike Lydor, Principal, The Street Plans Collaborative
Moderator: Jess Zimbabwe, AIA, Executive Director, ULI Daniel Rose Center for Public Leadership

Have a case study you would like to present during break-outs on urban density? Go to:
design.ncsu.edu/urban/call

SAVE THE DATE!
Join us for the 17th Annual Design Guild Award Dinner at
The Angus Barn, Raleigh, NC, on April 12, to honor our
2014 award recipient, Mitchell Silver, AICP, and celebrate
the College of Design community!

Interested in becoming a Design Guild Award sponsor?
Contact Cirilla Abramczyk at: 919.515.4310

For more information, visit: design.ncsu.edu/alumni/design-guild-award

Join Design Guild
Membership in the Design Guild is surprisingly affordable. Newer alumni who graduated from the College within the last decade can join Design Guild for as little as $10/month.

Please join the Design Guild online at:
design.ncsu.edu/alumni/give and consider making a gift at one of these levels:

GOLD Graduates of the Last Decade $16/month or $120 annual gift
MEMBER $20/month or $240 annual gift
COLLEAGUE $40/month or $480 annual gift
Minimum for businesses or organizations with one to two employees

DEAN’S CIRCLE $1,000 annual gift
Minimum for businesses or organizations with one to two employees
INSIDER $2,500 annual gift
Minimum for businesses or organizations with one to two employees

Colleague, Dean’s Circle and Insider level gifts may designate a portion (up to $250) to a specific department or initiative within the College of Design.

With your membership to Design Guild, you will receive personal invitations to attend the annual Design Guild Award Dinner where you can network with other top design professionals from around the country, attend guest lectures and join us at the annual Back-to-School BBQ as well as all other campus events.

So many of our alumni tell us that they would not be where they are today in their careers without a certain professor, class, scholarship or study abroad experience they had with the College.

This is your chance to help shape the life of another student, who like you, has a love of design – and a drive to make a difference in the world.
THANK YOU! Listed below are donors to the College of Design (individuals, firms, companies, and foundations) who contributed $100 or more to the College between July 1, 2012 and June 30, 2013. The list includes in-kind donations. Please accept our deepest apologies for any errors or omissions.

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2nd year MArch Track 3 student and 2013 winner of the Brian Shawcroft award.

The Brian Shawcroft Prize is awarded every year to architecture student(s) who demonstrate excellent hand drawing skills. The funds for this prize were established thanks to the generosity of Mr. Brian Shawcroft, architect and former faculty member at the College.