ANNUAL REPORT – 2010-11

The NC State College of Management concluded the 2010 calendar year with the announcement of a $37 million endowed gift that named the college as the Poole College of Management. The gift – part of a $40 million gift from Lonnie C. and Carol Poole to NC State and the largest endowment gift received to date by the university – reflects the value that Lonnie Poole has seen in what the college has accomplished since it was established in 1992. The gift will provide support for student scholarships and fellowships, and faculty research, recruitment and retention. It also is already spurring the development of new initiatives, including a focus on sustainability, as part of the goals and objectives in the college’s five-year plan, written in 2007. This report summarizes our 2010-11 accomplishments related to these goals and focus areas.

**Goal 1:** Create an exemplary educational opportunity which will prepare students to lead in the ever-changing technological and global business climate

**Goal 2:** Foster an intellectual environment supportive of impactful, meaningful, leading-edge research

**Goal 3:** Promote and support the advanced use of technology in instruction and research.

**Goal 4:** Strengthen corporate partnerships and global strategic alliances to enhance student opportunities and faculty research and to provide a student laboratory for learning based on real-world problems.

**Goal 5:** Strategically develop new programs and initiatives and increase enrollments to serve the growing demand for the college’s technology- and innovation-based academic and executive programs

NC State Poole College of Management Achievements: 2010-2011

**Goal 1:** Create an exemplary educational opportunity which will prepare students to lead in the ever-changing technological and global business climate

**Internationalizing the Curriculum**

In January 2011, the college joined NC State in welcoming SKEMA, a French business school which opened a branch for its students on NC State’s Centennial Campus. Poole College faculty taught several courses for the French students. The students also were welcomed to participate in college’s activities, such as the Wachovia Executive Lecture series. One of our MBA students served as a graduate assistant for NC State’s Global Training Initiative (GTI), organizing a student peer network that brought the French and U.S. students together for social and cultural activities. In spring 2011, the college joined the EFMD, international membership organization based in Brussels, Belgium, with more than 750 member organizations from academia, business, public service and consultancy in 82 countries, further growing our international network of academic institutions and increasing the range of opportunities available to our faculty for research and our students for learning in a global environment. Study abroad experiences also continued to grow, with the MBA program adding a short course in China during Spring Break.
Preparing Students for a Diverse Workplace

Dr. K. Leigh Forrell and Dr. Lauren Brown, Undergraduate Programs advisors, continued to strengthen the Student Network Groups (SNG) component of the college's M-100 Professionalism, Diversity and Academic Success course. More than 700 students participated during the fall and spring semesters, assisted by 35 professional mentors. The college's Diversity Initiative also hosted “Change comes Knocking” a documentary screening and discussion during Black History Month, and a panel discussion, Global Perspectives: Intersections of Faith & Professional Life in the fall semester. The college participated in CHAMS, Embrace NC State (a multicultural visitation day) and the African American Symposium, and held two focus groups exploring the culture and support for African American students in Poole College. A new diversity section was added to the college's website to provide easy access to information about the college's diversity-related activities.

Strengthening Entrepreneurship Education

Entrepreneurship faculty in the college's Department of Management, Innovation and Entrepreneurship continued their activities to update the college's undergraduate and graduate entrepreneurship curricula.

- Launched the NC State chapter of the Collegiate Entrepreneurs Organization (CEO). Membership grew to 40, with several students representing NC State at the national CEO convention in Chicago.
- Launched an Entrepreneurship Fellows Program to help attract the best and brightest candidates to the college's Jenkins MBA program. Fellows will have opportunities to participate in research, engage with local startup companies, interact with local investors and assist with technology commercialization assessments for the Office of Technology transfer.
- Undergraduate entrepreneurship students provided support to nine companies in the region, providing real world solutions to a variety of issues. MBA entrepreneurship students provided strategic analysis and recommendations to six early stage high-growth companies.

Real World Learning Experiences

The college continues to emphasize real world learning experiences, with practica and project-based learning available in most disciplines, and all students encouraged to participate in internships or co-op experiences as well as case competitions and entrepreneurship competitions. Examples of project based learning follow.

