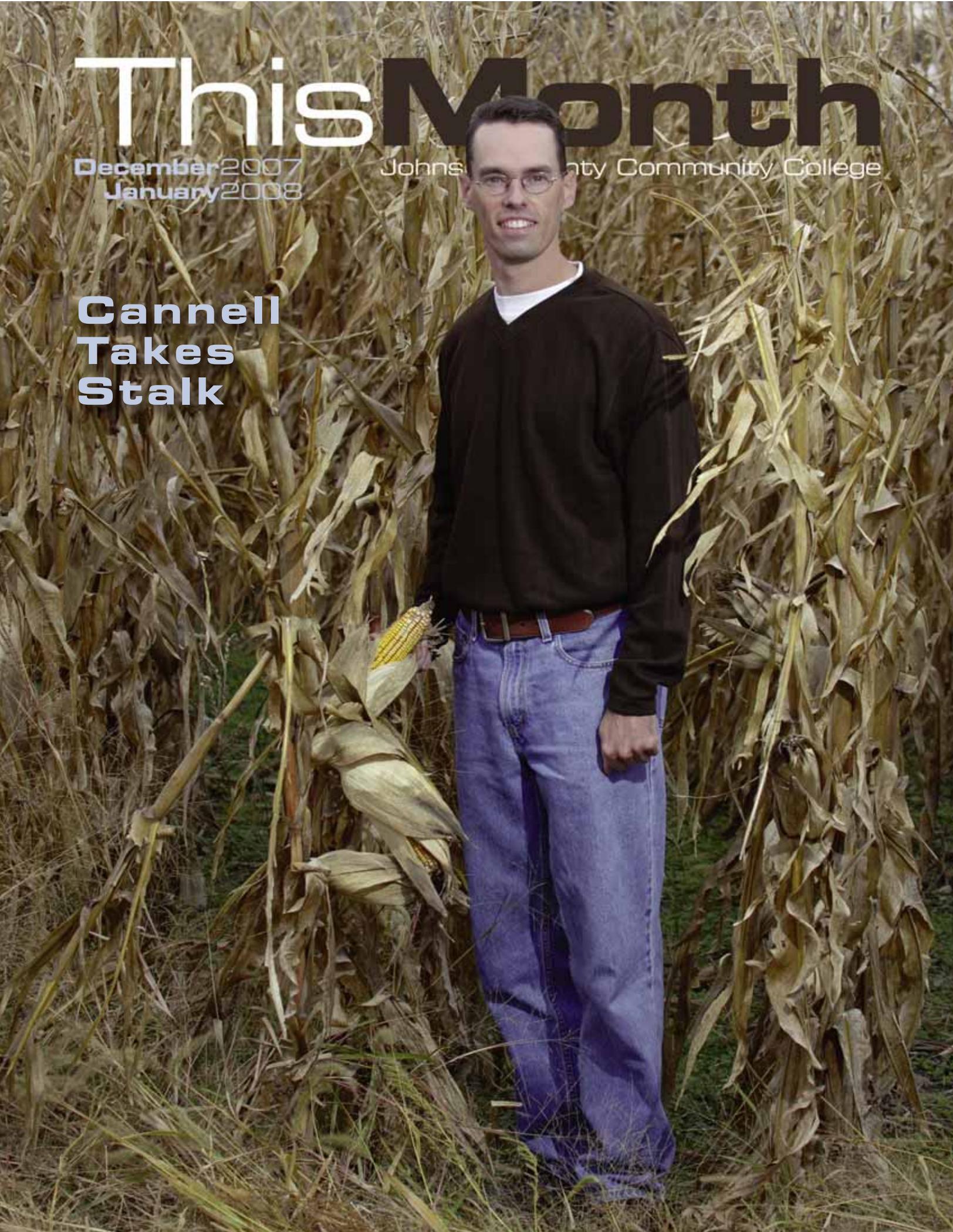


This Month

December 2007
January 2008

Johns County Community College

Cannell Takes Stalk





Cannell analyzed 1,800 samples of corn in room 209 of the Science Building.

