MEET
WILL
QUICK
NEW PRESIDENT OF THE FRIENDS OF THE LIBRARY BOARD OF DIRECTORS
Focus seeks to promote the services, activities, needs, and interests of the NCSU Libraries to the university, the Friends of the Library, and beyond.

Unless otherwise noted, photographs are by Charles Samuels and Brent Brafford, NCSU Libraries, or Marc Hall, NC State University Communications Services.

NC State Libraries:
www.lib.ncsu.edu
Focus Online:
www.lib.ncsu.edu/publications/focusonline

On the Cover: Will Quick, President of the Board of Directors of the Friends of the Library. Photo by Marc Hall, University Communications.

This publication was printed at a cost of $1.45 per piece with funding by the Friends of the Library of North Carolina State University.

©2015 NCSU Libraries
LIBRARY EVENTS Recap

This past Fall’s events were another testament to the fantastic students, faculty, and staff who help the NCSU Libraries remain a vital hub of creativity, thought, and purpose in the NC State community.

Genetics, Food and Society
In August Dr. Fred Gould of NC State’s Genetic Engineering and Society (GES) Center led a discussion featuring Pamela Ronald and Raoul Adamchak, visiting authors of the 2014 Common Reading book, Tomorrow’s Table: Organic Farming, Genetics, and the Future of Food. NC State’s Common Reading Program assigns a book to incoming undergraduate students, introducing them to the university’s “institutional and academic values and expectations, including engagement as members of this community of scholars.”

Documentary film – “If You Build It”
This inspiring documentary film tells the story of a design/build project that transformed the high school experience for a group of students in rural Bertie County, NC. Following the screening, NC State students Colin White and Stevie Mizelle, two of the students featured in the film, were on hand to answer questions and talk about how the experience affected their lives.

Independent film, “Harbinger”
NC State alumni Andrew Martin (producer) and Kieran Moreira (director) brought their new independent film, “HARBINGER” to the Hunt Library. The film is a live-action, fantasy-drama, seen through a child’s perspective. Martin and Moreira led a post-film discussion.

NCSU Libraries’ Amazing Alumni series featuring Josh Katz
The New York Times’ Josh Katz visited the NCSU Libraries in September to discuss how data visualization is improving researchers’ ability to convey complex information to the public. Katz is a graduate of NC State’s Department of Statistics and creator of the immensely popular interactive dialect map – the New York Times’ most visited piece of content in 2013.

A/V Geeks Presents: “Vote - And The Choice Is Yours” (1964)
In commemoration of the 50th anniversary of the signing of the Civil Rights Act, NC State alumnus Skip Elsheimer screened Elsheimer’s 16mm educational film, Skip Elsheimer, screened “Vote- And The Choice Is Yours”, a film produced in 1964 by the North Carolina Film Board. The film featured interviews with Fayetteville State College students discussing voting and other democratic processes. Dr. Blair Kelley of NC State’s Department of History provided historical perspective and context.

Author Event featuring Richard Blanco
Richard Blanco discussed his memoir The Prince of los Cocuyos: A Miami Childhood, a poignant, hilarious, and inspiring memoir from the first Latino and openly gay inaugural poet. This event was co-presented by the Friends of the Library and Quail Ridge Books & Music.
**Read Smart:**

*Flash Boys: A Wall Street Revolt* by Michael Lewis
Dr. Eileen Taylor, CPA, CFE, and associate professor of accounting at NC State, led our August discussion of the bestseller *Flash Boys: A Wall Street Revolt* by Michael Lewis.

*Cooked* by Michael Pollan
In September, Dr. Keith Harris, assistant professor of Food, Bioprocessing & Nutrition Sciences at NC State, moderated our discussion of *Cooked*, the newest bestseller by Michael Pollan, author of *The Omnivore’s Dilemma*.

**Fabulous Faculty**

*NCSU Libraries’ Fabulous Faculty series featuring Dr. Barbara Sherman*
Our Fabulous Faculty series took us to the College of Veterinary Medicine in September for a talk with Dr. Barbara Sherman, clinical professor of veterinary behavior at NC State’s College of Veterinary Medicine and past president of the American College of Veterinary Behaviorists (ACVB). Her presentation focused on helping dog-lovers better understand their canines’ cues and behavior.

**Furniture Design Series featuring the chairs of the Hunt Library**

As hundreds of student tweets, photographs, and even websites show, the Hunt Library is “full of chairs,” and students love them. In fact, we now have one of the most extensive collections of Modernist chairs anywhere—and a great opportunity to use them as an educational tool for those interested in design, textiles, and many other fields.

This fall we launched the Hunt Furniture Design Series to let the students, the community, and all of us who work at NC State learn more about our collection and design in general from some of today’s best designers and scholars. On September 16, 2014, Brian Lutz from Knoll presented the history of Knoll furniture design and the beginning of the Modernist Movement. Describing each designer’s thought process, Lutz detailed how many modernist designers sought to innovate by removing decoration and breaking with past conventions.

On October 28, 2014, our guest speaker was Tim deFiebre. His background working with Ward Bennett, one of the greatest furniture designers of the 20th century, brought him a great understanding of the ergonomics of the chair and the difference between “sitting on it” and “sitting in it.” Tim shared his design process of developing a simple, beautiful chair with a focus on the varied details that make it comfortable.

Both Brian and Tim reminded us that the Modernist Movement not only presented us with some of history’s most elegant design solutions, but also revealed the optimism in humanity’s ability to employ creativity to improve people’s lives.

You can learn more about upcoming Hunt Furniture Design Series events at [www.lib.ncsu.edu](http://www.lib.ncsu.edu).

**NCSU Libraries’ Fabulous Faculty series featuring Justin LeBlanc**
“Project Runway” season 12 finalist and NC State’s own Justin LeBlanc, assistant professor of Art + Design, talked about his design aesthetic, his work at NC State, and the inspiring story of his life before and after “Project Runway.”

In conjunction with LeBlanc’s presentation, NCSU Libraries has exhibited items from his Soundwaves collection in the D. H. Hill Library Ask Us lobby.

**The Maid’s Version by Daniel Woodrell**
In October, Dr. Marc K. Dudley, associate professor of English at NC State, led the discussion of this short novel by the author of *Winter’s Bone*.

**NCSU Libraries’ Fabulous Faculty series featuring Justin LeBlanc**

“Project Runway” season 12 finalist and NC State’s own Justin LeBlanc, assistant professor of Art + Design, talked about his design aesthetic, his work at NC State, and the inspiring story of his life before and after “Project Runway.”

In conjunction with LeBlanc’s presentation, NCSU Libraries has exhibited items from his Soundwaves collection in the D. H. Hill Library Ask Us lobby.

A special thanks to the Tom Russell Charitable Foundation, Inc. for its support of NCSU Libraries programs throughout the semester.
THE RESEARCH OF RESEARCH: THE 2014 I.T. LITTLETON SEMINAR WITH DR. SHEILA CORRALL

Supporting and advancing the research enterprise is part of the strategic fabric of modern research libraries. From formulating and researching a topic, to actively curating data, to visualizing scholarship, to advising on publication rights, to analyzing the impact of publications—research libraries are working across the research lifecycle to help make scholars more productive. This specialized expertise is part of the Libraries’ research service portfolio, and part of its vision to serve as NC State’s competitive advantage. These developing roles for libraries have one thing in common—they all help support emergent strategies for research. But what other services, expertise, and technologies can be offered, and what resources can be called upon to further this worthy endeavor?

Drawing on several of her recent and ongoing projects, I. T. Littleton Seminar speaker Sheila Corrall, Professor and LIS Program Chair at the University of Pittsburgh School of Information Sciences, addressed this topic with a well-researched survey of the current landscape of academic library support for high-end research in a digital environment. Though Corrall focused many of her research questions on library support for research data management, she was careful to point out that the issues covered in her lecture were just as important to libraries offering other high-end research services such as bibliometrics, visualization and digital humanities.

In efforts to become key players in this burgeoning research environment, Corrall advised that libraries should employ an admittedly bold “overextension” strategy and attempt to reach beyond their current capabilities. She feels that success can be achieved with this strategy if libraries mobilize their invisible assets, and swiftly acquire the required competencies by simply providing high-end research support. Corrall would like to see libraries overcome their aversion to launching services that are not completely polished and perfect. To be bold in adopting new services for and collaborations with researchers. Seeing how they work and adapting accordingly. In the dynamic arena of high-end research, libraries need to focus on being nimble, adaptable, and bold. That being said, Corrall still amusingly advised, “Don’t get reckless”.