- The ERM Initiative developed a new graduate practicum course that has teams of students working with organizations and companies to develop solutions for ERM issues. Two student teams worked with non-profit organizations this year.
- The HiTEC program completed five business plans, three of which are moving forward.
  - eBraille – a refreshable electronic reader (much like a Kindle™) for the blind and visually impaired.
  - Lykos – a company that provides coatings for fabrics using atomic layer deposition. This will initially be used for UV protection and fire retardation.
  - rVet – provides species specific therapeutics for the animal health. Their first product is a white blood cell amplifier for immunosuppressed canines.
- The Supply Chain Resource Cooperative coordinated more than four dozen student team projects with its partner companies. Students reported their project results during the SCRC's fall and spring meetings.
- The Center for Innovation Management Studies arranged for student teams from the college’s Master of Global Innovation Management program to work on projects for CIMS partner companies. One project involved big data research that is part of the college’s Executive Programs’ Executive Series: Managing Disruptive Innovation.
- The BioSciences Management Initiative coordinated team projects for students in the MBA biosciences management concentration.

Goal 2: Foster an intellectual environment supportive of impactful, meaningful, leading-edge research

In response to Lonnie Poole's endowed naming gift, a faculty committee has been formed in the college to lay a foundation for a center for excellence in sustainability, identified as an initiative following the
awarding of the gift. Faculty discussion sessions were facilitated by Nick Hamon, vice president and head of sustainability for Bayer Crop Science North America.

Faculty support got another boost with a Poole College of Management Board of Advisors commitment to fund an annual professorship, with total gift commitments of $125,000 over five years. Board member Steve Zelnak matched the contributions of the Board of Advisors and provided an additional commitment of $125,000 for a second term professorship.

Two faculty members received named professorships in the 2010-11 academic year: Dr. Stacy Wood, who joined the college as the Langdon Distinguished Professor of Marketing, Department of Business Management, and Dr. John Seater, a long-time member of the college’s Department of Economics, who was awarded the Thurman-Raytheon Distinguished Professorship in Economics. In addition, Dr. Jonathan Bohlmann, associate professor of marketing, Department of Business Management, received the Zelnak Management of Innovation Research Award.

Poole College had another strong year in terms of sponsored research activity. Seven new projects were awarded and the Center for Innovation Management Studies welcomed three new member companies, bringing the college’s sponsored research funding to a total of more than $1.2 million. In addition, faculty members submitted 18 research funding proposals valued at almost $3.5 million.

The college continued its commitment to faculty research through internal research funding programs, awarding $206,665 in internal grants in 2010-11. Five Faculty Research and Professional Development awards were made; six Edwin Gill Grant program awards, and eight Research Innovation Grant program awards.

The Poole College of Management Research Awards program promotes and recognizes leadership, growth and innovation in research. The Research Leadership Award, which recognizes excellence in research over the prior two years, was presented to Keith Brouthers, professor, Department of Management, Innovation and Entrepreneurship. The Research Growth and Innovation Award, which recognizes evidence of research growth and/or innovation over the prior two years was presented to David Henard, associate professor, Department of Business Administration. Also, the following faculty received department-level research awards:

- **Accounting**: Research Leadership. Paul Williams; Research Growth & Innovation, Bruce Branson
- **Business Management**: Stacy Wood, Research Leadership, David Henard, Research Growth & Innovation
- **Economics**: Research Leadership, Tom Grennes; Research Growth & Innovation, Thayer Morrill
- **Management, Innovation and Entrepreneurship**: Keith Brouthers, Research Leadership

Following are selected funded project highlights.

- **Dr. Joe Brazel**, associate professor in accounting, awarded funding for a follow-up project from the Financial Industry Regulatory Authority (FINRA) Investor Education Foundation to further develop and test a web-based fraud risk assessment tool, based on Brazel’s research into the comparison of financial versus nonfinancial measures. The fraud risk assessment tool that will result from this project will assist auditors and investors in determining a given company’s potential fraud risk.
- **Drs. Robert Clark, Steve Allen, and Melinda Morrill**, Department of Economics, are completing a year long term project for the Financial Industry Regulatory Authority Investor Education Foundation that has been evaluating employer-provided financial education programs pre-retirees, part of a four-year study that has examined employer approaches to pre-retirement education with a goal of determining the most effective methods of assisting pre-retirees gain the knowledge needed to make the best retirement decisions. Working with corporate and institutional partners, the investigators have observed pre-retirement programs, examined their
content, reviewed materials provided to participants, and conducted a series of surveys with program participants. The final results of the project will be instrumental to HR leaders of large corporations, employer organizations, and other employer groups in helping them evaluate existing educational programs for pre-retirees and to design and develop new programs using an evidence based approach.

