Education is enhanced when concepts are felt and principles are experienced. Simply learning that certain fish will group together to protect themselves from prey is not the same as watching it occur. Understanding the differences between Baroque and Romantic music is not nearly the same as hearing, or even playing, Bach and Chopin back-to-back.

Students at Saint Joseph’s University’s College of Arts and Sciences truly experience their education. They are given many opportunities to investigate, explore, experiment with, and put into practice the foundational ideas and core principles of their areas of study. They benefit from an engaged faculty whose enthusiasm for knowledge and learning makes them important contributors to their academic fields through research and creative explorations.

I am proud of the spirit of partnership between students and faculty in the classroom, the lab, and the studio. I am proud, too, of Saint Joseph’s new general education program, instituted this fall. It is designed to challenge all of our undergraduate students to be inquisitive, reflective, imaginative and engaged.

It is my hope that the pages of this premier issue of Intellect will provide readers a taste of the experiences that are the foundation of the many courses of study within the College of Arts and Sciences. This issue invites you to consider the possibility of reversing the aging process, explore the hidden trauma of concussions, imagine how switchgrass could power cars, and think about the place that food has not only in our kitchens, but in pop culture and ethics.

William Madges, Ph.D.
Dean

Intellect is a publication of Saint Joseph’s University’s College of Arts and Sciences, showcasing the latest research and news.

For more information, please visit our website at www.sju.edu/academics/cas.

On the cover: Barbelin Hall, alight with the excitement of new programs, research and opportunities for students and faculty.
Gambling on the Big Game: The Risk of Concussions

From Kitchen to Classroom, New Classes Nourish

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Sleepless Across the Globe: A Cultural Look

Tying Up the Ends: Investigating the Genetics of Cancer and Aging

Calm and Composed: The Art of Susan Fenton
Gambling on the Big Game: The Risk of Concussions

Previous research on ex-NFL players showed that repeated concussions resulted in greater incidence of cognitive impairment and depression. More recent research has revealed that ex-athletes with a history of multiple concussions had neurological brain changes commonly associated with advanced dementia. These findings have resulted in increased concern over post-concussion-related injuries and trauma of athletes.

PHILIP SCHATZ Ph.D., professor of psychology, and his associates published a study in Neurosurgery that identifies potentially enduring effects of multiple previous concussions on high school students. More specifically, Schatz and his colleagues propose through their research that teens who have sustained multiple concussions may already be demonstrating early signs of post-concussion syndrome.

“Our results show that high school athletes with a history of two or more concussions had significantly higher ratings of concussion-related symptoms, especially those that were cognitive, physical and sleep-related, than athletes with a history of zero or one previous concussion,” says Schatz.

The study, which evaluated over 2,500 high school athletes in three different states, assessed concussion symptom questionnaires that were administered during preseason testing. Results indicate that high school athletes with two or more concussions had higher ratings on symptoms such as headaches, difficulty remembering things, dizziness, and an increase or decrease in sleep, as compared to athletes with one or no previous concussion.

Although the study was based on self-report of concussion history and symptoms during the preseason screening of healthy teenage athletes, he does say that the results are congruent with the recent studies on long-term concussion-related symptoms in professional athletes.

“The results suggest that there may be early indicators of post-concussion syndrome seen in professional athletes with multiple previous concussions,” Schatz says. “These findings do not reflect any direct causal relationship. For example, it may be that athletes with multiple concussions are simply more familiar with concussion symptoms and terminology, or more sensitive to physical, cognitive, and emotional fluctuations.”

With the popularity of organized sports ever on the rise, Schatz wants people to remember that concussions are a serious hazard. “Concussions are a real risk, and there is no way to prevent them from occurring,” warns Schatz. “But if somebody sustains a concussion, the best practice is to make sure that they are symptom free, and that they don’t return to play or practice until they have been seen by a qualified medical professional for clearance.”
According to the Centers for Disease Control, approximately 1.6 to 3 million concussions occur every year in the United States, making it an epidemic.

Loss of consciousness is not required for diagnosis of a concussion, and the majority of concussions do not involve a loss of consciousness.

An athlete who sustains a concussion is 4-6 times more likely to sustain a second concussion, and up to 9 times more likely to experience more severe symptoms following subsequent concussions.

History of multiple concussions has been linked to decreased scholastic performance, decreased attention and concentration, increased incidence of depression and permanent neurological changes.

### Concussions and the Brain

| A concussion is considered a metabolic injury and cannot be detected on a CT scan or MRI. | Following concussion, there is a decrease in regional cerebral blood flow and an increase in need for glucose demand, creating a metabolic mismatch. | This typically results in rapid onset of temporary impairment of neurological function that resolves within 7-10 days. | During this time period, a second concussion or impact can have severe or catastrophic effects. |
Within the last decade, the food writing genre has become an American obsession — from best-selling memoirs based on food to food blogs and food journalism books,” says Tenaya Darlington, M.F.A., associate professor of English. A food writer herself, Darlington’s most recent foray into the field is her blog, “Madame Fromage: The Pillow Book of a Cheese Lover.” Things came together for Darlington when she started teaching a popular course in food writing.

“The class is an opportunity to examine our food culture through different lenses, from political to personal, and to study trends in various food movements,” says Darlington. “As well, students put their writing chops to the test by developing their own food blogs, some of which have really taken off.”

