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CLASnotes

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The Dean's Musings

With Thanks

Frequently, in this December issue of CLAS notes, I have taken stock of the many academic blessings that we enjoy in CLAS. Over my long term, now in the twelfth year, some holidays have been brighter than others at UF. The early 1990s, for example, when Ebenezer walked the halls of Tally, December cheer was stretched extremely thin. That remembrance of Holidays Past, with the evaporating budgets, makes the recent years seem all the more delightful and rewarding. Staying the course has its rewards.

In this, my last year as dean, the health of the College makes it easier to leave a job that I have enjoyed so much. Due to the hard work and talent of many people, CLAS is enjoying an unprecedented run of success and opportunity. Not that we don't need more resources (Provost—please note), but the faculty, students, and staff have come a long way toward many goals set for CLAS. And certain groups of people have stepped forward to play pivotal roles in this progress. It is these stalwarts that I wish to recognize as having made such a difference during my time as dean.

One of the most important tasks given a dean is the appointment of department chairs and program directors. The real business of the academy takes place at the unit level, making clear the importance of the 22 chairs and 10 or so directors in determining programmatic success. At this time of year, I am reminded of their leadership in making things happen. Not only the incumbents, of course, but all those who have served over my time in office, making my job much easier. I salute them here for all they have contributed to CLAS.

In a college this size, the dean needs a lot of help in day-to-day operation. My aim in coming into the office was to persuade some of the very best CLAS faculty to work with me as associate deans and directors. A simple review of those who have filled these positions confirms the success of this initiative. First class teacher-scholars have been willing to devote a few years to making this College what it is today. By assuming dean's level responsibility and authority, they have immeasurably enhanced the progress of CLAS. I particularly am grateful for the enthusiasm, creativity, and energy that the associate deans and directors have invested in the College Office.

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Demystifying DNA

Fundamental research in CLAS a major component of new UF Genetics Institute

What do prehistoric pigs have to do with cutting edge research in genetics? Plenty, says CLAS chemist Steve Benner, who investigates many genetic-based questions, including the role of genes in life, present and past.

In the race to sequence the human genome, scientists all over the world are busy mapping out the 75,000 genes encoded in our DNA. These genes dictate the production of proteins, which, as chains of 20 amino acids, can be mapped and stored as strings of letters in a computer. Thanks to sophisticated new research, we can now understand genes, once the mysterious building blocks of the human species, as complicated combinations of chemicals.

In other words, says Benner, all modern genetic study boils down to organic chemistry. "Scientists are out there sequencing whole organisms. They've done worms and bacteria and yeasts and are working on man. The minute we complete the genomic sequence for humans we have a chemical structure—an exact description of the material we pass on to our children.

"Our challenge now," he continues, "is to convert these strings of chemical notation into data relevant to biologists. To do this, we are trying to understand how we can interpret chemical behavior and biological systems of genes in light of their evolutionary past."

Here's where the pigs come in. When Institute of Food and Agriculture Sciences (IFAS) professors Rosalia and Frank Simmen discovered that pigs have three genes for making estrogen (instead of one), they came to Benner to help them figure out why. Benner conducted a chemical genealogy of sorts, building an "evolutionary tree" to trace the pig protein back to its early ancestors. "If we go back in time we can actually date when those extra genes emerged—about 25 million years ago," he says. "This is also the period when pigs began having litters of multiple young."

Todd Cayer

CLAS chemist **Steve Benner** *(pictured above examining a globe of Mars)* conducts research that explores a range of questions, from the genetic make-up of ancient animals to the possibility of extraterrestrial life.

By combining this chemical/genetic family history with associated paleontology (fossils) and physiological information from the Simmens, a story emerges. Apparently, after the cold, ecologically trying times of the Oligocene Period (around 30 million years ago), which many species did not survive, the warmer climate of the Miocene brought new semi-tropical forests to Europe. The new foliage may have provided pigs a sheltered habitat, allowing them for the first time to birth multiple young (by nature less ambulatory at birth than the more mature single young generally born in open savanna habitat) and to hide and protect these young until they became more self-suf-

*See **Genetics,** page 6*

Around the College

DEPARTMENTS

African and Asian Languages and Literatures

Aida Bamia was invited to present a paper entitled "The Language of Literary Texts: Between Accessibility and Political Correctness" at Bridging Past, Present, and Future: Arabic as a Foreign Language in the New Millennium, a conference hosted by The American Association of Teachers of Arabic, October 15-16 in Detroit, Michigan.

Haig Der-Houssikian presented a paper entitled "Pluralization in Colloquial Western Armenian" at the Sixth International Conference on Armenian Linguistics held in Paris, July 5-9, 1999. At the 26th Annual Conference of the Linguistic Association of Canada and the US, held in Edmonton, Canada, August 3-7, 1999, he presented a paper entitled "The Role of Conceptual Structure in the Acquisition of Vocabulary in a Morphologically Over-Differentiated Language."

Anthropology

In August, **Anita Spring** chaired a session and presented a paper entitled "The Positive Effects of Agricultural Commercialization on Women Farmers" at the Women Farmers: Enhancing Productivity Conference, sponsored by the Universities of Bonn, Hohenheim, and Tufts (Boston), held in Bonn, Germany. She was also elected co-chair for the State of Florida for the National Summit on Africa and organized a session at the US-Africa Trade Symposium in Orlando on August 9.

Botany

In August, **Walter S. Judd** attended the XVII International Botanical Congress in St. Louis, Missouri to present a talk entitled "The Implications of Phylogenetic Nomenclature for Floristics and Teaching." Judd began his term as president-elect of the American Society of Plant Taxonomists in September.

