

## 2015-2016 Annual Report to the Chancellor

### Strategic Initiatives

In a year-long effort, the College faculty, staff and students reviewed our 2013 strategic plan, with an eye toward updating it for the next four years. Throughout the process, all groups broadly endorsed **the College's vision and mission, and three interdisciplinary themes**. A refreshed and updated plan has been completed and is posted on the College web site. This plan continues to be in total alignment with the university's strategic plan. We are pleased to highlight the following accomplishments under each of the University's strategic goals.

#### **Goal 1: Enhance the success of our students through education innovation.**

- Based on the work of a Transfer Student Task Force last year, the College **launched a new and highly successful orientation for transfer students** and implemented on-going support programs targeted to their needs.
- **Hired a new College recruiter** who is responsible for high school and community college visits across the state. This spring she visited 39 different programs in 2.5 months, spoke to 982 prospective students, and organized 23 scholarship presentation visits.
- Received donor funding for a **Student Experience Enrichment Fund** to support undergraduate participation in high-impact learning experiences. In addition to providing direct student support, the fund also supported Jumpstart, a student-led incentive-based professional development program. Seventy-two students participated in Jumpstart learning activities related to securing internships, competing for premier scholarships and fellowships, conducting undergraduate research, and other topics.
- The College and DASA co-led a campus-wide task force to explore options for a **First Year Environmental Science Program**. A draft proposal is ready for campus consideration and approval in the Fall 2016. If modest funding is provided, faculty leaders who are enthusiastic about implementing a pilot program in the Fall 2017 have been identified.

#### **Goal 2: Enhance scholarship and research by investing in faculty and infrastructure, and Goal 3: Enhance interdisciplinary scholarship to address the grand challenges of society.**

- Continued to fund our **Building Interdisciplinary Strengths** collaborative research project, which is supporting the work of five Ph.D. students from three departments.

- Invested in **three new positions, one in each of our departments, as part of an internal cluster hire titled “Interdisciplinary Approaches to Natural Resource Challenges.”** The three new positions include an Assistant Professor of Sustainability Science and Engineering (Department of Forest Biomaterials), an Assistant Professor of Watershed Ecology (Department of Forestry and Environmental Resources), and an Assistant Professor of Human Dimensions and Policy (Department of Parks, Recreation and Tourism Management). As an innovative piece of the start-up for these positions, we have invested in a PhD student who will be co-advised by these three new faculty members to do an interdisciplinary research project in one of our signature interdisciplinary thematic areas.
- **Hired an additional faculty member into the Leadership in Public Science cluster**, in a joint position with the NC Museum of Natural Science – Caren Cooper, Research Associate Professor in FER and Assistant Head of the Biodiversity Research Lab at the Museum.
- The College also continued to fund four projects selected under the **CNR and CALS Cross-College Enrichment Grant program.**

**Goal 4: Enhance organizational excellence by creating a culture of constant improvement.**

- Last year, the College systematically revised its communications to be on brand and launched new web pages. This year, **the College invested in an additional public communications specialist and half-time social media communicator** to provide comprehensive communications on three channels of social media and produce a series of e-newsletters and stories for external media. **More than 90 national and international news articles** featured the research and accomplishments of the College's faculty, staff and students.
- The College **completely renovated the large lecture hall and its 34-person teaching computer lab** in Biltmore Hall.
- With funding from the Provost’s office, the College **renovated three research laboratories and graduate student offices** on the first floor of Biltmore Hall.
- To **reorganize our fundraising and development efforts to better support CNR's strategic plan**, we formally separated the responsibilities of fundraising and forest assets management this year. Our new Assistant Dean for College Advancement is responsible for major gift fundraising, alumni relations, and college communications and marketing. The Executive Director of Forest Assets will manage all 10 College forests according to our new forest management guidelines.

**Goal 5: Enhance local and global engagement through focused strategic partnerships.**

- Dr. Tom Gower (FER) successfully collaborated with Drs. David Shafer and Miriam Ferzli (Graduate School) to bring NC State into the **National Science Education Organization Center**

**for Integrated Research, Teaching and Learning (CIRTL).** Membership in CIRTL will facilitate better science education training for graduate students and post-doc, making them more competitive for faculty positions, and better science education training for faculty, which should translate into improved learning outcomes for undergraduates.

- The College has developed an **interdisciplinary study abroad course on Sustainability**, which will be delivered in the Spring 2017 in Costa Rica.

