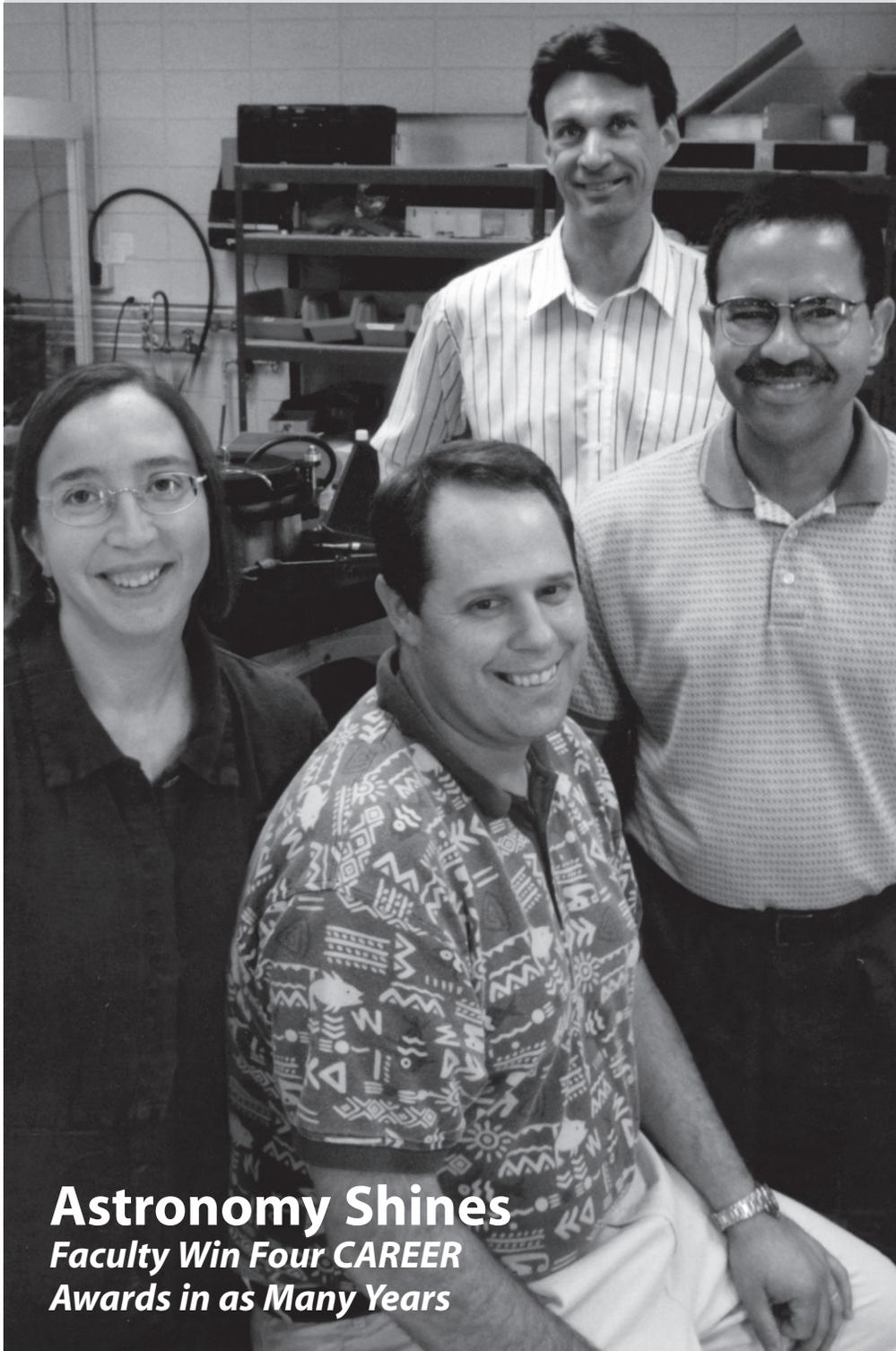


CLASnotes

Vol. 15

The University of Florida College of Liberal Arts and Sciences

Nos. 6/7



Astronomy Shines
*Faculty Win Four CAREER
Awards in as Many Years*

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Around the College

DEPARTMENT NEWS

Botany

Jack Putz was recently invited to speak at the University of Iowa as part of a distinguished lectureship series on "Economic Development and Environmental Protection: A Challenge for the 21st Century." The Iowa City Foreign Relations Council sponsored the series of presentations, and Putz's talk was titled "Conservation with Chainsaws: Market Forces and Improved Management in Working Tropical Forests." Putz is a senior research associate with the Center for International Forestry Research (CIFOR) in Indonesia, and his work focuses on the ecological basis of sustainable management of both old and new world tropical forests.

History

Jon Sensbach was appointed a National Humanities Center Fellow for the 2001-02 year by the National Humanities Center, which is a private, independent institute for advanced study in the humanities. Sensbach is one of 42 fellows named for the upcoming year. The fellows will work individually on research projects and exchange ideas in seminars, lectures, and conferences at the center, which is

located in Research Triangle Park, NC. Sensbach's project is titled "Rebecca's Revival: The Origins of Afro-Christianity in the Atlantic World."

Mathematics

A fundamental research paper by **David Drake**, coauthored with G.H.J van Rees and W.D. Wallis and titled "Maximal sets of mutually orthogonal Latin squares," was selected by the journal *Discrete Mathematics* to be in the Editors' Choice Edition. Elsevier Science, which publishes the journal, has posted the paper online at <www.elsevier.nl/inca/publications/store/5/0/5/6/1/0/>.

Psychology

James Shepperd presented a paper titled "Judging Relative Risk: Optimism in Personal Estimates or Pessimism in Target Estimates?" at a conference on social psychology and public health in Chambéry, France in May.

Religion

At the spring initiation of the UF chapter of the honor society Phi Kappa Phi, **Richard Hiers** was presented with a Certificate of Appreciation for Contribution to

Higher Education. Hiers is a past president of the UF chapter, which was founded in 1911. Each year the society elects to membership students who are graduating in the top 10 percent of their respective colleges or programs throughout the university; it also provides several scholarships to outstanding students.

In May, Hiers also had an article published in the online journal *Forum on Religion and Ecology*. The article, titled "Reverence for Life and Environmental Ethics in Biblical Law and Covenant," can be found at <[envi ronment.harvard.edu/religion/research/Christianity/hiers_1.htm](http://environment.harvard.edu/religion/research/Christianity/hiers_1.htm)>.

Sociology

Felix Berardo was invited to Haifa, Israel in June to participate in an international conference on "The Family, the Internet, and Privacy" at the University of Haifa. The special invitation recognized Berardo's contribution to the sociology of privacy and the family. Conference workshops will be devoted to analyzing and interpreting data recently collected in Israel, replicating a similar large-scale study conducted in the US. The study explores patterns of

computer use and general attitudes towards the internet, with a special emphasis on issues of privacy and release of information on the internet. Berardo will address the question "Has the Family Lost the Battle Over Privacy?" using the area of medical privacy to illustrate the onslaught of infringements now taking place in the health care industry.