George Bowes presented an invited talk and a poster entitled "Hydrilla: Inducible C4 Photosynthesis Without Kranz Anatomy" at the Gordon Research Conference on Photosynthetic Carbon Dioxide Assimilation held at Queen's College, Oxford University UK in September. Bowes was elected to serve as chair of the next Gordon Research Conference on Photosynthesis to be held in Europe.

English

In September, **Marsha Bryant** and **Mary Ann Eaverly** (Classics), along with two professors from Indiana University, led a workshop on "Teaching Myth through Modern Poetry" at the University of Maryland conference American Women and Classical Myths. At the workshop, they presented a talk on their collaborative teaching and research at UF and co-led a discussion on poems by Margaret Atwood, Adrienne Rich, Denise Levertov, and UF's **Debora Greger**.

On October 30, **Carl Bredahl** gave an invited lecture in Leiden, Holland to a gathering of Fulbright Program representatives. The topic was "The Oral Tradition and its Impact on Contemporary Native American Writing."

Mathematics Hosts International Conference

An international conference on Symbolic Computation, q-Series, Number Theory, Physics, and Combinatorics was hosted by the Mathematics Department November 11-13. Organized by Frank Garvan (Math), the event attracted fifty of the top researchers in these areas from USA, Canada, England, Germany, Austria, China, Korea, and Singapore and was funded by the National Science Foundation, The National Security Agency, The Number Theory Foundation, The Institute for Fundamental Theory, CLAS and ORTGE.

A section of the audience attending the opening lecture at the Symbolic Computation Conference. Seated in front, Mathematics chair **Krishnaswami Alladi** *(center)* and CLAS Associate Dean **Neil Sullivan** *(right).*

History

On October 12 and 14, 1999 **Ron Formisano** delivered lectures at Oxford and Cambridge universities to initiate the lecture series "American Political History, 1775 to the Present: Substance and Structure." Formisano is one of seven United States historians invited to participate in the series, which will eventually be published as a book by the University of Kansas Press.

Mathematics

Gerard Emch presented a paper at the Tenth International Conference on The Enlightenment in Dublin, Ireland, July 25-31. The title of his talk was "Is Mme. du Chatelet's a fair presentation of Newton's Principia?"

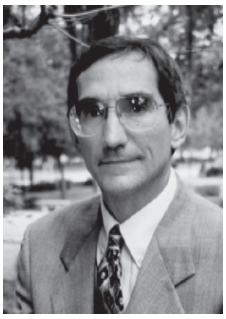
Yunmei Chen gave an hour lecture at the International Conference on Applied Partial Differential Equations in China during August 1999.

Sociology

Jay Gubrium was a member of an international panel of experts on aging invited to Helsinki November 1-3 to evaluate research proposals for the Finnish government.

Three CLAS Faculty Chosen For Top UF Administrative Positions

Kenneth Gerhardt (Communication Sciences and Disorders) was recently named associate dean of the Graduate School for academic programs and student affairs. His responsibilities will include leading the Graduate School and representing the university on graduate education issues, both on campus and externally. Chair of his department from 1985-1993, Gerhardt brings important experience to the position: he has participated on over 60 thesis and dissertation committees since he began his career at UF in 1978, and he was a key player in developing UF's new doctoral program in audiology. "It's an honor to be invited to serve in this capacity," Gerhardt said upon his appointment. "The Graduate School faces exciting and challenging academic issues in the coming years, including its role in positioning the University of Florida among the nation's top 10 public institutions."


Kenneth Gerhardt


Sheila Dickison

Sheila Dickison (Classics) has been appointed associate provost for Undergraduate Education and will maintain her position as director of the Honors Program. Dickison was CLAS associate dean for academic affairs between 1989 and 1995. She is the current president of the American Classical League, a national organization of more than 6000 teachers of classical studies at all levels. The Florida Blue Key Distinguished Faculty Award winner (1997) claims she is excited about having the opportunity to make a contribution to undergraduate education at UF. "Our students are terrific, and I see my role as helping them have the best experience possible while they are here," she says.

Former CLAS associate dean **Chuck Frazier** (Sociology) was named vice provost and senior associate vice president for academic affairs. He will assist the provost by handling a range of duties including tenure and promotions issues, enrollment and space management, and performance evaluations. Frazier joined the UF faculty as an assistant professor in 1972. The author of more than 50 publications, he has served on the editorial boards of three professional journals and as an associate consultant editor for the *Journal of Criminal Law and Criminology*. Frazier said that as CLAS associate dean for administrative affairs from 1991-1998 he enjoyed having a hand in deciding issues important to faculty, students and staff. Accordingly, he looks forward to the "new and interesting challenges" his university-wide appointment will bring.


Chuck Frazier

Gerhardt was appointed by Graduate School dean Win Phillips, while Frazier and Dickison were appointed by history professor David Colburn, interim provost and vice president for Academic Affairs since last month.

Author Visits Campus to Promote Collaboration with CLAS Program Director

Best-selling author and long-time syndicated columnist **Carl Hiaasen** *(left)* was on campus November 12 to promote Kick Ass, a new collection of his Miami Herald columns edited by CLAS program director **Diane Stevenson** *(right)* and published by the University Press of Florida. During his stay in Gainesville, Hiaasen, an alumnus of UF's College of Journalism, visited classes, attended several book-signings and spoke to students at the Florida Alligator.

UF Center for Smell and Taste

New University Center fosters research in the chemical senses

a report from Alan Spector, Psychology

Understanding the allure of Chanel #5 and the appeal of strawberry pie may become a reality in the future with the advent of the new University of Florida Center for Smell and Taste (UFCST), which was approved as a Class II Center by the Chancellor's Office during the last year. Dr. Barry Ache, Distinguished Professor of Zoology and Neuroscience, from the Whitney laboratory is director, and Dr. Alan Spector, Professor of Psychology, is assistant director of the center. The center, administratively based in the Office of the Vice President for Research, is located in the University of Florida Brain Institute (UFBI). The center is counseled by a campus advisory committee chaired by Dr. William Luttge, director of the UFBI, and a scientific advisory committee composed of external scientists representing basic, clinical and applied chemosensory research.