Supporter of high-end research, or collaborator? The modern library must carefully consider how to present itself to its research community. Corrall firmly asserted that there is a very clear choice. “Faculty don’t want supporters. They want people to help them do it. And I think libraries can be those people.”

Corrall’s lecture, held on May 5, 2014, was a part of the annual I. T. Littleton Seminar which is funded by an endowment established in 1987 to explore key issues in the development of academic libraries and to honor former Library Director Littleton upon his retirement from North Carolina State University Libraries. The Libraries welcomes your continued support of the I. T. Littleton Seminar series. If you would like to make a contribution to support future seminars, please send your check, payable to the Friends of the Library, NCSU Libraries, Box 7111, North Carolina State University, Raleigh, NC 27695-7111. Please note “I. T. Littleton Seminar Endowment” on your check. For more information, please call (919) 515-7315.
BUDGET CUTS FORCE JOURNAL CANCELLATIONS

As part of the 2013/14 budget reductions levied on the university by the North Carolina General Assembly, the Libraries’ budget was cut by more than $1.3 million, about 5% of our total budget. To meet these reductions, we had to eliminate 27 staff positions and reduce library hours.

As inflation continues to erode our buying power, this year the Libraries was also forced to make drastic cuts to the collections budget, resulting in the cancellation of more than 600 journal subscriptions.

The following is the list of journal titles that are no longer available to our faculty and students as of January 1, 2015. Read more about the cancellations and the process for choosing these titles at www.lib.ncsu.edu/collections/cancellations/.

Abstract and Applied Analysis
Acta adiabatika
Acta veterinarria
Ad-hoc & sensor wireless networks
Advances in mathematics of communication
Advances in theoretical and mathematical physics
Aeronautical journal
Aerospace
Aerospace America
African Diaspora Journal of Mathematics
African entomology
Afrika Statistika
Afro-Hispanic review publication of the Afro-Hispanic Institute
Air & space Smithsonian
Air power history
AJOB neuroscience
AJOB primary research
American Ceramic Society bulletin
American criminal law review
American fruit grower
American heritage of invention & technology
American journal of comparative law
American journal of forestry
American journal of intellectual and developmental disabilities
American nineteenth century history
American school and university
American theatre
American vegetable grower
Analytical science
Ancient philosophy
Andrology
Animal biotechnology
Animal law
Animal pharm
Animal sheltering
Annales de la Societe entomologique de France
Annales de l’Institut Fourier
Annals of science
Appita journal
Applicable analysis
Applied artificial intelligence
Applied economics
Applied financial economics
Archiv fur Geschichte der Gesellschaft
Archives des sciences
Archives of natural history
Argumentation and advocacy
Arizona journal of hispanic cultural studies
Arms control today
Ars combinatoria
Asian journal of comparative law
Asian Journal of Mathematics
Asian textile business
Asia-Pacific journal of risk and insurance
Astronomy & geophysics
Atomic data and nuclear data tables
Atomization and sprays
Audubon
B.E. Journal of Economic Analysis & Policy
B.E. journal of theoretical economics
Banach Journal of Mathematical Analysis
B.E. Journal of Macroeconomics
Basic income studies
Best’s insurance reports. L.H, US & Canada
Best’s insurance reports. P.C. US & Canada
Biblical archaeology review
Biochemical systematics and ecology
Bird study
Black scholar
Board leadership
Bollettino della Societa entomologica italiana
Brain, behavior and evolution
Breeding research
Breeding science
British medical bulletin
Bulletin (British Society for the History of Mathematics)
Bulletin de la Societe entomologique de France
Bulletin de la Societe entomologique de France
Bulletin de la Societe entomologique de France
Bulletin de la Societe entomologique de France
Bulletin de la Societe entomologique de France
Bulletin de la Societe entomologique de France
Bulletin of Spanish studies
Bulletin of the Belgian Mathematical Society Simon Stevin
Bulletin of zoological nomenclature
Business and Politics
Cabinetmaker+FDM
California journal of politics and policy
California veterinarian
Camelina journal
Campaigns & elections
Canadian journal of African studies
Cancer investigation
Capitalism and society
Cartes de las Americas
Case studies in sport management
Catholic Biblical quarterly
Catholic Record Society (Great Britain) publications
Cato journal
Cerebral research communications
Chat (Raleigh, N.C.)
Chemical and petroleum engineering
Chemical fibers international
Chemical product and process modeling
Chemistry international
Child & youth services
China agricultural economic review
Chinese optics and photonics
Christianity & literature
Chronica horticulturae
Church & state
Clays and clay minerals
Clinical toxicology
Clinics in laboratory medicine
Clio (Kenoshas, WIs.)
Coastal management
College and university
College student journal
Commentarii mathematici Helvetici
Communications in Mathematical Analysis
Communications in partial differential equations
Communications on applied nonlinear analysis
Comptes rendus mathématiques de l’Académie des sciences
Computer aided geometric design
Computer methods in biomechanics and biomedal engineering
Computer imaging & visualization
Computers in libraries
Concrete (London, England)
Construction innovation
Contributions to macroeconomics
Corrosion
Cortex
Cost engineering
Cotton, review of the world situation
CRC critical reviews in biomedical engineering
Critical reviews in biotechnology
Critical reviews in clinical laboratory sciences
Critical reviews in eukaryotic gene expression
Cultural & social science quarterly
Current (New York, N.Y.)
Current science (Bangalore, India)
Cervical and ocular toxicology
Defenders
Design engineering
Developmental neuropsychology
Dickens quarterly
Dickensian
Digeration
Digital philosophy
Discourse processes
Discover
Dynamic systems and applications
Earth
Economics & politics
Economists' Voice
Ecotextile news
Education USA
Education week
Educational gerontology
Educational horizons
Educational leadership
EDUCASE review
EHN - environmental health news
Eisei debutsu
Emu
Endangered species research
Endocrine research
Engineering design graphics journal
Engineering journal
Entomologist’s gazette
Entomologist’s monthly magazine
Environment and history
Environmental quality management
Equine
Epistemology and dynamical systems
European journal of archaeology
European journal of entomology
Exceptional children
Fiber organization
First things
Fish farmer
Florida scientist
Folia ecolopolica
Food biotechnology
Foresight
Forest history today
Forest landowner
Forests & people
Forum for health economics & policy
Fountain (London, England)
Functiones et approximatio,
Commentarii mathematici
Fundamental & clinical pharmacology
Fungal biology
Geomicrobiology journal
Georgia journal of science
Genetics
Global Economy Journal
Global jurist
Goat rancher
Great Lakes entomologist
Gulf of Mexico science
Hardy Society journal
Harvard civil rights-civil liberties law review
Harvard journal of law & public policy
Harvard Ukrainian studies
Herpetological bulletin
Herpetology
Historia medicinae veterinarum Amici
Historia mexicana
Historical reflections
History (Helen Dwight Reid Educational Foundation)
History of photography
History, reviews of new books
Howard’s diaryman
Hokkaido Mathematical Journal
Homology Homotopy and Applications
Horizons
Horse
Horse illustrated
Houston journal of mathematics
Human and ecological risk assessment
Human-computer interaction
IAWA journal / International Association of Wood Anatomists
IEEE transaction on electrical and electronic engineering
Immunology and allergy clinics of North America
India today international
Indonesian journal of entomology
Indonesia
Information management & computer security
Information processing letters
Information standards quarterly : a publication of the National Information Standards Organization
Information technology & people
Inquiry
Interactive technology and smart education
Interamerican journal of psychology
International commentary on evidence
International fiber journal
International immunopharmacology
International Journal of Biostatistics
International journal of climate change strategies and management
International journal of computers & applications
International journal of contemporary sociology
International journal of culture, tourism and hospitality research
International journal of emerging electric power systems
International journal of energy sector management
International journal of engineering education
International journal of geographical information science
International journal of hospitality & tourism administration
International journal of modelling & simulation