To hone their writing and epicurean skills, Darlington devised several ingenious activities to stimulate palates and imaginations. “The exercises require thinking beyond the obvious — they can’t just say something is ‘delicious,’ ” says Darlington. “They have to think through flavor and texture, and consider writing for an audience. Being a food writer requires understanding the plate on many levels, not just as cuisine, but also as a series of interconnected stories between food producers, politicians, flavorists, chefs, writers, diners, pilots and truckers.”
Typically, food isn’t a topic that philosophers consider,” says JULIE MCDONALD, PH.D., assistant professor and chair of philosophy. But McDonald’s course, Food and Justice, exposes students to the 21st century’s complex moral issues related to food.

McDonald believes the course’s focus is unique for a philosophy curriculum. Among other issues, students wrestle with the ethics associated with global hunger, malnourishment, starvation, biotechnology and food production, and the effects our current agricultural practices will have on future generations.

“My awareness of philosophy courses that look at food through the prism of aesthetics,” she notes, “but this course is quite different. It was developed through the University’s Faith-Justice Institute, and it makes students aware of the people who face hunger and starvation globally, and in our own backyard.”

During the semester, McDonald divides the moral issues students grapple with into three broad categories: questions concerning one’s relationship to oneself — healthy eating and gluttony — questions concerning one’s relationship to other people — food security, food rights, marketing and labeling, the safety of food workers — and questions concerning one’s relationship to animals and the environment — ethics, genetically modified foods, vegetarianism, veganism, animal rights.

McDonald says one of her goals for her students, who are often senior food marketing majors or minors in faith-justice studies, is for them to learn to question prevailing systems of thought that contribute to our culture’s failure to pay attention to these issues. “We are educating the leaders of the future who will be challenged by the problems — such as hunger and food insecurity — that they have encountered in class. It’s crucial they recognize them and learn to think effectively about how to solve them,” she says.

When asked about the course she would most like to develop, MELISSA GOLDSWAITE, PH.D., professor of English, described the class she now teaches, Literary Forms and Styles: Books that Cook. Blending the reading, analysis and enjoyment of literature that focuses on or features food, the course is also a study of the history and sociology of food and foodways in America.

“Students are encouraged to consider their own relationship to food, and the literatures of food, through writing,” says Goldthwaite. “Class members read a variety of forms and genres, even analyzing the roles recipes play both in literature and as literature.”

The co-author of the forthcoming Words Rising: An Anthology of American Food Writing (University of Nebraska Press), Goldthwaite says that course work is not confined to rhetorical analysis.

“Though I don’t require it, I invite students to make something for their classmates to eat,” she says. “They might use a recipe from one of the books we are reading — like Nora Ephron’s Heartburn or Laura Esquivel’s Like Water for Chocolate. Or they can bring in foods that are important to them. One student talked about her family’s blueberry farm, and discussed how it defined her, how her family in the abundant summer months created recipes. She brought in blueberry pizza, following a dessert recipe created by her aunt.”

Throughout the semester, students confront our culture’s complicated relationships to food, notes Goldthwaite. “At the same time, they are consuming the literature,” she says. “By the end of the class, they are not only aware of how much literature deals with food, but they also go through a transformation of ‘tastes’ — both literary and sensory.”
Water, Water, Everywhere – But Not a Drop to Drink

Over 1.1 billion people, mostly in low- and middle-income countries, lack access to safe water sources within a reasonable distance (1 kilometer) and reasonable quantities (20 L/day) from their homes.
Even after the United Nations voted to recognize water as a human right, the World Health Organization reports that 1.1 billion people lack access to a safe and adequate water supply. To address this public health crisis, a team of 10 graduate and undergraduate students — led by medical bioethicist Peter Clark, S.J. ’75, professor of theology and director of the Institute of Catholic Bioethics, and four Institute Fellows — are developing an inexpensive and sustainable slow-sand water filter for use by Third World nations.

“We witnessed the need for clean water while working in medical clinics in the Third World, where children are dying needlessly from water-borne illnesses like typhoid, malaria and bacterial diarrhea,” says Fr. Clark. “A low-cost, effective water filter could help lessen mortality from these diseases.”

In 2008, Fr. Clark and his students began developing the filter, aided by faculty members in several disciplines. Through trial and error, the group has designed a model filter that is now being tested.

Costing only $20, each slow-sand filtration system is constructed from easily accessible materials: two six-gallon plastic buckets, 50 pounds of sand and gravel, cheesecloth and plastic spigots. Research has shown that similar filters can remove up to 99 percent of bacterial pathogens and produce between 20 and 30 liters of clean water daily. The group hopes that the filter will someday be used in communities that are connected with Jesuit parishes, clinics or schools in Guatemala, Tanzania and the Dominican Republic.

With the help of microbiologists John Tudor Ph.D., professor of biology, and Catalina Arango, Ph.D., assistant professor of biology, the team is testing the filter with E-coli — a bacterium similar in size and shape to Salmonella typhi, which causes typhoid — using a water supply from Guatemala.

“There are many elements that go into the testing process, and we must continuously repeat the procedure,” says senior Institute Fellow Danielle Lucchesi. “Taking any setbacks into consideration, as well as the duration of the testing, I hope the filter will be ready for use in the next year.”

When testing is completed, the group plans to set up filters in 35 homes in one of the targeted countries and teach residents how to maintain them. They will also determine the filter’s effectiveness in decreasing the number of typhoid cases and other related water-borne diseases.

According to junior Institute Fellow Matthew Fadus, the main goal is to develop a filter that is sustainable and easily maintained. “There are many Tanzanian, Dominican and Guatemalan people who spend hours a day procuring water,” says Fadus. “Education and employment lag behind in terms of priorities, hindering economic growth and development. If families don’t have to worry about foraging for clean water, they will be able to focus on other priorities.”

