

Nova Southeastern University **NSUWorks**

The Farquhar Forum College Magazine

Farquhar Honors College

10-1-2007

Fall 2007 Farquhar Forum

Farquhar College of Arts and Sciences

Follow this and additional works at: http://nsuworks.nova.edu/far_forum



Part of the Arts and Humanities Commons

NSUWorks Citation

Farquhar College of Arts and Sciences, "Fall 2007 Farquhar Forum" (2007). The Farquhar Forum College Magazine. Book 9. http://nsuworks.nova.edu/far_forum/9

This Article is brought to you for free and open access by the Farquhar Honors College at NSUWorks. It has been accepted for inclusion in The Farquhar Forum College Magazine by an authorized administrator of NSUWorks. For more information, please contact nsuworks@nova.edu.



Summer 2007

An Interdisciplinary Community







A Message from the Dean

he Farquhar College of Arts and Sciences is committed to providing a well-rounded, diversified education. Fostering an interdisciplinary academic environment gives students access to perspectives and expertise beyond their majors or semester course schedules. The 2006–2007 academic year has been full of guest lectures, dramatic performances, workshops, conferences, panel discussions, and seminars designed to supplement the studies, research, and hard work of our students.

The college offers a range of resources to challenge students beyond the scope of their majors. For example, faculty members from other academic divisions offer guest lectures in courses. Additionally, undergraduate students from any major can enroll in the Clinic Exploration Program to shadow health professionals at work in various NSU health care clinics. From this experience, students expand their understanding of the many health care career options offered at NSU.

Engaging the world beyond campus and coursework is essential to a quality liberal arts education. The college invites highly respected experts to campus to discuss issues that supplement our students' understanding of their academic studies. The college's own Faculty Lecture Series addressed topics that extend beyond the curriculum. Our Distinguished Speakers Series presented Spencer Wells, who explained a genetic-based theory on the origin of humanity, and former Israeli Prime Minister Ehud Barak, who spoke from personal experience about current history-shaping events. As a result, members of the college community were able to cultivate clearer perspectives on how the past and present define us. Other guest speakers, such as author Bruce Feiler, extended the boundaries of academic inquiry as well, while doctors Oliver Sacks and Antonia Novello connected the world of medicine to individual and global issues.

Our rapidly growing performing arts programs include collaborations with the greater South Florida community. The college's busy production schedule has been complemented by thriving partnerships with Ars Flores in music and The Promethean Theatre in drama, both of which present performances that entertain and inspire audiences. Talented local choreographers helped to shape our first full-length original dance production, *Groove:* A Movement and Identity Journey. NSU Theatre also created a special performance inspired by The Wizard of Oz at the Broward Center for the Performing Arts to support a major Habitat for Humanity fund-raising event.

Some special events, including the Forensic Science Symposium and the Second International Workshop on Matrix Analysis and Applications, delved deeply into specialized areas of academic inquiry from many perspectives. Others, including the Undergraduate Student Symposium, gathered representatives from disciplines across the spectrum of majors to present and share stimulating research.

To view the comprehensive offerings of the Farquhar College of Arts and Sciences over the course of any academic year is to see a vital and varied learning community extending its reach as it broadens its foundations. While the college generates far more educational experiences than this magazine can report, the stories in this edition of the *Farquhar Forum* portray a college expanding its capabilities to benefit all students.

Students can sample diverse offerings through interdisciplinary study, whether across the medical disciplines (pages 14–15), across academic divisions (pages 8, 9), or even across generations (page 20).

Don Rosenblum, Dean

Farquhar College of Arts and Sciences

Tasummer 2007 Contents

2 College News



8 An Interdisciplinary Community



10 Distinguished Speakers Series Explores Identity



- 12 Faculty Achievements
- 14 Medical Outreach



- **16** Performing Arts
- 17 Alumni Profile
- 18 Keeping Digressions to the Point
- 19 From Keystroke to Hard Copy
- 20 Intergenerational Learning at the Lifelong Learning Institute



- 21 Staying Focused with Crystal Rego
- 22 More Shark Spirit Than Most



Cover illustration: From the underwater world to the heightened reality of the stage, from recognition by awards to private, personal moments of achievement, students and faculty members create accomplishments that unite individual disciplines in a lively learning community. Clockwise from top: Colin Morgan and Natalie Solomon; Tangeneka Bryant and Robin Sherman, Ph.D.; a marine biology student; Jigna Shah; Sara Gama; Deidre Fossey. Center: Yi Jey Lin, Fabio Vogel, and Don Rosenblum, Ph.D., Farquhar College of Arts and Sciences dean

The Farquhar Forum is published twice each year by

Nova Southeastern University Farquhar College of Arts and Sciences Administration

Don Rosenblum, Ph.D., Dean
Naomi D'Alessio, Ph.D., Associate Dean
Marlisa Santos, Ph.D., Director, Division of Humanities
Matthew He, Ph.D., Director, Division of Math, Science, and Technology
Allan H. Schulman, Ph.D., Director, Division of Social and Behavioral Sciences

Farquhar College of Arts and Sciences Office of Information Services

Alyssa Rothman, Director Richard Toumey, Editor Jill Gambill, Assistant Director 3301 College Avenue Fort Lauderdale, Florida 33314-7796 Telephone: (954) 262-8185 Email: OlS@nsu.nova.edu www.undergrad.nova.edu

Nova Southeastern University admits students of any race, color, sexual orientation, and national or ethnic origin. Nova Southeastern University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097, Telephone number: 404-679-4501) to award associate's, bachelor's, master's, educational specialist, and doctoral degrees.

Second Annual International Workshop on Matrix Analysis and Applications

The Farquhar College of Arts and Sciences' Division of Math, Science, and Technology hosted the Second Annual International Workshop on Matrix Analysis and Applications. This international workshop was designed to support and stimulate research and interaction for mathematicians and scientists in all aspects of linear algebra, matrix analysis, and their applications.

The Division of Math, Science, and Technology co-sponsored the conference with the International Linear Algebra Society (ILAS). Fifty-five experts from 10 countries attended the math conference, with 30 talks and one poster session presented during the three days of meetings. Researchers had the opportunity to exchange ideas and discuss recent developments in their fields. A key speaker was Richard Brualdi, Ph.D., chair of the Department of Mathematics at the University of Wisconsin—Madison.

For more than four decades, he has been a leading figure in the development of linear algebra, the branch of mathematics concerned with the study of vectors and systems of linear equations. Brualdi was recently awarded the Hans Schneider Prize, the highest award in linear algebra and matrix analysis. In conjunction with the workshop, the college presented exceptional mathematician Chi-Kwong Li, Ph.D. Li, the Ferguson Professor and chair of the Department of Mathematics at the College of William & Mary, is a leading mathematician in the field of Matrix Analysis and Linear and Multilinear Algebra.



Undergraduate Student Symposium



Pictured (I–r): Allan Schulman; Amrish Ramnarine (first place in film); and Don Rosenbum, dean

The college hosted its Undergraduate Student Symposium in the Alvin Sherman Library. This annual event showcased outstanding scholarship by undergraduate students. Students presented their academic projects through performances, oral presentations, and poster displays.

