On a perfect May afternoon, two students are contemplating a dramatic new addition to the campus skyline.

“It reminds me of the Enterprise,” observes one. The other agrees.

The similarity runs deeper than coincidence. Like the starship, the circular glass and steel Center for Student Innovation is designed to take students where they haven’t been before. The 10,000-square-foot space will serve as a nexus of creativity and technology, a hub where teams of students from all corners of the university can develop and showcase innovative and entrepreneurial projects.

“The center will be a signature structure that brings RIT closer to the vision of becoming America’s ‘Innovation and Creativity University,’ ” says RIT President Bill Destler.

The goal is for every RIT student to acquire an intrinsic understanding of the innovation process, says Ian Gatley, recently named director of Student Innovation and Undergraduate Research Support. “The world is eager for young people who are eager to change the world,” says Gatley. “And the best approach to solving the problems of the world is to work in teams.”

An internationally known scientist, Gatley came to RIT in 1997 to become director of the Chester F. Carlson Center for Imaging Science. He was named dean of the College of Science in 2001 and gave up that position to take the new post. There’s no job more important than guiding the launch of the new center, he believes.

“My sense is that RIT is ready to take a giant step forward,” says Gatley, “and I want to help lead the charge.”

Jeremy Haefner, RIT Provost and Senior Vice President for Academic Affairs, notes that research and scholarship grew significantly during Gatley’s tenure with the College of Science. Two new doctoral degree programs – in color science and astrophysical science and technology – are among the achievements.

Haefner points to the success of the annual Undergraduate Research Symposium as another example of Gatley’s leadership. In 2008, 93 students presented research guided by faculty from nearly all the colleges at RIT.

Innovation is for everyone

Research and innovation are two sides of the same coin, Gatley believes, and these activities should not be the domain of a few upper-level undergrads and graduate students. In his new role, he will help make such experiences available to all students much earlier in their college careers.

Gatley will have plenty of help. People
across campus are working to define what it means to be the innovation university. The Innovation Curricula Working Group is currently focused on inventorying curricula (existing and planned) that supports the innovation vision.

“The problems of the world are interdisciplinary in nature, but traditional education often turns students into single-discipline ‘adepts’,” says Jon Schull, associate professor, interactive games and media, and co-chair of the curricula group. “We want to build a culture of collaboration and unleash it on the world’s most wicked – and interesting – problems.”

During the past academic year, while the Center for Student Innovation was taking shape, about 100 students were already participating in an experiment in innovation. The Collaborative Innovation Program offered nine honors courses that explored the question, “How do we approach innovation at RIT?” In addition to the courses, a series of related “town hall” meetings open to anyone took place in the Wallace Library “Idea Factory.”

The classes and meetings attracted students from science, engineering and technology as well as visual art and design disciplines, says Xanthe Matychak ’07 (industrial design), coordinator of the program. Faculty from different colleges joined forces to teach courses such as Design Research, Social Networking in Action, and Innovation and Invention. Students also had the opportunity to lead workshops (for example, photographic technology major Eric Kirby presented a session on taking product photos).

“Students who would not normally have the chance to meet got to know each other,” says Matychak. “Those communications are really hard. We all speak different languages.

“From my own experience as a student, I know that when I took courses outside my comfort zone, I didn’t always ‘get it’ right away,” says Matychak. “But later, I realized those experiences were invaluable.”

Embracing collaboration
In addition to exploring multi-disciplinary, collaborative ways of working, students used those methods to develop ideas for possible furnishings, technologies and uses for the Center for Student Innovation.

“We tried to simulate the experience of a new person coming here,” says Lauren Courtney, a new media publishing major from Buffalo who begins her second year this fall. Dozens of ideas were explored: a directory of electronic business cards, social networking systems, interactive displays and specialized accoutrements to make the facility functional, impressive and inspirational.

“We were from all different majors,” says

Center fosters new relationships
The new Center for Student Innovation is already helping RIT connect to organizations outside the university.

The center’s corporate partnership with Vuzix Corp., a Rochester-based manufacturer of 3-D video eyewear, was announced in April, and a formal alliance with Rochester Museum & Science Center has also been established.

Vuzix will supply the center with the company’s advanced personal display eyewear, software development kits, technical expertise and previews of future product offerings. Vuzix designs and manufactures digital displays and eyewear used in a range of commercial, medical and defense applications. One of its upcoming products, see-through “sunglass” displays, will bring 3-D movies and graphics to iPhone users.

“It’s only natural that we team with a premier technology and innovation center that just happens to be in our backyard,” says Paul Travers, president of Vuzix. “We have a special relationship with our RIT co-op employees, and many of our engineering staff are graduates of the university.”

Cultivating curiosity about science and technology in children and in their families is at the heart of the relationship between RIT and the Rochester Museum & Science Center.

“RIT and the museum are in the same business, which is the education of the next generation,” says Ian Gatley, director of Student Innovation and Undergraduate Research Support. “The museum typically gets students at a younger age than we do on campus, but we both help develop the upcoming generation of people who are going to save the planet.”

“For years now, we’ve been involved with RIT and this is a celebration of our past work and stimulation for future opportunities,” says Kate Bennett, president of RMSC. “So much of what goes on can be driven or executed by faculty and student projects, and we welcome new ideas.”
Courtney, “so when people brought ideas to the table, it was really interesting to see.
Before I came to RIT, I never thought I would be working on something like this,” she adds. “It was a great experience. I’m a designer, and it would be easy to stay in my own little bubble. I don’t want to do that.”
The Center for Student Innovation will serve many people and many functions, so the space needs to remain very flexible. Gatley uses the analogy of a park, which could be the setting for a picnic, a ball game, or a band concert.