- Dr. Mike Kowolenko, principal research scholar and CIMS fellow, is leading a series of projects for CIMS members BASF, Eisai Pharmaceuticals, and the North Carolina Biotechnology Center Drug Development Center of Innovation, demonstrating how text analytics tools and high powered computing can be combined to comb through the massive amounts of unstructured data available on the internet. Together with partners at IBM - developers of the text analytics tool - and NC State’s virtual computing laboratory, Kowolenko is demonstrating how this technology can be used to identify and extract competitive business intelligence by applying it to applications critical to the individual sponsor’s goals and interests.

- Dr. Melinda Morrill was awarded a grant from the NIH’s National Institute on Aging for a project titled “Macroeconomic Conditions and Marital Dissolution.” The project is examining the impact of the recent recession on marital stability in the United States. While researchers going at least as far back as the 1920s have speculated that divorce rates might decline in times of economic recession there is surprisingly little formal empirical evidence on whether such a link exists. In contrast to the relatively sparse literature on the link between business cycles and marital instability, there is significant literature showing that family-level economic shocks (such as job loss) increase the probability of marital dissolution. The research for this project will include a detailed empirical examination of the impact of macroeconomic conditions on marital dissolution, comparing and contrasting it with the impact of family-specific shocks on marital dissolution and considering interactions of the two.

Following is a sampling of research by faculty associated with the college’s initiatives.

- Enterprise Risk Management Initiative: Two research-based publications were commissioned by COSO, an internationally recognized think-tank focused on providing ERM principles-based guidance for boards and senior executives.
  - “Developing Key Risk Indicators to Strengthen Enterprise Risk Management” provides guidance to assist senior executives and boards of directors in their development of effective metrics to monitor an organization’s top emerging risks. Over 20,000 copies of this paper were distributed by COSO to individuals serving on boards of directors and in senior executive roles within U.S. public companies and over 51,000 copies were downloaded from the COSO website.
  - COSO’s “2010 Report on Enterprise Risk Management” summarizes results of a survey conducted by Poole College faculty members on the current state of enterprise risk oversight within organizations all across the U.S. COSO distributed 20,000 copies of this report to individuals serving on boards of directors and in senior management of U.S. public companies and an additional 50,000 copies were downloaded from the COSO website within two months of issuance.
  - Faculty in the ERM Initiative also conducted a joint research project commissioned by the London-based Chartered Institute of Management Accountants (CIMA) and the American Institute of Certified Public Accountants (AICPA). This global-based online survey was provided CIMA and the AICPA information about the current state of ERM among global organizations, resulting in a monograph developed by the ERM Initiative and distributed globally by both organizations.

- The TEC Algorithm - developed at NC State by Poole College’s entrepreneurship and strategy faculty with funding from the NSF and the Kenan Institute for Engineering, Technology and Science – is being made more powerful. Stephen Markham, one of the originators of the TEC Algorithm, launched the TEC Renaissance in October 2010 at the CIMS sponsors meeting in Raleigh. The three-year project is underwritten by CIMS and will incorporate research and input from CIMS, Poole College faculty, and other partners.

- The new Supply Chain Resource Cooperative website is adding white papers and other articles by Poole College faculty, in addition to research summaries that have contributed to the site’s popularity among supply chain management practitioners. A primer on business process
management by Cecil Bozarth, professor, supply chain management, is one of the newest contributions to the new site’s knowledge base.

- Faculty associated with the BioSciences Management Initiative’s new website are blogging on topics impacting the biosciences industries.
- The Center for Innovation Management Studies is updating tools in the collection of innovation management resources available through its website, as well as adding new tools. One tool being updated by Paul Mugge, CIMS director, is the Innovation Management Maturity Assessment (IMMA) tool, developed by Poole College faculty member Dr. Lynda Aiman-Smith, associate professor, Department of Management, Innovation and Entrepreneurship, and introduced through CIMS in 2007. Originally designed for organizations engaged in product, process and service innovation, it now is being adapted for use in business model innovation, with the assistance of Dr. Richard Kouri and Dr. Stephen Markham. Also being updated is a quantitative tool for improving a company’s services development process – the Services Development Application tool. It is a product of work by CIMS and the Research Foundation of the Product Development and Management Association.