More than 100 students took part in over 50 projects. Their research covered biological and physical sciences, humanities, the social and behavioral sciences, computer science, mathematics, education, and business. The symposium, organized by Allan Schulman, Ph.D., director of the Division of Social and Behavioral Sciences, and Rehana Seepersad, also featured works from the undergraduate student film competition and a keynote address by Charles Messing, Ph.D., professor in the Division of Math, Science, and Technology.



Arts Events

The University Arts Center, the Farquhar College of Arts and Sciences' performing arts facility for teaching and program presentation, is preparing to officially launch its public role in fall 2007. As the Black Box Theatre has begun to host events, the college is providing the NSU campus community and South Florida with a new center for cultural experiences.

The college offers dynamic, diverse productions by its own theatre program that draw from the full spectrum of accomplished dramatic possibilities, as well as other events such as dance performances. Relationships with local cultural organizations ensure a well-rounded roster of performing arts events.

Theatre Workshop

The Farquhar College of Arts and Sciences hosted an instructive theatre workshop with Tony Thompson, artistic director of the Metropolitan Diversity Theater Company. The workshop was held in conjunction with a performance of Thompson's play, Just Us: From Bean Pickers to Presidents, an original historical drama about the early Black history of Fort Lauderdale. Both events were part of NSU's Black History Month program. In the workshop, Thompson discussed the process of writing and directing a docudrama play. From formulating an idea to adding details such as music and authentic dialogue, students were able to learn how to transform historic material into an engaging production. The Farquhar College of Arts and Sciences Black History Month Committee, consisting of Tachi Egwu, Ph.D.; Gary Gershman, Ph.D.; Dave Kilroy, Ph.D.; and Andrea Shaw, Ph.D., organized these events.

Art Exhibit

The college hosted an exhibit, Expressions of Identity: Faculty, Family, and Art, in the Library Galley on the second floor of the Alvin Sherman Library. The exhibit featured original artwork, photography, and sculptures created by college faculty and staff members, and their family members. The art show, which corresponded with the college's 2006–2007 academic theme of "Identity," was organized by Eileen Smith-Cavros, Ph.D., assistant professor in the Division of Social and Behavioral Sciences.



NSU Theatre performed a 20-minute rendition of the timeless classic The Wizard of Oz, titled There's No Place Like Home, at the Broward Center for the Performing Arts as part of the Habitat for Humanity's Annual Banquet. The production illustrated how needy families could apply for housing with the organization and the process through which Habitat for Humanity helps local communities. This banquet honored volunteers, board members, and donors, as well as raised money on behalf of Habitat for Humanity. NSU Theatre also presented three performances of The Laramie Project, by Moisés Kaufman and members of the Tectonic Theater Project. A docudrama, this play was written as a collage of testimony compiled from local residents in Laramie, Wyoming, after the publicized hate crime that resulted in the violent murder of gay college student Matthew Shepard. The final theatre production of the 2006-2007 academic year was the Director's Festival of One-Acts, a group of studentdirected works by established playwrights, in the new Black Box Theatre in the University Arts Center on the main campus.







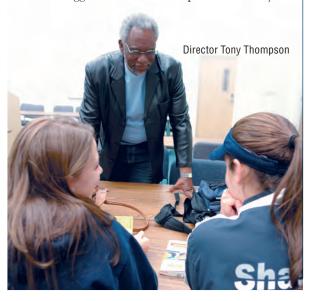
Biology Students Take Their Research to D.C.

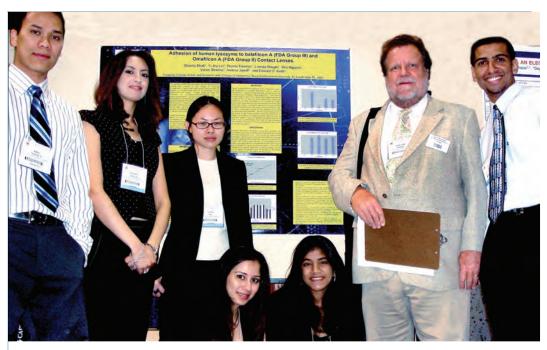
Community Partners

The college's orchestra in residence, the Ars Flores Symphony Orchestra, provided opportunities for the community to hear and learn about classical music at the Rose and Alfred Miniaci Performing Arts Center. Offerings included "Music for Munchkins," a free, 30-minute mini-concert geared toward children and their families; Christine Jackson, Ph.D., professor in the Division of Humanities, delivered a preconcert lecture with biographical information on composers featured in the concert and key listening moments for audience members; and the orchestra featured violin virtuoso brothers, Marc and Jeff Thayer, presenting double-violin concertos by Bach and Mozart along with "Symphonic Dances," from West Side Story, by Leonard Bernstein.

The college, in collaboration with the Broward Center of Dance and Theatre Arts, presented the Live in Color Dance Collective's *Fusion of Funk*, culturally rich performances directed by Zedric Bembry at the Miniaci Performing Arts Center.

The Promethean Theatre, NSU's theatre in residence, presented four performances of *A Number*. Written by Caryl Churchill, *A Number* was directed by Margaret M. Ledford. Winner of the 2002 Evening Standard Award for Best New Play, this family drama tackles the ethical labyrinth of genetic engineering, following one man's struggle to understand his personal identity.





Biology students presenting their poster at the 2007 annual FASEB meeting in Washington, D.C. (I-r): Kha Nguyen; Lamiaa Rougui; Yi Jey Lin; Shweta Shah; Prerna Thomas; Edward O. Keith, Ph.D.; and Varun Sharma

From April 27 through May 2, a group of six students in the Farquhar College of Arts and Sciences attended Experimental Biology 2007, the annual meeting of the Federation of American Societies for Experimental Biology (FASEB) in Washington, D.C.

The students presented results from their research project that examined the adhesion of proteins in human tears to contact lenses. They performed this research under the direction of Edward O. Keith, Ph.D., associate professor in the division of Math, Science, and Technology, and College of Optometry assistant professor Andrea M. Janoff, O.D., FAAO, chief of the Cornea and Contact Lens Service in the NSU Optometry Clinic. The title of the student's presentation was "Adhesion of Human Lysozyme to Balafilcon A (FDA Group III) Contact Lenses."

Human tears contain a number of proteins, predominantly lysozyme, and the adhesion of these proteins to contact lenses contributes to lens deterioration, vision problems, and ocular pathology. Keith has been conducting this research with students since 2000.

"It's a good experience for students to come to conferences," Keith said. "They're exposed to the breadth of research going on in the biological and medical sciences. It's stimulating, but also humbling as they find out the degree of technical detail that experts in the field have mastered. They move beyond getting the experiments right to understanding the implications of the project, the bigger picture."

FASEB has an annual conference in a different city each year, hosting 12,000 to 15,000 scientists and another 5,000 exhibitors. At the conference, the students presented their poster at both the Undergraduate Poster Competition, sponsored by the American Society of Biochemistry and Molecular Biology, and at the regular meeting poster session. These students also attended lectures on advances in biomedical research and a large exhibition of new products.

Athletic Training Education Program

The Commission on Accreditation of Athletic Training Education (CAATE) officially accredited the Nova Southeastern University Athletic Training Education Program.