Jay Gubrium presented a three-day seminar titled "Narrative Approaches to Social Research for the Qualitative Social Research Unit" at Tampere University, Finland in May. The seminar was part of a series of presentations he has been giving in the Nordic countries on the intersection of narrative practice, institutional cultures, and social interaction.

Women's Studies and Gender Research

Antoinette Emch-Deriaz organized a panel titled "Rousseau's Geneva for the American Society" for the Eighteenth Century Studies' annual meeting in New Orleans on April 18-20. She also presented her paper, "The Reality/Ideality of Geneva."

Introducing New CLASnet PC Techs



Clockwise from lower left: Bob Childs, Leon Buckles, Maureen Busby, and Christina Neipert provide PC computer and networking support to departments.

The John G. Thompson Research Assistant Professorship

During a reception held at the Keene Faculty Center on April 4 in honor of National Medal of Science winner John Thompson, Interim Dean Neil Sullivan announced the creation of the John G. Thompson Research Assistant Professorship in Mathematics. This will be a three-year position offered every year and open to young PhDs in all areas of mathematics.

Mathematics Chair Krishnaswami Alladi says, "A number of top mathematics departments throughout the country have prestigious named assistant professorships. By having Professor Thompson's name attached to such a position, we will gain national attention and attract the best young minds in mathematics. I am glad that this idea received strong support from the dean, the provost, and the vice president for research."

In 2002 Thompson will celebrate his 70th birthday, and a Special Year in Algebra is being planned for the occasion. The first appointment of this newly formed assistant professorship will be during the 2002-03 year.

Correction: The **Maurice Coffyn Holmes Memorial Scholarship** can be awarded to either graduate or undergraduate students. In the May issue, we mistakenly referred to the scholarship as the Coffyn-Holmes Dissertation Fellowship.

Associate Dean Becomes Associate Provost

CLAS Associate Dean for Faculty Affairs Joe Glover will be leaving the dean's office at the end of June. Glover is the university's new Associate Provost for Academic Affairs and will be working in Tigert. After serving as math department chair for five years, Glover came to the dean's office in July 1998. Former CLAS Dean Will Harrison created Glover's position to deal with faculty matters such as tenure, promotion, salary, and teaching awards. Harrison says the job calls for someone who has the respect and trust of the faculty, and Glover has been superb in the position. "Joe will be missed in CLAS, but he is ready for the next level. He is one of the most efficient people I know, rapidly cutting through the academic dreck to solve seemingly intractable problems."

As associate provost for academic affairs, Glover's job duties will include serving as UF's articulation officer in charge of community college relations, managing university-wide grievances for faculty and professional school students, and overseeing UF's tuition exchange program. Interim Dean Neil Sullivan says Glover's new position will allow him to continue serving CLAS and the university. "Through his attention to detail and to the needs of students, as well as his insistence on high standards, Joe has served our college with distinction."



List of Promoted Professors, Effective Fall 2001

Distinguished Professor

Steven Albert Benner, *Chemistry*
Louis Joseph Guillette, Jr., *Zoology*

Professor

Aida A. Bamia, *African and Asian Languages and Literatures*
Thomas W. Gallant, *History*
Angel Kwolek-Folland, *Women's Studies*
Scott A. McCullough, *Mathematics*
Julian M. Pleasants, *History*
Luise Susan White, *History*

Associate Professor

Monika Ardel, *Sociology*
Shifra Armon, *Romance Languages and Literatures*
Tim D. Cleaveland, *History*
Kimberly Lynn Emery, *English*
Alice Freifeld, *History*
Andrey Korytov, *Physics*

Sheryl T. Kroen, *History*
Kenneth J. Logan, *Communication Sciences and Disorders*
Ellen Eckels Martin, *Geological Sciences*
Dmitrii Maslov, *Physics*
Joseph F. Spillane, *Criminology and Law*
Weihong Tan, *Chemistry*
Pham Huu Tiep, *Mathematics*
Phillip E. Wegner, *English*
Caroline R. Wiltshire, *Linguistics*

Research Professor

Margaret M. Bradley, *Psychology*

Scientist

Khalil A. Abboud, *Chemistry*

Associate Scientist

Ion Ghiviriga, *Chemistry*
Jacobo Konigsberg, *Physics*

CLAS Retirees

The following CLAS professors retired during the 2000-2001 academic year:

Corbin S. Carnell, *English*
Peggy Conway, *Political Science*
Brain M. DuToit, *Anthropology*
Dana Griffin, *Botany*

Marilyn Holly, *Philosophy*
Dorothy Nevill, *Psychology*
Carolyn Smith, *English*

Dial Center's Public Speaking Competition

The eleventh annual Public Speaking Students Forum was held on April 11th. This competitive public speaking event is co-sponsored by UF's Dial Center for Written and Oral Communication and McGraw-Hill Publishers. Five student speakers were selected to compete from over 1,000 UF students who were enrolled in the Dial Center's introductory course in public speaking over the past year. These five students, who were nominated by their instructors, presented speeches on topics of their own choice. The topics included questioning eyewitness testimony, the worthiness of the SAT, and promiscuity among America's youth.

This year's judging panel included: David Hedge, Political Science; Marilyn Roberts, College of Journalism and Communications; David Foster, UF Speech and Debate Team president; and Dan Moors of McGraw-Hill Publishing. Slade Dukes, a graduate assistant at the center, was the master of ceremonies. He presented cash awards to the top three speakers. Taking first place as the most communicative speaker was **Courtney Dealy**, a junior majoring in psychology and Spanish. **Reid Mullen**, a political science major, was second and **Starr Chiodo**, a junior in telecommunication production came in third.

The Dean's Musings

University Summer

The time when universities essentially closed down over the summer has long passed. Today's research university, and UF is no exception, is a bustling enterprise offering a full range of programs from basic courses of instruction to advanced research. In CLAS, summertime finds colleagues in the field from the Yucatan peninsula to the Tibetan highlands, while others on campus take the opportunity to complete that anthology or repeat that stubborn experiment that needs the extra time not available in the academic year. It is true some take leave and flee to cooler climes, but they are fewer than in the past.

The summer also offers a valuable time for reflection on the future, as well as a chance to prepare for the coming academic year. This opportunity is all the more important this year as we gear up for the new governance structure and the changes that are anticipated. There is a special need to create new structures to ensure the welfare of our staff, students and faculty, who will be under our charge in a more direct manner in the new system.

While the budget prospects are challenging (to say the least), in order to build new structures with new staff, CLAS must continue to focus on its goals and long term plans. College faculty have developed new initiatives in international areas ranging from the partnership in the new telescope being constructed on the Canary Islands to the advanced studies of land use and climate change in southeast Florida and Guatemala, to new ventures in bioinformatics. These initiatives, if successful, can propel the arts and sciences at UF into the top tier of public universities.

Providing the highest quality in our core programs is critical if we are to meet our responsibility to the state to provide future leadership for Florida. Emerging industries and growing socio-economic needs are crying out for improved standards in education and for individuals with advanced skills at all levels. While one or two of our state leaders have said that they do not want to see a Berkeley or M.I.T. of the South in our state, most of us certainly agree that Florida cannot attain the economic level that is within our grasp without such institutions.