Cannell Finds Fuel by the Bushel

Faculty

Kevin Cannell, JCCC associate professor, chemistry, has helped contribute to the field of renewable energy.

When Renew Energy, Jefferson, Wis., opened one of the biggest ethanol plants in the country this October, it had basic

scientists like Kevin Cannell, JCCC associate professor, chemistry, to thank. Renew Energy is estimated to generate 130 million gallons of ethanol each year and is home to the world's largest dry fractionation mill.

For those of us who are not analytical chemists, the short story is this: the starch in corn, a renewable energy source, can be fermented into alcohol and used in place of fossil fuels for gasoline. Fractionating the corn into its components so that there is a pure stream of starch makes the production of ethanol more efficient, generates valuable co-products and reduces the overall cost of operations for ethanol production.

Cereal Process Technologies, St. Louis, is the license holder of the patented dry-fractionation process now in place at Renew Energy. Dry fractionation, a way to separate the kernel's starch from the germ and the bran, has been used for 100 years for food products, but Renew Energy is the first facility to use CPT's fractionation process for ethanol.

Cannell's contribution, under the direction of CPT, was to use NIRS (near-infrared spectrophotometry, an analytical method that uses wavelengths in the near infrared region) to analyze corn taken from the dry-fractionation process. What CPT needed from Cannell was a set of calibration curves to determine the corn's components using NIRS.

During his sabbatical in fall 2006, Cannell analyzed 1,800 samples of corn in room 209 of the Science Building. He was sent duplicates of samples analyzed at an independent lab by the traditional wet-lab techniques. Both processes measure the same components within corn – protein, moisture, fat, fiber and starch – but NIRS is simple and quick, while wet chemistry is more time-consuming with beakers and reagents.

Cannell's work resulted in several "robust" calibration curves, meaning the curves were determined by a large number of samples and that the curves sufficiently predict their respective components.



“The advantage of the NIRS is that the information comes back in six seconds, as opposed to wet chemistry that takes several days,” Cannell said. “There is a huge time interest in being able to incorporate NIRS into a fractionation mill and ethanol production.

“My task was to collect the data and validate that one can, in fact, correlate NIRS data to wet chemistry so that eventually the amount of wet chemistry one has to do is minimal.”

The quicker NIRS results means that millers can make adjustments in the milling process, maximizing starch purity.

“So all this begs the question: Why go to the trouble to build a big expensive dry-fractionation facility in conjunction with an ethanol plant?” Cannell asks.

He answers his own rhetorical question. Although there is more cost up front in adding the milling process, it takes less energy to turn the corn starch into alcohol and results in a higher ethanol yield. Another big selling point for CPT is that co-products also can be put to good use – the protein and bran streams are valuable in other agricultural fields. Dairy farmers will be particularly interested in these co-products.

Was the tedious work of analyzing corn samples for three months in the Science department’s stock room gratifying?

“Science is science, and you have to collect data. Not all science is discovering the structure of DNA and winning a Nobel Prize. That’s not the point. You appreciate the science, you appreciate your contribution to the science and you have fun doing it. Now I have a photo of an ethanol plant and know I had a small part in it. I take a lot of pride in that.”

Cannell says that his sabbatical taught him about the business of science.

“I teach from an academic and research side of science; this experience taught me more about the business side of science,” the analytical chemist said.

As for ethanol, Cannell doesn’t see it as the silver bullet.

“The ethanol industry is aiming to dent gasoline usage by 10 percent, so it’s important, but the United States is a long way from energy independence.”

Renew Energy’s ethanol plant opened October 2007 in Jefferson, Wis. The blue storage tanks indicate the milling part of the facility.