View all Poole College faculty research activity at: http://poole.ncsu.edu/index-exp.php/research/

**Goal 3: Promote and support the advanced use of technology in instruction and research.**

Poole College’s Jenkins MBA program announced the launch of its new Online MBA option, with enrollment starting in August 2011 for the 2011-12 academic school year. The program will be using Delta’s robust online education platform and onsite lecture capture equipment. The MBA program also moved into a new facility for its part time distance program based in Research Triangle Park, N.C. Dan Steen, director of the college’s IT department, coordinated the installation of classroom and related communications technology for the faculty’s four classrooms, as well as mobile video conferencing units in Nelson Hall and at the RTP site.

Following are among other projects completed by the college’s IT department in Nelson Hall:

- Coordinated the installation of a new onsite lecture capture studio in 3151 Nelson Hall, including a PC, two large LCD panels, a Mediasite recorder, robotic video camera and microphone. Faculty can schedule time with DELTA to record lectures to be uploaded to a DELTA server. Similar system installed at the MBA@RTP location.
- Installed a collaborative learning environment in two MBA breakout rooms, including furniture, LCD panels and speakers. The system enables student teams to connect their laptops to collaborative tabletops, allowing images to display from their laptops to the LCD panels.
- With the college’s instructional technologist, the IT team provided support for faculty using NC State’s learning management systems – Moodle, WolfWare and Blackboard Vista – including the migration from Blackboard Vista to WolfWare powered by Moodle. The result: a significant increase in Poole College student enrollment in Moodle courses: 8,393 in fall 2010 and 8630 in spring 2011, compared to 1533 in fall 2009 and 3149 in spring 2010.
- Provided support for campus-standard student response systems (clickers) in the Nelson Hall classrooms, including software and hardware support.
- Installed electronic billboard messaging systems throughout Nelson Hall, to facilitate dissemination of college news and events.

**Goal 4: Strengthen corporate partnerships and global strategic alliances to enhance student opportunities and faculty research and to provide a student laboratory for learning based on real-world problems.**

The college’s faculty, individually and through our Center for Innovation Management Studies, BioSciences Management initiative, Enterprise Risk Management Initiative, Supply Chain Resource Cooperative (SCRC) and Technology Entrepreneurship Commercialization (TEC) program, continue to develop new relationships with business, industry, and other academic institutions.

- Faculty members individually have provided project-based learning experiences that include providing marketing guidance for nonprofit organizations that serve North Carolina’s veterans as well as companies needing a fresh perspective on their marketing and other operations.
The BioSciences Management Initiative launched a new website to increase knowledge sharing and interaction with the biosciences community. The initiative also supports the biosciences management concentration in the college’s Jenkins MBA program, arranging for eight practica projects with 16 student participants, and summer internships for seven MBA students. Dr. Dick Kouri, BioSci director and professor of practice, Department of Management, Innovation and Entrepreneurship, worked with the CIMS leadership team to co-develop and present two workshops for the college’s Executive Programs’ Managing Disruptive Innovation workshop and a webinar, Managing Innovation in any Market. Kouri also co-developed with CIMS a big data analytics platform, engaging four outside organizations. The BioSciences Management Initiative also welcomed the following new board members: Mary Kuhn, Talercris; Jeannene Martin, WakeMed; Arjun Rajaratnam, Smith and Nephew; Phil Priest, GSK; Naina Bhasin, The Hamner Institutes for Health Sciences; Michelle Grainger, program director, CIMS; Dr. Mike Kowolenko, CIMS fellow. - http://biosci.poole.ncsu.edu/

The Center for Innovation Management Studies collaborates with Poole College faculty as well as faculty in its partner academic and industry organizations on various research projects related to innovation management. A sample of the work being done is reflected in other parts of this report. Additional details are available online at http://cims.ncsu.edu/.