Water that is fit to drink without risk of immediate or long-term harm is fundamental to human well-being. Without food we can survive weeks. But without water, we can die of dehydration in as little as two days.

—UN-Water, United Nations
Closing the Gap: Understanding Variables in Mathematics Achievement

As a child and a first-generation Chinese American, Aubrey Wang, Ph.D., assistant professor of education, knew she was different from others in the classroom. As an adult, her work in education brought to her attention the achievement gap in the United States related to students’ backgrounds. As a researcher, she wants to do something about it.

A specialist in educational leadership, Wang is researching students’ opportunity to learn mathematics in preschool, kindergarten and early grades and how student background (gender, age, ethnicity and socioeconomic status) intersects with that opportunity. The project involves performing analyses of National Center for Education Statistics (NCES) data, and required Wang to obtain a special limited license from the federal government. With this license, Wang has access to two data sets that comprise the Early Childhood Longitudinal Study. Currently, there are approximately only 350 individuals with access to the data.

Wang’s research has shown that opportunity to learn is influenced by four major factors: the time spent learning the curriculum, the content of the curriculum, how the curriculum is delivered and students’ individual and diverse learning needs.

In one study, published in the Early Childhood Education Journal, Wang found that low-income African-American kindergartners had greater opportunities to learn mathematics than their low-income Caucasian peers. But while their instruction time was greater,
If progress in improving the mathematics proficiency of Americans is to continue, much greater attention must be given to early mathematics experiences.

— The National Association for Education of Young Children and National Council of Teachers of Mathematics

the type of instruction may not have been the most effective. Wang discovered that teachers of African-American kindergartners used math manipulatives, math worksheets and real-life math more often than teachers of low-income Caucasian children, who taught higher-order math. Ultimately, Wang found that, despite more instruction time, African-American kindergartners did not score as high as their Caucasian peers.

“The findings suggest that kindergarten teachers need to balance their math curriculum with more emphasis on higher-order mathematics content and less on manipulatives and math games,” she says.

Wang has presented her initial findings on how the opportunity to learn mathematics intersects with student diversity at the Fifth Annual IES Research Conference in Maryland, at the 2011 biennial meeting of the Society for Research in Child Development in Montreal, Canada, and at a meeting of the Chinese American Educational Research and Development Association.

Wang is also researching the influence of student background on motivation to learn and acquire a language, specifically Chinese. She won a secondary data analysis grant totaling $34,076 from the American Educational Research Association Grants Program for a two-year project titled “Factors Predicting Early Mathematics Skills for Low-Income African-American, Hispanic-American, and Caucasian-American Preschool and Kindergarten Children.” The award spans 2011 to 2013.
On the face of it, switchgrass (Panicum virgatum), one of the native grasses of the tallgrass prairie identified as a potential biofuel source, and green roofs, tight eco-systems of succulent plants engineered to thrive on the tops of buildings, have little in common.

But at Saint Joseph’s, a $1 million grant from the Department of Energy’s (DOE) Energy Efficiency and Renewable Energy Program is funding key research and public education projects focused on these two different entities that will impact the sustainability movement. Both initiatives are being conducted on Saint Joseph’s campus, but field studies of switchgrass are being carried out at the Konza Prairie, near Manhattan, Kan., a National Science Foundation Long Term Ecological Research site.

While switchgrass is a potential alternative energy source for biofuel production, very little research has focused on how its yields, and the characteristics that make it a biofuel candidate, will be altered by the predicted changes in climate specific to the Great Plains, where much of its cultivation is slated to occur.

“We will initiate a multi-year, basic research project examining the effects of changes in precipitation, temperature, nitrogen deposition and elevated atmospheric carbon dioxide on the potential yield of varieties of switchgrass,” says Michael McCann, Ph.D. ’89, associate dean, College of Arts and Sciences and professor of biology. The study will also examine the physiological and structural mechanisms that lead to changes in yield.

“Understanding the effects of global change on switchgrass is critical because we don’t want to be caught off guard if we are relying on this crop for fuel,” says Clint Springer, Ph.D., assistant professor of biology and principal investigator of the study. “Future changes in climate could have negative consequences on both the yield of the plant and the attributes that allow it to be used as a biofuel.”

Green roof systems provide a wide range of benefits including reduced energy use and increased energy efficiency. Basic green roofs usually involve a structure built on an existing roof that includes a waterproofing membrane and additional layers of root barrier and drainage systems. Growing medium and specialized plant vegetation is then added to that structure.

“There is a variety of commercial green roof systems available, precipitating a need for research focused on direct comparisons of different systems and plant communities,” says McCann. “Our system, which is installed on the Science Center roof deck, permits the direct, side-by-side comparison of four green roofs. This novel, ‘many roofs on one building’ approach will provide valuable data on the various systems in use in Southeastern Pennsylvania,” says McCann.

“Moreover both of these studies are meaningful to the sustainability movement and to students who are interested in environmental science careers.”

Why Switchgrass?

- Perennial, producing high yields for a decade or more once established.
- Low water and nutrient requirements.
- Grows well in soils not suitable for other crop production.
- Increases soil organic matter through root turnover.
- Sequesters carbon, helps to offset CO₂ emissions to atmosphere.
- Native to United States, grows well across wide geographical areas of the country.
- Provides habitat for animals and birds.
- Large root system that reduces nutrient losses from fields.