Not Just for the Sake of Argument

Political Pundit George F. Will To Deliver First Cohen Community Series Presentation

Programs

Jon Stewart, JCCC trustee and president of Metcalf Bank, and Dr. Mary D. Cohen, wife of the late Bart Cohen, at the Foundation dinner in September, when the announcement of the Cohen Community Series was made.

While the title of his talk may be *The Political Argument Today*, there will be no fingers wagging or tempers flaring when

George F. Will delivers the inaugural Cohen Community Series presentation at 7:30 p.m. Dec. 11 in the Carlsen Center's Yardley Hall.

Known for his erudition and incisive political commentary, Will's writings appear in more than 450 newspapers. He also pens a biweekly column for Newsweek, and serves as a political commentator on ABC.

In 1977, he won the Pulitzer Prize for commentary for his newspaper columns. He was also the recipient of a 1978 National Headliners Award for his "consistently outstanding special features columns" appearing in Newsweek. In 1985, The Washington Journalism Review named Will "Best Writer, Any Subject." He was named among the 25 most influential Washington jour-

nalists by the National Journal in 1997. Currently, Will serves as an analyst with ABC News and has been a regular member of ABC's *This Week* on Sunday mornings since 1981.

Born in Champaign, Ill., Will was educated at Trinity College in Hartford and Oxford and Princeton universities. Prior to entering journalism, Will taught political philosophy at Michigan State University and the University of Toronto and served on the staff of U.S. Sen. Gordon Allott. Until becoming a columnist for Newsweek, Will was Washington editor of the National Review, a leading conservative journal of ideas and political commentary.

The Cohen Community Series is the result of a \$1.3 million gift from Jon Stewart, college alumnus, trustee and president of Metcalf Bank. Stewart designated the gift to initiate the series in honor of the late Barton P. Cohen, president of Metcalf Bancshares, vice chairman and general counsel of Metcalf Bank and an attorney with Blackwell Sanders Peper Martin LLP.

The annual presentations will take place every Dec. 11, the day Cohen was born in 1930 and the day he died in 2006. Proceeds will support JCCC scholarships, programming and training.

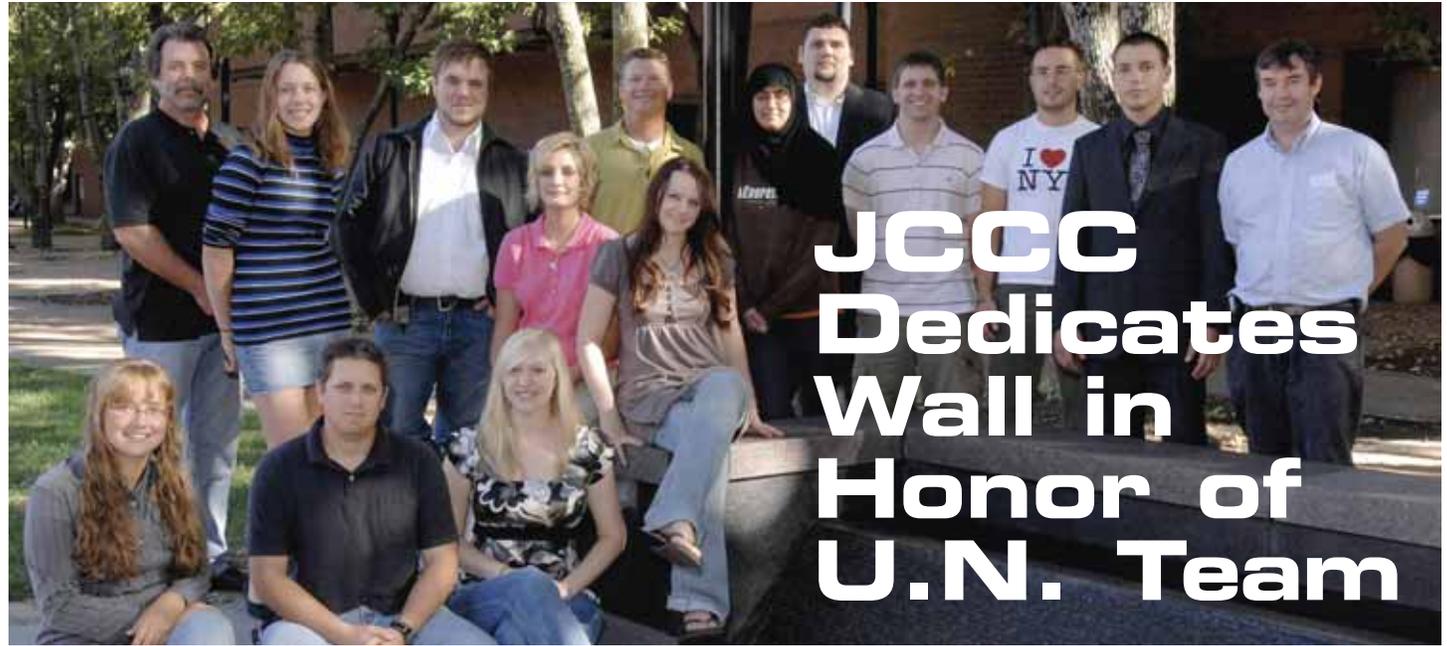
Stewart said he made the gift for three reasons. "First, I wanted to honor my friend and a very strong supporter of the community, Bart Cohen. Second, I wanted to raise funds for scholarships and programs at the college. And third, I wanted to bring regional and national recognition to JCCC."

