

horizons

Incubating Bright Futures

by Megan Galbraith



It began, like most scientific theories do, with a hypothesis—the spark of an idea that warrants more testing, analysis and research. But, as they sometimes do, little ideas yield phenomenal results.

Tom Keane, chair of the department of Chemistry and Physics at Sage, had the germ of such an idea—to create a home for high-tech business at Russell Sage College (see related story, “A Passion for Science”). From that germ grew a major project for Sage and the Capital Region.

When Senator Joseph L. Bruno, President Jeanne Neff, Keane and his science faculty, and Evident Technologies announced the receipt of \$2.5 million from the New York State Senate to create an Incubator for Nanotechnology Ventures, Emerging Sciences and Technologies (INVEST) at Sage in June, it marked a national first for women in science at a women’s college. And it came at a time when the national conversation was focused on women who do science.

The National Academy of Sciences had just elected 19 female members—the largest number of women ever chosen in one year. And the American Association for the Advancement of Science (AAAS) was calling for higher education to develop an emerging U.S. talent pool that includes more attention to women, under-represented minorities and non-traditional students.

“Jeanne Neff’s leadership and innovative approaches, like the INVEST at Sage program, are effectively educating our children in unique new ways, advancing Tech Valley by helping cutting edge businesses develop their products and create jobs, and enhancing Russell Sage’s reputation as one of finest colleges for women in the nation,” said New York State Senator Joseph L. Bruno.

Evident Technologies (www.evidenttech.com), a successful nanoscience startup company based in Troy, will be INVEST’s first tenant. In contrast and in complement to programs focused on women in engineering, Russell Sage College is positioned to leverage a liberal dose of science to women majoring in everything from chemistry to business to market communications.

Sage already has important and successful pipeline programs for young women interested in

science, math and engineering. These include the GEMS program for middle and high school girls, aimed at increasing the number of girls and women studying engineering, mathematics and computer science, which drew more than 400 girls to campus last year. The SMART Women club at Russell Sage encourages the sharing of research among students and faculty in these same fields, who make formal presentations and engage in the kind of debate that is found in real life scientific environments. A group of Sage students each year travels to the National Conference On Undergraduate Research (NCUR) for similar presentations—more sharpening of their scientific knowledge and communication skills.



INVEST at Sage will turn John Paine Hall, a building at the center of the historic Russell Sage campus, into a cutting-edge incubator facility with lab space that will be used by new and growing technology companies as well as Sage's science programs. "We expect that the exposure to Evident will lead more Sage students to internships in technology companies, not just here but elsewhere in the Capital Region, and that more will stay here after graduation to become part of the growth of Tech Valley," said President Jeanne Neff. "Sage will strengthen relationships with young women in local middle and high schools, including the proposed Tech Valley High School, and help them explore science careers and learn about entrepreneurship."

Quantum Dots

Evident Technologies is a pioneer and world leader in the development of "quantum dots" that have nearly endless applications including biological research, drug development, anti-counterfeiting inks, and smaller and better silicon chips for emergent nanotechnology markets. During its occupancy, Evident will help the College understand the needs of future start-up incubator occupants, mentor students and support internships, and serve as an invaluable living resource for Sage faculty and students in the sciences and many other fields, says Neff.

"Evident has grown up in downtown Troy, and we are happy to help the growing entrepreneurial spirit of the city by being part of INVEST at Sage," said Clinton Ballinger, Ph.D., CEO of Evident. "We have learned that it is not just breakthrough science or technology that makes a company successful. We are glad to have the benefit of student interns who will bring their interest in science, as well as their passion for business, education, and other fields that can inform the work being done in our labs."

The company anticipates 32 jobs in their first year of operation at Sage, including 15 new lab technicians, and there are an estimated 40,000 more high-tech positions available in New York state, according to the business development group www.hightechny.com.