Neil Sullivan
<sullivan@phys.ufl.edu>

Read CLASnotes online at
<web.clas.ufl.edu/CLASnotes/>

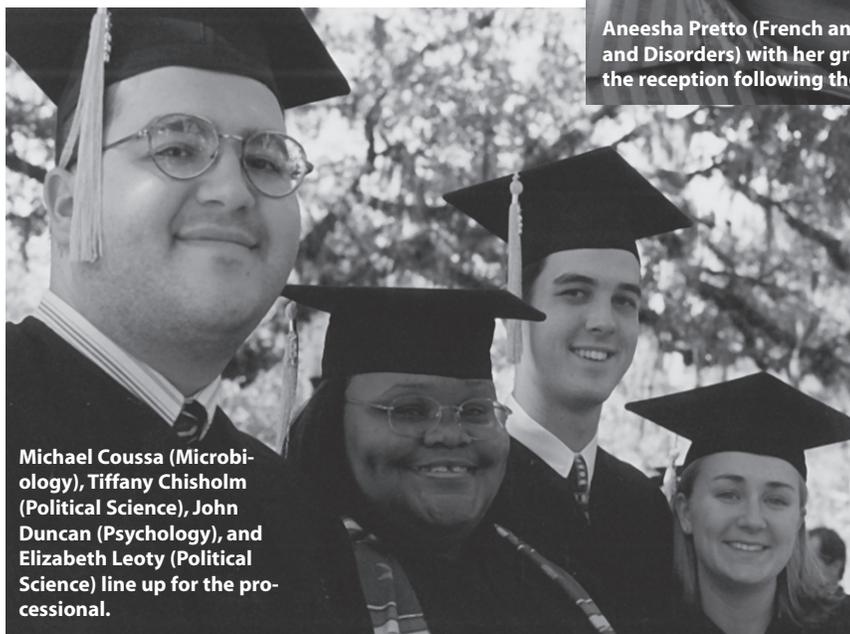
Spring 2001 Baccalaureate

CLAS graduates, family, friends, and faculty filled the University Auditorium for the 19th Annual CLAS Baccalaureate Ceremony on Friday, May 4 to celebrate Spring Commencement.

During the program, Interim Dean Neil Sullivan introduced top CLAS scholars and faculty, the Gainesville Civic Chorus performed, Michelle D. Hardwood gave the valedictory speech, Patricia Craddock (president pro-tempore to the faculty) honored retiring faculty, and President Charles Young spoke about the importance of a liberal arts and sciences education.



Aneesha Pretto (French and Communication Sciences and Disorders) with her grandmother Mary Owens at the reception following the ceremony.



Michael Coussa (Microbiology), Tiffany Chisholm (Political Science), John Duncan (Psychology), and Elizabeth Leoty (Political Science) line up for the processional.

Outstanding Graduates

Each semester, the UF Alumni Association recognizes an elite group of outstanding graduating students for their performance on and off campus. Of the 11 graduates honored at the May 5 commencement ceremonies, six were CLAS students.

Four-Year Scholars

Kristan M. Raymond, *Zoology*
Hamp Sessions, *Chemistry*
Jessica M. Valenzuela,
Psychology

Outstanding Female Leader

Jennifer Schwanke,
Cell Biology

Two-Year Scholar

Liisa Ann Collins, *English*

Outstanding Male Leader

Brian Dassler, *English*

CLAS Valedictorians 2001

The following CLAS graduates were honored at Baccalaureate on May 4 for maintaining a 4.0 GPA throughout their undergraduate careers at UF.

David S. Almeling, *Political Science*

Nathalia A. Christie, *Psychology*

Melinda M. Cothorn, *Criminology and Law*

Mark W. Delaquil, *History*

Janice D. Gorin, *History*

Michelle D. Harwood, *Psychology*

Jessica M. Jones, *Anthropology*

Daniel E. Manzano, *English*

Lindsay C. Maxon, *Communication Sciences and Disorders*

Jason S. Nochimson, *Political Science*

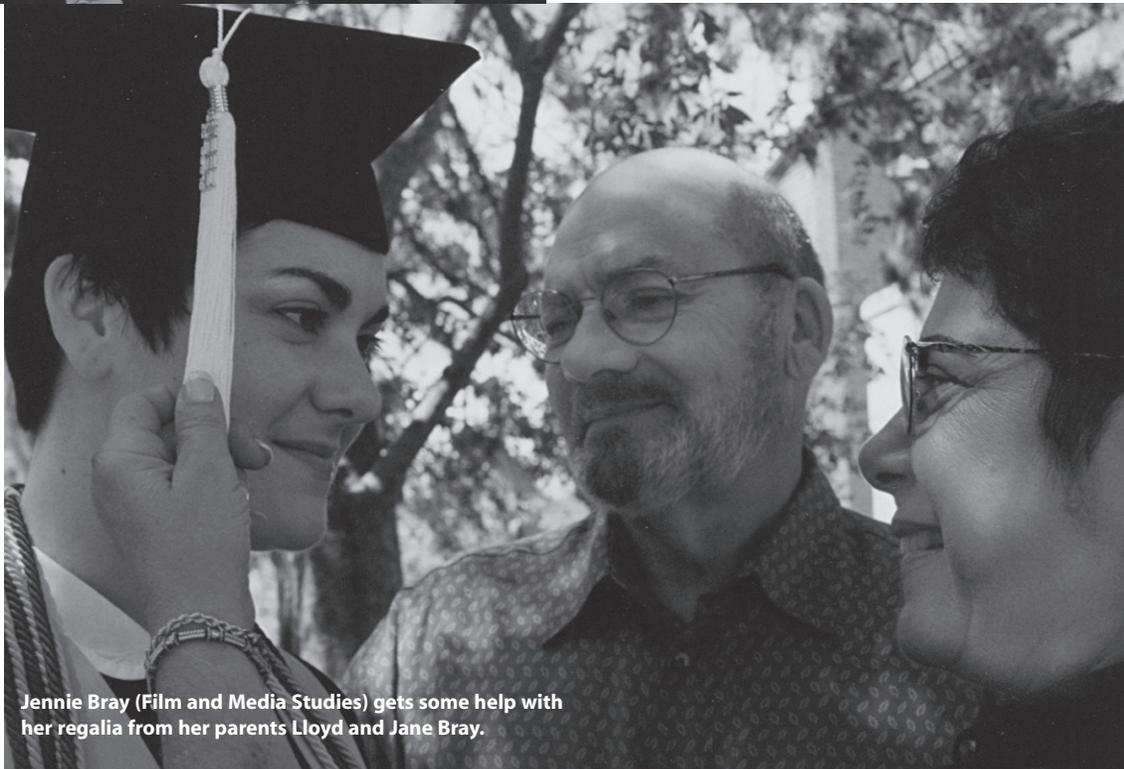
Elizabethan O'Shields, *Psychology*

Kristan M. Raymond, *Zoology*

Katharine E. Ruffett, *Communication Sciences and Disorders*

Hamp Sessions, *Chemistry*

Jessica M. Valenzuela, *Psychology*



Jennie Bray (Film and Media Studies) gets some help with her regalia from her parents Lloyd and Jane Bray.