There will be nine athletic training students graduating in 2007 as the major's inaugural class. The accreditation came at the perfect time for these students, as graduating from a nationally certified program ensures that these students can qualify as certified athletic trainers on the condition that they pass the certification exam.

One of the athletic training charter students, Deirdre Foisy, was named an Outstanding Student from the 2007 NSU undergraduate graduating class. She was also interviewed by the magazine *Florida Trend* for a "Top College Grads" article, published in May.



Stolzenberg-Doan Family Endowment



Pictured (I-r): Ron Norwood; James Doan; and Don Rosenblum, dean

The Farquhar College of Arts and Sciences established the Stolzenberg-Doan Family Endowment in support of the college's international studies major. In appreciation of this opportunity to support the efforts of students interested in learning more about other countries, the college acknowledges the generosity of James E. Doan, Ph.D., professor in the Division of Humanities, for this endowment.

The endowment is named in memory of Doan's grandparents, Helen M. Stolzenberg and Joseph J. Stolzenberg, as well as his mother Marilyn J. Doan, to honor their commitment to furthering knowledge of the languages, history, and cultures of other nations. The endowment will support the Stolzenberg-Doan Lecture Series and the Stolzenberg-Doan Scholarship to help students study abroad.

Success with Fundamentals in a Field of Innovations

Communication is "an umbrella discipline" that engages many fields of study, according to Jennifer Reem, M.S., the communication program coordinator in the Farquhar College of Arts and Sciences' Division of Humanities. Students in this major examine many aspects of communication and media technology, but the foundation of the field remains face-to-face interaction, the most direct form of human communication. This supports student success in many ways.

At all levels of communication—interpersonal, group, mass, and the machine-mediated context of the Internet—competence is crucial, Reem said. "When I seek hands-on internships for students, I'm never at a loss because organizations want people who can communicate. Employers know this skill is a key to success," she explained. "There are many communication internship opportunities in South Florida. Media and political organizations and

not-for-profit groups want our interns. Our students can go to local radio and TV stations, museums, cultural centers, theatrical organizations, special events, and public relations and advertising firms. The Red Cross and museums work with donors for fund-raising, and they need effective communicators to create better partnerships, leading to success in raising donations."

The proliferation of new technology for distributing information requires careful consideration as it expands professional possibilities. Students today are used to electronic message-sharing through the personal computer, iPods, YouTube, MySpace, and other means of access. According to Reem, "We have to get them to realize that communication careers require more than that, but we have to teach them how to use all that too. We need to make sure they're grounded in other areas that make them more productive citizens and people."



The new avenues of communication open many prospects for those who can recognize, and work with, great change.

As Reem pointed out, "Those who have something to say and know how to say it will always make good use of advances in media. If you align your values with your audience, if you pay attention to ethical issues, you can be successful and persuasive. This can lead to many promising and exciting career opportunities."

Claiming a 2,000-Year-Old Tradition

No one should need an excuse to visit Italy, but the Athletic Training Education Program in the Division of Math, Science, and Technology had a valid academic interest. In March, a group of students led by assistant professors Patricia McGinn, Ph.D., and Elizabeth Swann, Ph.D., came to see where the Greek physician Galen worked with Roman gladiators and became the father of sports medicine.

One site adjacent to the Colosseum, the Ludus Magnus, served as a training facility and living quarters for gladiators. There, Galen and his successors treated the warrior athletes and performed eye and brain surgeries, using scalpels shaped much the same as those used today.

Athletic training student Monica Henderson, an athlete on NSU's rowing team, said, "It was powerful to stand in the Colosseum where my profession began. Some things

we do today are similar to what people did centuries ago, but I also see how far the work has advanced. I now feel part of a 2000-year-old process."

The group visited Rome's Museo di Sotia della Medicina (Museum of Medicine), whose exhibits illustrate the development of medicine from ancient Rome to modern times. They also spent time at the Istituto Universitario di Scienze Motorie (University of Movement Science), where faculty members and students perform research in exercise physiology, kinesiology/biomechanics, and other sports-related areas.

In Pompeii, students visited the excavation site of the city buried by the eruption of Mount Vesuvius in 79 A.D. At the National Archeological Museum of Naples, they saw medical instruments from a Roman physician's home in Pompeii.



Even the art museums added a component to the group's studies. Michelangelo's Sistine Chapel ceiling in the Vatican and the statue of David in Florence confirmed the artist's anatomical studies of human structure. His accurate depictions in marble and fresco of musculature and bone, as well as correct placements of veins and other physiological details, demonstrated his advanced scientific knowledge of the human body five centuries ago.

An Interdisciplinary Community

With its many majors and diverse areas of faculty expertise, the Farquhar College of Arts and Sciences can blend its academic resources into exciting interdisciplinary courses.

Though students seek to master a particular major during their undergraduate years, interdisciplinary courses can open broader learning opportunities. This approach can expand a student's spectrum of knowledge and promote conversations across the borders of academic specialties. As a result, the college community becomes more closely joined through the sharing of its educational resources.

A LIVELY LOOK AT THE END OF LIFE: AN INTERDISCIPLINARY PERSPECTIVE

A course titled, Loss, Grief, and Bereavement, offered interdisciplinary perspectives on a subject many people would prefer to avoid. Ellen Flynn, Ph.D., an assistant professor in the Division of Social and Behavioral Sciences, said, "It's an elective, so I get biology, business, humanities, and pre-law students. They come at the topic from different perspectives."

Flynn brought in experts to address topics from unique viewpoints. An NSU law professor spoke about the right to die, euthanasia, and assisted suicide. A health professional examined the same themes in terms of helping patients make difficult decisions.

"An emergency room physician spoke about split-second life and death decisions he deals with," Flynn said. "He talked about second-guessing himself, having nightmares, driving down the street and having a 'should've' flashback. He became pensive, almost pained."

Another guest, a hospice worker, spent the first half of her career as a midwife, then the second half helping people die. According to Flynn, "She told us that, even if we

can't hear them, people tell us when they're ready to die. I now think that, just as someone can have a lifestyle, there can also be a death-style when people are ready to go. Understanding this can help us help our loved ones at the end of their lives."

For Flynn, the greatest benefit of interdisciplinary study is that guest lecturers demonstrate the diversity and value of various specializations. Christine Jackson, Ph.D., a professor in the Division of Humanities, spoke about death symbols in literature and visual art, helping students see new implications in depictions of loss in popular media.

"I showed them symbols of enclosed spaces, death's heads, colors associated with death," Jackson said, "images from medieval art to the Hell's Angels, from other cultures. We spoke about the value of literature, art, and film showing people working out how to face death. This is a valuable social function of art."

Jackson was glad she could participate because "my own life is interdisciplinary, with writing, music, and drawing. Students can make connections between faculty members' specialties and develop a broader worldview. Medical students can see that death has a cultural context. Psychology students can see how common social symbols influence people's attitudes about death."

People, even if we can't hear them, tell us when they're ready to die.



Students interviewed each guest. Then Flynn wove the information back into the course as a whole "to help students place what they learned into an overall pattern of knowledge. I teach this course because a better understanding of death and dying can help us grow more motivated to live, to not waste the moments we have."