Right: Plants growing through coconut fiber wind blankets on SJU’s green roofs.
Switchgrass and Green Roofs: Researching Sustainable Options

*Sedum rupestre* “Angelina”

*Phlox subulata* “Candy Stripes”

*Nepeta x faassenii* “Walker’s Low”

*Achillea x* “Terra Cotta”
One of the toughest adjustments for parents is matching the erratic sleep patterns of their infants and toddlers. Some newborns sleep so little their parents feel almost nocturnal, while others will snooze for up to six hours at a time just days after birth. Jodi A. Mindell, Ph.D., professor of psychology and director of graduate psychology, found dramatic discrepancies in nighttime sleep of children in a published global study in Sleep Medicine.

This first-of-its-kind study collected data on day and nighttime sleep patterns, and sleep-related behaviors, in almost 30,000 infants and toddlers from 17 different countries and regions. The study focused on two distinctly different regions of the world: countries and regions that are predominantly Caucasian and countries and regions that are predominantly Asian.

“We found differences in bedtimes of almost three hours, with children from New Zealand and Australia going to bed at approximately 7:30 p.m. compared with children in Korea, who were going to bed almost three hours later,” says Mindell. “Interestingly, we found that the time children wake up in the morning is just about the same and that naps are almost identical around the globe. You end up with a difference of two to three hours in total sleep times, with children in Australia and New Zealand getting dramatically more sleep than children in places such as Japan and Korea.”

It is not clear whether these vast differences in sleep times are biologically or culturally driven, although according to Mindell, they appear to be culturally based.

Other interesting differences were also found. For example, parents of children living in predominantly Asian countries were much more likely to report that their children had sleep problems. The factors that predicted sleep problems in all the countries included going to bed after 9 p.m., falling asleep with a parent present and watching television at bedtime.

One thing is certain: This study will be the baseline for future studies.

“We need to take the next step and look at the consequences of these differences in sleep,” says Mindell. “We also need to learn more about why there are such differences.”
Tying Up the Ends: Investigating the Genetics of Cancer & Aging
When Harvard released a study in the fall of 2010 revealing that researchers at the Dana Farber Cancer Institute had successfully reversed many effects of aging degeneration in mice, the news garnered significant media attention. For most readers, the idea of slowing the aging process was revolutionary, if not surreal. But for **Julia Lee-Soety, Ph.D.**, assistant professor of biology, it harkens back to her research. Awarded a grant by the National Institutes of Health to investigate the science of cancer and aging, Lee-Soety has long been interested in the maintenance of chromosome ends — called telomeres — and their function in the aging process.

**Telomeres serve as protective caps for chromosomal ends, allowing cells to retain their biological information — much like the plastic aglet at the end of a shoelace protects the end from fraying.**

Telomeres serve as protective caps for chromosomal ends, allowing cells to retain their biological information — much like the plastic aglet at the end of a shoelace protects the end from fraying. As a cell divides, the telomeres shorten, limiting the cell’s life span. When the telomere can no longer protect the end of the chromosome, the cell ages and dies. Researchers believe that extending a cell’s telomeres helps extend the life of the cell and therefore, the organism to which it belongs. But when it comes to cancer, maintaining telomeres could allow cancer cells to live indefinitely. “It’s a Catch-22,” says Lee-Soety. “How do you shorten the telomeres of bad cells while prolonging them in good cells?” The Harvard study produced results that suggest mice with elongated telomeres experienced a reversal of the aging process when telomerase, the enzyme that maintains telomeres, was reintroduced to their cells.

In humans, this could lead to treatments for medical conditions that cause premature aging.

Lee-Soety’s research focuses on the maintenance of telomeres by telomerase and other proteins. By using baker’s yeast as a comparative model system and manipulating it to resemble aging mammalian cells, Lee-Soety and graduate student Erin Remaly have isolated an important protein and shown that it aids in telomere maintenance. They have further observed that one critical component of the protein was necessary for the maintenance.

“It’s like having a machine with several major parts and testing to see which part is the most important,” says Lee. “By removing one part at a time and seeing the effects, we are able to understand how the protein works to maintain telomeres.”

The protein of interest in Lee-Soety’s study, called Npl3, has a mammalian homologue despite being found in single-celled yeast. According to Lee-Soety, this means that the mechanisms for maintaining telomeres in both yeast and in mammals are similar enough that the results of her study can, eventually, translate to understanding mammalian telomere maintenance.
Calm and Composed

The Art of Susan Fenton

White Dress Red Headband
In her third-floor office in Boland Hall, Susan Fenton, M.F.A., associate professor of fine and performing arts, has few moments to herself. Whenever she’s in the building, the constant flow of photography students working just outside her door find her to ask questions about composition, lighting, development … anything.

“When I’m here,” she says, “you can bet I’m working with students.”

It’s no surprise that her students seek her expertise. Fenton’s own photography has been shown in nearly 30 solo exhibitions domestically and internationally, and is featured in 19 permanent collections, including both the Philadelphia Museum of Art and the Victoria and Albert Museum in London. She has been the recipient of 12 grants and fellowships, some of which have taken her as far as Ireland and France. Most recently, she earned a spot in a group exhibition in Guatemala.

Fenton’s most well-known works feature models dressed in reconstructed clothing or found objects, allowing her to visually explore ethnicity, gender and body image — themes influenced by her extensive time spent abroad. Recently, she has turned to more traditional still-life images, prompting The Artblog (www.theartblog.org) to review her new work as having an “aesthetic … of aching beauty and calm.”