## **Changes in the Service Environment**

The public debate over the future of **Hofmann Forest** has had the biggest impact on the service environment for the College. The successful resolution of the US EPA inquiry into water management practices on the forest in an Administrative Order on Consent paved the way for the negotiation of a timber deed on the forest plantations. On June 30, 2016, the Endowment Fund and Natural Resources Foundation Board signed a **\$78 million, 50-year timber deed** on 56,335 acres that will be managed by Resource Management Service (RMS), a leader in sustainable forest operations. This timber deed is exactly what we hoped would anchor our new strategy for Hofmann Forest. While it provides no new money for the College, it will generate a stable income stream. It also allows ongoing access for faculty and students for research and education. With these steps in place, the College can build new partnerships and connections with constituents and stakeholders around the country.

## **Diversity**

The College has invested in several programs **to build a pipeline of students from underrepresented groups to NC State and our College.** We are a partner in **College Bound**, a program at Bugg Elementary in SE Raleigh to develop interests in higher education. We further developed the **Neighborhood Ecology Corps** to reconnect middle schoolers with the natural world and develop interests in STEM and Natural Resource career pathways, successfully delivering a second full-year program to seventh and eighth graders. The College also continues to lead the **EnvironMentors Program** at NC State, which matches high school students with mentors in industry, government and the university to do independent study projects in the environmental sciences. Finally, the College is the NC State lead for the **externally funded Doris Duke Conservation Scholarship Program**, which provides scholarships to undergraduate students from underrepresented groups along with a series of enrichment opportunities that increase awareness of conservation careers, develop leadership skills, and promote inclusivity.

## **Instructional Program Advances**

Effective July 1, 2016, the **Environmental Sciences B.S.** degree program moved from DASA to the College of Natural Resources, where many co-curricular and support services will be available to the

approximately 225 students in this program. An additional benefit is that new faculty will be brought into the delivery of the curriculum.

The following program reviews occurred this year:

- The **B.S. in Forest Management**, the **B.S. in Natural Resources** and the **Master of Forestry** in the Department of Forestry and Environmental Resources (FER) underwent accreditation review by the Society of American Foresters in April 2015. All were **accredited in December 2015**.
- The **Sustainable Materials and Technology B.S.** program underwent accreditation review by the Society of Wood Science and Technology (SWST) in March 2015 and was **accredited in July 2015**. The accreditation team “found a dynamic, growing department that has the opportunity to play a significant role in the new strategic directions articulated by NC State University.”
- The **Professional Golf Management B.S.** degree program was reviewed for reaccreditation this year by the PGA of America. The review was positive and accreditation is expected in the fall.
- The **Parks, Recreation and Tourism Management (PRTM) graduate program** received an external review in March 2016. The overall review was positive and will be discussed with the Provost and Dean of the Graduate School in November 2016
- The **Sports Management undergraduate program** (PRTM) also received an external review in March. The overall review was positive and the department is responding to recommendations.

## Research

- **The College submitted \$31 million** in sponsored research proposals and **received \$10,869,878 in awards**, up \$957,767 from last year.
- Both the **Center for Geospatial Analytics** and the **Center of Industry Research Programs in Forestry** underwent successful 5-year reviews and will continue to operate. The IRPF is reorganizing and will search for a permanent director in the coming year.
- The **Center for Advanced Forestry Systems** is one of two NSF I/UCRC’s led by NC State. CAFS bridges nine leading universities’ forestry research programs with forest industry for the purpose of solving complex, industry-wide problems. In 2016, CAFS will complete its ninth year of operation, and has been encouraged to submit a Phase III proposal for five additional years.
- Dr. Elizabeth Nichols and colleagues received **one of ten USDA NIFA Water for Agriculture Challenge Area grants**. The Challenge works with universities to develop regional systems for sustainable use, reuse, flow and management of water.
- Dr. Aaron Hipp, Associate Professor of Community Health and Sustainability, was awarded the **College’s first NIH grant**. He will use an archive of 23,000 publically-available, online, outdoor webcams and crowdsourcing to develop reliable and valid tools to improve the capture of global physical activity patterns and built-environment characteristics.

- Dr. Myron Floyd is one of four members of a multidisciplinary, multi-institutional team that was recently awarded a \$2.9 million research grant by the **Robert Wood Johnson Foundation** to establish the Physical Activity Research Center (PARC).