Britain Was the Textbook

The Division of Humanities offered two summer courses, Special Topics in Theatre and Special Topics in History, which combined their students in a single journey across much of England and Scotland. This exposed all participants to the lessons of each course through shared experiences. As a result, students were able to develop greater interest in each other's fields of study.

"Almost any study-abroad program is interdisciplinary by its nature," said associate professor Gary Gershman, Ph.D. "You're dealing with culture and history at the very least." Gershman, with assistant professor Mark Duncan, M.F.A., planned the trip's itinerary to visit historical sites that related specifically to theater.

The interdisciplinary nature of the group extended beyond the original syllabus of each course. Gershman said, "In Scotland, our tour guide told us about the history of the region and spoke about issues of ecology, global warming, and politics, too. In London, at the Globe Theatre, the reconstruction of the debut site of many of Shakespeare's plays, we were looking at Elizabethan culture and politics as well. We watched *Othello* while standing in the pit on the ground floor like the common folk in that time."

Study abroad can blend an immediate course subject with its greater social and environmental context, according to Gershman. "As teachers, we're often concerned about helping students make connections between what they learned in one class and another. In a new environment, it's possible to see more so you don't miss the bigger picture."

Gershman and Duncan assigned readings and films for the students to watch before they left, but from the moment the group arrived, "Britain was the textbook. It was all learning by doing." Students saw *King Lear* performed by the Royal Shakespeare Ensemble in Stratford-upon-Avon, Shakespeare's birthplace, as well as modern plays in London. They toured historic sites that spanned thousands of years from Stonehenge to the Scottish battlefields where William "Braveheart" Wallace fought.

Legal studies student Sara Gama, who enrolled in Special Topics in History, enjoyed the trip to Britain in part because it awakened her interest in theater. "I was interested in the history before I went, but I also saw some unforgettable theater. Theatre students, on the other hand, might not have been as likely to visit York or a Scottish battlefield if it hadn't been a combined trip. The itinerary allowed us all to explore outside our majors and move into more general knowledge.

"Our professors wanted us to be interactive rather than just follow a syllabus. Every day we met local people, made friends everywhere, and it all encompassed far more than Layrosted."







From its inception, The Honors Program at the Farquhar College of Arts and Sciences has promoted interdisciplinary studies for students in special seminars.

One of the first honors seminars was called Genes and Schemes.

Naomi D'Alessio, Ph.D., associate dean of the college, taught about the functions of genes from a biological perspective.

Allan Schulman, Ph.D., director of the Division of Social and Behavioral Sciences, addressed ways that genes affect human behavior.

Don Rosenblum, Ph.D., dean of the college, presented a sociological perspective, sharing a view of genetic influences on populations. Ben Mulvey, Ph.D., associate professor in the Division of Humanities, taught about the ethical implications of mapping individual genetic structures. Students gained a comprehensive view of a complex topic with strong social implications for the 21st century.

In fall 2007, Emily Schmitt, Ph.D., associate professor in the Division of Math, Science, and Technology, and James Doan, Ph.D., a professor in the Division of Humanities, will teach Genetics and Genealogy, in which students extract and analyze their own DNA, then develop a family tree using those results.

DISTINGUISHED SPEAKERS

Distinguished Speakers Series Explores



Mark Nerenhausen, M.A.

The college welcomed Mark Nerenhausen as the keynote speaker for the Convocation on Tuesday, September 5, 2006. Since 1998, Nerenhausen has served as president and CEO of the Broward Center for the Performing Arts, which presents more than 600 performances each year for an annual attendance of more than 600,000. The Broward Center also manages the Parker Playhouse in Fort Lauderdale and the Miniaci Performing Arts Center on NSU's main campus. The Farquhar College of Arts and Sciences has partnered with the Broward Center on numerous activities and events.

Focused on the role the arts play in community building and economic development, Nerenhausen also serves on local community boards, including Fort Lauderdale's Downtown Council Steering Committee, ArtServe, the Museum of Art, the Concert Association of Florida, and the Greater Fort Lauderdale Lodging and Hospitality Association.



he Farquhar College of Arts and Sciences pursued a college-wide academic theme of "Identity" during the 2006-2007 academic year. Members of the college community studied various meanings and implications of identity through special courses, theatre productions, student-faculty reading groups, faculty lectures, and panel discussions. This theme was reinforced by the college's Distinguished Speakers Series, offering compelling perspectives on how we know ourselves and others, as well as how those understandings are changing for millions of people.



Spencer Wells, Ph.D.

The Division of Math, Science, and Technology presented geneticist and anthropologist Spencer Wells, Ph.D., who spoke on "The Journey of Man: A Genetic Odyssey," on Thursday, October 26, 2006.

Wells is project leader for the National Geographic Society's Genographic Project, a sweeping, five-year genetic study of human migration, whose global network of research laboratories collects and analyzes DNA from cultures both near and remote. The project's resulting genetic atlas provides insight into the connection between modern humans and African ancestors living 60,000 years ago.

In his talk, Wells discussed how the Genographic Project has linked geneticists, archaeologists, anthropologists, climatologists, and linguists for interdisciplinary research into the origins of human identity. This has led to a theory that humans dispersed in migratory patterns from Africa to settle across the globe.

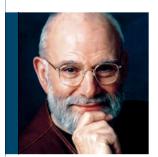


Ehud Barak, M.S.

The Division of Humanities presented Ehud Barak, former Israeli prime minister, on Wednesday, February 14, 2007.

Barak served a 36-year career in the Israeli Defense Forces as the most decorated soldier in Israeli history. He led Israel's elite anti-terrorist unit and served his country as minister of the interior, minister of foreign affairs, and defense minister. From 1999 to 2001, Barak served as the 10th prime minister of Israel. On January 7, 2007, Barak launched a political comeback by announcing that he will seek the leadership of Israel's Labor Party in the May primary elections.

Barak earned his B.S. in physics and mathematics from the Hebrew University in Jerusalem in 1976 and his M.S. in engineering-economic systems in 1978 from Stanford University. His political, educational, and military backgrounds give him a unique perspective for assessing the key challenges of world terror, international diplomacy, globalization, and the free world in the 21st century.



Oliver Sacks, M.D.

The Division of Social and Behavioral Sciences welcomed distinguished neurologist Oliver Sacks, M.D., to campus on Thursday, April 19, 2007. In 1966, Sacks administered the experimental drug L-dopa to a group of survivors of the "sleeping sickness" epidemic that killed millions in the 1920s. Frozen like human statues for decades, they awakened with what Sacks describes as "an explosive quality, as of corks released from a great depth." Sacks is also author of bestselling books, including Awakenings, The Man Who Mistook His Wife for a Hat, and An Anthropologist on Mars. Through his work with brain disorders, he has transformed our understanding of the human mind by portraying patients who adapt to, and survive, various neurological conditions. Exploring the nature of perception, memory, consciousness, and creativity, Sacks has enlarged our understanding of the complexities of the human mind.



Antonia Novello, M.D.