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USDA Under Secretary for Food Safety Speaks on Public Health

Elisabeth Hagen, M.D. ’91 (B.S.), the chief public officer responsible for the safety of the nation’s supply of meat, poultry and egg products, delivered the spring installment of the McNulty Scholars Lecture Series. Sworn in as Under Secretary for Food Safety in August 2010, Hagen oversees the policies and programs of the Food Safety and Inspection Service.

“Saint Joseph’s University was honored to host our distinguished alumna, Dr. Elisabeth Hagen,” says Michael McCann, Ph.D. ’89, associate dean of the College of Arts and Sciences and McNulty Scholars program director. “As a model scientist, physician and public servant whose primary concern is protecting public health through food safety, Dr. Hagen is a perfect example of the kind of leader the McNulty Scholars Program for Excellence in Science and Math aspires to produce.”

Before entering public service, Hagen taught and practiced medicine in both the private and academic sectors. In addition to several hospital and university appointments, her experience includes research and publications in infectious diseases and providing medical care to underserved populations. Hagen holds a bachelor’s degree in biology from Saint Joseph’s, an M.D. from Harvard Medical School, and is board certified in infectious diseases.

The McNulty Scholarship Program is dedicated to women’s professional success in science and mathematics fields, providing full-tuition, merit-based scholarships to study science and mathematics at SJU. Alumnus John P. McNulty ’74, after whom the program is named, is known for his mentorship of younger associates and for challenging women to reach their full potential.

Faculty Study Recession’s Impact on ‘GENERATION R’

As the old saying goes, “growing up isn’t easy.” And for 20-somethings who’ve recently finished college or set out in the working world, it has been an especially difficult time.

Maria Kefalas, Ph.D., professor of sociology, and Kim Logio, Ph.D., associate professor of sociology, are looking into the recession’s impact on everything from young people’s salaries and employment to its effect on the hopes and dreams of this particularly vulnerable group, which they refer to as “Generation R,” a term coined by New York Times reporter Steve Greenhouse.

The study consists of 150 in-depth interviews of graduates from Philadelphia area high schools in 2006. To supplement the interviews, data is also being collected using an online survey.

“If we can better understand how well they are navigating through these difficult times, we can support them and also learn how to better insulate our young people/young families from a future economic crisis,” Logio says.

Early interviews have revealed much heartache, according to Kefalas, who notes that many students leave college with debt but without jobs.

Professor’s Film Chosen for New Directors/New Films

“The Destiny of Lesser Animals” (Sibo Ne Kra, Dabo Ne Kra), a film directed and produced by Deron Albright, M.F.A., chair and associate professor of fine and performing arts, was screened at New Directors/New Films (ND/NF), a curated film program in New York.

Albright, an award-winning independent filmmaker, shot the film while in Ghana, West Africa, where he was teaching as a Fulbright Scholar. The film is a police drama that is also the moving story of one man’s journey to find and understand the value of his own culture.

Presented by The Museum of Modern Art’s Department of Film and The Film Society of Lincoln Center, the program is known for premiering work that breaks or re-casts the cinematic mold, and is dedicated to the discovery of emerging filmmakers. ND/NF has uncovered the talents of industry giants, among them Stephen Spielberg, Pedro Almodovar, Ken Burns and Darren Aronofsky.
Classics Program Brings Drama to Campus

In mid-November, 10 Saint Joseph's students staged a production of “Effie and the Barbarians,” an adaptation of Greek playwright Euripides’ “Iphigenia Among the Taurians.” Dated between 414 and 412 B.C.E., the original play exemplifies classic Greek drama — complete with intricate family webs, divine intervention, murder, lies and heroic rescue. The staging at SJU, adapted and directed by Mary-Kay Gamel, Ph.D., professor of classics, comparative literature and theater arts at the University of California - Santa Cruz, was only the second time this version of the work was performed.

“Effie” came to Philadelphia through the efforts of Konstantinos Nikoloutsos, Ph.D., assistant professor of classics at Saint Joseph’s. Working with support from the Alexander S. Onassis Public Benefit Foundation’s University Seminars Program, Nikoloutsos arranged for Gamel to serve as a visiting scholar for four weeks, during which she offered the course “Adapting Ancient Greek Drama to the Modern Stage.” Open to students from any major and class year, it provided the opportunity for budding classicists and playwrights to get hands-on experience adapting and performing the theatrical work.

Nikoloutsos says that this kind of project allows students to see the relevance of classics in modern society.

“The SJU production attracted an audience to the Forum Theater that included patrons from regional and national academic institutions, as well as local community members. The strong attendance marks, for Nikoloutsos, the continued interest in — and importance of — classical works.

“Students need to be exposed to these early dramas precisely because we build the present on the past, and view the past with the lens of the present,” he says.

In addition to the course, Gamel gave two public lectures while on campus: “Revising ‘Authenticity’ in Staging Ancient Mediterranean Drama” and “Athenian Theater as Community Space.”

The Alliance for Catholic Education at Saint Joseph’s University (ACESJU), a two-year graduate education experience with the aim of training quality educators and principals to serve Catholic schools, was recently accepted into The University Consortium for Catholic Education (UCCE). UCCE is a partnership of university programs joined by this common mission of recruiting and training faith-filled, energetic teachers. ACESJU, which is modeled after the University of Notre Dame’s program, joins 15 other universities in the UCCE and is the first in Pennsylvania.