UFCST co-directors **Alan Spector** (Psychology) and **Barry Ache** (UF's Whitney Laboratory) in front of the UF Brain Institute.

Scientists doing research related to the chemical senses are scattered across the broadest organizational units of the University, including the colleges of Dentistry, Liberal Arts & Sciences, and Medicine, as well as IFAS, the USDA, and the Whitney Laboratory. Their academic activities range from performing endoscopic surgery for chronic sinusitis and nasal polyposis, to studying how early exposure to salt affects food intake and taste sensitivity, to using artificial noses in quality control, to deciphering the chemistry of insect sex attractants. The UFCST provides an important forum to integrate this academically diverse group. In addition to providing a forum for the university's diverse chemical senses research community, the center's mission includes enhancing the visibility of chemical senses research at UF by bringing in outside experts for seminars, seeking programmatic funding for chemical senses research from governmental sources such as the National Institute on Deafness and Other Communication Disorders, developing closer ties between UF and the flavor and fragrance industry, and fostering increased graduate student education by creating a training program in the chemical senses.

Faculty with an interest in the chemical senses who are not already members are encouraged to join the UFCST in its mission to foster chemosensory research at the University of Florida. Everyone is encouraged to attend center activities and functions, especially the new seminar series featuring lectures from internationally renowned chemical senses researchers. To obtain more information on the center and its activities, contact Dr. Barry Ache <bwa@whitney.ufl.edu>, or visit or call the center's office in Room L5-100D in the Brain Institute (294-0199).✎

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Center for Forensic Anthropology

New UF center will develop academic programs in forensic science and provide greater criminal investigation services

by Health Sciences writer Nancy Dohn

Building on the legacy of the late Bill Maples (Anthropology), an international pioneer in forensic anthropology known for his work advancing the analysis of human skeletal remains, the University of Florida has established the William R. Maples Center for Forensic Medicine.

By unifying forensic services campuswide, the Maples Center will be able to provide greater criminal investigations assistance to medical examiners and law enforcement officials at the state and national levels.

Maples Center co-director **Anthony Falsetti**, pictured at work in the C.A. Pound Human ID Lab.

The center will also offer cross-campus courses in toxicology, pathology, anthropology and criminology to help train students in the emerging disciplines of the forensic sciences.

Forensic science uses highly developed technologies to uncover physical evidence in a variety of fields. In criminal cases involving assault, rape or murder, forensic science can be used to detect the presence of unusual substances in victims, suspects or crime scenes. It can also be used to determine the genetic composition of blood and saliva left behind by a perpetrator and to identify unknown human skeletal remains.

In civil cases, forensic science makes it possible to monitor food processing, pesticide use, abuse of children and the elderly, among other applications.

"Unifying the existing forensic specialties at the University of Florida will help balance scholarship with research and service in forensic medicine. The aim of the center is to provide comprehensive services and innovative programs that relate to the medical and legal investigation of death," said Bruce Goldberger (ADD DEPARTMENT), Maples Center co-director and director of the UF Diagnostic Referral Laboratories Forensic Toxicology Laboratory.

"The center will be the first in the State University System to focus on forensic medicine. It creates an exciting exploratory environment for approaches and perspectives that transcend traditional forensic science research and education," said Anthony Falsetti (Anthropology), Maples Center co-director and director of the C.A. Pound Human Identification Laboratory.

Paul Klein, a UF professor of pathology, immunology and laboratory medicine, is the center's associate director.

The new center provides fitting tribute to Dr. Maples, an internationally recognized pioneer in the field of forensic anthropology who joined the UF faculty in 1968 and rose to the rank of distinguished service professor.

In the 1970s, Maples began assisting Florida's medical examiners with crime and accident investigations. He also developed a relationship with the US. Army central Identification Laboratory and provided consultation involving military personnel missing or killed during World War II, the Korean War and the Vietnam War.

Margaret Kelley Maples, widow of renowned medical anthropologist Bill Maples (Anthropology) is pictured *(center)* above with *(from left)* Maples Scholarship recipients **Dendra Smith** and **Heather Walsh-Haney**, **Bill Goza** (CLAS alumnus and long-time volunteer researcher at the Pound Lab), Pound Director **Anthony Falsetti**, and Maples Scholarship recipients **Shuala Martin** and **Phoebe Stubblefield**.

In a career that spanned nearly three decades, Dr. Maples was involved in more than 1,200 cases, many high profile. In 1992, he supervised a team of forensic scientists that identified the remains of the last Russian monarch, Czar Nicholas II, and his family who were killed by revolutionaries in 1918. Dr. Maples chronicled the demise of the czar, the truth about Pizarro's bones and other career highlights in the book *Dead Men Do Tell Tales*.

Before his death in 1997 from brain cancer, he assisted Dade County medical examiners in identifying victims of the ValuJet disaster in the Everglades.

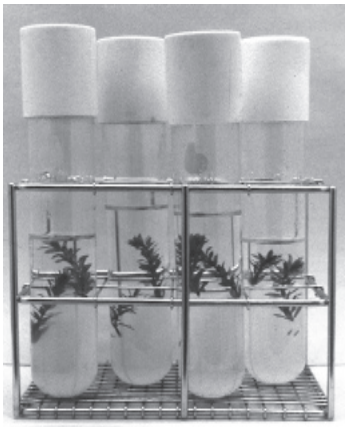
The CLAS C.A. Pound Human Identification Laboratory, formed in 1991, focuses on forensic anthropology, which identifies skeletal or other remains suspected of being human. Under the direction of Dr. Maples and his successor, Falsetti, it has become a premier forensic anthropology laboratory. The C.A. Pound Laboratory continues to provide analyses of human skeletal remains to all 24 medical examiner districts in the state as well as to such groups as the Florida Department of Law Enforcement, the US Central Identification Laboratory and the FBI.