The Commencement speaker on Saturday, May 12, 2007, was Antonia Novello, M.D., the first Hispanic and first woman to serve as U.S. Surgeon General. Her tenure raised awareness about domestic violence, underage drinking and alcohol abuse, and pediatric AIDS. In 1990, President George H. W. Bush appointed Novello to be Surgeon General of the United States.

Her causes, particularly AIDS research and children's health, have taken her around the globe. After serving as surgeon general, Novello was appointed special representative for health and nutrition for UNICEF, the United Nations' children's health organization. In 1999, she was appointed commissioner of health for the state of New York.

One of Novello's guiding principles is "Service is the rent you pay for living, and that service is what sets you apart." At Commencement, Novello was awarded an honorary doctor of humane letters, as approved by the NSU Board of Trustees.

FACULTY ACHIEVEMENTS



Paul Arena, Ph.D., assistant professor in the Division of Math, Science, and Technology, published an article in Hydrobiologia. "Fish assemblages on sunken vessels and natural reefs in southeast Florida, USA," focused on fish

populations at six derelict vessels deployed as artificial reefs off the Florida coast. The study indicated that vessel-reef fish assemblages may utilize food resources and habitat characteristics not found at natural reefs in the area.



Christine Jackson, Ph.D., professor in the Division of Humanities, published a short story, "Cabin Fever," in *Spine Tingler* magazine. Jackson's suspense tale takes place just before Christmas in a New England seaside town.



Delmarie Martínez, Ph.D., associate professor in the Division of Humanities, presented, "Religious Codes and Self-Identity in La Batalla de las Vírgenes" at the 67th Annual Convention of the College Language Association in

Miami. The theme of the conference was, "Religion and Spirituality in Literature."



Jason Rosenzweig, Ph.D., visiting professor in the Farquhar College of Arts and Sciences' Division of Math, Science, and Technology, published research in the upcoming book Advances in Experimental

Medicine and Biology and in the Federation for European Microbiological Societies' (FEMS) journal, FEMS Microbiology Letter. His work has paved the way for a new subfield of molecular pathogenesis, investigating dynamics of host-pathogen interactions.



Andrea Shaw, Ph.D., assistant professor and assistant director of the Division of Humanities, was invited by the Caribbean Literary Studies program at the University of Miami to speak about writing, then publishing, her

dissertation. The book, *The Embodiment of Disobedience:* Fat Black Women's Unruly Political Bodies, was published by Lexington Books in 2006. The Center for Latin American Studies sponsored this event. Shaw also read from her novel in progress, *The Shadow Box*, at the Miami Book Fair International.

Four faculty members from the Division of Math, Science, and Technology won NSU's prestigious President's Faculty Research and Development Grants.



Donald Baird, Ph.D., assistant professor, with Patricia L. Blackwelder, Ph.D., associate professor in the Oceanographic Center, for: Construction of Metalorganic Frameworks with Potential for Hydrogen Gas Storage.



Edward Keith, Ph.D., associate professor, for: Field Testing Sonar Fishfinders for Manatee Avoidance Technology.



Ahmed Albatineh, Ph.D., assistant professor, for: Correction of Jaccard Similarity Index for Chance Agreement in Cluster Analysis.



Fuzhen Zhang, Ph.D., professor, with G.P.H. Styan, Ph.D., and Jennifer Novak, B.S., for: The Hua Matrix Equality and Determinantal Inequalities

Skills That Help Therapists Help

he education of therapeutic counselors requires careful preparation. Before their first sessions with clients, counseling students need to understand how to support those who come to them for help.

Michael D. Reiter, Ph.D., assistant professor and assistant director of the Division of Social and Behavioral Sciences, has written an introductory textbook for beginning counseling students. His intent was to provide foundation skills for conducting therapeutic interviews with a variety of clients in a variety of settings. *Therapeutic Interviewing: Essential Skills and Contexts of Counseling* will be published by Allyn & Bacon in August 2007.

Reiter said, "I developed the book after teaching undergraduate, master's, and doctoral courses. I couldn't find a single textbook that taught both the development of therapeutic skills and an overview of the context of therapy." Most books he considered were too focused on specific theories of therapy. "They each gave 'how-to' guides for cognitive or behavioral therapy interviews, for example. I wanted to teach effective ways to interact with clients, regardless of the therapist's theoretical approach." The book combines the "why's" of therapy with how-to examples. Case scenarios, self-reflections, and exercises help the reader learn the concepts and applications of the material.



"

Clients have a sense of whether you honor and understand them or are just following a protocol.

"

While this book is useful for graduate students, Reiter wrote it for his undergraduate psychology majors as well. "In fall 2006, I taught this as an undergraduate course, using a rough draft of the manuscript for the text. The students had no problems with the writing level. They also gave me useful feedback for revisions."

The book is divided into four sections. The first focuses on the relationship between the client and therapist.

Section two reviews theories and offers case scenarios. Section three addresses context concerns, such as multicultural considerations, and ways to work with children, families, and groups. The last section discusses where therapy occurs—in the therapist's office, homes, schools, residential facilities, and even online—and how locales can affect sessions.

While *Therapeutic Interviewing* helps aspiring therapists to develop their skills and understanding, it also is realistic about the challenges that arise in this field. "I included examples of cases I had that didn't go well. It's important for therapists to know how to handle those situations too."

Reiter's goal is to help students understand how things make sense for the client, whether or not they agree with it. "I talk to the reader about considering your own orientation, biases that impact how you are with the client and how clients respond to you. Clients have a sense of whether you honor and understand them or are just following a protocol. You need to open doors for them."

Reiter's next book will be Case Conceptualization in Family Therapy. This volume will present several in-depth fictional cases. Reiter will apply different theories to each case, demonstrating that there is more than one effective approach to any client family.





Career Building Through Community Action

"As professionals, we owe it to the people who supported our learning to pass this opportunity on to the next generation of students."

Mark Jaffe, D.P.M., assistant professor in the Division of Math, Science, and Technology, helps to organize a series of medical outreach events for South Florida residents every year. These programs provide members of the community with free evaluations and educational services by NSU faculty members and students. They also offer useful field experience to students from the Farquhar College of Arts and Sciences.

lectures, health screenings, and giveaways. Jaffe also enlists students to join him at other local fairs to offer specialized assessments of health needs.

"I work with a half-dozen events a year," Jaffe said. Undergraduate students can help provide health screenings because Jaffe first teaches them basic protocols and techniques. "Fortunately, students from the college are a pleasure to bring into public settings."

In the fall, NSU hosts the His motivation runs deeper than Day for Children, which simply joining students with attracts thousands of skills to people with needs. children and their He said, "I want to do for family members to its my students what fun activities, bicycle wasn't done for helmet giveaways, and me. Years ago, more. In the winter, being a medical the Healthy Aging resident was a Expo offers the terrible rite of public a selection of passage. My teachers had been abused as residents, and they passed

that tradition on to us. It left a bad taste for me, so I want to help our students more." Jaffe went to the University of Kansas, which had large classes. "I wish I'd had the small classes NSU offers," he said. He enjoys providing students with the close mentoring his education lacked because it can enhance students' successes. "Twenty-five years ago, I was competing regionally for medical school. The competition is now international. You can't just get good grades, great entrance exam scores, and volunteer at hospitals. You have to show your passion for medicine. You have to be professional, and that has to begin when you start your undergraduate courses."