Cohen was a strong supporter of JCCC. He and his wife, Dr. Mary Davidson Cohen, served on the Foundation's board of directors, and a gallery in the Nerman Museum of Contemporary Art has been named for them. Cohen helped form the Johnson County Mental Health Association and Johnson County Human Relations Council.



Story by Tim Curry





JCCC Dedicates Wall in Honor of U.N. Team

Dr. Brian Wright, associate professor, political science, was an undergraduate at Duquesne University, Pittsburgh, Pa., when he

was convinced of the value of the Model United Nations. A member of the university's Model U.N. team, he was attending his first MUN conference on Sept. 22, 1980, when Iraq attacked Iran at the start of the First Persian Gulf War. He found his work on a document for MUN strikingly similar to calls for a cease-fire by the United Nations Security Council.

"If students do their research and play their roles correctly, their simulations are supported by the work of the real United Nations," Wright said.

Wright went on to earn bachelor's and master's degrees in political science from Duquesne University and a doctorate in international relations from Kent State University, Ohio. His expertise is in transnational relations (the intersection of private individuals and governments), particularly in the area of environmental non-governmental organizations.

Wright came to JCCC in fall 2002 and became adviser to the JCCC U.N. team in fall 2003, serving previously as adviser to a U.N. team at Western Carolina University, Cullowhee, N.C.

Founded in 1997, the JCCC U.N. team, under adviser George Belzer, adjunct professor, political science, quickly developed a reputation for winning awards, winning its first Best Delegation award at the Midwest MUN in spring 1998. The following fall the team became the first community college to win such an award at the American MUN, Chicago, an achievement repeated every year since.

In the last two years, students in the JCCC U.N. team have won awards at the last six conferences they have attended. This achievement

places JCCC among the best MUN programs in the country.

Most notably, the JCCC U.N. team, in partnership with the Wichita State University team, won an Outstanding Delegation Award and Outstanding Position Paper Award at the 2007 NMUN, New York City.

The JCCC team won three Outstanding Delegation awards for its portrayal of Greece and Tanzania at the 2007 MMUN Conference, St. Louis, and an Outstanding Delegation award for its portrayal of Spain and Portugal at the 2006 AMUN, Chicago. These two wins together with the NMUN award gave the JCCC team a clean sweep for the 2006-2007 academic year in the Outstanding Delegation category.