A key component of the new Maples Center, the C.A. Pound Lab uses forensic anthropology to assist law enforcement and CIA investigations (among other applications).

The Pound Laboratory, the College of Medicine's Forensic Toxicology Laboratory as well as several academic departments will be housed in the Maples Center.

Established in the early 1990s, the Forensic Toxicology Laboratory provides a variety of services including testing to determine

*See **Maples Center,** page 12*



The Botany Department boasts four faculty members working in genetic-related areas: George Bowes, Alice Harmon, Bernard Hauser and David Jones.

ficient. "The bottom line," says Benner, "is that these genes evolved in response to a changing climate to allow the pig to take on a new reproductive physiology. By correlating molecular events and reconstructing them in an evolutionary context, we can put together a story of function which converts these strings of letters into something that has meaning to a biologist."

Benner and his research group are in hot demand, and not just from IFAS. "We have been working with HIV reverse transcriptases and proteases and the 'obesity gene protein,' leptin, and there are evolutionary stories in all of these protein families, which, placed in their historical contexts, all of a sudden talk to you and tell you the meaning and role of disease."

As many human diseases are associated with heredity, medical scientists are scrambling to tie each illness to a change in one of our 75,000 genetically-dictated protein strings. A bit like looking for a needle in a haystack, but Benner's group can help simplify the process. "We use our evolutionary knowledge to tell technologists, 'Oh yeah, this protein is associated with pig reproductive strategy, not with immunosuppression,' to cut down their margin of trial and error in the hunting process."

Benner's partnership with UF's medical and agricultural researchers is a prime example of the interdisciplinary nature of the brand new UF Genetics Institute. And Benner points out that CLAS adds the kind of fundamental science to the mix that is the basis of all technological advancement. "I'm doing basic science. I have not cured a disease. But every modern approach to the treatment of disease is associated with a better understanding of what it is that you're trying to treat. In the medical school, they have a very easily defined technological goal: they want to cure disease by introducing genes whose absence creates the diseased state. When you formulate a problem from this technological perspective you are saying, 'What can it *do*? Can I sell it?' From the scientific perspective, like much of what we do in the Liberal Arts and Sciences, the question is instead, 'What do I *understand*?'"

"Unfortunately, it's more difficult to evaluate basic science. If you say you're going to cure the common cold," explains Benner, "we can appreciate that and know roughly what it's worth to us and to society, but if you say you're going to understand the history of the biosphere, we can't really evaluate or quantify that." Despite this, Benner emphasizes that basic research is always more powerful than applied technology (which is only relevant to what you apply it to). "Basic research, when done correctly, can in principle grow and grow and grow for decades. The discovery generations ago of gallium and germanium, two of the 90 naturally occurring chemical elements, eventually led to the creation of the semiconductor and the computer, but who could have known that at the time?"

While the Genetics Institute is not a physical reality yet (the proposed $40 million, five-story ultra high-tech facility should be operational by 2004), a diverse array of groundbreaking genetics-related work is already being conducted across the UF campus. With contributing faculty not just in chemistry but also in biostatistics, zoology, mathematics, botany and anthropology, CLAS is one of the new Institute's key players.

"In Liberal Arts and Sciences, it is our diverse research and teaching across the field of genetics that is our strength and that ensures our major place in the Institute," explains zoologist Mike Miyamoto, the CLAS liaison to the Genetics Institute. Miyamoto, who himself is using DNA and protein sequences to trace

Zoology professor **Marta Wayne** *(right),* zoology major **Angela Kuntz** *(center),* and 1999 zoology grad/research technician **April Spivak** *(left, at microscope)* examine structures of the fruit fly ovary as part of their attempt to understand the genetic basis for variation in fly reproduction.

DNA profiling can aid researchers in identifying remains for both criminal and historical cases. *Pictured at left,* **John Schultz**, PhD student in anthropology, excavates a grave thought to be that of George Washington's brother, Samuel. Schultz worked with UF's Pound Lab on the Virginia-based project, initiated by George Washington University professor James E. Starrs to locate and identify Samuel's remains.

the evolutionary history of humans and other mammals, stresses the diversity CLAS brings to the genetics table. His fellow zoologist Marta Wayne is investigating the genetic and environmental forces underlying major phenotypic traits, such as anatomical, behavioral, and ecological features. Additionally, CLAS faculty in Botany who work in plant genetics (and groups like Benner's in chemistry) are using the tools of modern molecular biology such as DNA amplification and sequencing to investigate how the genomes of humans and other species function, to assess their biological significance, and to better understand the historical factors that have shaped their evolution.

"CLAS also has anthropologists who are studying human genetic variation that is the underlying basis of disease susceptibility and resistance, drug responsiveness, and the like," continues Miyamoto. "Indeed, the Chair of the North American Committee of the Human Genome Diversity Project is our own anthropology professor John Moore.

"Furthermore, CLAS includes the internationally renowned Pound Human Identification Laboratory, directed by anthropologist Anthony Falsetti. This facility has been involved in numerous high-profile forensic cases for law enforcement and other government agencies and will become involved in more and more DNA work (particularly DNA fingerprinting and profiling) in the near future."