As a podiatrist, Jaffe shows students what he does in medical practice with lower extremity treatments, but he also helps students work with other health practitioners at NSU. This gives students valuable experience and the potential to meet mentors in many areas of interest. "I'm offering lectures about how I behave and perform during assessments to prepare students before they come out with me. I want them to be able to talk at medical school interviews

Christopher Tann (center) explaining lower extremities care



Pictured (I–r): Christopher Tann, Jessica Velez, Jaffe, Kristina Christoph, Crystal Rego, and Omar Grant

about skills they've already used. It will

separate them from other candidates." Outreach events open students' eyes to a variety of specialties available in the community. Jaffe has also brought undergraduate students into projects with the Senior Services Team at NSU's Health Professions Division (HPD) so his students can mingle with graduate students. Because he had already provided them with training in certain assessments, Jaffe has watched his undergraduate students teach graduate students in physical and occupational therapy how to perform lower extremity evaluations.

"Students don't realize what abilities they need to develop until I take them into the community or to the medical clinics. I want them to consider what specialties they can explore and find clinicians to mentor them. They need to learn about patient satisfaction, too. You won't get as far in medicine if you're highly skilled but not good with people."

Jaffe promotes evaluation as a holistic practice, as opposed to simply an analysis of problems. This attitude also applies to his work with students. "I encourage students to watch not just the procedures they're interested in but also what everyone else is doing. Health care is now, more than ever, about teams. You have to understand diversity, get along with your patients and your peers." Learning by example in the field is essential in Jaffe's view. "As professionals, I believe we owe it to the people who supported our learning to pass this opportunity on to the next generation of students."



Amber Taylor: Putting the Clinic Exploration Program to Good Use

Amber Taylor has always wanted to help people. "In high school, I shadowed nurses and saw that the quality of health care is not good enough because nurses have huge case loads," she said. "Americans usually don't realize how much they need beyond a doctor's care to get them well." The holistic approach and the manipulations of osteopathic medicine appeal to her, "especially in an age when people need cures and some antibiotics don't work anymore." She is considering a career in family practice because she is attracted to the diversity of treating patients from the pediatric to the geriatric, populations she has worked with through volunteer opportunities at the Farquhar College of Arts and Sciences.

Taylor has gained valuable insight into her career options through the college's Clinic Exploration Program (CEP). This exceptional program gives students the opportunity to shadow health professionals in the various NSU health care clinics.

"The CEP allows people like me, who are undecided, to see what's possible. I've been on dental, internal medicine, and pediatric rotations. I can speak with physicians and observe their

assessments of patients. I also get the graduate students' points of view, including the realities of life in medical school."

She would like to shadow health professionals in both a hospital and a personal practice. "Mostly, I want the direct contact with people that you can't have in, say, an operating room." The clinical connections have also helped Taylor network for her career. "NSU is big, but it's also small. The contacts I've made by following physicians through the day's practice have given me the chance to know them a little, and for them to get to know me."

Working her way through the premed program with an on-campus job has not held Taylor back. "The campus is beautiful. I feel I belong here," she said. An intensely focused and dedicated detail person, she says she's over-organized and comfortable with that trait as she looks ahead. "Documentation is the number one medical error—mistakes of notation and dictation. Paying attention to details can save lives. I try to put myself in other people's positions, so I hope to answer my patients' needs with the best possible care."



After trying majors in computer science, psychology, and criminal justice at another college, Rob Coward joined the U.S. Army for five years and returned to school as a theatre major in the Farquhar College of Arts and Sciences.

Forum: What has being a theatre major done for you?

Rob Coward: Studying theatre at NSU opened my eyes to the range of technical aspects of theatre. I tried carpentry, building sets, then lighting, which is my main focus now. I like having a generalist academic program like we have here, instead of just getting a degree in acting somewhere. I never would have developed my interest in lighting if I'd gone that route. I

like seeing the whole picture. Diverse experience also makes you more valuable when someone wants to hire you.

Forum: Have you been able to explore any professional possibilities yet?

Rob Coward: I

work for the Coral Springs Center for the Arts

as an assistant master electrician. Their technical director urged me to learn everything I could because he might not need me on a particular day as a master electrician, but he might need me to run the fly rail. I'm a better asset if I know a bit of everything. It's a fully functional theatre facility, so I get to work with Broadway touring companies too. Also, last year I found a job at a summer stock company in West Virginia. I applied for an internship, but they thought my resume was impressive enough that they offered me a paying job as a full-time lighting assistant for the summer. They offered me better pay for this summer to be the master electrician and assistant lighting designer.

Forum: Do you work with other production companies?

Rob Coward: I'm technical director for The Promethean Theatre, the company in residence here at the college. I was

the lighting designer for their last play. Their shows are smaller, so I can get more focused, deeper into some things.

Forum: What do you want to do after you graduate?

Rob Coward: I definitely want to work with a production house that produces its own shows all season with its own actors and scene shop. I like consistent production values.

Forum: What about acting?

Rob Coward: Acting too. I enjoy performing. But the more you know, the more you understand what works and doesn't work. For example, a lighting designer needs to know what an actor needs so the stage doesn't get too hot for the person playing the role. Technical people complain about the actors, and vice versa, but we wouldn't be here without each other.

Forum: Have your studies changed you as an audience member?

Rob Coward: I can't go to a show without analyzing the lighting now, but I wish I could go sometimes and just get lost in the show without making mental notes. In theater, everyone borrows from everyone else. I'll see a production, maybe a Broadway tour, and later for a show I'm working on, I'll pull out an idea I learned from it.

Protecting Minds

fter earning her B.S. in psychology at the Farquhar College of Arts and Sciences, Cheryl Luis, Ph.D., ABPP-CN, has pursued a career as a neuropsychologist. She researches brain behaviors at the Roskamp Institute, a privately funded, nonprofit organization located in Sarasota and Tampa, Florida, which seeks to help cure diseases of the mind.

She remembers with gratitude her professors' enthusiastic support for her efforts while she was defining her career plans during her undergraduate career. In her senior year, Luis worked alongside graduate students at the Broward General Medical Center, doing research on children and adults with head injuries. This led her to turn away from a planned M.B.A. and instead become one of the first doctoral graduates from the neuropsychology specialty in clinical psychology at NSU. Her personal life steered her into a deeper involvement in her professional interests. "My father was diagnosed with Alzheimer's and I became a caregiver," Luis said. Research interests then led her to work for the directors of the Roskamp Institute: Michael Mullan, M.D., Ph.D., a molecular biologist, and Fiona Crawford, Ph.D., a geneticist. They discovered the Swedish mutation, one of the genes connected with the highly genetic form of Alzheimer's. Luis is the associate director of the institute's two memory disorder clinics. She said, "I do administrative work, community education, and research." She also holds a

"My father was diagnosed with Alzheimer's, and I became a caregiver."

gubernatorial appointment on the state's Alzheimer's Disease Advisory Committee, which helps to support research centers and offers advocacy for patients and caregivers. Research led her to study Lewy body dementia, a progressive brain disease that is the second leading cause of degenerative dementia in the elderly. "For several years, I've worked on early detection of neurodegenerative disease. We have no cures at this time, but sometimes we can slow down the progression a little." Finding methods to catch these diseases in their early stages is a high priority in her research. "Early detection will grow in importance as compounds that halt disease progression become available. If people don't get diagnosed early enough, we can't repair the damage. We need to screen people early to catch them before

too many brain cells are lost. Only then will halting the disease make sense."