The JCCC U.N. team also won at three conferences in the 2005-2006 academic year: an Outstanding Position Paper award for 12 position papers representing Mali at the 2006 NMUN Conference, New York City; Outstanding Delegation award for its portrayal of France at the 2006 MMUN, St. Louis; and an Outstanding Delegation Award for its portrayal of Kenya at the 2005 AMUN International Conference.

In recognition of the team's achievements, JCCC dedicated an MUN honors wall in October across from room 264 of the Office and Classroom Building. The dedication of the wall coincided with the date the JCCC team received a one-time Special Recognition award for its outstanding performance during the last year presented by the United Nations Association, Greater Kansas City Chapter, at the University of Missouri-Kansas City. 

Academics

JCCC's Model U.N. team received a one-time Special Recognition award for its outstanding performance during the last academic year presented by the United Nations Association, Greater Kansas City Chapter, at the University of Missouri-Kansas City. Shown here is the fall 2007 team.

Front row: (left to right)
Vika Schnose
Jared Hedge
Jenn Edmonds

Middle row
Calvin Baumgarten
Brandy Schmitz
Joe DeNoon
Lois Grimshaw
Amy Pepper

Back row
Mick Larson
Nida Fatima
Mike Fields
John Thompson
Jerome Berndt
Norman Decelles
Dr. Brian Wright

Science Solved



(left to right) Melissa Dugas, Crystal Grunert and Sean Robbins say the extra study time in the Science Resource Center is reflected in their grades.

Academics

Hours for Science

Resource Center,

room 110 A Classroom

and Laboratory Building

Monday, Wednesday

7:30 a.m.-5 p.m.

Tuesday, Thursday, Friday

7:30 a.m.-8 p.m.

Saturday 9 a.m.-6 p.m.

Sunday 10 a.m.-5 p.m.

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Sean Robbins, Olathe, and Crystal Grunert, Merriam, spend a minimum of two hours a day Monday-Friday going over anatomy

in the Science Resource Center.

“The best way to learn anatomy is through repetition and studying the models,” Grunert said. “Maria (Hawkins) is incredible; she is always willing to help.”

“Let me put it this way,” Robbins said. “On my first quiz I got a C (grade). I have been coming here daily, and I’ve gone from a C to an A.”

Tejash Purohit, Lenexa, studies 20 hours a week in the SRC for physics, chemistry and anatomy classes, in addition to having a 40-hour-a-week job.

“Concepts become more clear, and you can confirm your knowledge with the tutor and other students in the resource center,” Purohit said.

The dedicated Science Resource Center opened its doors at the beginning of the fall semester. Maria Hawkins, formerly an Access Services tutor, is the SRC coordinator. Tutors in biology, anatomy, physics, chemistry, physiology and zoology are available to help students according to posted hours (see sidebar). Aids such as anatomy and molecule models, zoology slides

and microscopes assist students with visualizing concepts. Computer software instruction programs and a reference library help with self-guided studies.