Liberal Arts and Sciences mathematicians and statisticians are also involved in computational and analytical research designed to maximize the information available from the swelling databases of molecular and genetic knowledge. Miyamoto emphasizes that beyond the hard sciences, CLAS also covers the philosophical, historical, and social implications of modern genetics. "Genetics has grown to be so important to society at large that such contributions may become some of our most unique and important to the new Institute," he says. "In short, thanks to its rich diversity, outstanding faculty, and excellent students, CLAS will remain critical to the Institute in unifying disciplines from around the entire University."✎

—Jane Gibson

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Zoologist **Mike Miyamoto**, the CLAS liaison to the new UF Genetics Institute.

Insight Into the Human Genome

The October 15 issue of *SCIENCE* includes a full-sized poster entitled "Comparative Genomics: Mammalian Radiation." This poster was generated by an international team of evolutionary biologists and molecular biologists, led by Stephen J. O'Brien of the National Cancer Institute.

Poster reprinted with permission from *Science* (286: 15 October, 1999). Copyright 1999.

The team included two faculty from UF, **John Eisenberg** (Florida Museum) and **Michael Miyamoto** (Zoology), both of whom are experts in the area of mammalian evolution. This poster summarizes the emerging family tree for humans and other mammals and the current knowledge of the chromosome structure and gene organization of humans versus other mammalian species.

By combining an evolutionary perspective with the study of the human genome, the poster highlights the historical origins and connections of our chromosomes and genes with those of our closest relatives (other mammals). Such interconnections extend the utility of model organisms from mice and rats to all other mammals and can lead to new insights about the molecular causes and possible cures of human diseases.

New Faculty

Assistant professor of communication sciences and disorders **Debbie Moncrieff** earned her PhD from the University of Texas at Dallas. Her research focuses on the auditory processing problems of children with dyslexia. Using event-related potentials (ERPs) and functional magnetic resonance imaging (fMRI) techniques to record brain activity during auditory input, she hopes to develop better diagnostic tools for establishing auditory processing disorders at an earlier age and to identify the subgroups of individuals within disordered populations (dyslexia, ADD/ADHD, hearing impaired, psychosocial disorders) who have specific auditory processing deficits. In her spare time, Moncrieff enjoys cooking, reading, movies, walking her dog and gardening.

Sara Schatz, an assistant professor of sociology, received her PhD in December from UCLA, having completed a dissertation entitled "Delayed Transitions to Democracy: The Case of Mexico." Her research focuses on the social bases of democratization, the relationship between political and legal development, and social struggles for citizenship rights. She is currently expanding the comparative focus of her research, building on her forthcoming book, *Elites, Masses and the Struggle for Democracy: A Culturalist Approach* (Praeger, 2000). In addition, she recently authored an article on Latin American indigenous actors' struggles for juridic rights to political autonomy.

Buzz Holling Retires

To recognize and celebrate the retirement of the Arthur R. Marshall Jr. Chair in Ecological Sciences Crawford S. "Buzz" Holling, the Department of Zoology hosted a lecture, reception and dinner in his honor on September 30th. Dr. Carl Walters, a distinguished ecologist and long-time colleague and friend from the University of British Columbia gave a lecture on "Tales from the Foraging Arena" a presentation on the interactions between individual and ecosystem level research in fisheries biology. The lecture was followed by a reception at the Keene Faculty Center. The lecture and reception were attended by members of the Arthur R. Marshall Jr. family, colleagues from the Southwestern Water Management District and other areas of the State, as well as faculty and graduate students from many UF departments and colleges.

Holling came to UF as an Eminent Scholar ten years ago from the University of British Columbia, and since his arrival, he has won more than $4.8 million in research and program grants, staged nine workshops on the Everglades for more than 160 scientists, corporate leaders, public officials, and managers and public interest groups, trained 140 graduate students in ecosystem research, and created an information and policy "Resilience Network" of scientists, business persons, government officials and public interest groups that focuses on sustainable development in 10 countries and 17 regions.

"The Eminent Scholar Program of SUS brought me here," Holling explained. "It is a rare resource for UF. My colleagues in the Department of Zoology, in other Departments of CLAS, and in Forestry and Wildlife, Environmental Engineering and Agricultural Economics, kept me here. Together they, and a fine group of graduate students, provided an environment of excellence and cooperation that made my ten years at UF a wonderful and personally fulfilling journey of discovery."

In August of this year, Holling was recognized for "outstanding contributions to the science of Ecology" by being awarded the Eminent Ecologist Award of the Ecological Society of America.

Holling will occupy his Bartram Hall office for at least the next year to continue his work with the ongoing $1.5 million Resilience Project. Funded by the MacArthur Foundation, the Resilience project is in its third and final year, and seeks to develop a theory that integrates ecology, economics and the social sciences with environmental resource management and policy-making.

Holling's Resilience work has provided the basis for a new project funded by the Rockefeller Foundation, designed to take Resilience discoveries and put them into practice around the world by conducting training courses and workshops, and by using the Web to develop integrative communications on issues of sustainability and regional development.

Other Holling projects have had dramatic effects closer to home. Through Everglades workshops he organized in the early part of this decade, Holling brought together key people in US and State government agencies, and non-governmental groups to develop sophisticated and detailed computer models of the Everglades ecosystem. These electronic models so convincingly portrayed the Everglades' pivotal importance and its potential for restoration, that present restoration efforts plans have been formed by them.

Ruthann Czerenda

Buzz Holling *(left)* at his September 30th retirement party, with **Joseph Delfino** (Environmental Engineering Sciences).

Though passionate about his life's work in science and conservation, and, by extension, public well-being, Holling says he'll enjoy having more time to pursue his artistic passion, creating sculptures that capture some of the essence of the patterns in nature his scientific studies have revealed.✎

Analytical Chemistry at UF

UF's world-class reputation builds on long-standing tradition

Certainly the world-class reputation of Florida's analytical chemistry division swayed renowned Colorado State University professor Charles Martin to accept an offer from UF last year. But Martin admits another important factor influenced his decision: palm trees. "After nine years in Colorado, I liked Gainesville's palm trees," he says.