E. Raymond Andrew

June 27, 1921–May 27, 2001

World-renowned physicist E. Raymond Andrew passed away on May 27 at his home in Gainesville. Andrew was a graduate research professor emeritus in the Department of Physics. He was a member of the Royal Society and taught at UF from 1983–1998. Andrew was renowned internationally for his work on magnetic resonance and in particular for his pioneering contributions to nuclear magnetic resonance (NMR) spectroscopy and magnetic resonance imaging (MRI), which has made such an enormous contribution to medicine.

“Although Andrew was truly one of the greats in his field of science, he always had time to talk to and encourage young scholars and students,” says Interim Dean Neil Sullivan. “He was a statesman and a gentleman in all his interactions with fellow scientists, staff and students. He will be dearly missed by all who had the fortune to know him.”

Andrew was a graduate of the Cavendish Laboratories, Cambridge, and he received a bachelor’s degree in 1942, master’s in 1946, doctorate in 1948 and doctor of science in 1964. His first work on NMR came shortly after it was discovered at Harvard, where he was a Commonwealth Fellow from 1948–49. He returned to Scotland as lecturer at St. Andrews where he carried out seminal NMR studies of solids. Many of his experiments are classics in today’s textbooks.

Andrew moved to the University of Wales (Bangor) in 1954 and was professor and head of the Department of Physics until 1964. During this period he made one of his most significant discoveries, the narrowing of NMR lines by magic angle spinning, which has been the foundation of modern high resolution NMR studies for chemical structures. In 1964 he was appointed Lancashire-Spencer Professor and head of physics at Nottingham where he became dean in 1975. There, Andrew continued his work on using rapid rotation of samples for high resolution studies and made another major contribution to the field of magnetic resonance with his pioneering studies on MRI.

He left Britain for the US in 1983 to join the NMR physics group at UF as

graduate research professor with joint appointments in the Departments of Physics, Radiology, and Nuclear Engineering. Every time Andrew made a move he added another quantum to the advances in NMR. Indeed, he played a major role in establishing the vision for the National High Magnetic Field Laboratory in Florida in 1990.–Andrew continued a very active program at UF with particular interest in the use of a recently acquired 3 T whole body-imaging capability jointly operated by UF and the Veterans’ Administration Medical Center in Gainesville.

Andrew’s work was characterized by his exceptional ability to see things clearly and a careful insight into the fundamentals of his area of physics. All in the field are deeply indebted to him, not only for his accomplishments but also for the style that was his hallmark: he was a firm but kind gentleman of high standards that could only come from an aristocrat of the academy.

Andrew is survived by his wife Eunice, twin daughters, Patricia Andrew and Charmian Hopkins, and his grandchildren Heather and Holly Hopkins.

A memorial service will be held at UF later this summer. Please contact the Department of Physics for more information.

Donations are being collected to establish the E. Raymond Andrew Memorial Fund. You are invited to send contributions to:

The Physics Department, Fund #2233
c/o University of Florida Foundation, Inc.
PO Box 14425
2012 West University Avenue
Gainesville, Florida 32604



Spinning Spins

A Tribute to Raymond Andrew

Today we salute
A great man of repute
We bring greetings from near and afar,
With boundless delight
We applaud his insight
Into the workings of NMR.

With magical skill
He could select at will
The weak from the strong interaction,
Revealing to all
Those shifts large and small
That yield such key information.

Few experiments can surpass
The versatility of MAS
In probing the secrets of nature
We ponder anew
The progress that’s due
To Raymond’s great genius and stature.

Vincent McBrierty, 1997

Astronomy Shines

Faculty Win Four CAREER Awards in as Many Years

In April, when Ata Sarajedini received a Faculty Early Career Development Program (CAREER) award from the National Science Foundation, he became the fourth faculty member in the astronomy department in four consecutive years to win the prestigious award. Winning a single CAREER award is a boon for a department, and “four in a row is truly amazing,” says Stan Dermott, chair of the department.

CAREER awards are given by the NSF to junior faculty in order to support overall career development. The awards are intended to support research as well as education and outreach. The NSF describes the program as enabling “the early development of academic careers dedicated to stimulating the discovery process in which the excitement of research is enhanced by inspired teaching and enthusiastic learning.” The award is usually in the range of \$500,000 and is given out over a five-year period.

“I was ecstatic when I found out that I had won,” recalls Sarajedini. “As a science educator you need external funding to keep your research going. Now I know that I have that for the next five years.” Sarajedini’s proposal, “Stellar Populations in the Local Volume,” involves measuring and analyzing the colors of stars in our galaxy, the Milky Way, and its galactic neighbors, collectively known as the Local Group. The colors of stars are indicators of their temperatures—hot stars are blue and cool stars are red. The temperature is in turn a measure of the star’s evolutionary state and its chemical composition. Therefore, the colors

of stars can be used to study the formation, evolution, and chemical enrichment properties of both stars and the galaxies in which they reside.

By studying the ages and chemical compositions of Local Group galaxies with a range of masses—from dwarfs to giants—Sarajedini’s research will help shed light on the validity of the accretion hypothesis. This hypothesis is the most popular theory for the formation of galaxies such as the Milky Way and involves a gradual build up achieved by tearing, shredding and assimilating much smaller dwarf galaxies. This accretion picture of galaxy

formation has recently received dramatic support because of the discovery of a dwarf galaxy that is apparently in the process of being cannibalized by the Milky Way.

Like all CAREER grant programs, the involvement of undergraduate and graduate students is an important component of Sarajedini’s research. His projects involve students at the highest levels of research. They will have the chance to work with observations from the Hubble Space Telescope in addition to taking their own data at observatories in southern Arizona and the Andes mountains in Chile. “I really enjoy mentoring

students, and one-on-one interaction is very important.” says Sarajedini. “Seeing them learn new concepts, understand research, and ask questions is incredibly rewarding.”

Sarajedini’s CAREER grant comes on the heels of the one awarded to Fred Hamann just a year ago in the spring of 2000. Hamann had only been at UF for a month when, encouraged by Dermott, he applied. “I had been developing this project for the last six or seven years,” Hamann explains. “The challenge in applying for the CAREER award was to develop a five-year plan and not think only about the next step.”

Hamann’s CAREER research focuses on a particular exotic aspect of galaxy formation, quasars (or quasi-stellar objects). Quasars live in the centers of massive galaxies. They are called “quasi-stellar” because they appear to us as unresolved points of light, like stars. But quasars are a trillion times brighter. They typically outshine the entire galaxy around them. That extreme brightness allows us to observe quasars out to the limits of the observable universe. From those great distances, the light takes billions of years to reach us, so we can essentially look back in time.

Hamann takes advantage of this ability to look back in time to study the early evolution of both the quasars and their host galaxies. The leading theory about quasars is that they are powered by black holes, which are a million to a billion times more massive than the sun. Matter from the surround-



I had been developing this project for the last six or seven years. The challenge of applying for the CAREER award was to develop a five-year plan and not think only about the next step.