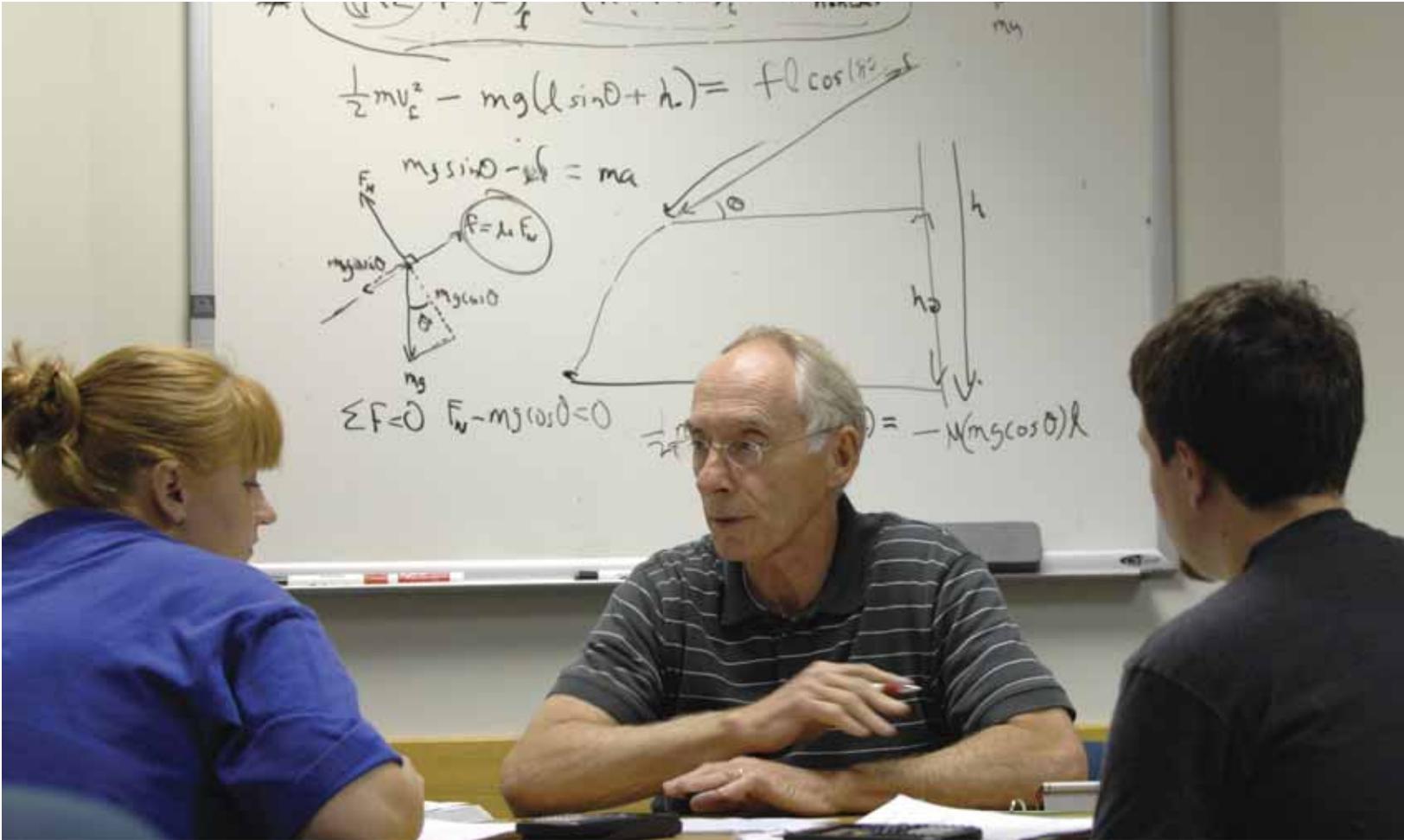
Students come individually and in groups.

“I like to sit with other people because they ask the tutors questions that I didn’t think of,” said K.K. Vouthy, Overland Park, who is taking *Organic Chemistry II* in preparation for acceptance to pharmacy school. “After struggling with a problem, we can help each other arrive at a conclusion.”

“When we get a larger group, there is a cross-fertilization of ideas. People get to interact,” said tutor Gary Dirks, a retired forensic chemist.

“We’ve seen a lot of business here during the first semester. The Science Resource Center definitely has high usage,” said Brent Long, biology and zoology tutor, who has a master’s degree in ecology and evolutionary biology.

There are several faculty who hold office hours in the SRC – Dr. Jeanne DeHaan, assistant professor, chemistry; Michelle Clark, assistant



professor, chemistry; and Richard Sherry, assistant professor, anatomy. Students looking for further assistance seek them out.

Tutors find the experience rewarding. Dr. John Bosnak, retired Honeywell physicist, says he really enjoys helping young people. He guides students with solving problems, setting up equations from problems and semantics.

Dr. Joe Gadberry, assistant dean, Science, says plans for a Science Resource Center have been in the works since 1995. Until now, the problem was lack of space. Gadberry wants to see the SRC expand its space, hours, resources and number of tutors.