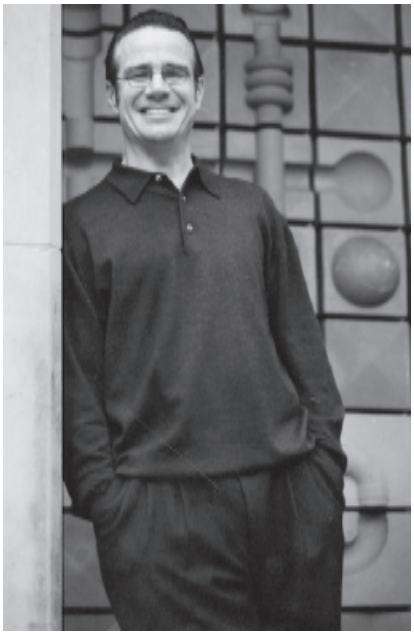
Martin, an internationally recognized expert in nano-materials and their role in chemical analysis, joined the UF analytical chemistry faculty this fall. In addition to teaching and conducting research, he is also directing the new Center for Research at the Bio/Nano Interface, which he hopes will become a pioneering force in the field of bio-analytical chemistry. "We'll be working at the juncture between analytical chemistry and materials science, developing new analytical methods and the new materials that make those methods possible. It's a new area; we'll see where it leads."

Now that he's here, Martin is impressed. "The faculty is terrific. And another important attraction at UF is the quality of the graduate students. This year I have an enthusiastic, motivated, and diverse group of students. It's very exciting and invigorating for me."

Rick Yost, head of the analytical chemistry division, thinks Martin is an excellent fit for the highly regarded program. "We are very student centered; we have a long tradition of combining academic excellence with a collegial work atmosphere," he says. "This department has what I call a very low ego-to-reality ratio, and Chuck was looking for just that kind of environment."


Bob Kennedy

According to Yost, the analytical division's growing preeminence —earlier this year it was ranked #6 in the nation by *US News and World Report* —can be traced back to the atmosphere created by Jim Winefordner in the 1960s. "Winefordner is probably the most prolific chemistry faculty member in the world," says Yost. "He has graduated over 140 PhDs, published over 800 articles, and won almost every award possible, yet he remains a very humble guy." Yost believes the analytical division has been able to attract and keep world-class chemists because the faculty members are also friends. "All the members of this division are superb. They get offers to go other places, but they stay here in part because of the humanity of this place, and Jim Winefordner is the father figure for that."


Molly VanWagner

New UF analytical chemistry professor **Chuck Martin**.

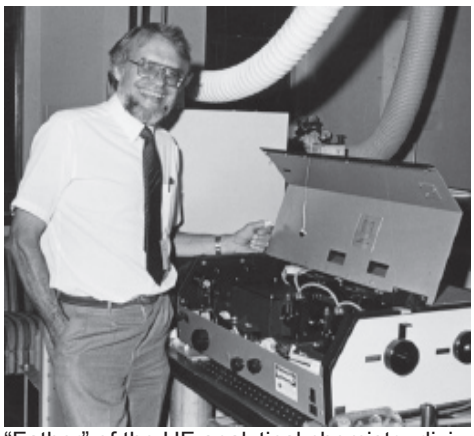
Many other faculty members have also contributed to the analytical division's outstanding reputation. Herb Laitinen, who served on the faculty for fourteen years, was the editor of the journal *Analytical Chemistry* during the field's period of rapid expansion in the 1970s and 80s. And Roger Bates, who became a professor emeritus in 1979, is considered the father of pH for defining the way pH should be measured.

The senior analytical chemistry faculty also includes Will Harrison, who has maintained an active research program during his tenure as CLAS Dean.

Bob Kennedy and Weihong Tan, two of the division's younger members, have each received the National Science Foundation's prestigious Faculty Early Career Development (CAREER) Award. Kennedy was also awarded a Presidential Early Career Award for Scientists and Engineers (PECASE), which is the highest honor bestowed by the US Government on outstanding young scientists, and Tan has been designated a Young Investigator Awardee by the Office of Naval Research.

Other members of the analytical chemistry division are Anna Toth (electroanalytical) and Vaneica Young (surface charac-

*See **Chemistry,** page 12*


"Father" of the UF analytical chemistry division, professor emeritus **Jim Winefordner**, pictured here in 1988.

Top 10 US Analytical Chemistry Graduate Programs

1. Purdue University–West Lafayette (IN)
2. University of North Carolina–Chapel Hill
3. Indiana University–Bloomington
4. University of Illinois–Urbana-Champaign
5. University of Wisconsin–Madison
6. **University of Florida**
7. University of Arizona
8. Pennsylvania State University–University Park
8. University of Texas–Austin
10. Iowa State University

From *US News and World Report's America's Best Graduate Schools* 2000 edition. Online <www.usnews.com/usnews/edu/beyond/gradrank/gbschesp1.htm>

Grants

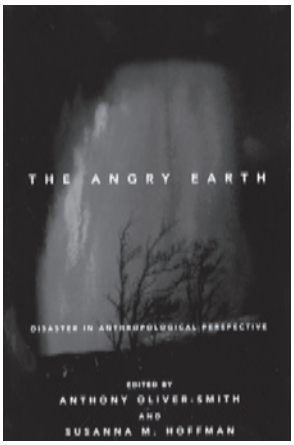
(through the Division of Sponsored Research) **October 1999 Total: $1,372,559**