## **Extension**

Working with NC State's Poole College of Management and Duke University, the College completed "**An Economic and Environmental Analysis of the U.S. Biobased Products Industry.**" To date, this report has over 144,000 downloads and 165 million media impressions. This project and report was undertaken as part of USDA's BioPreferred Program.

Dr. Duarte Morais, along with colleagues from CHASS and COS, launched **People-First Tourism Inc. (P1T)**, the first entrepreneurship venture originating in PRTM. P1T software is enabling small tourism business owners to reach a larger market for their goods and services.

## **College Rankings and Program Recognitions**

- USA TODAY ranked the College of Natural Resources #7 on its list of the 10 Best Colleges for Studying Natural Resources and Conservation.
- The **Fisheries, Wildlife and Conservation Biology program was ranked #2 in the country for research productivity by the PLOS ONE journal**, a multidisciplinary open access peer reviewed research journal. The journal compared the NC State program to 436 similar programs across the country and suggested performance benchmarks for fisheries and wildlife faculty scholarship.
- The **Masters of Parks, Recreation, Tourism, and Sport Management was ranked #2** of the top 25 Schools for Online Sports Management Master's Degrees in 2015 by the website *Top Management Degrees* using data from U.S. News & World Report and the National Center for Education and Statistics.
- The College's **Master of Geospatial Information Science and Technology** was the first Professional Science Masters (PSM)-affiliated GIS program in the country, as designated by the PSM National Office, and boasts consistently high enrollment with nearly 140 graduate students engaged in any given year.
- The Center for Geospatial Analytics (CGA) is designated the first **Open Source Geospatial Research and Education Lab** ([geospatial.ncsu.edu/osgeorel](http://geospatial.ncsu.edu/osgeorel)) and is the primary node for the OSGeo Foundation ([osgeo.org](http://osgeo.org)) in North America.

## **Faculty and Staff Honors, Awards and Recognition**

### **Center for Geospatial Analytics (CGA)**

- Helena Mitsova (CGA Associate Director of Geovisualization and CGA Faculty Fellow) was elected to the Open Source Geospatial Foundation ([osgeo.org](http://osgeo.org)) Board of Directors.

- Ross K. Meentemeyer (CGA Director and FER Professor) was elected President of the US - International Association of Landscape Ecology (2016-2018).
- As part of the Ecological Society of America's 2015 Centennial celebration, ESA cited Meentemeyer et al 2011 *Ecosphere* article, "Epidemiological modeling of invasion in heterogeneous landscapes: Spread of sudden oak death in California (1990-2030)," among top 10 most notable papers impacting the science of ecology.
- Stacy Supak (Teaching Assistant Professor with CGA) mentored the winning team of hackers at the 2nd annual Bayes Hack (<http://bayeshack.org/>) in San Francisco, developing software to make Federal lands easier to access and explore by all citizens.

### **Forest Biomaterials (FB)**

- Dr. Hasan Jameel was named the Jordan Family Distinguished Professor, 2016-2020.
- Dr. Hasan Jameel was named Alumni Association Distinguished Graduate Professor, 2016.
- Dr. Ilona Peszlen was awarded the Society of Wood Science and Technology Distinguished Educator Award, 2016 (two given globally each year).

### **Forestry and Environmental Resources (FER)**

- Dr. Ron Sederoff received the 2016 Alumni Association Outstanding Research Award. Dr. Sederoff was also selected as a member of the Inaugural Class of the NC State Research Leadership Academy
- Dr. Lara Pacific was awarded the Certificate of Merit in the category of Outstanding New Faculty Advisor by the National Academic Advising Association.
- Dr. Steve McKeand is NC State's nominee for the Governor Holshouser Award of Excellence in Public Service.
- Dr. Susan Moore and Dr. Mark Megalos won the 2015 Southern Regional Extension Forestry Award for Excellence for their Sentinel Landscapes publication, "Conserving Working Lands: A land legacy handbook". The publication provides accessible, understandable land conservation resources, information and activities for forest and farm owners.
- Dr. Gary Blank received the 2016 Fred Fletcher Outstanding Project Volunteer Award for the contributions his classes have made to improving Raleigh Parks and Greenways.
- Dr. Jason Delborne (FER) was invited to serve on the National Academy of Sciences committee on gene drives. Their report, "Gene drive research in non-human organisms: Recommendations for responsible conduct," was released in early June 2016.
- Dr. Fred Cabbage was elected Vice President, Society of American Foresters, and received the Forest Science Award in November 2015.