“Saint Joseph’s expertise in education has made a deep impact on regional schools for many years,” says Daniel Joyce, S.J. ’88, assistant to the vice president for mission and identity. UCCE schools must meet requirements in the three pillars of education, spirituality and community, the same pillars ACESJU was built upon. Fellows receive full tuition, no-cost community housing and a stipend, and work toward the completion of course work in a master’s degree in education over two years. In turn, candidates teach at a Catholic elementary school, with the school covering the cost of his or her health benefits. The schools realize a tremendous cost savings in teacher salaries.

Associate Dean of Education Jeanne Brady, Ph.D., and Fr. Joyce worked with the University of Notre Dame and Fox Leadership at the University of Pennsylvania to replicate the ACE model in Philadelphia. SJU’s program is housed in the University’s Faith-Justice Institute.

“We are thrilled to join with other universities serving under-resourced Catholic and parochial schools in 54 dioceses,” Brady says.
Senior Lena Lupey has been awarded a Barry M. Goldwater Scholarship for the 2011-12 academic year. The Barry M. Goldwater Scholarship Program was created to encourage outstanding students to pursue careers in mathematics, the natural sciences or engineering, and to foster excellence in those fields. Lupey plans to pursue a joint M.D./Ph.D. in neurobiology. From Hummelstown, Pa., she is an Honors Program student with a major in biology and a minor in classical studies.

Megan Rigler, a senior actuarial science and math double major from Marlton, N.J., was chosen as one of 13 college students worldwide to receive a 2010 John Culver Woody Scholarship for actuarial science. The scholarship, which is administered by The Actuarial Foundation, is awarded annually to college seniors who have successfully completed at least one actuarial examination, rank in the top quartile of their class and are nominated by a professor at their school.

Sophomore Caitlin Rothwell has been awarded the Mutch Scholarship of the St. Andrew’s Society of Philadelphia to spend her junior year studying at the University of St. Andrew’s in Scotland. A member of the Honors Program, Rothwell hails from Washington, D.C., and is pursuing a major in psychology with a minor in Italian.

“The AAAS is one of the best scientific conferences in the world because it brings together scientists from different fields and areas,” says McRobert. “It is a great opportunity for the students to interact with these scientists and also to present their research.”

Fish Cam, the brainchild of McRobert, is a 24-hour camera that captures the shoaling, or grouping, patterns of fish in the Biodiversity Laboratory. The tank housing the fish is streamed live to a webpage, allowing both elementary school and high school teachers to utilize it for classroom experiments.

Social Ethicist Receives Louisville Institute Grant

James F. Caccamo, Ph.D., associate professor of theology, was awarded the Louisville Institute Sabbatical Grant for Researchers, to write Rewiring Virtue: Christian Ethics in an Age of Gadgets. The book, to be used at universities, discusses the ethics of communication and information technologies from a Christian perspective.

“Currently, there is nothing like this proposal in Christian ethics literature,” says Caccamo. “This grant, combined with an SJU sabbatical, will allow me to move forward on this project.”

The book will explore modern technologies through a virtue approach. Virtue ethics is a moral method focusing on the formation of character through development of good moral habits — or virtues — like prudence, justice and love. Caccamo hopes the book will provide tools to morally evaluate the way technological gadgets are used.

Students Earn Exceptional Opportunities for Study
Freshmen Participate in National Genomics Research Initiative

Last year, the first cohort of Saint Joseph’s students joined the Phage Safari, a two-semester genomics laboratory course that enables SJU freshmen to engage in scientific research early in their college careers. Looking for, isolating DNA from, and sequencing the genome of viruses that infect bacteria, called bacteriophage, students experience the excitement of making scientific discoveries.

The course was introduced in the 2009-10 school year through funds provided by the Science Education Alliance of the Howard Hughes Medical Institute (HHMI) in Chevy Chase, Md. Christina King Smith, Ph.D., professor of biology, and Julia Lee-Soety, Ph.D., assistant professor of biology, applied to become part of the project, known as the National Genomics Research Initiative (NGRI), in 2009. More than 270 students from 12 academic institutions participated in the first year.

“The students we enroll put a lot into the course because the nature of research is such that it takes place on its own schedule, so they must be prepared to show up outside of their scheduled lab times,” says King Smith. “But where other lab courses require students to reproduce known results from ‘cook book’ experiments, the Phage Safari asks them to isolate and identify unique phages through authentic research.”

The course begins using soil the students bring from home, enabling them to work with phages from different geographic areas. The fall is spent isolating different phages and purifying their DNA. During Christmas break, HHMI sequences one genome per school. The spring semester involves analyzing the phage DNA sequences, identifying genes and determining their role in the virus life cycle.

The completed sequences are published in GenBank, an annotated database of DNA sequences publicly available through the National Center for Biotechnology Information. All students in the course are listed as co-authors.

SJU Center Goes Viral to Fight Violence in Philadelphia

For young people in Philadelphia’s high-poverty neighborhoods, violence is a way of life. It is now more likely that a young, black male will die a violent death in Philadelphia than in combat in the Middle East. As schools and parks have become battlegrounds, there are fewer and fewer places for youth to feel safe.

Researchers at SJU’s Richard Johnson Center for Anti-Violence have been hard at work building an online sanctuary for kids and teens who want to reclaim their voices and their neighborhoods. Building on the social media phenomenon and the 24/7 connectedness of this generation, the Philadelphia Youth Solutions Project (PYSP) has launched a website with the aim of providing an online forum (www.pysp.org) for youth to discuss violence. This effort is a first-of-its-kind grassroots anti-violence initiative.

“The PYSP website is a safe space for Philadelphia’s young people to explain their views and emotions about the danger and violence that consumes so much of their daily lives,” says Maria Kefalas, Ph.D., director of the Richard Johnson Center and professor of sociology. “We want them to ask questions of themselves and the people charged with running this city, and to have a serious conversation with teachers, parents, city officials, community leaders, state legislators, reporters and politicians.”