—Fred Hamann

ing galaxy is drawn in, forming an accretion disk around the black hole. This material heats up and glows brightly as it spirals furiously into the gravitational abyss. The resulting light source is the quasar. Hamann analyzes spectra of distant quasars to infer basic properties of their gaseous environments, such as their dynamics, temperatures, elemental compositions and total masses. The goal of his work is to understand quasars better in the larger context of the formation and evolution of galaxies.

Hamann draws on his research to contribute to various outreach projects in the community. In February, for instance, he gave a talk about quasars to the Alachua County Astronomy Club. "I consider it a part of my job to try to communicate in public venues and make connections between UF and the community," remarks Hamann. "This was an audience extremely interested in astronomy and there were questions throughout."

While Hamann was putting the final touches on his proposal for the NSF, Richard Elston was finishing his first year of research supported by a CAREER award. In 1999 Elston not only won the CAREER award, in the fall he was notified that he had been selected for the distinguished Presidential Early Career Award for Scientists and Engineers (PECASE) award as well. Each year, a select group of CAREER winners are recognized by the president with PECASE awards. This award supercedes the

CAREER award and is "the highest honor bestowed by the United States Government on scientists and engineers beginning their independent careers."

The goal of Elston's CAREER/PECASE study is to understand how galaxies and the structures they trace in the universe came into being. Owing to their distances, galaxies become very faint and, because of the expansion of the universe, all of the visible light that astronomers typically study from galaxies is "redshifted" into the near-infrared. Elston has constructed the world's first near-infrared multi-object spectrometer called "FLAMINGOS." While infrared spectrometers exist on nearly every large telescope in the world, they can only observe one object at a time. FLAMINGOS allows 50 to 100 objects to be recorded simultaneously, so an entire class of objects can be studied in detail for the first time. FLAMINGOS imaging will allow Elston to find galaxies during the crucial epoch when galaxies and clusters are forming.

The year before Elston won his CAREER/PECASE award, his colleague and wife, Elizabeth Lada, was recognized with

the same distinction. Lada was the first of the consecutive four astronomers in the department to win a CAREER award. Less than a year later, she too went to the White House to receive the prestigious PECASE award.

Lada is using the funding to study the formation and evolution of young stars and their potential planetary systems. Results from Lada's earlier work have shown that most stars in our galaxy form in dense clusters of stars rather than in relative isolation. The extent to which such a dense environment alters the formation and evolution of the stars and their subsequent planetary systems is unknown and is the focus of her current research.

"These awards have been extremely helpful in my career and have allowed me to pursue long-term and sometimes risky projects without worrying about where the funding will come from," explains Lada. "I am focusing on larger projects and am able to research an area more thoroughly, therefore having a greater impact on solving a problem."

Along with directly involving both graduate and under-

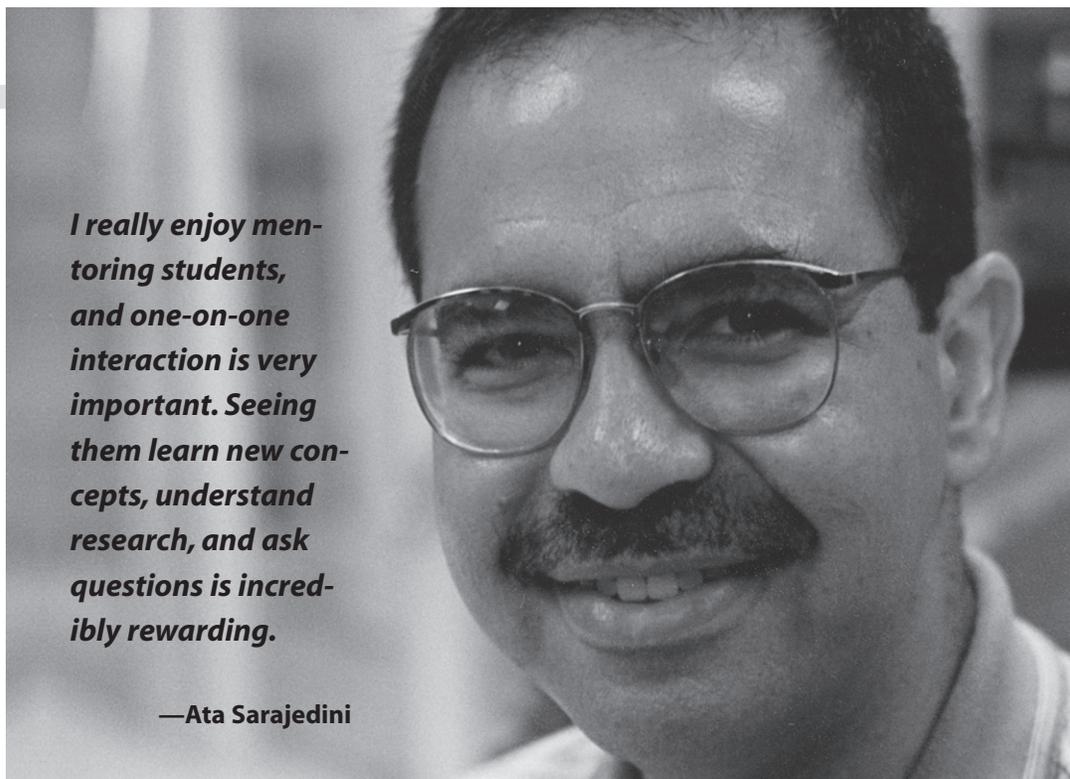
graduate students in their research programs, Elston's and Lada's NSF CAREER/PECASE grants both have strong educational components. For instance, jointly they have organized a series of "Children's Astronomy Nights" that are designed to increase science awareness and enjoyment among children in grades K-12. This program has been expanded to bring UF graduate students into classrooms in Alachua County, thus providing a unique teaching experience for graduate students as well as exciting science lectures for the students.

Lada, Elston, Hamann and Sarajedini are all poised to continue to make remarkable contributions to the study of astronomy, both through their own research as well as through mentoring students and community outreach. The prestige and potential that come with winning a CAREER award have been multiplied by four in their department. "These awards will allow our department to grow in strength and stature and to achieve an outstanding academic environment," says Sarajedini. For this department, not even the sky is the limit.

—Laura H. Griffis

I really enjoy mentoring students, and one-on-one interaction is very important. Seeing them learn new concepts, understand research, and ask questions is incredibly rewarding.

—Ata Sarajedini



2001-2002 UFRF Professors

The University of Florida Research Foundation (UFRF) recently recognized its annual class of UF Research Foundation Professors. The three-year professorships were created by UFRF to recognize faculty who have established a distinguished record of research and scholarship that is expected to lead to continuing distinction in their field. Six CLAS professors received the awards this year, which include a \$5,000 annual salary supplement and a one-time \$3,000 research grant.

Since it was founded in 1986 to enhance research at UF, UFRF has become the primary vehicle for handling research and intellectual property interactions with private companies and foundations. Today, it manages more than 800 grants and some 60 licensed technologies.