Investigator	Dept.	Agency	Award	Title
Corporate $101,300				
Boncella, J.	CHEM	Mobil Corp	50,000	Bimetallic group 4 amide complexes for the polymerization of alpha-olefins.
Katritzky, A.	CHEM	Glaxo Res & Dev Ltd	1,500	Compounds for biological screening.
Katritzky, A.	CHEM	Multiple Companies	1,800	Miles compound contract.
Tucker, C.	PSY	Hitachi Foundation	10,500	Establishment of the research-based model partnership education program as a center for nation-wide dissemination of the program.
Marks, R.	STAT	Procter & Gamble	37,500	Service agreement for Web-based dental research.
Federal..... $1,221,932				
Moseley, M. Smailes, R.	ANT	NSF	9,480	Dissertation research: building Chan Chan: project management analysis of ancient architecture.
Elston, R.	AST	NASA	131,087	The morphological evolution of field galaxies at 1<Z<2.
Hamann, F.	AST	NASA	13,195	Intrinsic UV and X-ray absorption in QSO's.
Enholm, J.	CHEM	NSF	90,000	New methods in free radical chemistry.
Kennedy, R.	CHEM	US Army	125,601	Role of glutamate release and metabotropic autoreceptors in seizureogenic actions of cholinomimetic agents.
Martin, C. Eyler, J.	CHEM	US Army	75,000	Conducting a polymer-based electronic nose for land mine detection.
Weltner, W.	CHEM	NSF	135,000	ESR and IR spectroscopy of molecules, ions, and clusters.
Sapienza, C.	CSD	US Navy	40,628	Respiratory function during speech production at 1000 FSW.
Martin, E.	GEOL	NSF	53,162	ND isotope investigation of North Atlantic deep water population over the past 25,000 years and education in geology.
Dorsey, A.	PHY	NSF	92,000	Dynamics of vortices and interfaces in condensed matter.
Bradley, M.	PSY	NIMH	57,274	Project 3: Center for the Study of Emotion and Attention.
Fischler, I.	PSY	NIMH	15,901	Project 4: Center for the Study of Emotion and Attention.
Carter, R.	STAT	Health Care Admin Agncy	28,000	Birth vital statistics: survival low birth weight and morbidity outcomes research.
Bolten, A. Bjorndal, K.	ZOO	US DOC	355,604	Experiment to evaluate gear modification on rates of sea turtle by catch in the swordfish longline fisheries in the Azores.
Foundation..... $35,720				
Guillette, E. Lieberman, L.	ANT	Jenifer Altman Foundation	3,300	Community health assessment manual.
Woolard, J.	CRIM	MacArthur Foundation	1,670	Competence: effective participation of juvenile defendants: developmental aspects of the attorney-client relationship.
Kennedy, D.	PHY	Eppley Foundation	5,750	Precise comparison of the sun and nearby sun-like stars with the Hipparcos astrometric satellite.
Holling, C.	ZOO	MacArthur Foundation	25,000	UF Foundation account for C. Holling.
State..... $4,840				
Scicchitano, M.	POL	Multiple Sponsors	4,840	State applied research for surveys.
Miscellaneous..... $8,767				
Bowes, G.	BOT	Miscellaneous Donors	1,000	Miscellaneous donors.
Schanze, K.	CHEM	Am Chemical Society	2,927	ACS editorialship.
Scicchitano, M.	POL	Multiple Sponsors	4,840	Outside applied research for surveys.

The Angry Earth: Disaster in Anthropological Perspective
Edited by **Anthony Oliver-Smith** (Anthropology) and Susanna M. Hoffman
Routledge

(from book cover)
"This collection is the first to adequately represent the cultural, historical, and geographical scope and complexities of the problem of disaster. It introduces a range of useful perspectives and arguments, with compelling examples. One wishes such a collection had been available to help define the agenda for the International Decade for Natural Disaster Reduction, now ending."
—Kenneth Hewitt, editor of *Interpretations of Calamity*

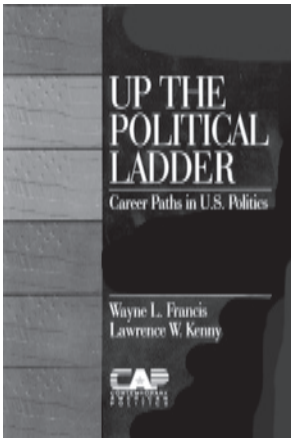
(excerpt)
Similar to disaster research in other fields, almost all aspects of anthropological investigation of disaster implicitly carry an applied consideration. Virtually every focus of the investigation in some measure expounds the problems of individuals, communities, and societies engrossed in disaster. However, a growing corpus of work in anthropological research explicitly addresses applied concerns and methods. Work has varied depending on the type and scope of disaster, but applied anthropologists have directed attention and action to issues of prediction, prevention, and mitigation. They have been concerned with warning systems, the construction of habitat and workplace and relief efforts.



Wilhelm Hausenstein: Ausgewählte Briefe 1904-1957
Edited by **Hal H. Rennert** (German & Slavic Languages & Literatures)
Igel Verlag Literatur

(translated from the book cover)
Wilhelm Hausenstein was born July 17, 1882 in Hornberg in the Black Forest in Germany. He received his doctorate from the University of Munich in 1905 and lived in that city as an art writer almost all of his life. He published more than eighty books. Among his friends were Rainer Maria Rilke, Annette Kolb, Paul Klee, Alfred Kubin, Max Beckmann, Karl Valentin and the first president of the Federal Republic of Germany, Theodor Heuss. He was an editor of the famous "Frankfurter Zeitung" from 1934 until 1943, when the Nazis prohibited this paper and all of his publications. Upon the urging of Konrad Adenauer, he accepted the difficult position of the first ambassador of Germany to France after World War II. In this position he and his wife Margot Hausenstein contributed significantly to the reconciliation of these two countries. He died in Munich on June 3, 1957. [The personal library of Wilhelm Hausenstein was acquired by the University of Florida Library in the early 1980s and is now housed in Special Collections. His papers (Nachlass) are located at the German Literary Archive in Marbach, Germany.]