NCSU Libraries - FOCUS | 5

LIBRARIES NEWS
Scandinavian journal of work, environment & health
School business affairs
School science review
Science & technology libraries
Science and children
Science in context
Scientific studies of reading
Scriberian and the Kit-Cats
Sea history
Sea technology
Security studies
Seed science and technology
Seminars in nuclear medicine
Sierra
Skeptical inquirer
Sky and telescope
Social cognition
Social theory and practice
Soil horizons
Soils and foundations
Sojourners
Souls
South African statistical journal
South Atlantic quarterly
South Carolina wildlife
Soviet and post-Soviet review
Spanish in context
Spatial economic analysis
Sport management education journal
Stanford law review
State legislatures
Statistical communications in infectious diseases
Steel research international
Structural engineer
Structural engineering and mechanics
Structural survey
Studia dipterologica
Studia Leibnitiana
Studies in 20th and 21st century literature
Studies in the literary imagination
Surgical clinics of North America
Synthesis
T+D / ASTD
Tax law review
Taxonomic report of the International Lepidoptera Survey
Teaching exceptional children
Teaching science
Tech directions
Technical services quarterly
Technical textiles international
Technology & conservation
Technology analysis & strategic management
Telos
Tenside, surfactants, detergents
Theater
Theatre notebook
Theatre research international
Theatre survey
Theoretical computer science
Theoretical inquiries in law
Therapeutic drug monitoring
Therapeutic recreation journal
Thomist
Tijdschrift voor entomologie
Timber mart-south
Times educational supplement
Times index
Tobacco journal international
Tohoku Mathematical Journal
Tokyo Journal of Mathematics
Tourism recreation research
Tourism, culture & communication
Toxin reviews
Training
Transactions on emerging telecommunications technologies
Transgenics : biological analysis through DNA transfer
Transport theory and statistical physics
Tribology & lubrication technology
Tsukuba Journal of Mathematics
UMAP journal
Union Seminary quarterly review
United Nations Chronicle / Department of Public Information
University of Chicago law review
Value line daily options survey
Value Line investment survey
Value Line investment survey (Small and mid-cap ed.)
Veliger
VINE
Virginia journal of science
Virginia wildlife
Wake Forest law review
Wall Street journal. Index
Washington monthly
Washington post index
Water quality research journal of Canada
Web semantics
Woman engineer journal of the Women’s Engineering Society
Women studies abstracts
Women’s writing
World leisure journal
World political science review
World trade, WT100
Worldwide hospitality and tourism themes
Wyoming law review
Xenobiotica
Yale journal on regulation
Yeats Eliot review
Zeitschrift der Arbeitsgemeinschaft Österreichischer Entomologen
Zeitschrift fur die attestationsmäßige Wissenschaft
Zeitschrift fur Naturforschung. A, A journal of physical sciences
Zentralblatt fur Didaktik der Mathematik
Zoologica
Zoologicheskii zhurnal Zoonooz

NCSU LIBRARIES AWARDED AN LSTA EZ INNOVATION GRANT FOR SOCIAL MEDIA ARCHIVING

Jason Casden and Brian Dietz have been awarded a Library Services and Technology Act EZ Innovation Grant from the State Library of North Carolina for their proposal on archiving social media. Projects like My #HuntLibrary are a great example of the power of social media to generate content that will prove to be valuable for generations to come. From the project abstract:

Social media platforms have become a venue where serious discourse and creation take place, but the use of social media platforms as a method for building more representative archival collections is still a very new area. With the development of the award-winning lentil (My #HuntLibrary) Instagram harvesting and presentation platform, the NCSU Libraries has taken a leading role in this emerging area. Grant funds would allow us to build on our ongoing work by exploring the potential for integrating a social media collecting program into existing collecting plans addressing events, spaces, and student groups, and other campus units. This project will make a meaningful impact on our ability to develop more representative archival collections involving a wider set of contributors and potentially highly ephemeral content. The outcome of the project will be the implementation of new methods (including software, procedures, and documentation) and the provision of a free web-based toolkit to guide the development of new social media archiving efforts at other institutions.

Work has begun on the grant, and so far, Casden and Dietz have collected Instagram activity related to many campus events, assembled a list of campus Twitter accounts for tracking, worked with a donor to receive a donation of Facebook data, and collaborated with colleagues at George Washington University on their “Social Feed Manager” tool.

Read more about the grant funding this exciting work at: statelibrary.ncdcr.gov/ld/grants/lsta/2014-2015Abstract.html#NCSUI
INTERVIEW WITH THE
LIBRARY WELCOMES
THE FRIENDS OF THE
LIBRARY BOARD PRESIDENT

Will Quick: An
INTERVIEW WITH THE
LIBRARY WELCOMES
THE FRIENDS OF THE
LIBRARY BOARD PRESIDENT

The Friends of the Library is pleased to welcome Will Quick, '07, '09 (MBA) as President of our Board of Directors, beginning July 2014. Will was involved with the Libraries as a student leader and has continued in his capacity as a board member and now board President. We asked Will to answer a few questions about his time at NC State and his love for the Libraries.

Tell us about your experience with the Libraries as a student at NC State, and during your time as Student Body President.

My first introduction to the Libraries as a physical space was through spending several hours every weekend during the first semester of my freshman year in mandatory “pledge study hall” up on the ninth floor of D. H. Hill. Needless to say, mandatory study hours are probably no one’s idea of a great time. However, it didn’t take long for me to realize how important it was to my academic pursuits to have a quiet place to get away from all the other distractions when I really needed to get something done. Long after I’d gotten through fraternity pledging, the ninth floor of D. H. Hill remained my go-to place for peace and quiet in the middle of a school project or when I just needed a quiet place to think.

As far as my commitment to the Libraries as a student leader, it really all started and ended with my early realization that the Libraries was and always will be a part of campus life that is vital from an academic standpoint to all students, no matter what college they are in or whether they are an undergraduate or graduate student. Unfortunately, another thing I realized pretty quickly was that there is a tendency for the majority of students to take campus services for granted until something happens to make a particular service no longer available. That was certainly true in the case of the Libraries. Very few students realized how much work Susan and her staff put in to operate the Libraries at a consistently high level. It wasn’t that students didn’t appreciate the effort, it was that they didn’t realize how much it took from a financial and operational standpoint to stock journals, provide open and collaborative study space, or keep D. H. Hill open 24 hours a day.

One of the ways we worked to remedy this and to focus our support for the Libraries during my administration was through a series of open forums where students could hear from and ask questions of the various entities and departments on campus requesting fee increases. It gave students an opportunity to hear from the Libraries and other campus units directly about their needs, and it provided the students a forum to voice which initiatives were most important to them.

When given the right information, students overwhelmingly expressed their support for the Libraries, which made it much easier for me to make a strong argument to the rest of the Board of Trustees in support of the Libraries’ request when the time for voting on particular fee increases came around.

My support for and involvement with the Libraries is most certainly a result of those experiences as an undergraduate, especially the opportunity to learn about the specific needs of campus units. Having seen what it takes to keep the university operating at a top level, I am committed to increasing alumni involvement and support for NC State, and specifically the Libraries.

YOU HAVE A BUSY CAREER AS AN
ATTORNEY, BUT YOU STill FIND TIME TO CONTRIBUTE TO THE FRIENDS OF THE LIBRARY AND OTHER NC STATE ALUMNI GROUPS. WHAT DO YOU FIND MOST SATISFYING ABOUT THESE VOLUNTEER ROLES?

Among the many things I learned from the other trustees during my year on the NC State Board of Trustees was the value of and personal satisfaction that comes with giving back to one’s alma mater. There I was as a 21-year-old sitting in the room with men and women who were at the pinnacles of their careers in law, business, and politics, yet they chose to give immensely of their time to help guide the university. I told myself then that I would never let myself become so busy that I couldn’t find the time to give back to NC State, which has given so much to my wife and me.

On a more personal level, I’m energized by the opportunity that involvement with the Libraries and other NC State groups gives me to interact with students on a regular basis. While I’m not that much older than many of them, I find it refreshing and invigorating to hear from current students about their studies and future plans, and to be able in a small way to help them achieve their goals.
What prompted your interest in the Friends of the Library and your decision to serve as President?

I’ve had an interest in and affinity for the Libraries ever since I was an undergraduate, but the honest truth is that the single biggest driver behind my continued involvement with the Libraries has been Susan Nutter, our exceptionally talented, visionary, and dedicated Vice Provost and Director of Libraries. Susan was one of the folks on campus who really listened and engaged with student leaders while I was an undergraduate. We developed a good relationship while I was a student leader and were able to coordinate on several efforts that benefited the Libraries. Susan continued to keep tabs on me, and not long after I graduated she asked if I would consider joining the Friends. The timing was perfect, as I was looking for ways to stay involved with NC State. I could not think of a better place to be than with Susan and the Libraries.

My willingness to take on a leadership role with the Friends is also a direct result of Susan’s activities. Her dedication to serving students and the rest of the campus community and her commitment to making the Libraries truly great made me want to take on a more involved role on the Friends Board. In short, she inspired me!

During your term as FOL Vice President, the Hunt Library opened to great acclaim. How has the Hunt Library changed the landscape of research and learning at NC State, and what impact will it have on students?

Like many other alumni—especially recent graduates who just missed its opening—my first reaction on touring the fully completed Hunt Library was a mix of pride and jealousy. Pride in my alma mater for the innovative approach that is evident in every detail, design, and use of technology throughout the space. Jealousy for the fact that Hunt wasn’t opened while I was a student.