PYSP will tackle the many realities of urban youth: street-based violence and interpersonal and romantic violence. The Richard Johnson Center has already worked with youth to create their own public service viral videos, along with an online memorial paying tribute to victims and presenting facts and figures on the state of violence in the city.

The Richard Johnson Center plans to work with local schools to launch a letter-writing campaign to the mayor and police commissioner, as well as feature youth-driven performance art, original video production, poetry-writing and other forms of self-expression.

Visiting Scholar Graham Hatful, Ph.D., HHMI lead scientist, NGRI, with student Bernadette Eichman ’14.
Sociologist’s Research Examines Growing Up in Poor Neighborhoods

Research on transitions to adulthood has been growing, but little has been done to study how economically disadvantaged kids fare. Funded with over $400,000 from the W.T. Grant Foundation, Assistant Professor of Sociology Susan Clampet-Lundquist spent last summer in Baltimore, Md., to follow up with families who were part of the Moving to Opportunity (MTO) initiative of the mid-’90s. MTO is a federal research-based demonstration that offers the chance for very low-income families living in public housing to move to low-poverty neighborhoods.

Clampet-Lundquist, along with Kathryn Edin, Ph.D., of Harvard and Stefanie DeLuca, Ph.D., of Johns Hopkins, worked with a team of graduate students interviewing young adults (ages 15-24) whose families signed up for MTO. They sought to understand how MTO may have improved their well-being, and how youth transition to adulthood, particularly in the areas of education, employment, family formation, risk behavior and mental health.

Clampet-Lundquist describes Baltimore as a place “ripe with learning opportunities for sociologists” and hopes her research in Baltimore last summer will inform policy regarding public housing and community development programs aimed at improving the health and well-being of American at-risk youth.

Her first study of MTO families uncovered some unexpected gender differences that she says the follow-up study seeks to better understand.

“I enjoy conducting research using in-depth interviews because it offers researchers an insight into the process through which policies can make a difference in the lives of individuals,” she adds. “For example, if a housing mobility policy like MTO benefits girls more than boys, we want to understand why so that we can put into place more supports for boys. By letting young people tell their own stories, we can understand what is going on behind the statistics.”

Clampet-Lundquist published an article about outcomes for MTO teens in Baltimore and Chicago in the American Journal of Sociology and plans to author more articles on the topic. She holds two master’s degrees, one from Temple University and the other from the University of Pennsylvania, where she also earned her doctoral degree in sociology.

Italian Program Sponsors Spring Workshops

Paola Giuli, Ph.D., associate professor of modern and classical languages, secured a grant from the Italian Consulate in Philadelphia to fund four workshops on “Teaching Italian Today: Language, Culture and Technology.” The courses will address the cultural, linguistic and pedagogical aspects of teaching Italian in middle school and high school, cover the latest trends in language teaching, and provide an updated image of Italy — not just as the cradle of western civilization, but also as an advanced and modern country.

The program benefitted area high school and middle school faculty, as well as SJU seniors aspiring to be teachers of Italian, and recent alumni. With the help of matching funds from Saint Joseph’s University, the day-long sessions ran on four Saturdays in the spring.

Fine and Performing Arts Department Opens New Music Studio

In fall 2009, SJU music students started attending classes on the James J. Maguire ’58 Campus, where they are now utilizing renovated spaces that include a teaching studio, choral rehearsal room, music theory classroom and two practice rooms. The choral rehearsal room is home to the Jazz Ensemble, Concert Choir and Chamber Music groups, and is also used for piano and voice lessons and music composition classes. The music theory classroom is used for courses, sections and studio classes.

The space was formally dedicated as the Beatrice F. Nicoletti Music Studio in April. “The new studio and rehearsal spaces have created a positive culture change for the study of music at Saint Joseph’s,” says Suzanne Sorkin, Ph.D., associate professor of music. “We now have a central location for students to meet and study. It is gratifying to see the level of commitment this move has engendered.”

Sorkin working with students.
Faculty Books


April Lindner, Ph.D., professor of English, Jane. (Poppy, 2010).

Jo Alyson Parker, Ph.D., professor and chair of English, with Paul A. Harris and Christian Steineck (eds.), Time: Limits and Constraints. (Brill, 2010).


CA&S Newsmakers

College of Arts and Sciences faculty have contributed their expertise to stories appearing in the following media outlets:

ABC News
ABC’s “20/20: What Would You Do?”