Alexander Dranishnikov

Alexander Dranishnikov, professor of mathematics, works in the field of topology, which is an offshoot of geometry. The great mathematician David Hilbert defined a topologist as a person who does not see the difference between a doughnut and a beer mug, since each has one hole in it. These holes are “visual” topological invariants. Many geometric objects have less visual topological invariants. One of them is dimension. The dimension of a line or a plane is easy to see, but seeing the dimension of general topological spaces is not easy.

Dranishnikov’s most prominent research achievement to date is solving the Alexandroff problem, first stated in the 1920s, which concerns the equivalence between geometric and algebraic approaches to the definition of dimension. Several prominent mathematicians were unable to solve the problem, and by the 1970s it had gained the reputation of being unbreakable. Using a unique application of a mathematical tool called the K-theory, Dranishnikov solved the Alexandroff problem in 1988. The K-theory, which has been around

for more than 30 years, is an evolutionary step in the development of the idea of homology (the classification of configurations into distinct types that imposes an algebraic structure on families of geometric figures). For his solution of the problem, Dranishnikov received an award from the Russian Academy of Science as well as the Bing Award, presented to Dranishnikov in 1990 at Southwest Texas State University.

His current research is connected with one of the central problems in topology, the Novikov Higher Signatures Conjecture. He has discovered that the Novikov Conjecture, from a completely different part of topology, resembles the Alexandroff Problem when considered from a macroscopic point of view.

David Evans

David Evans, professor of zoology, is a comparative physiologist who studies how the gills of fishes play a vital role in such important processes as gas exchange, salt and water regulation, excretion of nitrogen waste, and regulation of blood acidity (pH). Each summer

since 1978, Evans’ research has taken him to the Mt. Desert Island Biological Laboratory in Maine to work on such exotic species as dogfish sharks, lampreys, hagfish, and eels. His work has been funded continuously since 1970 by the National Science Foundation.

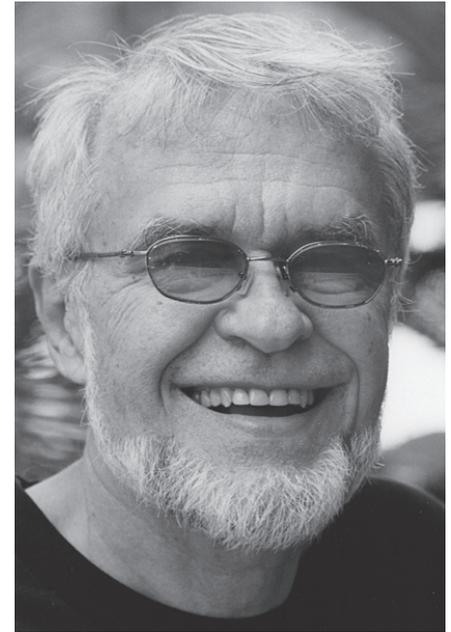
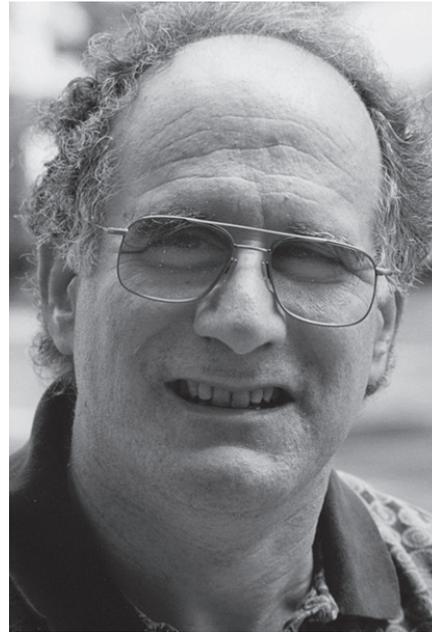
Evans has given numerous invited talks in the US, Canada, and Europe and has published over 200 refereed papers, abstracts, and articles. In addition to the NSF, his research has been funded by the National Institutes of Health and the American Heart Association. His edited book, *The Physiology of Fishes*, is now in its second edition and was considered a best seller by CRC Press when the first edition passed the 2,500 sales mark. The book is used throughout the world in university courses on fish biology and by numerous research scientists.

Evans is currently serving on the Integrative Animal Biology Panel of the NSF and also sits on the editorial boards of the *Journal of Comparative Physiology*, the *American Journal of Physiology*, and *Physiological and Biochemical Zoology*.

Anna Peterson

Anna Peterson is an associate professor of religion and an affiliate of both the Center for Latin American Studies and the College of Natural Resources and the Environment. Her research examines the mutual shaping of religion and politics. She has worked extensively in Latin America, exploring the ways that religious communities interpret and live out ideas. In her recent research, Peterson participated in a comparative study of Latino and Latin American churches, and collaborated





with Manuel Vásquez (religion) and Philip Williams (political science), as well as Latin American scholars. This research has resulted in a co-edited volume, *Christianity, Globalization, and Social Change in the Americas*, to be published by Rutgers University Press in July.

In addition to working on religion and society in Latin America, Peterson has written extensively on social and environmental ethics. In her most recent book, *Being Human: Ethics, Environment, and Our Place in the World*, she draws on ethnographies, the natural sciences, and other sources to build an argument about the ways that ideas about non-human and human nature are intertwined in various religious and philosophical worldviews [see Bookbeat, p. 11]. Peterson's different research interests are united by an overarching concern with the ways religious communities articulate ethical ideas and the ways those ideas in turn have consequences in concrete social and historical conditions.

Alan Spector

Alan Spector, professor of psychology and assistant director of the UF Center for Smell and Taste, studies the sense of taste. As he likes to point out, "although frequently taken for granted, the sense of taste is very important in guiding feeding and drinking. The taste buds stand guard over the rest of the alimentary tract and anything that is ingested must first pass their scrutiny." Spector pursues his study of taste in part by manipulating the gustatory system of laboratory rats and mice in order to understand better the neurobiology of taste function. He uses a specially designed rodent taste-testing apparatus, which he refers to as his "behavioral microscope," in many of these experiments.

Spector is currently funded by the National Institute on Deafness and Other Communication Disorders (NIDCD) to study the functional consequences of oral nerve injury and

regeneration on taste perception. With the aid of his students and colleagues, he has discovered several severe and unequivocal impairments in performance on various taste-related behavioral tasks as a result of nerve damage. He has also recently received a grant from the NIDCD to study gustatory function in selected inbred strains of mice suspected of having specific abnormalities in taste perception. Once the exact nature of the taste-related behavioral phenotypes are identified, the strains can be used in a comparative manner by biomedical investigators in the search for the underlying anatomy and physiology associated with the perceptual abnormality.

Kenneth Wald

Religion and politics may be two subjects best avoided in conversations with strangers, but their volatile mix provides Kenneth Wald, professor of political science and director of the Center for Jewish Studies, with an expansive research agenda.

One of the first scholars to call attention to the importance of religion in contemporary political behavior, Wald has examined the role of churches as institutions that form political ideas, the significance of religious differences in voting, and the behavior of religious activists in public office. Together with UF colleagues, he has pioneered the study of value-based urban conflicts over school-based health centers and gay rights ordinances. Most recently, he has investigated how the political outlooks of religious groups differ across national borders.