Up the Political Ladder: Career Paths in US Politics
Wayne L. Francis (Political Science) **and Lawrence W. Kenny** (Economics)
Sage Publications



(from book cover)
Those interested in American politics, political careers and legislatures will marvel at this down-to-earth, straightforward book. Authors Wayne L. Francis and Lawrence W. Kenny examine why states differ in ease of entry into state and national political office and analyze the strategic decision making behavior of politicians in their attempts to move up the political ladder. The authors take a look at the careers of US presidents, showing how they successfully climbed the political ladder after starting at the bottom and working their way up.

(excerpt)
The traditional solution to poor performance in office is for citizens to vote legislators or chief executives out of office. But for many offices, voters have difficulty perceiving who, for example, has become responsive only to special interests at the cost of the larger majority. That is, voters may have difficulty perceiving whether their representative is casting the votes they would like cast. Incumbents have clear information advantages. They can send out a stream of positive messages during their term and can command greater campaign resources to offset negative information from challengers. A citizen would need to be very attentive to public affairs to objectively monitor the representative's official behavior.

Musings, continued from page 1

I am not sure how I have been able to retain nearly all of my closest office staff members for these many years. My guess is that they saw how lost I would have been without them, and having managed to get me trained, they were reluctant to start over with someone else. Given the degree to which UF staff move around, it is all the more remarkable (and fortunate) that the College Office has enjoyed this degree of continuity. So for their deep loyalty, to say nothing of their talent, can-do attitude, and everlasting good cheer, I look back with no small measure of thanks.

Included in our Holiday recognition must be the many alumni benefactors who continue to show their great love for the University of Florida and CLAS. More than most, I have the opportunity and to see and appreciate their investments of time and treasure to benefit our programs. And notice that these friends put their gifts to academic causes. Nothing against football, Steve, but with all due respect, it is the strengthening of the fundamental Arts and Sciences that is laying the foundation for where the University of Florida is headed. One of the great joys of my job has been to make friends with UF alumni who believe in academics as strongly as I do, and who have supported CLAS—and me—with moral support when times were tougher and with sustained fiscal support to make academic dreams come true. Without my reciting names here, you know who you are. Thanks for keeping the faith.

It is the faculty, of course, who truly make the university happen. In no place is this more true than in CLAS, where the 600+ faculty produce outstanding teaching, research, and service. It has been a real advantage for me that I actually like faculty (OK, with a few rare exceptions). But we have all experienced administrators who seemed put off by faculty as a group, which is a bit bizarre when you think about it, given that the faculty provide the basis for their jobs, just as the students give us all employment. In any case, we have been fortunate in hiring terrific faculty who make this an exciting place to be. True, overseeing faculty is sometimes like herding cats, but it is their independence that makes a university what it is. I have delighted in getting to know so many interesting CLAS faculty over the years. Thanks for being here.

I still look forward to the remainder of my term, extending to July 1, 2000. It has been a remarkable 12 years, with seldom a dull moment. Once a year, at least, it seems worth pausing to offer thanks for the many who have made my time in office so enjoyable.

Will Harrison,
Dean
<harrison@chem.ufl.edu>

Chemistry, continued from page 9

terization).

Yost points out that the entire UF chemistry department is regarded as excellent, and that the polymer and quantum theory divisions also contribute to the high ranking. "It takes a long time to gain or lose a reputation, and the entire department is on the upswing."

"An important attraction at UF is the quality of the graduate students. This year I have an enthusiastic, motivated, and diverse group of students. It's very exciting and invigorating for me."
—Charles Martin

Martin's arrival comes at an ideal time for the chemistry department. "Graduate programs have been made a priority by the Board of Regents and UF," says Yost. "We added 27 new analytical chemistry graduate students this year, which is more than ever before. And certainly one of the reasons our numbers went up is because people knew Chuck was coming."

Martin recently traveled to Hawaii to receive the Carl Wagner Memorial Award from the Electrochemistry Society, which cited his "numerous contributions to the field of electrochemistry and profound dedication to education in chemistry."

While teaching at Colorado State, Martin played guitar in a classic rock band called Hair of the Dog. "I've played in bands all my life," he says. "I consider myself very lucky to have seen Stevie Ray Vaughn and the Fabulous Thunderbirds learning their chops while I did post-doctoral work at the University of Texas in Austin." An avid rockabilly and blues fan, he enjoys recording music in his home studio when time permits.

Although Yost is excited about Martin's arrival and the division's national recognition, he believes the best is yet to come. "I think we've belonged in the top five for years," he says. "We were number six before Chuck came, so we can only go up from here."✎

—John Elderkin

Maples Center, continued from page 5

the absence or presence of drugs and their metabolites in fluids and tissues after death. "Currently, the laboratory serves close to one-third of the state's medical examiner offices. Results are reported to medical examiners, who are responsible for evaluating the role of these substances in an individual's death," Goldberger said.

During its first year, the new Maples Center will launch two week-long educational programs in forensic anthropology and forensic toxicology for medical examiners and law enforcement personnel. In addition, the center will provide educational and training opportunities in toxicology, pathology, anthropology and criminal justice to attract the best and brightest graduate students from around the country.

The center's goal over the next two years will be to solicit research funding and to expand services into the southeastern and the northeastern United States. Plans also include the recruitment of a nationally recognized forensic anthropologist to the faculty in fall 2000.

Leaders of the center hope to formalize a new degree program in forensic medicine during the fourth year. Construction of a 5,000 square-foot-building to house laboratories and provide research facilities and classrooms is slated for year five.✎

UNIVERSITY OF FLORIDA

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