Luis helps to develop and fine-tune screening instruments that can be used in routine health checkups for those 60 and older. She said, "Neuropsychologists test for patterns of mind functions. We're also looking for biomarkers to detect disease through bodily fluids. If we develop a test that can be given during a physical, we may catch people in early and moderate stages. Currently, we can detect the abnormal protein that accumulates in Alzheimer's patients, but only with a spinal tap. We're looking at something more practical that can be found in a routine screening."

In addition to her main job and her state service, Luis is the chair of WIN, Women in Neuropsychology, a program of the American Psychological Association, Division 40, which advocates for women to be leaders in their field. "Many people graduating into this field are female," Luis said, "but sadly, many don't advance or pursue positions of leadership or committee involvement. These are important to providing leadership in neuropsychology, and I'm proud to be part of the effort to encourage women to do this."

Her advice to undergraduate students is to claim their ambitions early. "I would encourage students, if they have ambitions for graduate school, to get focused and committed as early as possible. Competition for seats is fiercer now. Focus on achievements that will support your applications to good schools."

Keepin' Digressions to the Point

Digressions is the annual student-run literary magazine produced by the Farquhar College of Arts and Sciences's Division of Humanities. Students are encouraged to submit original works of poetry, short fiction, artwork, and photography for consideration in the magazine, which is published yearly in the winter semester.

Under the guidance of Suzanne Ferriss, Ph.D., professor in the Division of Humanities, the magazine is in its fourth year of production. Its visual and physical appeal has developed steadily, along with the quality of submissions.

The *Digressions* staff members and contributors, all students, have broad interests that range from literature to the hard sciences. As a result, the magazine presents creative expressions from across the college disciplines. Ryan Frabizio, current editor-in-chief, is a man of multiple creative interests himself. In addition to his varied literary efforts, he plays trumpet and trombone in the college's pep band, The Sharkestra.



AN INTERVIEW WITH EDITOR RYAN FABRIZIO

Forum: How did you become the *Digressions* editor?

Fabrizio: I started at NSU as a dual-admission dental student. In my second year, I switched my major to English when I realized I enjoyed reading literature more than I enjoyed cutting open frog heads. And our final project for my first creative writing course was assembling a portfolio of poems and short stories. My professor suggested I contribute some them to *Digressions*. When I did, the editors told me they were short-handed, so I reviewed submissions and helped them put that issue together.

Forum: What do you like to write?

Fabrizio: I prefer poetry because it helps me clarify what I want to say. In essays and short stories, it's harder to determine what's too much or too little to say. But poetry forces me to be more concise. And it's fun to decide whether or not to rhyme, how long to make the lines.

Forum: What poets inspire you?

Fabrizio: I like Whitman, Shakespeare, Wordsworth, and Poe, but my favorite is a Persian from the 13th century, a Sufi named Rumi. I'm starting to read Rumi's longer works.

Forum: What's it like editing the magazine? You have to decide whose work goes in and whose doesn't, and you must know a lot of the people who submit.

Fabrizio: I go to the staff a lot. People submit to the managing editor, who erases the names from the submissions before passing them on to us. If someone sends something directly to me, I won't look at it before I send it on. I try to protect everyone's anonymity. Sometimes we'll rate them on a scale of one to five and decide by that.

Forum: What would somebody be missing if they didn't read the magazine?

Fabrizio: We keep trying to be better at getting out the word about *Digressions*. Students who don't think they have time to read the magazine might want to give it a try anyway. Our writers challenge themselves to write these pieces, and they challenge their readers too.

For more information about Digressions, visit www.undergrad.nova.edu/hum/digressions.cfm

From Keystroke to Hard Copy: Getting Writers onto the Page

Shanti Bruce, Ph.D., serves as the writing program coordinator for the Division of Humanities. Her duties include teaching, overseeing the required undergraduate writing courses, and providing faculty development workshops. She also chairs the curriculum committee for the M.A. in writing program.

Fortunately, with all her responsibilities, she is organized as few devotees of writing are. Her desk is not a mess. Her office is serene, her movements precise and efficient. She demonstrates that being creative is not always chaotic.

While she confesses to loving her administrative duties because they allow her to contribute to the college in other ways, teaching is her favorite part of the job. "I love to help writers find their voices and get excited about writing. If a student tells me she's keeping a journal now, that she realizes she can write, it can change her life."

Another source of encouragement comes from students who report that they don't mind writing a five-page paper for another class because they wrote much more than that in Bruce's class.

For her, the love of writing should be encouraged as early as possible in a college career. She said, "I love to have a Monday morning class in the fall, teaching true freshmen students, because they're wide-eyed and open. It's a privilege, an honor to welcome them to college." Bruce said that the key to making students comfortable with themselves as writers is to teach writing as a process. "It's not something that goes from your brain onto the paper in perfect condition. You write drafts, make notes, take suggestions. It doesn't have to

have to be perfect the first time.

They can get ideas first. ??

be perfect the first time. Students can get ideas first."

Bruce wants students to start with creating good ideas. "I give them a process called a White Write," she said, "on a computer in an electronic classroom. We change the font to white so their words are the same color as the screen, invisible to them. I tell them not to use the backspace, to just keep writing. There will be time later to edit, to get feedback from your peers and the teacher before reaching the final draft."

Bruce takes her beginning students all the way through the writing process to publishing. She said, "They work in MS Publisher so they learn how to present their work visually. I tell them at the start of the course that they won't have their book until the end. Some students produce far more pages than I require because it's their book. Some make extra copies of their book to share with their families."

Her classes are a microcosm of the whole writing process, from finding a topic to generating raw material to being able to say, Yes, I've published something. She includes spoken reports in her classes because, "It's the whole language experience—reading, writing, speaking, and listening. Each one improves the others. Speaking about current events topics relates to the writing and to what's going on in the world around them." Bruce's assignments include research methods and exploring differences between genres or various audiences. She also provides

traditional tools for essays. "I help them

see that if they don't like academic writing,

there are other choices, but they have to be

competent in all areas."

The technological classroom is important to Bruce's approach. "Using the technology helps students find information they need while they're working on a piece," she said. "Computers and search engines change quickly, so it helps to build community in the classroom because we're all learning more together. This also ties us in with more of the outside world. Because of the small class size at NSU, students learn more from each other too. One student might be able to teach the rest of us something." Bruce also researches, speaks at conferences, and reviews and edits manuscripts for publishers. Her first book, ESL Writers: A Guide for Writing Center Tutors (Boynton/Cook, 2004), written with Ben Rafoth, is in its second printing, and she has a second book in press. Somehow she finds time to help with educational software development for writing as well. "I want to do everything," she said. She is well on her way to that goal.