Advance
AIDS Weekly
AOLhealth.com
Armenian Medical Network
Associated Press
Baltimore Jewish Times
BBC (U.K.)
Behavioral Healthcare
The Bellingham Herald (Wash.)
Boston Globe
BusinessWeek.com
Bylines and Deadlines
The Catholic Review
Centre Daily Times (Pa.)
Christian Science Monitor
Citizen’s Voice (Pa.)
CNN
Connecticut Post
CoTygodnik Television (Poland)
Counterpunch
Courier-Journal (Ky.)
Courier-Post (N.J.)
Daily Mail (England)
Epochtimes.com
Examiner
Forbes.com
Foreign Policy
History News Network
The Huffington Post
The Independent (England)
The Insana Quotient
Jewish Exponent
Kansas City Star
KFMB/8CBS (Calif.)
KHNL/NBC (Hawaii)
KMTV/3CBS (Neb.)
Kruger Park Times (South Africa)
KYW-1060AM (Pa.)
La Razon (Spain)
Lexington Herald-Leader (Ky.)
Marshfield News Herald (Wis.)
The Miami Herald
Military Press
Mothering.com
MSN Health and Fitness
MSNBC
National Public Radio’s “All Things Considered”
News 18 (India)
News Journal (Del.)
The New York Times
Omaha World Journal
Parenting Online
Patriot-News (Pa.)
Philadelphia Business Journal
Philadelphia Daily News
The Philadelphia Inquirer
Philadelphia Tribune
The Philippine Star
Pittsburgh Business Times
Pittsburgh Post-Gazette (Pa.)
Politics Daily
Rebel News
Sacramento Bee (Calif.)
Seattle Times
Staten Island Advance (N.Y.)
Technology News Online
Telegraph (England)
The Times-Tribune (Pa.)
Times Literary Supplement (England)
The Wall Street Journal
U.S. News & World Report
USA Today
Valley News Live (N.D.)
Washington Post
Washington Times
WCAU-NBC10 (Pa.)
WebMD
WGRZ-TV (Buffalo, N.Y.)
WHYY-FM (Pa.)
WHYY-FM
WPHT/1210AM (Pa.)
WPVI/6ABC (Pa.)
WRCI/8ABC (Va.)
WTVF/29FOX (Pa.)
WYSP/47FOX (Mich.)
Yahoo Finance
Yahoo News
York Daily Record (Pa.)

Faculty members who have been seen and heard in the news include:
Carolyn Berenato, Ed.D.
Keith Brown, Ph.D.
James Caccamo, Ph.D.
Peter Clark, S.J.
Philip A. Cunningham, Ph.D.
Tenaya Darlington, M.F.A.
Jennifer Ewald, Ph.D.
Richard Haslam, Ph.D.
Jeffrey Hyson, Ph.D.
Daniel Joyce, S.J.
Maria Kefalas, Ph.D.
Raquel K. Bergen, Ph.D.
Sally Kuykendall, Ph.D.
Althier Lazar, Ph.D.
Kim Logio, Ph.D.
J. Michael Lyons, A.B.D.
William Madges, Ph.D.
Shawn M. Krahmer, Ph.D.
Michael McCann, Ph.D.
Scott McRobert, Ph.D.
Randall Miller, Ph.D.
Jodi Mindell, Ph.D.
Michelle Rowe, Ph.D.
Philip Schatz, Ph.D.
Alex Skolnick, Ph.D.
Karen Snetselaar, Ph.D.
David Sorensen, D.Phil.
Jenny Spinner, Ph.D.
Clint Springer, Ph.D.
John Tudor, Ph.D.
Journal Highlights


Catalina Arango Pinedo, Ph.D., assistant professor of biology, Journal of Bacteriology.

Mary DeKonty Applegate, Ed.D., professor of education, Reading Teacher, Essential Reading on Struggling Learners, Preparing Reading Professionals, Reading & Writing Quarterly.


Richard A. Cavaliere, Ph.D., associate professor of mathematics, Production and Operations Management.


Jonathan Fingerut, Ph.D., assistant professor of biology, Freshwater Biology.


Kristen Grimes, Ph.D., assistant professor of foreign languages and literatures, Latomus.

Emily Hage, Ph.D., assistant professor of fine and performing arts, The Journal of Modern Periodical Studies, English Language Notes.

Allen Kerkeslager, Ph.D., associate professor of theology, Eerdmans Dictionary of Early Judaism.

Ailing Kong, Ph.D., associate professor of education, Preparing Reading Professionals.

Douglas Kurtze, Ph.D., associate professor of physics, Ocean Modeling.

Sally (Black) Kuykendall, Ph.D., associate professor of health services, Health Promotion Practice.

April Lindner, Ph.D., professor of English, First Things.

Maria S. Marsilio, Ph.D., associate professor of classics, Quaderni urbinati di cultura classica, Latomus, Companion to the Worlds of Roman Women.

John McCall, Ph.D., professor of philosophy and management, Journal of Catholic Higher Education.


Randall M. Miller, Ph.D., professor of history, Library Journal.

Jodi Mindell, Ph.D., professor of psychology, Journal of Clinical Sleep Medicine, Pediatrics.


Konstantinos P. Nikoloutsos, Ph.D., assistant professor of classics and ancient studies, Romance Quarterly.

Nina Nilsson, Ph.D., assistant professor of education, Essential Readings on Struggling Learners, Reading & Writing Quarterly.

Paul J. Patterson, Ph.D., assistant professor of English, Medieval Latin and Middle English Literature: Essays in Honour of Jill Mann.

Agnes M. Rash, Ph.D., professor of mathematics, The Department Chair, The Mathematics Teacher.

Rommel G. Regis, Ph.D., assistant professor of mathematics, European Journal of Operational Research.

Mark Reynolds, Ph.D., associate professor of chemistry, Journal of Biological Inorganic Chemistry.

Encarnacion Rodriguez, Ph.D., associate professor of education, Educational Philosophy and Theory, Teacher Education Quarterly.


David Sorensen, Ph.D., professor of English and associate director of the Honors Program, Carlyle Studies Annual, Le sujet romantique et le monde.

Terri Sosa, Ed.D., associate professor of education, Advancing Women in Leadership.

Aimee Terosky, Ph.D., assistant professor of education, Change, Journal of Excellence in College Teaching.


Bruce Wells, Ph.D., associate professor of theology, Zeitschrift für altorientalische und biblische Rechtsgeschichte.
CA&S List of Programs & Chairs

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