- Dr. Ryan Emanuel received the American Indian Science and Engineering Society (AISES) Community Service Award in recognition of his commitment, service and dedication to AISES.

### **Parks, Recreation and Tourism Management (PRTM)**

- Kathy Gore, Teaching Associate Professor, received the 2015 Ernest T. Attwell Award from the National Recreation and Park Association Ethnic Minority Society for contributions “to the development of new professionals through teaching, mentoring and programming for over 10 years and professional service activities for more than 20 years at local, state, and national levels.”
- Dr. Ed Lindsay received the 2015 Innovation in Teaching Award from the Academy of Leisure Sciences at the 2015 National Recreation and Park Association Congress. Dr. Lindsay also was named a DELTA Faculty Fellow in recognition of his innovations in teaching.
- Drs. Yu-Fai Leung, Carla Barbieri and Myron Floyd received the Spark Award for the most stimulating paper published in 2014: "Tourism and Recreation Research Along the Natural-Rural-Urban Gradient: Global Trends and Implications for China," in *Tourism Tribune*.

## **STUDENT HONORS AND AWARDS**

### **Cumulative List of Major Student Awards**

- 5 Doris Duke Conservation Scholars, 2 new Hollings Scholars, 1 Fulbright Scholar
- 4 CNR Valedictorians, Academic Dean’s List: 418 (Fall 2015) and 365 (Spring 2016)
- Devon Gaydos (FER and CGA PhD Student) received an award to participate in a workshop at the National Socio-Environmental Synthesis Center (SESYNC) in Annapolis, Maryland.
- Brian Pickard (FER and CGA PhD Student) was elected US graduate student representative of the US - International Association of Landscape Ecology, representing all US-IALE graduate students as a voting member on the executive council.
- Rebecca Nishida (undergraduate in FWCB) was awarded the Minorities in Natural Resources Conservation Travel Grant to attend the annual meeting of Southeastern Association of Fish and Wildlife Agencies.
- Samuel Freeze (undergraduate in FWCB) was awarded the Ken Wilson Memorial Student Award from the North Carolina Chapter of the Wildlife Society.

## **FUNDRAISING**

In the last fiscal year, the College raised \$2,420,866 in private support, reaching a total of \$18,392,613 toward the ongoing campaign. The College Advancement office has actively engaged volunteer leadership in campaign planning and has achieved 100% giving participation from our Natural Resources Foundation Board members.

## **ADMINISTRATIVE ACHIEVEMENTS AND STAFF CHANGES**

### **Leadership Team Reviews**

- **Associate Dean Adrianna Kirkman** underwent a successful 5-year performance review.
- **Director of the Community for Diversity, Thomas Easley**, underwent a successful 5-year performance review.

### **New EPA Administrative Hires**

- Lara Brown de Fuenmayor – Assistant Dean, Advancement (January 16, 2016)
- Sam Cook – Executive Director, Forest Assets (July 1, 2016)
- Marko Hakovirta – Department Head, Forest Biomaterials (August 1, 2016)

### **New Tenure Track Faculty Hires Starting in Spring, 2016**

- Dr. Caren Cooper – Research Associate Professor, Forestry and Environmental Resources (Partnership with Natural Sciences Museum)
- Dr. Rachel Cook – Assistant Professor, Forestry and Environmental Resources
- Dr. Jodi Forrester – Assistant Professor, Forestry and Environmental Resources

### **New Tenure Track Faculty Hires Starting 2016 – 2017**

- Dr. Mathusudan Katti – Associate Professor, Forestry and Environmental Resources
- Dr. Krishna Pacifici – Assistant Professor, Forestry and Environmental Resources
- Dr. Joshua Gray – Assistant Professor, Forestry and Environmental Resources
- Dr. Bethany Cutts – Assistant Professor, Parks, Recreation, and Tourism Management
- Dr. Whitney Knollenberg – Assistant Professor, Parks, Recreation, and Tourism Management
- Dr. Marcelo Ardon-Sayao – Assistant Professor, Forestry and Environmental Resources
- Dr. Jelena Vukomanovic – Assistant Professor, Parks, Recreation, and Tourism Management
- Dr. Kathryn Stevenson – Assistant Professor, Parks, Recreation, and Tourism Management
- Dr. Katherine Martin – Assistant Professor, Forestry and Environmental Resources
- Dr. Yuan Yao – Assistant Professor, Forest Biomaterials
- Dr. Lincoln Larson – Assistant Professor, Parks, Recreation, and Tourism Management