Poole College faculty affiliated with the ERM Initiative provided custom executive education and conference lectures for organizations all across the U.S. and abroad as well as state and local government organizations. ERM Director Dr. Mark Beasley, Deloitte Professor of Enterprise Risk Management, Department of Accounting, also served on a task force of the London-based International Corporate Governance Network and Yale University’s Millstein Center on Corporate Governance who were responsible for developing international guidance for board risk oversight from an institutional investor perspective. Such activities have positioned NC State as one, if not the, most recognized academic thought leader on the topic of ERM globally. The ERM Initiative welcomed four senior risk executives to its board of advisors this past year: Paul Zavolta, Alpha Natural Resources; Brian Pauls, Best Buy; Joe Steakley, Hospital Cororation of America, Inc.; and George Munoz, Munoz Investment Banking Group, LLC. - http://poole.ncsu.edu/erm/

The Supply Chain Resource Cooperative continued to expand its network of participating companies, adding three this year: GSK, Novozymes, and Bayer CropScience. Faculty provided industry updates during the SCRC’s spring and fall partners meetings. - http://scm.ncsu.edu/

TEC is bringing entrepreneurship research, curricula and activities within Poole College together to form a dynamic environment and portal for students and faculty to engage with the local business community. TEC’s new Entrepreneurship Advisory Board was established this year with an inaugural four members representing leaders in the local business community who are active in startups and small business activities. The entrepreneurship program already engages with scores of mentors and other volunteers from the community who advise and provide other guidance to student teams in the entrepreneurship curriculum’s project-based courses. The faculty also received funding to restart the Commercialization of Technology (ACT) program, supported by NC State’s Springboard Initiative, providing commercial viability assessments for NC State IP and assisting with the Chancellor’s Innovation Fund award process. It also will enable TEC to hire its own students as interns and support the university’s efforts to become the innovation leader in North Carolina. TEC also is wrapping up EU-US Atlantis grant-funded project that established TECnet, an international network of TEC-like courses and technology commercialization activities, with Ted Baker and Roger Debo as co-principle investigators. They are collaborating on the project with COTEC in Portugal; the University of Loughborough, UK; and Brown University, U.S. TECnet partner faculty members also published two journal articles about technology entrepreneurship education. - http://tec.ncsu.edu/

The college’s development and external relations staff hosted a well-attended alumni event in Charlotte, N.C., in fall 2010, and coordinated with the NC State Alumni Association in co-hosting events for Chancellor Randy Woodson in New York City and Washington D.C. For both occasions, the college provided guest faculty presenters and arranged to have the events sponsored by corporate donors. In addition, the college held its inaugural Alpha Kappa Psi reunion in March 2011, bringing college alumni from many together for the first time.
Goal 5: Strategically develop new programs and initiatives and increase enrollments to serve the growing demand for the college’s technology- and innovation-based academic and executive programs

The college’s Executive Programs launched several new executive offerings in the past year: The Executive Series, Managing Disruptive Innovation, TechPros, and Business Collaboratories, a unique approach to executive education that involves hands-on learning, engaging participates in learning new tools and techniques while using them to identify and solve problems for their organizations as part of the learning experience. The Business Collaboratories website provides additional information about this new approach to executive education and its current program offerings. - [http://execed.mgt.ncsu.edu/](http://execed.mgt.ncsu.edu/)

The college’s Jenkins MBA program received approval for its online MBA, to begin in August 2011. It also received approval for several dual degree programs: MBA/JD with Campbell University; Master in Biomedical Manufacturing/MBA, and Master of Industrial Engineering/MBA. With these, it now offers seven dual degree options.

University and External Awards and Recognition

- Dr. Ted Baker, professor of entrepreneurship: Received the 2011 Greif Research Impact Award for his paper, “Creating Something from Nothing: Resource Construction through Entrepreneurial Bricolage,” published in the *Administrative Science Quarterly*. The award recognizes impact as measured by number of citations in the five years since it was published; to date, the paper has 103 citations through the Web of Science and 340 through Google Scholar.
- Dr. Robert Clark, professor of economics and management, innovation and entrepreneurship, was invited to speak on two panels for the New York Stock Exchange’s forum, Workplace Financial Fitness: Empowering Employees Beyond the 401(k). He also participated in the ringing of the stock exchange opening bell on April 12, 2011.
- Dr. John Seater, Thurman-Ratheon Distinguished Professor of Economics, received NC State’s Distinguished Graduate Teaching Award in May 2011.
- Dr. David Washington, associate teaching professor, human resources, was invited to speak at NC State’s inaugural Distinguished Professors Award Lecture in March 2011.