Intergenerational Learning at the Lifelong Learning Institute

The mission of the Farquhar College of Arts and Sciences extends beyond fulfilling the needs of traditional degree-seeking students. Among the innovative services the college offers is the Lifelong Learning Institute (LLI), an educational program for older adults. Since 2003, Edward N. Aqua, D.Eng., director of the LLI, has collaborated with various NSU centers to promote intergenerational learning programs.

NSU's participation in the intergenerational learning process began during the 2003 fall semester in collaboration with the Department of Occupational Therapy. Soon after, students from the Division of Geriatrics in the College of Osteopathic Medicine visited for discussions about health care and clinical services.

In 2005, students from the Graduate School of Computer and Information Sciences researched older people's acceptance and use of new technologies. Students and teachers from the college's Division of Social and Behavioral Sciences partnered with LLI members and their adult children to create a video about healthy aging.

NSU students hone useful skills in their areas of specialization in a nonthreatening and nonstressful environment. Cardiovascular diagnostics students have screened members' carotid and abdominal vascular systems. Pharmacy students have discussed the complexities of Medicare drug plans. A joint program by the Physical

"Older people are a wonderful resource that can fulfill an unlimited amount of society's needs."

Therapy-Public Health-Optometry Research Team examined the relationship between exercise and eye health to Type 2 Diabetes. Doctoral students in psychology have discussed assessing driving competency for older adults. The members also share their legacies of lifetime learning with younger generations at NSU.

Aqua defined three goals for his intergenerational learning projects. The first is to counter misconceptions about senior citizens. "The strongest stereotype we try to counter is that older people are a burden to society," Aqua said, "that such people are fragile and needy and cost us money. We want to help people, particularly NSU students, to see that older people are a wonderful resource that can fulfill an unlimited amount of society's needs."

A second goal is to encourage more students in caring professions to consider careers in geriatric or gerontology specializations. The need for quality care and services for older generations grows with advances in life-extension. The third goal has been to strengthen and extend the ties between LLI members and the university.

Not all of this is easy for members to schedule, according to Aqua. "Because they're active people engaged in life, it's hard for them to take part in all these intergenerational projects. As they say, they're always missing out on something because they're busy doing something else."





Since biology student Crystal Rego moved to South Florida from Canada, she has enjoyed the warmer climate at NSU, smaller classes, and opportunities with campus organizations. This has worked well for her, as she was named the 2007 Student of the Year at the Farquhar College of Arts and Sciences and was accepted for admission by NSU's College of Osteopathic Medicine for fall 2007.

To investigate medical career choices, Rego joined the Clinic Exploration Program (CEP), which allows undergraduate students to accompany medical professionals through clinical duties on campus. Students observe procedures, discover potential specializations, and connect with mentors for their academic and professional aspirations.

Osteopathic manipulations and team care practices particularly interested Rego. "I've

spent a great deal of time volunteering in hospitals," she said. "But I was inspired watching osteopathic physicians treat patients with long-term, preventative care, using every skill they could to help treat patients. To me, that's the primary goal of medicine."

She is currently researching the quality of drinking water in South Florida with fellow student Besty Jacob and faculty adviser Robert Pomeroy, Ph.D., an associate professor in the Division of Math, Science, and Technology. Rego is also compiling an interactive CD-ROM for future students with eight other members of the Pre-Medical Society. She explained, "We decided to make our own photographs and videos to show, on an interactive CD-ROM, every bone, muscle, nerve, and internal organ of a cat."

As president of the Pre-Medical Society, Rego has helped the organization host speakers and hands-on events that allow members to experience life in the medical field, including suture clinics, injection workshops, CPR certifications, and participation in free health care clinics. "At the clinics, we checked the patients' feet and lower legs. Faculty members provided feedback on our accuracy." Members also supported volunteer and community service opportunities and attended conferences in Chicago and Washington, D.C.

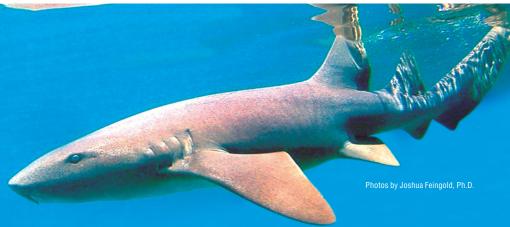
Serving as head of an organization has been a positive experience for Rego. "Handling business issues with friends and peers had its ups and downs, but it's made me a stronger person. I found myself in new situations where I learned how to resolve conflicts."

The Honors Program has been another valuable resource for her academic career. During her first year, she attended the national conference, where she observed research presentations and met honor students at other universities. Honors also provided Rego with academic scholarships and challenging coursework. "Honors courses provided great opportunities to interact with others who have similar goals and work ethics," she said.

The most challenging aspect of Rego's student career has been balancing her responsibilities. "Being president of Pre-Med was a great opportunity, but it took time away from a lot of my other interests," which included being a physics teaching assistant. She is also a member of Beta Beta Beta, the biology honor society, and the Alpha Chi National Honor Society. Rego volunteers at the Westside Regional Medical Center and has a part-time job on campus as well. An active member of the Best Buddies organization, she participates in fund-raising walks supporting those with autism.

Rego's advice for incoming students matches her experience closely. "Try to get involved as much as possible in activities that will help you understand the career path you want. I did what I felt was needed, but looking back, it was a lot. Managing my responsibilities helped prepare me for medical school and my career."

More Shark Spirit Than Most





"I chose
a field in
which I
can have
adventures."

Gina Shure with manatee

A marine biology major and an Honors Program student, Gina Shure intends to pursue her master's degree in oceanography at NSU. "I'd never even been snorkeling until I moved to Florida from Colorado. Then I knew that underwater is where I belong." Since then, she has been diving all over the world. "It's peaceful, and I can dive to the same place, time after time, and see something new. I don't think about anything else but where I am and how beautiful it is."

Shure particularly loves very deep water "where I can look up the boat's anchor chain and can't see the boat anymore, and I can't see the bottom. You can't feel gravity, can't tell up from down except for the direction of the bubbles."

Forum: Do you worry about sharks?

Shure: I'm hoping to study sharks. The more I see, the happier I am. Once I was photographing anemones and felt the hair on the back of my neck stand up. I turned and saw lots of teeth. But I also noticed what a beautiful creature the shark was. I hope someday humans become as perfectly adapted to our environment as an ordinary shark is.

The amount that sharks need to eat for their body size is minimal. And they don't kill for fun. Sharks only kill because they must. Not for cash, or pleasure, or from wounded pride, or from feeling the world isn't kind enough to them.

Forum: What else are you studying?

Shure: My big project right now is researching deep sea coral. Before we know how to help the sea, the first step is figuring out what's there. I'm the undergraduate assistant on this project. My job is to look at images and count what's there.

Forum: Where are you going to take your work when you finish college?

Shure: Hopefully, to South Africa to work with the great white sharks there. But first, I'll probably do my master's research in the Galápagos. It's full of opportunities there that are not tame, at-your-computer research.

I chose a field in which I can have adventures, go to work every day, and not know what's going to happen. I don't want to be back in the lab a lot. I could study anything in the sea and be happy. Even with this coral research, we're discovering new understandings about life that exists out of reach of the sun.

22