There are so many great things about the Hunt Library, but to my mind the two most important advantages that Hunt provides to students are access to technologies that were previously only available to a select few students, and additional space that is specifically designed to foster student collaboration. In designing Hunt to be one of the most technologically sophisticated learning spaces on campus, the Libraries has opened up opportunities for students and faculty from different disciplines to cross-train on and utilize various technologies in new and innovative ways. It is truly a space designed to encourage entrepreneurship and creativity — along with providing a resource to help build relationships with industry partners. Providing broad access to technologies embodies the “think and do” attitude that NC State is all about.

A great example of this is the 3D printing capability provided in the Hunt Library Makerspace. This is a technology that was previously only available to students working in specific research labs. Now students from a wide variety of backgrounds and fields of study from engineering to medicine to fashion and design get first-hand experience with how to use this technology well before they enter the workforce.

Another way in which Hunt will impact campus life for years to come is by being a central gathering place and hub of activity on Centennial Campus. In many ways, the Hunt Library is like the town hall for Centennial Campus. It is a place for students to come together to socialize and do serious work. Upon entering the building, it is clear that it was designed to allow students to work both independently and collaboratively, depending on their needs. Gone are the stuffy stacks, cramped carrels, and dim desk lighting that made one think that speaking in a voice louder than a whisper would mean banishment from the building. Bright colors, large wide-open spaces, tons of natural light, and furniture designed to be easily moved and reconfigured creates a whole different atmosphere where students feel empowered to think outside the box. The space is truly designed to meet the needs of each student using it, not impose a certain way of thinking and studying on all students.

What do you hope the Friends of the Library will accomplish during your term as President? What will be the most challenging?

The Libraries and its supporters are in an interesting position at the moment. The “high” from the overwhelmingly successful opening of the Hunt Library has not yet worn off, and the accolades keep flowing in from sources within academia and beyond. What the Libraries has been able to achieve has become the number-one selling point for the rest of the University and a hallmark of what can be realized with strong administrative leadership and dedicated supporters and advocates. The challenge for the Libraries over the next couple of years will be in keeping up with the high bar that it has set for itself, especially as the University enters its next capital campaign. In a nutshell, despite our achievements to date, we cannot rest on our laurels if we wish to stay at the top.

From the perspective of the Friends of the Library, staying at the top means keeping our current membership engaged, continuing efforts to expand Friends membership, and developing new ways for individuals and entities to support the Libraries. In the near term we will explore the benefits and programming available to Friends members with an eye towards duplicating events and programs that have been popular. We will also look to expand our efforts to attract young alumni support and our efforts to increase corporate partnership with the Libraries.
CLAIRE VOGELEY JOINS THE FRIENDS OF THE LIBRARY OFFICE

The Friends of the Library is pleased to welcome our new Program Associate, Claire Vogeley. Based in the D. H. Hill Library, Claire works with Director Leia Droll and other staff to administer the Friends of the Library membership, plan programs and events for our patrons, and carry out the Libraries’ broader development efforts.

Claire’s career with the NCSU Libraries began in 2012, one month before the opening of the James B. Hunt Jr. Library. As part of the administrative team, Claire was essential to the successful opening of the new library, and worked closely with students, faculty, staff, and visitors to coordinate many of the tours and events that followed.

A native of California, Claire graduated from the California State University system before moving to North Carolina in 2004. Prior to her employment at NC State, she worked for the Cumberland County Public Libraries and the Southern Regional Area Health Education Center.

FRIENDS OF THE LIBRARY WELCOME NEW MEMBERS TO ITS BOARD OF DIRECTORS

Dr. Richard Bloomfield

Dr. Bloomfield recently joined Duke to oversee mobile technology initiatives within the healthcare system. During his residency, Dr. Bloomfield founded a successful software company creating health and social networking apps for iOS devices that has enjoyed over 15 million downloads to date. A native of eastern North Carolina, Dr. Bloomfield graduated as valedictorian from North Carolina State University in 2004 where, as a Park Scholar, he earned a BS in Chemistry and BA in Secondary Education with minors in Spanish and Saxophone Performance. He graduated with honors from the Brody School of Medicine at East Carolina University in 2008. Dr. Bloomfield is distinguished educator with many awards and honors, including the Harvey Hamrick Teaching Award in 2011.

John Quintin Gant

Gant is currently Director of Research and Development for Glen Raven Custom Fabrics, LLC. He earned a mechanical engineering degree from North Carolina State University in 1988, and an MBA from Duke University in 2004. John is an active member of organizations such as the US Green Building Council, Window Covering Manufacturers Association, and Professional Awning Manufacturers Association. He and his wife Sheri recently celebrated their twentieth wedding anniversary. They have two sons, Ben (13) and Weston (9), who attend Chapel Hill schools.

Joseph Hightower

Hightower is a North Carolina native who earned a BS degree in Zoology at NC State University in the 1970s. After receiving his PhD from the University of Georgia in 1984, Joe moved to California and worked for six years as a marine biologist. He was then very fortunate to return to his home state, university, and even department (was Zoology, now Applied Ecology). His research has been focused on fisheries management questions, including impacts of fishing and dam construction on migratory fishes. When not building computer models of fish populations, Joe likes to play the banjo.

Suzanne Kennedy-Stoskopf

Dr. Kennedy-Stoskopf is Research Professor of Wildlife Infectious Diseases at NC State’s College of Veterinary Medicine. A member of the NC State faculty since 1990, she was the first woman veterinarian at the National Zoo, the original organizer of the zoological medicine program at the University of Tennessee, a co-founder of the first three-year residency in veterinary medicine in the U.S, and has been honored with her own stamp, a US Postal Service First Day Cover in the Postal Service’s Women’s History Series. In 2006 she was recognized as Outstanding Woman Veterinarian of the Year by the Association for Women Veterinarians.

Andy Walsh

Andy Walsh earned a political science degree with honors from North Carolina State University in 2013 and currently serves as the Legislative Assistant for the Office of Federal Relations at NC State. He previously worked in the Office of Government Affairs at SAS Institute. Andy served as the Student Body President and as a member of the NC State Board of Trustees in 2012-2013. Andy actively volunteers at the Raleigh USO and serves as the Vice President of the Cary Academy Alumni Board.
PROFESSOR DAVID HILL AWARDED 26TH ANNUAL LIBRARIES FACULTY AWARD

The Virtual Paul’s Cross installation has been a light-bulb moment for many of us—walking into the Hunt Library’s Teaching and Visualization Lab and instantaneously stepping into a very realistic simulation of the 17th century. For the committee who chose Professor David Hill for the 2014 Libraries Faculty Award for his work on the Virtual Paul’s Cross project in the Hunt Library’s Teaching and Visualization Studio. Read more about Professor Hill’s Faculty Award in the following article on this page.

Dr. Marie Davidian, William Neal Reynolds Professor of Statistics at NC State, gave the keynote address, which focused on the use of statistics in personalized medicine. Through the description of a clinical trial as an example, she explained how statistical analysis is critical at every step in the process to assess the efficacy and safety of a drug, plan the next developmental stages, and make better use of drug researchers’ time and resources. The work of statisticians in this process will ultimately help healthcare providers make better decisions, and select the right treatment for the right patient at the right time. Davidian’s scholarship, which explores the complex and varied application of statistical analysis, is a perfect example of the research and innovation that sets NC State and its Libraries apart. To learn more about the connection between statistics and personalized medicine, read Dr. Davidian’s excellent piece in the Huffington Post at go.ncsu.edu/huffpo_davidian.

The Hunt Library was designed to encourage a spirit of discovery, even of risk taking. As Susan K. Nutter pointed out at the award ceremony, “Professor Hill personifies this spirit.” Along with Professor John Wall of the English Department—a 1995 winner of the award—Hill came to us before the building was even dried in and staked a large portion of the next several years of his professional work on that vision. Collaborating with the Libraries to bring together experts in architecture, archeology, literature, religion, lighting design, audio engineering, and computer science, Virtual Paul’s Cross has sparked the imaginations of scholars around the world on how virtual and immersive technologies can open windows into scholarly questions that could otherwise never even be posed.

Nominators pointed out that Hill has “also written another blueprint for how collaborators can leverage the Libraries’ resources to transform learning, teaching, and research” with his long-running Digital Representation class. Using our rich collection of hand drawings from modernist architects, his students make them come alive as digital models, illustrations, and videos. “It is,” Nutter pointed out, “hands-on, engaged learning that teaches first-class visualization skills—and creates the sort of personal, imaginative engagement with our architectural traditions that develops inspired young architects.”
Cyrus B. King was a man who, above all, made us think more deeply about our responsibilities to each other. Those of us who knew him at the NCSU Libraries appreciated him as an able administrator who from 1963 to 1984 led the development of our collections; as a generous supporter after he retired; and as a life member of the Friends of the Library.