The center, in fact, is a big, open space surrounded by glass. It’s not set up as a classroom, a lab or a workshop – but it could be any of those things.

**Hands on, minds open**

One idea under development is a system of two-way “video portals” that will connect the center with labs and facilities all over campus, says Schull.

“There’s going to be a holodeck aspect to this,” says Schull, “and we think RIT students will be able to implement it using digital projectors and augmented reality eyewear manufactured by a local company called Vuzix.”

Rob Vlosky, who helped negotiate the deal with Vuzix (see related story page 11) and taught commercialization in the Saunders College of Business this year, says, “I think the center can become a catalyst for all sorts of interesting collaborations between RIT and innovative businesses. It’s going to be very cool.”

Chris Tompkins-Tinch, a fourth-year imaging science major from Poughkeepsie, N.Y., helped develop a prototype for the video portal system. In spring 2008, he was taking Schull’s Innovation and Invention class.

“He set out a challenge to come up with ‘immersive computing systems’ for the Center for Student Innovation,” says Tompkins-Tinch. “We came up with a four-screen, rear projection system in a cube. We called it ‘Sensational 4-D’ and demoed it at the first Imagine RIT festival.”

Tompkins-Tinch is president of RIT’s MAKE Club, a student group interested in do-it-yourself projects, skill exploration and learning. He’s developing a “people project finder,” a Facebook application that he describes as a “dating site for projects,” for use in the innovation center.

He has a particular vision for the new facility. “We hope the it will become a hacker space – not in the negative sense. It would be great if it could be a space where students could get together to work any time, 24/7.”

**Epicenter of action**

Whatever happens inside the new structure, it is destined to be surrounded by a bustling new campus complex. The University Services Center, a 44,000-square-foot, three-story office building that opened in May, is attached to the Center for Student Innovation by the new Student Services Lobby. That area is now the site of student business functions related to finances, scheduling, parking and housing.

Construction has begun nearby on Global Village, a complex of student housing and services that will open in fall 2010. Included is Entrepreneurs’ Hall, a residence and business development program affiliated with the Albert J. Simone Center for In-

**Hall of Fame will honor innovators**

As the Center for Student Innovation was being constructed, an idea for recognizing innovators and innovation was also taking shape.

RIT’s Innovation Hall of Fame is intended to acknowledge individuals and innovators that have had a positive impact on global society.

Criteria for inclusion in the hall will focus on: artistic, creative and/or technical work: creation of a working product, system or design; unique developments within a particular field or profession; creation of a product or start-up business based on a unique intellectual property.

RIT alumni, students, faculty, staff or others affiliated with the university are eligible. Nominations can be made online at www.rit.edu/ihfnomination.

The first induction ceremony will take place in May 2010 in connection with the third annual Imagine RIT: Innovation and Creativity Festival.
Innovation and Entrepreneurship, a business incubator for ideas developed by students.

Richard DeMartino, professor of management and director of the Simone Center, says the Center for Student Innovation and the entrepreneurship program are closely aligned. The process of innovation entails finding an opportunity, creating a solution and putting it into action – either as a commercial entity or to address a societal issue, explains DeMartino, who co-chairs the Innovation Curricula Working Group with Jon Schull.

“The vision is that every student in every program will have an innovation experience,” says DeMartino. “We add a business component for students who want to take their projects in that direction.”

The center opened just in time for the Imagine RIT: Innovation and Creativity Festival May 2. For that one day, the center was filled with exhibits showing a range of student innovation.

The academic year ended just a few weeks later, so many students and faculty members left for the summer without setting foot inside the new structure. When they return in September, the center will be ready and waiting.

“I really hope people take advantage of it,” says Lauren Courtney. “It can become such a great resource for everyone.”

Kathy Lindsley

Artist provides a clear view of science and technology

An intriguing glass mural marks the boundary between the Center for Student Innovation and the adjacent University Services Center.

Rochester artist Nancy Gong created the 11-by-54-foot work, titled In Art, Science & Life, What is the Question? Etched on 13 tempered-glass panels each weighing 450 pounds is a flowing design that is more than decorative. Gong has incorporated symbols representing colliding atoms, DNA, the Earth and other planets, molecules, fractals and other images from science, math and technology. The dominant wave motif, which could be seen as a moonscape, represents the Bose-Einstein condensate theory from quantum physics. Along the top of the mural is binary code representing a quote attributed to Thomas Berger: “The art and science of asking questions is the source of all knowledge.”

Gong talked to faculty and administrators to develop ideas. “It was important to me that the imagery have meaning,” she says. She worked on the panels at Rochester Glass Inc., and completed the hand-chipped texture etching after the pieces were assembled on site. In the 30 years since she founded Gong Glass Works, this is the largest piece she’s ever created. Considering the scope of the project, the timetable was short: About three months from conception to completion.

Gong is delighted to have had the opportunity to be part of the new Center for Student Innovation.

“It’s really cool to be able to share this with the students,” says Gong. “Soon, they’ll be the stewards of our world.”

Artist Nancy Gong puts finishing touches on a panoramic glass mural. The artwork, left, forms a dramatic backdrop for the Center for Student Innovation.