He helped found the Religion and Politics Section of the American Political Science Association. His widely cited text, *Religion and Politics in the United States*, is now undergoing revision for a fourth edition and has been published in Chinese and Indian editions. He also served on the editorial board of the *Encyclopedia of Politics and Religion*, and

he has twice assisted the American National Election Study, the largest NSF grantee in political science, in developing better ways of measuring religious attitudes and behavior. Wald has received Fulbright fellowships on two occasions and serves on the screening committee for the Fulbright program in Israel.

James Winefordner

James Winefordner is a graduate research professor in chemistry. He has been at UF since 1959 and has published more than 800 scientific articles, reviews, and books. To date, 144 PhD students and 41 MS students have received their degrees under his direction. Over the past 40 years, he has obtained an average of \$500,000 per year to carry out research in the ultratrace analysis of atoms and molecules (the analysis of very low concentrations of atoms or molecules in samples) in industrial, biological and environmental materials. He has also worked extensively in fundamental, instrumental and application research involving atomic absorption, emission, fluorescence and ionization spectrometry, as well as molecular fluorescence, phosphorescence and Raman spectrometry.

His current research involves working with a group of 20 PhD and post-doctoral students on laser breakdown spectrometry (a science dealing with the interaction of light and matter) for the rapid measurement of atoms and characterization of materials. Winefordner and his students are also working on a unique method of imaging moving objects, including possible biological imaging (the area of science where the human body is imaged in surface area and depth, such as MRIs, X-rays and CAT-scans) based on laser ionization or fluorescence of mercury or cesium atoms in a special cell.

—Compiled by Bill Hardwig

Grants *through the Division of Sponsored Research*

Investigator Dept. Agency Award Title

June 2001..... Total: \$4,745,421

Corporate.....103,790

Dolbier, W.	CHE	Synquest Laboratories Inc	9,666	Organic synthesis and mechanism.
Katritzky, A.	CHE	Multiple Companies	2,727	Miles compound contract.
Katritzky, A.	CHE	Multiple Companies	3,316	Miles compound contract.
Katritzky, A.	CHE	Multiple Companies	4,090	Miles compound contract.
Scicchitano, M.	POL	Lockwood Greene Consulting	8,991	A study of households and businesses in Alachua and Branford counties regarding unemployment.
Tucker, C.	PSY	FL Chamber of Commerce	75,000	Statewide teacher training to improve grades and reduce behavior problems of African American and Latino American students.

Federal4,562,241

Stansbury, J.	ANT	NSF	4,500	The anthropology of health during reconstruction in post-hurricane Honduras REU supplement.
Sarajedini, A.	AST	NSF	160,126	Stellar populations in the local volume.
Sarajedini, A.	AST	NSF	195,131	Deep astronomy and photometry of key open clusters: a new foundation for stellar astrophysics.
Chege, M.	CAS	US DOE	129,000	Training: national resource center and foreign language and area studies fellowships.
Eyler, J.	CHE	NSF	195,000	Construction of a fourier transform ion cyclotron resonance mass spectrometer to obtain infrared spectra.
Harrison, W.	CHE	US DOE	117,299	The glow discharge as an atomization and ionization source.
Hudlicky, T.	CHE	NSF	187,816	Biocatalytic conversion of aromatic waste into useful compounds.
Kennedy, R.	CHE	NIH	266,716	In vivo chemical monitoring using capillary separations.
Martin, C.	CHE	NSF	4,311	Detoxification.
Martin, C.	CHE	US Navy	39,239	Smart membranes for detection and separations.
Schanze, K.	CHE	NSF	123,421	Photophysics of mono-disperse metal-organic oligomers.
Winefordner, J.	CHE	NSF	6,604	Advanced measurements and characterization.
Binford, M.	GEO	NASA	13,047	Land-use and land-cover change: decadal-scale dynamics of land ownership, land management, and carbon storage patterns.
Gholz, H.				
Acosta, D.	PHY	US DOE	6,540	US CMS trigger subsystem-FY.
Mitselmakher, G.				
Hagen, S.	PHY	NSF	128,974	Dynamics of polypeptide diffusion and collapse.
Sharifi, F.	PHY	US Navy	57,501	Electronically- and photonically-controlled magnetism in semi-conductors.
Stanton, C.	PHY	NSF	108,561	The ultrafast dynamics of coherent and incoherent electrons and phonons in condensed matter systems.
Branch, M.	PSY	NIH	184,135	Behavioral determinants of cocaine tolerance.
Jimenez, R.	RLL	US DOE	1,950	Language instruction: foreign language across the curriculum and FC/LAS foreign language project.
Carter, R.	STA	Agcy For Health Care Admin	125,000	Birth vital statistics: survival low birth weight and morbidity outcomes research.
Carter, R.	STA	DOH	20,000	Informatics-database management for Florida birth defects registry.
Hutson, A.	STA	NIH	33,927	Mitochondrial encephalomyopathies and mental retardation.
Hutson, A.	STA	NIH	34,480	Mitochondrial encephalomyopathies and mental retardation.
Shuster, J.	STA	NIH	2,287,363	Pediatric oncology group statistical office.
Kepner, J.				
Bjorndal, K.	ZOO	US DOC	23,726	Sea turtle tag distribution for the CMTTP.
Bolten, A.				
Bjorndal, K.	ZOO	US DOC	16,250	Management of the CMTTP database.
Bolten, A.				
Chapman, C.	ZOO	NSF	3,500	Determinants of colobine abundance: implications for theory and conservation.
Vollmer, T.	ZOO	NIH	88,124	Destructive behavior and matching theory.

Miscellaneous.....79,390

Burns, A.	ANT	UF Foundation	8,000	Zora Neale Hurston fellowship.
Bowes, G.	BOT	Miscellaneous Donors	770	Unrestricted donation.
Schanze, K.	CHE	Am Chemical Society	1,236	ACS editorials.
Scicchitano, M.	POL	FL Inst of Phosphate Research	25,190	Survey of public knowledge and perceptions of issues related to the Florida phosphate industry.
Devine, D.	PSY	Univ of Michigan	36,194	The role of orphanin fq in motivational functions in the rat.
Hollinger, R.	SOC	Multiple Sources	8,000	Security research project.

Bookbeat

Recent publications from CLAS faculty

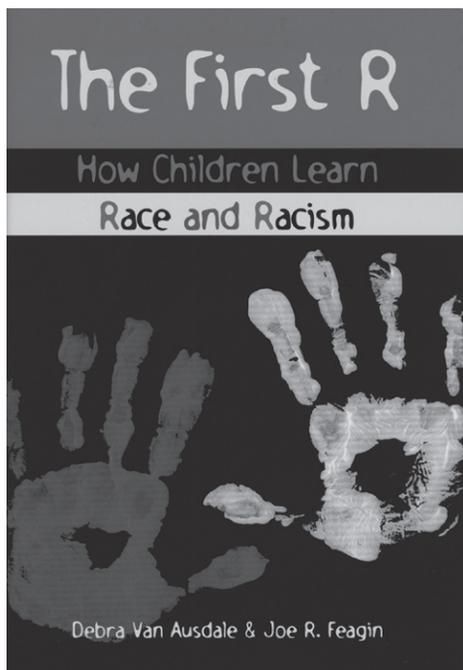
The First R: How Children Learn Race and Racism

Debra Van Ausdale and
Joe R. Feagin (Sociology)
Rowman & Littlefield Publishers

(jacket)

Writers since Piaget have questioned when and how children assimilate racist attitudes—or simply become aware of racial differences. This remarkable book offers stirring evidence that the answers may be more surprising than we ever imagined.... The careful ethnographic analysis, conducted over many months, led the authors to question many of our long-held assumptions about the nature of race and racial learning in American society. The stories of the children are compelling, often endearing, and unforgettable. They will change the way parents, teachers, and other educators understand the world as seen by children.