But his capable leadership and considerate philanthropy were hardly the most important reasons why he was one of the most beloved people to ever brighten a room in the D. H. Hill Library. Cy King earned our respect and love because you couldn’t be around him for ten minutes without realizing that you were in the presence of a person who lived his life with a purpose, a passion, and joy that were extraordinary, even on a campus filled with people intensely dedicated to purpose.

Cy was raised a pacifist Quaker, but he chose to serve in WWII, seeing human violence at its worst across Europe, including in the Battle of the Bulge. The rest of his life was a determined, relentless, reasoned campaign—as an editorial in the Raleigh News & Observer concluded shortly after his death on June 25—“dedicated to raising awareness of the needs of the less fortunate, the deprivations of rights for those of color, the consequences of war.”

Cy King was absolutely determined to help us think about justice and the inevitable results of living in a world without it. He was never loud; he was unfailingly polite and respectful; he preferred sly humor over argument. These attributes made him a formidable champion for the causes he believed in so deeply. Even those not on the same page as Cy could not help but respect the fact that for over twenty-five years he stood almost every Wednesday in vigil for peace and nuclear disarmament in front of the post office in downtown Raleigh. Within years of returning to Raleigh in 1949 after the war and after college, he and his wife, the late Carolyn S. King, had helped establish the city’s first racially integrated housing project, day care center, and vacation Bible school. Name the good cause—civil rights, women’s rights, humane treatment of the imprisoned, fair treatment of farm workers, commitment to civil liberties—Cy worked for it with dignity, diligence, and good humor. In recognition of their constant work for the community, Cy and Carolyn were inducted into the Raleigh Hall of Fame in 2009.

Cy’s support of the NCSU Libraries was part and parcel of his commitment to that strong sense of community. The Cyrus King Endowment for Peace Studies now supports the Libraries’ collections in this area across all formats, both digital and print. Even more tellingly, in 2007 Cy recognized twenty-two former library and campus colleagues by purchasing bricks in their honor. Engraved with the names of these friends, the bricks are installed outside the entrance to the D. H. Hill Library to provide a permanent tribute to longtime library staff and to faculty members who served on the University Library Committee. He loved the people he worked with, and they loved him back.

“We’ve lost a giant,” the Rev. Nancy Petty, pastor of Pullen Memorial Baptist Church, said of Cy shortly after his death this summer. The NCSU Libraries feels that loss deeply.
Donor Spotlight: Debbie and Warren Stephenson

“We want to be part of something permanent”
Debbie and Warren Stephenson’s Legacy of Contribution

When Warren Stephenson was an undergraduate in the ‘50s, the D. H. Hill Library was far from a campus destination point. It was, he says, “quiet, studious, nobody talked out loud.” Useful, for sure, “but not a fun place to go.”

So after what he calls “first shots at independence” during those freshman “barbecue and beer” days on Hillsborough Street, he gravitated to the Textiles Library and made it his base for mastering the advanced math and physics that were not offered in the small North Carolina high school he attended. “I had to work a little harder to catch up,” he offers, but the urge to learn and the work ethic came naturally, and NC State gave him flexibility to branch out from his textiles major into marketing, accounting, and sales classes that were to serve him well when he graduated. His wife and fellow philanthropist, Debbie Stephenson, demonstrated that same urge to learn and contribute when, after retirement from a demanding job, she went on to earn a Masters degree from the Southeastern Baptist Theological Seminary.

Fast forward a few decades—through distinguished careers in manufacturing and management, leadership in too many civic projects to count, a “Citizen of the Year Award,” and generous and constant support for the Wolfpack Club—to a night a few years ago:

“I had accidentally left a book in a meeting room at D. H. Hill, so I circled back to pick it up. When I opened the door at 6:30, it looked like Crabtree Valley Mall at Christmas. Students everywhere. As I made my way up to the desk to pick up my book, I could see team studying going on up every hall in every direction. Just continual student activity every place that I looked. This was the hub of the campus, a campus that Debbie and I both love. This place was a magnet bringing in the students.”

“We’ve always been very active in all the communities that we’ve lived in—it’s just our nature, that we ought to leave things better than we found them if possible—and it’s always possible,” explains Warren. Experiencing the exuberant spirit in the D. H. Hill Library, coupled with early tours of the Hunt Library as it was under construction, gave the Stephensons another focus for their impulse to improve the places they care deeply about.

When the Hunt Library opened in 2013, two of its group study rooms in the Graduate Student Commons (in honor of Debbie’s love of the time she spent in graduate school) had Warren and Debbie’s names engraved on them. And their wills now include a legacy gift that will help ensure that the NCSU Libraries will remain strong for the generations that follow them.

“Some things are fleeting—most things on campus come and go,” Warren explains. “The tide comes in and the tide goes out,” even with their much-loved NC State athletic teams. “But the Libraries are there steady as a rock, open every day, a part of campus that we can take pride in just being a part of.”

Warren is very clear about what he hopes that his and Debbie’s legacy gift will accomplish: “Leaving a path to the future for things that were important to you is what wills are for . . . we all want to leave a legacy.” For the Stephensons, a part of that legacy is establishing a sustainable path for the NCSU Libraries far into the future:

“When we give to the Libraries, we help maintain and help grow something that will keep NC State’s competitive edge twenty years from now. The world is very impressed with the Hunt Library as it stands today, but it will have to grow and change as technology and new types of learning evolve.

We have to be ready to meet those demands twenty years from now. What we did with our gifts contributes to the permanence of what the Libraries can offer. We want to further ensure that permanence.”

He laughs a little when asked if he thinks that years from now students doing research in the Graduate Student Commons will recognize his family’s contribution, “Students may not always pay attention to the actual names on the study rooms,” he says with a smile. “But the fact that somebody who came before them thought enough of the Libraries’ mission to want to be a lasting part of it—that will make an impression. Not the particular names as much as the idea of service to their community.”

From leadership in a long line of charitable organizations to missions to Belarus for their church, that service to the community has been a hallmark of Warren’s and Debbie’s lives.

They are serious about that commitment and are intense and thoughtful when they talk about what may ultimately be the most important result of their support for the Libraries: “Just walking up to the Hunt Library, just seeing it at a distance, it takes your breath away. The building itself says, ‘These people are serious about what they are doing.’”
HANDS ON.
MINDS ON.
NCSU LIBRARIES
MAKERSPACES
FOSTER ACTIVE LEARNING
EVERYWHERE YOU TURN THERE IS ANOTHER MAGAZINE ARTICLE ABOUT HOW “YOUNG PEOPLE ARE RUINING THEIR MINDS BY BURYING THEIR HEADS IN SCREENS HALF THEIR LIVES.”

The jury is still out, of course, on whether all the supposedly passive time on smart phones, tablets, and video games is stunting the intellectual and emotional lives of the latest generation—or just immersing them in the digital skills to create the next Google or Facebook.

But almost everyone agrees that another emerging trend in how students are spending their time is almost always incredibly productive.

THE MAKER MOVEMENT AND THE HUNT LIBRARY MAKERSPACE

Emphasizing experimental, experiential attempts to solve problems by literally making the solution with 3D printers and other new tools for creating physical objects, the Maker Movement fosters hands-on collaborative skills with emerging technologies that are changing a host of design, manufacturing, and technology industries—as well as energizing new educational practices that encourage active learning.

Initially using 3D printing, laser scanning, and inexpensive electronics “inventor kits,” the movement was just beginning to find its sea legs as final planning for the Hunt Library was in progress. With its “figure it out together and make it yourself” ethic and the value it places on working in groups, the principles behind the Maker Movement aligned perfectly with the creativity and engaged learning that the Hunt Library was designed to foster.

The result? On any given day you might walk by the Makerspace in the Hunt Library when a student...
THE MAKER MOVEMENT FOSTERS HANDS-ON COLLABORATIVE SKILLS WITH EMERGING TECHNOLOGIES THAT ARE CHANGING A HOST OF DESIGN, MANUFACTURING, AND TECHNOLOGY INDUSTRIES—AS WELL AS ENERGIZING NEW EDUCATIONAL PRACTICES THAT ENCOURAGE ACTIVE LEARNING.
is printing out a prototype for her mechanical engineering project on one of the space's three 3D printers. Or drop by a workshop and watch a group enthusiastically combine several bananas, the electronics from a Makey Makey inventor kit, and a dash or two of ingenuity to create a working piano.