“The Science Resource Center is a valuable resource. I only wish we had had it sooner,” Gadberry said. “If students don’t take advantage of it, it’s their loss. Where else can you get free tutoring from people with bachelor’s, master’s and doctorate degrees?”

Tutors and subjects:

- Maria Hawkins, coordinator, Science Resource Center, anatomy and physiology
- Gary Dirks, chemistry
- Dr. John Bosnak, physics
- Matt Krafft, physics
- Safina Safder, biology
- Brent Long, biology, zoology

Phone number: 913-469-8500, ext. 2473.

Dr. John Bosnak, a retired Honeywell physicist, helps Nicole Campbell and Chris Herling set up a physics equation in the Science Resource Center.



Brent Long, prospective Ph.D. student at KU, tutors Athena Parker on Mendelian genetics in the Science Resource Center.





(left to right) Lynn Mitchelson, chair, JCCC board of trustees; Bob Regnier, president and CEO, Bank of Blue Valley; and Dr. Terry A. Calaway, JCCC president, were among the ribbon-cutters in the Capitol Federal Conference Center at the Regnier Center dedication.



Jean Hunter, former chair, board of trustees, greets Dr. Terry A. Calaway, JCCC president, at the standing-room-only Regnier dedication.



Biotech students Paushpala Sen (left) and Stephanie Cantrell prepare for the Regnier Center open house in the biotechnology suite.



Two Openings Attract Community, College

Food was a popular commodity at the Regnier Center open house.

Openings

A collective chorus of “hallelujahs” was heard from JCCC when the college finished the planning, fund-raising, building,

landscaping, cleaning, moving, dedications, food preparation, galas, videos, publications and just a few meetings for two new buildings that opened within a month of each other this fall – the Regnier Center on Sept. 25 and the Nerman Museum of Contemporary Art, with a gala fundraiser on Oct. 20 and the public opening on Oct. 27.

During the open houses, all doors and floors were thrown open to serious business clients, art

afficionados, students, community leaders and curious passers-by. While the goals of the open houses were to highlight learning, art and sleek showpiece buildings, guests seemed to comment most on the delish food and its posh presentation and free giveaways. A good time was had by all this fall: approximately 650 people attended the Regnier Center opening, 1,000 at the NMOCA gala and 2,000 at the NMOCA public opening. 🙌



Blake Schmidtberger and Henry Martinez, Document Services, discuss *Miasma* at the faculty-staff preview.



Mark Cowardin, assistant professor, fine arts, studies *Rococo View* by John Torreano at the faculty-staff preview.



Allison Smith, assistant professor, art history, wrote an interview with Marti and Tony Oppenheimer for the book *Oppenheimer Collection*.



Dick Stine, speech professor, contemplates art at the sneak preview of the Nerman for faculty and staff.



Jia Self, 6, tries her hand at drawing Frank Magnotta's *Resort*, part of the *American Soil* exhibition during the Nerman's public opening on Oct. 27.



Tony and Marti Oppenheimer, Carl and Lee McCaffree, Margaret and Jerry Nerman, Beth and Bill Zollars, and Sue and Lewis Nerman at the Oct. 20 gala.



Architect Kyu Sung Woo and artist Leo Villareal stand under Villareal's *Microcosm* at the Nerman gala fund-raiser.

Grant Funds Wellness



Activities keep children busy as parents wait for dental/health screenings.

JCCC Family English Program

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Concepcion Rivera and her 11-year-old daughter, Xochitil Rivera, waited in a line of 40 people to receive dental screenings in

October as part of the health and dental wellness fair at the JCCC Family English Program, Olathe. Families visited, mainly in Spanish, as they waited, while younger children were entertained with crafts and activities.

“Dental care is the last thing that families who are uninsured take care of,” said Elizabeth Canabal, the Hispanic wellness case manager for the Olathe Family Resource Center, a comprehensive collaborative program sponsored by the Olathe District Schools, Catholic Community Services, JCCC and the City of Olathe.