Student and Alumni Recognition

- Triangle Business Journal’s 40 Under 40 Awards to four college alumni: David Forrest (‘93) is vice president, commercial banker with Fidelity Bank, Raleigh, N.C; Laura Hulsey (‘97) of Raleigh is regional vice president for Triangle Commercial Markets with RBC Bank USA; Paul Kizakevich (‘07 MBA) is regional executive with CA Technologies; Mark Saad (‘08) of Garner, founder of Kinder Soles footwear.
- Collegiate DECA’s International Career Development Conference: a team of four Poole College undergraduate students in the college’s DECA chapter placed in the top ten at this new club’s first attempt at the national competition. Billy Burnet and Thomas Lamm were Top 10 finalists in the Sports and Entertainment Marketing Team Case Study event; Sarah Mazur was a Top 10 finalist in the Restaurant and Food Service Management Business Simulation; Brianne Bower received the top comprehensive exam score in the Travel and Tourism Business Simulation.
- National Association of Women MBAs, Jenkins MBA Chapter: second place, 2010 NAWMBA National Case Competition
- Triangle Global Health Case Competition: Jenkins MBA team received second place
- Canadian Leadership Orientation Program: Jenkins MBA student Robert Flynn selected to attend, summer 2011.
- Business Leader Magazine’s Top 50 Catalyst Entrepreneur in Research Triangle Park Award in 2011: received by Jenkins MBA alumnus Ted Mosler
College Rankings
- BusinessWeek: Undergraduate Programs (2011), 100
- Supply Chain Management Review (2009) - Supply Chain Management Curriculum: 14th by academics | 20th by practitioners | overall ranking, 16th
- Beyond Gray Pinstripes: MBA (2010), 99

Administrative Update
On the operational level, the college’s continued careful stewardship of its financial resources brought us to the end of the academic year with minimal disruption of services to our students. We responded to ongoing economic constraints by continuing to adjust faculty teaching assignments, further reducing reliance on adjunct faculty and replacing multiple sections of classes serving smaller numbers of students with larger sections, and creating more distance education sections to help students continue progress toward their degrees. The college also filled vacancies and new positions required to meet growing program needs.

Retirements, departures, changes
- Dr. Joe Bertha, assistant dean, budget and finance
- Susan Clark, administrative support specialist, Supply Chain Resource Cooperative
- Steve Edwards, Supply Chain Resource Program co-director
- Sandra Gibson, Undergraduate Programs scheduling officer
- Brendalee McCarthy, director, career development, Office of Undergraduate Programs
- Christine Miller, administrative associate, Office of the Dean
- Dr. Art Padilla, professor and head, Department of Management, Innovation and Entrepreneurship
- Dr. Doug Pearce, professor and head, Department of Economics, returning to teaching faculty
- Carol Smith, MBA program assistant

New Hires/Appointments
- Dr. Lee Craig, professor of accounting and head, Department of Economics
- Arnette Ejire, assistant dean, budget and finance
- Jenny Champ, Online MBA Academic Coordinator
- Lisa Chang, program administration, Technology Entrepreneurship and Commercialization Initiative
- Lee Clark-Sellers, program director, Executive Programs
- Morgan Coston, Undergraduate Programs scheduling officer
- Ashley Creech, MBA office assistant
- Clyde Crider, Supply Chain Resource Program co-director
- Belinda Dowdy, Jenkins MBA program assistant director
- Allen Dupont, adjunct assistant professor, Economics
- Amanda Elam, lecturer, Department of Management, Innovation and Entrepreneurship
- Bill Everett, executive in residence
- Tracy Freeman, teaching assistant professor, Department of Business Management
- Valarie James, assistant director, Graduate Economics Program
- Heather Johnson, assistant director, admissions, Master of Accounting Program
- Roger Mayer, professor, Department of Management, Innovation and Entrepreneurship
- Karen McKay, adjunct lecturer, Department of Accounting
- Dan McGurrin, director, Executive Programs/Business Collaboratories
- Brian Newton, director, career development, Office of Undergraduate Programs
- Nora Traum, assistant professor, Department of Economics
- Lauren Van Arsdale, administrative support specialist, Supply Chain Resource Cooperative
- Deborah Waller, MBA program assistant
- Elizabeth Warren, academic advisor, Office of Undergraduate Programs