INITIAL CREATIONS
Soon after the new library opened, Hunt's Makerspace started making its mark as two transportation engineers discovered our 3D printers and realized they could make it easier for the blind to navigate complicated traffic intersections by quickly prototyping and printing out custom tactile maps of real-world intersections.

Within a year, four entrepreneurial students had prototyped their unique Jar-with-a-Twist to tackle the age-old problem of how to dig out peanut butter or other condiments as you get closer to the bottom of the container. Using the Makerspace's 3D printers among many other tools on campus, the group created an ingenious solution—merely twist the jar's bottom and screw the contents toward the top. After a few rapid evolutions to the initial concept, the Jar-with-a-Twist was on its way to a patent and the marketplace.

Last spring, two mechanical engineering students used the Makerspace laser scanners to transform a tiny plastic toy wolf into the beginnings of the detailed 3D plans that allowed them to build a full-sized animatronic wolf for their senior honors assignment, a project that helped land one of them the job of a lifetime building animatronics for Universal Studios.

At least two of the NCSU Libraries' student workers have also leveraged their Makerspace work to jump-start their futures. Since our student workers deliver the majority of training that their peers receive in the...
A STRATEGIC MOVE: NC STATE’S OWN CUSTOM-PRINTED CHESS SET

Stormy Faw is the first in his family to earn a college degree. Two, in fact: NC State undergraduate (2011) and graduate (2013) degrees in aerospace engineering. And he is planning to enter the Ph.D. program in electrical engineering in Fall 2015 to translate his passion for all things related to space into further expertise in next-generation guidance and control systems.

In what passes for downtime in his life, he wanted to take on a project that showed his pride in his alma mater—and to explore a new craft and stimulate his own creativity. Chess is another passion, and 3D printing—which the space industry is already using both for rapid prototyping and for printing parts used in actual vehicles—was a great next step.

So now NC State has its first custom 3D printed chess set, a blend of Faw’s longtime love of woodwork in the beautiful board itself and the 3D printing skills he mastered in the Hunt Library Makerspace, and the 3D computer aided-design software available on special computers in the library.

Each piece for the set honors some part of what Faw calls “the spirit of NC State”: the rocket “rook” a nod to his own aerospace training; the farmer “knight” a tribute to our roots in agricultural leadership; the Belltower “queen” a salute to the College of Design; and the Mr. Wuf “king” leading a long line of Tuffy “pawns” to celebrate the student body, embodied in the Tamaskan dog who has served as the live NC State mascot at athletic events.

“It’s great to have the Makerspace as a resource less than 500 meters from the Engineering buildings,” concludes Faw. “Personally for me it gives a real boost to my creativity, letting me invest time in personal projects that develop the culture of exploration. The Makerspace is a great blend of course work and knowledge—and being creative on a personal basis.”

The Wolfpack chess set will be on display in the Apple Technology Showcase at the Hunt Library in early 2015.
Makerspace, they become experts in quickly solving problems with a set of technology skills that are in high demand in industry. One recent graduate credits his first job to his Makerspace work experience, and another used his 3D printing and laser scanning expertise as a key point in his successful application to a prestigious doctoral program.

WHAT WE’RE MAKING NEXT

Early next year, students and faculty based on NC State’s main campus will no longer have to trek to the Hunt Library to immerse themselves in the Maker Movement. With help from generous donors, the D. H. Hill Library will soon have its own Makerspace—in a large, prominent location adjacent to the Ask Us center.

In recognition of the NCSU Libraries’ pioneering role in the Maker Movement in academic research libraries, the federal Institute of Museum and Library Services has recently appointed the NCSU Libraries as the higher education representative for a major initiative to provide best practices for deploying makerspaces in the nation’s libraries and museums. In conjunction with the Children’s Museum of Pittsburgh, San Francisco’s Exploratorium science museum, the Chicago Public Library, and the non-profit Maker Education Initiative, the Libraries will partner on a national program to make it easier to bring makerspaces to institutions that serve the public.

FRIENDS OF THE LIBRARY PRESENTS THE FIRST ANNUAL LIBRARY STAFF AWARD FOR ADVANCEMENT TO ADAM ROGERS

The Friends of the Library Staff Award for Advancement, created by the Friends of the Library Board of Directors in June 2014 and to be given annually, recognizes a Libraries’ staff member who demonstrates a commitment to the missions of both the NCSU Libraries and the NCSU Friends of the Library, and who goes above and beyond to help build relationships and partnerships that help to further the Libraries’ advancement goals. This year’s inaugural award was given to Adam Rogers, Emerging Technologies Librarian, for his outstanding work to help build and attract support for our makerspaces at both the Hunt and the D. H. Hill Libraries. The award comes with a prize of $1,000 to be used for professional development or to support a project of the recipient’s choosing.

Our next step is to build an endowment to support this award in perpetuity. We ask that you please consider designating part or all of a gift to this award fund, and help us to recognize the Libraries’ outstanding staff, foster a culture of philanthropy, and promote an environment of collaboration.

“...This award is a fantastic way to support library staff by highlighting their innovations and encouraging them to seek external funding, which is crucial to the Libraries’ continued success. The award money is already helping me explore new project ideas more freely, and I anticipate spending most of it on learning new skills in a conference or workshop.”

-Adam Rogers
Emerging Technologies Librarian

Brian Boothe of the FOL Board of Directors (right) presents the Award for Advancement to Adam Rogers.
FROM NOVELTY TO ADVANCED RESEARCH

EXCERPTED FROM RESULTS, NC STATE’S MAGAZINE OF RESEARCH, INNOVATION, AND ECONOMIC DEVELOPMENT

By Tim Peeler

At Makerspace, the well-appointed, technologically advanced common room on the fourth floor of NC State’s Hunt Library, advanced printing, scanning and cutting technologies are readily accessible to any member of the campus community.

It’s a place where dreams, and an occasional daydream, come true. That’s why it has become one of the most popular places in the world-renowned Hunt, which may explain why the NCSU Libraries will open a space that’s similar — but twice as large — at D. H. Hill Library in the spring of 2015. The people who run Makerspace helped recent graduates Austin Carpenter and Jonathan Gregory develop a portable three-dimensional scanner with a rotating platform and three tower scanners for their senior design project. One of the first things they printed, in conjunction with the fifth-annual Maker Faire this summer at the North Carolina State Fairgrounds, was a figurine of Chancellor Randy Woodson. Why exactly did they do this, except for the purpose of creating the nation’s first chancellor action figure?

Because they could.

“Ten years ago, doing something like [advanced scanning and 3-D printing] wasn’t really a thing,” Carpenter says. “So it’s just really exciting to be on the cutting edge of technology.”

That’s the thing about the emerging technology in the 3-D printing world: With such a low commitment of resources involved, why not find out what’s possible? There are practical applications just waiting to be discovered, some of which are ready to hit the market at inkjet speed. How about an on-demand spare part for an aircraft carrier, printed onboard in the middle of the Pacific Ocean? Or a life-sized, fully integrated human skeleton? Or a scale model of a dinosaur found in deepest Mongolia?

NC State alum Aly Khalifa, founder of Raleigh’s Gamil Design and Designbox and the multifaceted SPARKcon, recently introduced his Lyf (Love Your Footprint) Shoes to Sustainable Brands conferences in San Diego and London. His innovative footwear — made of recycled cork and plastics without using environmentally damaging glue or heat — is custom-designed with 3-D scanners and manufactured with the assistance of a $2,000 3-D printer, cutting out the costly production of prototype molds that can cost up to a quarter of a million dollars.

He likes to think of the Lyf Shoes model as the first “digital cobbler.” He knows these innovations wouldn’t be possible without the use of 3-D scanning and printing technology.

“It allows us to create a totally different business model,” says Khalifa, from his offices in downtown Raleigh. “It’s a complete game changer.”

Center for Additive Manufacturing and Logistics (CAMAL) co-director Ola Harrysson has been doing such work for more than a decade, especially in medical applications for the NC State College of Veterinary Medicine. He printed out his first artificial orthopedic leg for a cat shortly after he arrived in 2002.
The advances in 3-D printing since then are breathtaking, crossing the boundaries between disciplines, universities and even species.

Harrysson is currently working with UNC-Chapel Hill School of Medicine associate professor Austin Rose to develop printed plastic bones that will enable doctors to do preoperative simulation — a surgical scrimmage of sorts — for difficult ear surgeries such as cochlear implantation. In the past, those simulations have been done on well-worn cadaver bones.

Harrysson, Rose and NC State graduate student Caroline Webster have been working with a team of engineers and physicians to develop near-perfect replicas of those same bones for both adult and pediatric surgeries, all produced on a 3-D printer.