Margaret LoGiudice, JCCC assistant dean, dental hygiene, and Stephanie Bright, a Johnson County dental hygienist, volunteered 2 1/2 hours in a makeshift dental clinic, examining patients and making recommendations, often through a translator, for further care at either JCCC’s dental clinic or the Health Partnership Clinic of Johnson County.

In addition, 25 people who attended the fair had cholesterol and blood sugars tested by the Johnson County Health Department. People who had abnormal results were referred to the Health Partnership Clinic of Johnson County for follow-up appointments. Canabal, whose position was funded through a grant from the Health Care Foundation of Greater Kansas City in

August 2007, says pre-diabetes and high cholesterol are silent diseases that are often ignored by the uninsured until symptoms are evident.

“The Olathe Family Resource Center/Johnson County Community College received a grant for \$50,000 for a Hispanic wellness case manager to connect the Hispanic population with health resources in the community,” said Susan McCabe, grant administrator, and program director, ABE/GED/ESL.

“This grant will serve 300 underserved Hispanic families with significant medical, dental, nutrition, immunizations, pre-natal care, social and economic needs. The project focuses on access to practitioners for health and life skills for Hispanic families. Program success will be indicated by children and adults receiving needed health services and learning about health care in their neighborhood.”

The bilingual Canabal, a native of Venezuela, says the grant provides health care to low-income families without insurance. Health screenings and programs for diet and exercise are being accomplished by home visits and as part of the JCCC Family English Program at Center of Grace Church (Iglesia Centro de Gracia), Olathe. Approximately 75 percent of ESL students in Olathe have Spanish as their first language, according to McCabe.



Margaret LoGiudice, JCCC assistant dean, dental hygiene, examines Miguel Ruelas while his mother, Graciela Pedroza, watches.



Elizabeth Canabal is the Hispanic wellness case manager, Olathe Family Resource Center.

At the Center of Grace, ESL classes are held during the day or evening with childcare provided. Here, Canabal has introduced parenting classes for one hour a week, bringing in, for example, a nutritionist from the Kansas State University Extension Service to talk about healthy meals. She has started a walking class of about 15-20 people four mornings a week and an hour aerobic class one day a week; a zumba fitness class is in the offing.

The four-hour October health and dental wellness fair offered something for everyone of the 110 people in attendance – a dinner for the entire family and Wonderscope Children’s Museum activities for children.

Screening tests will be scheduled again in four months in order to measure the effect of exercise, diet and doctor/dental appointments on participants’ health and serve as an evaluation of the grant. 🌿



Stephanie Bright, hygienist, takes a history from Pia Paisano, patient, with the help of Monica Gatierrez, interpreter.

Vol*Stars Support Scholarship, ArtsEd



Vol*Stars give approximately 11,500 hours of service to Carlsen Center events each year, unpaid. While it's often been said their work is "priceless," it turns out the volunteers had accumulated \$15,000 from coatroom tips and a small percentage on the sale of merchandise in their JCCC Foundation funds.

This spring the 18 Vol*Star event captains had a series of meetings about how to best use their money, and the resulting beneficiaries are the Carlsen Center ArtsEducation Program and the Vol*Star Theatre Scholarship. Interest on the principal of the money will be awarded annually.

Donations to the Vol*Star Theatre fund can be made by calling the JCCC Foundation, 913-469-3835.

"We have been very fortunate to have a team of volunteers dedicated to ArtsEducation and our future audience," said Angel Mercier, ArtsEducation program director.

(left to right) Sheilah Philip, theater professor, and Vol*Star event captains Barbara Anselmi, Bunnie Purcell, Madelon Goetzinger, and Karen Haake gathered at the college to discuss the Vol*Stars gift.

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When planning your estate, remember Johnson County Community College. For more information, call Emily Fowler, JCCC Foundation, 913-469-3835.