"A sensitive and politically sophisticated work of on-site observation and engaging scholarship which ought to shake our nation from its equanimity. The lessons we were given long ago by Dr. Kenneth Clark and, nearly one hundred years ago by W. E. B. DuBois, have yet to be internalized. Perhaps, as the authors of this valuable and stirring work suggest, it is our children who will prove to be our wisest teachers." —Jonathan Kozol, author of *Savage Inequalities: Children in America's Schools*



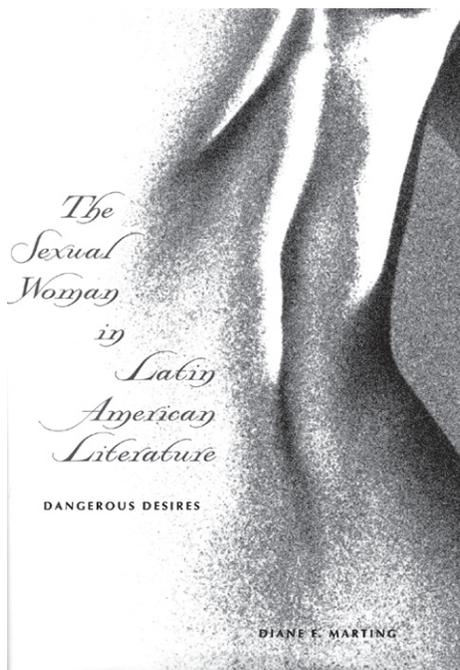
The Sexual Woman in Latin American Literature: Dangerous Desires

Diane E. Marting (Romance
Languages and Literatures)
University Press of Florida

(jacket)

Latin American fiction achieved a turning point in its representation of sexual women sometime in the 1960s. Diane E. Marting offers a richly detailed analysis of this development.

Her central idea is that in Latin America narrative women's desires were portrayed as dangerous throughout the twentieth century, despite the heroic character of the "newly sexed woman" of the sixties. She argues that women's sexuality in fiction was transformed because it symbolized the many other changes occurring in women's lives regarding their families, workplaces, societies, and nations. Female sexual desire offered an ever present threat to male privilege.... Marting's book surveys the topic of women's sexuality in the work of both men and women writers and engages two current controversies: feminist and moral issues related to the female body, and the nature of literary history.



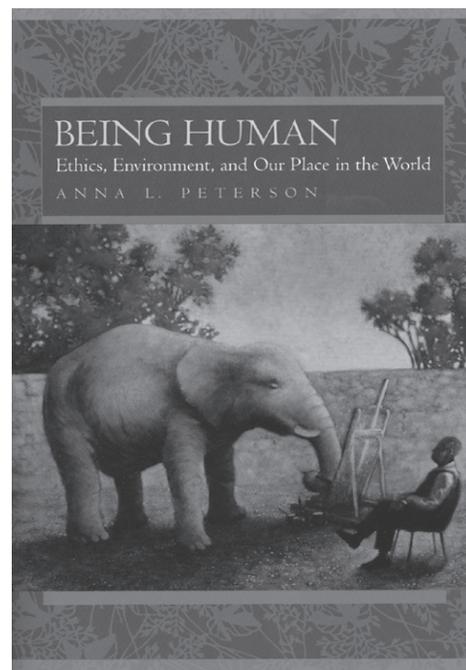
Being Human: Ethics, Environment, and Our Place in the World

Anna L. Peterson (Religion)
University of California Press

(jacket)

Being Human examines the complex connections among conceptions of human nature, attitudes toward nonhuman nature, and ethics. Anna Peterson proposes an "ethical anthropology" that examines how ideas of nature and humanity are bound together in ways that shape the very foundations of cultures. She discusses mainstream Western understandings of what it means to be human, as well as alternatives to these perspectives, and suggests that the construction of a compelling, coherent environmental ethics will require revising our dominant ideas not only about nature but also about what it means to be human.

"Anna Peterson's *Being Human* is a stellar work of integration. Peterson argues that the ideology of human exceptionalism and disconnection from the rest of nature is a major source of social and ecological harm. She draws together cultural constructionist, Asian, Native American, feminist, and evolutionary thought to present a view of the human as both an integral part of nature and a creator of culture." —Rosemary Radford Ruether, author of *Gaia and God: An Ecofeminist Theology of Healing*





AAC Advisor Named UF Advisor of the Year

LaCusia Washington, an advisor in the Academic Advising Center (AAC), has won the university-wide Advisor of the Year award. Washington was recognized at a reception at President Young's home in April. She received the CLAS Advising Award this year and was in competition with advisors from other university departments for the top honor. "I was very surprised that I won at both levels," says Washington. "It truly is an honor to be recognized for doing something I really enjoy—advising and working with students."

Washington has worked at the AAC for five years. She earned her bachelor's and master's degrees from Louisiana State University. She chose to pursue a career in counselor education at the college level because she remembers what it was like to be a somewhat confused college freshman. "I think back to when I was just starting out in college and how I had so many questions about what classes to take. I wish I'd had someone to point me in the right direction and offer some advice and guidance."

Washington is also one of the Achievement In Mainstreaming (AIM) advisors who works with first-year minor-

ity undergraduates. The AIM program's mission is to assist at-risk students with their transition into a higher education institution. Washington helped design the AIM advising process when the program was transferred to CLAS in 1997. Her other job responsibilities include serving as the budget coordinator for Preview orientation and as editor of both the *CLAS Act* newsletter for students and the *Advising Update* for departmental advisors.

Despite having a full load of advising responsibilities, Washington has also been active in the Association of Black Faculty and Staff on campus. She recently completed

a term as secretary of the group.

AAC Director Albert Matheny says Washington excels in every aspect of advising and in service to the university. "LaCusia's advising is a remarkable combination of intelligence, preparation, and grace. She is always calm and collected no matter the task or the level of stress involved. She has high expectations for her students, and she is willing to work with them to achieve their goals. They really appreciate that in her. She is one of the first to volunteer for a new job, and when she gets it, I know it will be done well."

—Allyson A. Beutke

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CLASnotes is published monthly by the College of Liberal Arts and Sciences to inform faculty and staff of current research and events.

Interim Dean: Neil Sullivan
Editor: Laura H. Griffis
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Layout/Illustration: Jane Dominguez
Copy Editor: Bill Hardwig

Photos:
Jane Dominguez: cover, p. 2, 4, 6-9, 12
Jane Gibson: p. 3
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