Webster, a native of Orlando who came to Raleigh from Mocksville, North Carolina, began working in Harrysson's lab during her sophomore year as a biomedical engineering student because "students here are allowed to do things and make things that make a difference," she says.

She has since become an expert in integrating MRI and CT scans with digital software called Mimics to map important nerves, the carotid artery, the sigmoid sinus and every variation in and around the delicate temporal bone that a surgical student may encounter during implant surgery. She's also learned to understand and translate the languages of both medicine and engineering.

The work done in Harrysson's lab spans multiple disciplines. In fact, members of the group spent the summer presenting their findings at conferences: Webster at a medical software conference in Chicago and an engineering conference in Austin, Texas; Rose at medical conferences in Las Vegas and Israel; and Harrysson at a medical advance digital conference in Beijing, China.

Medical printing could be the next significant innovation coming from the emerging field. NC State engineers have helped develop a printed cast that conforms perfectly to a patient's broken limb and that delivers ultrasound waves to stimulate healing.

While others may be peering into the future with their 3-D printing capabilities, paleontologist Lindsay Zanno is using 3-D scanning and printing, gaming technology and design software to help turn the ancient bones and bone fragments she has found in the field into full models of newly discovered species of dinosaurs.

We are experimenting with some nifty programs that will allow us to take two bones and compare them in 3-D space," says Zanno, director of the Paleontology and Geology Research Lab at the North Carolina Museum of Sciences. "We can turn that into quantitative data, and in turn, we can use that to understand how bones differ between species in a way we couldn't before."

"With digital scanning and the data we have, we can print a model of any size we want. We can make all sizes for all purposes. 3-D printing makes that very simple. That helps speed up the whole process of paleontology, which can sometimes be arduously long."

At NC State, 3-D printing is one more tool that students, faculty and staff are using to turn ideas into reality.

To read the full article in Results, visit: research.ncsu.edu/results/2014/12/from-novelty-to-advanced-research/
The old expression that a picture is worth a thousand words is still true in the age of big data. But it only scratches the surface of what a good visualization can mean when a scientist, engineer, or economist is trying to make sense of a data set with millions of variables and tens of millions of data points.

That’s why the Hunt Library’s Teaching and Visualization Lab and the five visualization walls in the Hunt Library have rapidly become essential for research and learning at NC State—and written about in publications around the world.

In April 2014, the D. H. Hill Library got its turn with the opening of the Visualization Studio in space on the second floor of the bookstacks that became available as part of the library’s collection was moved into the Hunt Library bookBot.

Funded by a special award from a competitive, university-wide process, the Visualization Studio
uses 12 projectors to create an immersive 360-degree view across four walls. In the Visualization Studio:

- Students now have a powerful way to work together on group projects, to boost their presentations to new levels, and to study complex ideas and phenomena at a large scale, seeing them spread out around the room.

- Professors are conducting interactive classes and engaging seminars that surround their students in images, documents, movie clips, and data visualizations.

- Researchers are working collaboratively to explore new ways to describe and communicate their findings visually, compare complex, detailed images, and analyze large maps and graphics.
THE NEW D. H. HILL LIBRARY

Ask Us CENTER

A NEW LOOK—AND A NEW PHILOSOPHY
On the one hand, it was a classic case of necessity being the mother of invention. On the other, we had already invented the solution and knew it would work. That’s the back story behind the new Ask Us center at the D. H. Hill Library.

THE HUNT MODEL
Since the Hunt Library opened, its inviting Ask Us center—just inside the main entrance—has provided an extremely popular single point of contact for students and faculty with a question or a request for a service. The concierge feel of the space encourages students who otherwise might not so easily engage, and the staff loves working at a place where an interesting range of questions and requests are constantly walking up.

. . . IMPLEMENTED AT D. H. HILL
The loss of several public services positions in last year’s budget cuts made it clear that it was time to adopt the same model at our other main library—integrating the work currently performed at the library’s Main Circulation Desk and in the Learning Commons into a single service point.

But the reasons for the new Ask Us center at Hill were even stronger than the need to make wise use of our staff during difficult times with the budget. Anyone who hasn’t been in the building recently cannot possibly imagine how much the library has become a churning hub of student activity. If you don’t have a ready image for it, think “airport lobby” for our slower days and “NC State Fair midway” for the busier ones. And almost every one of the
Student worker Hannah Cranford assists a student at the new Ask Us center at the D. H. Hill Library with single-point, concierge-style service.
Our library staff and student workers don’t just stand behind a counter. They are out in the library, meeting our users’ needs wherever they arise. Student worker Travarus Littlejohn carries a radio and iPad as he makes the rounds, assisting with everything from finding a book to troubleshooting a printer.
10,000 daily visitors need something critical to their coursework or research from the library staff.

With its bright Wolfpack red walls and iconic logo, the new Ask Us center at D. H. Hill opened in August at the top of the main staircase on the first floor. Staffed by a combined group from the Access and Delivery Services, Research and Information Services, and User Experience departments—and some of our best student workers—it provides a single space for help with everything from finding data or information for a research project, to receiving training on how to use iMovie, to checking out a high-definition video camera, to printing a poster.

But Ask Us is a lot more than a single space. It isn’t just a desk, but a living, breathing system of student workers and librarians armed with iPads and two-way radios circulating through the library, constantly monitoring chat, email, or calls from students and faculty and ready to instantly show up wherever and whenever anyone has a question or needs a service. And those student workers are earning much more than just a paycheck. Because they are trained to provide our first-line support on the sophisticated technology throughout the NCSU Libraries, they are telling us they have both one of the most stimulating student jobs on campus—and a substantial competitive advantage when they go on the job market.

Staff members like Alex Reher (above) and Anne Burke (below) are on hand to provide both quick search assistance as well as more in-depth research consultation services in the Ask Us center.
Our Library Personnel

The following are Libraries staff members who have joined us in recent years but have yet to be introduced.

As Special Assistant to the Director, Chris Tonelli manages the policy functions and the external and internal relations of the Office of the Vice Provost and Director of the Libraries. His duties involve coordinating communication for the Director, including strategic reports, speeches, position statements, articles, opinion pieces, and other communiqués. He also investigates and analyzes topics in librarianship and higher education for the Director; participates in administrative studies related to the planning and development of library programs; contributes to the preparation of grant proposals; and coordinates arrangements for visitors.

Tonelli brings experience in higher education, administration, and publishing to this position. Most recently, he was both a lecturer in the Department of English and Assistant Director of the First Year Writing Program at NC State. He is also Director of the Young and Teen Writers Workshops in the College of Humanities and Social Sciences, where he was nominated as Outstanding Lecturer. Previously, he was the Co-Director of the Art of London and Paris program in the NC State Study Abroad Office. He has been an active member of the NC State campus community, serving on the University Library Committee, the Common Reading Committee, the NC State Faculty Senate, and other academic committees.

A prolific and prize-winning poet, Tonelli has published in a variety of formats, including the book, The Trees Around, and in the anthologies PoetrySPARK, Leopard Print, and The Bedside Guide to No Tell Motel. Tonelli has been an editor with Houghton Mifflin Company and an editorial assistant for the Natural Standard Research Collaboration and for the Journal of Herbal Pharmacotherapy. He is the co-founder and editor of So and So Magazine and Series, as well as Birds, LLC, an independent poetry press. He has been a participant in several collaborative projects that have been awarded grants from the Council of the Arts at MIT and the Council of Literary Magazines and Presses. He holds the Master of Fine Arts in Poetry from Emerson College, the Master of Arts in English, and the Bachelor of Science in Zoology from NC State.

Jennifer Garrett is the Research Librarian for Management, Education, and the Social Sciences.

In this role, Garrett provides information and research services for students and faculty, offering in-depth reference service and consultation in the areas of management, education, and the social sciences. She works closely with faculty and students in the Colleges of Management, Education, and Humanities and Social Sciences to determine and meet service needs, including the design and delivery of research skills instruction.

Most recently, Garrett served as an NCSU Libraries Fellow with a home department assignment in Research and Information Services, where she was interim subject specialist for several of the social sciences. She worked closely with faculty to design and deliver advanced instruction sessions and managed online resources for these disciplines. Garrett’s initiative assignment focused on shaping the visitor experience at the James B. Hunt Jr. Library. She assisted in the design, content development, and implementation of the Hunt Library mobile tour application, and contributed to the creation of a sustainable model for visitor experience programming at the NCSU Libraries.

Before joining the NCSU Libraries, Garrett was a graduate assistant in the Humanities and Social Sciences Library at the University of British Columbia. She completed practicums with the Public Health Agency of Canada and with the Knight Library Maps & Aerial Photography Collection at the University of Oregon. As an Association of Research Libraries (ARL) Career Enhancement Fellow, Garret was assigned to the University of Kentucky Medical Center Library.
Eric Hanson takes a lead role in describing and providing access to print, electronic, and manuscript resources, with a specialization in the Libraries’ digital repository and user discovery systems. He is a member of the Data Projects and Partnerships Unit, which manages projects, develops workflows, and trains staff. His role includes overseeing data operations across the Libraries’ systems, as well as developing and analyzing statistical and management reports.

Hanson was an Acquisitions Technical Assistant at the W.W. Clark Memorial Library at the University of Portland, where his duties included ordering and receiving all firm and standing orders for print and audiovisual resources. He has experience creating original MARC records for monographs, electronic resources, and audiovisual materials, and is skilled at designing XML-based application profiles using a variety of metadata standards. Hanson has held positions in a variety of library settings. He was a Library Assistant at Clark Elementary School, a Summer Reading Outreach Assistant and Public Relations Intern at Multnomah County Library, and a Cataloging Clerk at Lewis & Clark College, all in Portland, Oregon.

Hanson has presented on topics relating to collections, access, and cataloging. He is the author of the recently published article, “RDA Training and Implementation at the University of Chicago: An Interview with Christopher Cronin,” in Serials Review. He recently completed his Master of Library and Information Science at the University of Washington. He was awarded the Oregon Library Association Scholarship in both 2011 and 2012. He holds the Bachelor of Arts in History from Lewis and Clark College, where he was a Dean’s Scholarship recipient.
As we begin 2015, we are grateful to recognize the support of our members and donors. Private funding for the Libraries provides the vital technologies, furnishings, and enhancements that give the Libraries its competitive edge. We thank the students, alumni, faculty, staff, retired faculty, and community members who are committed to the NCSU Libraries and the quality of its services to NC State students and researchers.

Thanks for Your Support.
2013–2014 HONOR ROLL OF FRIENDS

DIRECTOR OF LIBRARIES’ CABINET
$15,000 AND OVER
Richard H. & Cynthia P. Bernhard
Mitchell Bush
College of Humanities and Social Sciences (CHASS)
Robert I. & Kathleen M. Connelly
Council on Library & Information Resources
iPearl Inc/Haihui Huang & Jie Zheng
Frank C. Harmon
F. M. Kirby Foundation, Inc.
Marvin J. & Cynthia M. Malecha
Frances W. Massey
Estate of Raymond L. Murray
PNC Financial Services Group
State Library of North Carolina
Ed & Agnes B. Weisiger
Robert & Diana Wong

BENEFACTORS
$5,000 TO $14,999
Association for Computing Machinery, Inc.
Anonymous
BASF Corporation
Cree, Inc.
Michael C. & Beth A. Goff
Susan K. Nutter & Joe A. Hewitt
INFORMS Simulation Society
William Johnson & Tracy Schario-Johnson
Myron W. & Sandra L. Kelly
Robert P. & Elaine L. Kennel
LexisNexis
Nandapurkar Family Trust
North Carolina Arts Council
North Carolina Humanities Council
RTI International
Henry E. & Dianne M. Schaffer
Scynexis Inc.
Skanska USA Building Inc
Michael K. Stoskopf & Suzanne Kennedy-Stoskopf
James, E. & Linda P. Turlington

PATRONS
$1,000 TO $4,999
C. Frank Abrams Jr. & Judy W. Abrams
AgBiome Inc
American Board of Anesthesiology, Inc.
Cristi P. d’Andrea
Beverly Z. Armstrong
Charles W. & Jane M. Arvey
John & Carolyn D. Argentati
Asinex
Bayer CropScience
A.C. & Naomi P. Barefoot
Robert E. Beasley Sr.
biomerieux, Inc.
Carl F. Blackman & Carolyn R. Miller
Richard A. & Kimberly B. Bloomfield
Edgar J. & Ethel B. Boone
Henry & Sory G. Bowers
Centennial Campus
Chimerix Inc
College of Sciences
Arthur W. & Jean F. Cooper
Cotton Incorporated
Charles B. & Elizabeth A. Davey
Patrick E. Deaton
William L. & Linda L. Dowdy
EBSCO Industries Inc
Envisia Therapeutics, Inc.
Fujifilm Diosynth Biotechnologies

Thomas R. & Sue B. Fulghum
Elin E. Gabriel
Eileen S. Goldgeier
David W. & Colleen L. Goldsmith
Lynda H. Hambourger
John A. Heitmann Jr. & Joy M. Heitmann
Henkel Technologies
George L. & Rebecca E. Hodge
J. Anthony & Gloria W. Housner
James B. Hunt, Jr. & Carolyn L. Hunt
Institute for Hepatitis and Virus Research
Intrexon Corporation
C. Tim Kelley & Chung-Wei Katherine Ng
Robert C. & Larita Kellison
Carl C. & Evelyn Koch
Isaac T. Littleton
Liquida Technologies, Inc.
W. Robert Maddin & Nancy Kuivila
Charlotte M. Martin
Geoffrey D. McLean
Jivan Moaddeb
Richard M. & Debra M. Morgan
Myers, Bigel, Sibley & Sajovec, PA
Richard E. & Barbara P. Nance
2013–2014 MEMORIAL AND HONORARY GIFTS

The Friends of the Library received gifts in honor or memory of the following individuals during the 2012–2013 fiscal year. For information about how to pay tribute to a loved one through a gift in their name, please call Leia Droll at (919) 513-7033.

**GIFTS IN MEMORY OF**
- Irving S. Goldstein
- Doris Hakey
- Donald S. Keener
- Cyrus B. King
- Elizabeth McMahan
- Shamrao Nandapurkar
- James Troyer

**GIFTS IN HONOR OF**
- Josh Boyer
- Kathy Brown
- Eleanore & Burt Greenberg
- Gloria Houser
- Cyrus B. King
- Richard McLane
- Dr. Elizabeth McMahan
- Dr. Carl D. Meyer
- Carl Pireneo, Jr.
- Madison Roberts
- Joyce Hill Vaden

**BRICKS**
The following individuals honored both their loved ones and the NCSU Libraries by naming an engraved brick, installed in the entryway to the D. H. Hill Library overlooking NC State’s iconic brickyard. To order a brick, contact the Friends of the Library office at (919) 515-2841 or visit [www.lib.ncsu.edu/giving/buyabrick](http://www.lib.ncsu.edu/giving/buyabrick).

**BRICKS (RED)**
- Rohan Kapoor
- Robert L. Pascucci
- Brian L. Peeler
- Jason Perry
- Jennifer Peavey
- Naveen Pitchandi
- Celeste L. Sciabarasi
- Sarah E. Teague

---

**IN MEMORY: LEONARD AND ELEANOR AURAND**

Leonard and Eleanor Aurand, Friends of the Library Life Members, passed away this year at Springmoor Life Care Retirement Community, Raleigh. The Aurands were longtime supporters of the Libraries, and of NC State.

Len graduated from Pennsylvania State University in 1941, and served in the Navy in the South Pacific during World War II. After the war he earned graduate degrees from the University of New Hampshire and Pennsylvania State University. Dr. Aurand was a founding team member of the Department of Food Science at NC State where he taught Food Chemistry and Human Nutrition. He retired in January 1988 as Professor Emeritus in Food Science. He was also active in numerous service organizations including Gardeners of Wake County, Optimist Club of Raleigh, and Drug Action of Wake County.

Eleanor was formerly the Food Service Director at Governor Morehead School for the Blind, where she became an ardent supporter for blind causes. She was a member of N. C. State University Woman’s Club, Raleigh Home Makers Club, Raleigh Oratorical Society, and Virginia-Carolina Morgan Horse Club, where she was awarded the 1st annual Barbara Cole Service Award.

Len and Eleanor are survived by their children Rebecca Newton (Wallace), Durham, NC; Dr. Thomas J. Aurand (Kay), St. Paul, MN; Sarah J Anderson (Ken), Mechanicsville, VA; six grand children and ten great grandchildren.
STAY IN TOUCH WITH US.

Every effort has been made to accurately list the names of all donors to the Friends of the Library during the 2013–2014 fiscal year, which ran from July 1, 2013, through June 30, 2014. If there are any errors or omissions, please call or email the Friends of the Library office:

**NCSU Friends of the Library**
Campus Box 7111
Raleigh, NC 27695
friends_of_the_library@ncsu.edu
919-515-2841
Your Support Makes the Difference.

http://www.lib.ncsu.edu/giving/ways-to-give