

Vol. 18 No. 2

Summer 2002

IMPACT

The University of Florida Institute of Food and Agricultural Sciences



 UNIVERSITY OF
FLORIDA
Institute of Food and Agricultural Sciences

**College of Agricultural and Life
Sciences: "Society-ready" Graduates**

Perspective

By Michael V. Martin



Mike Martin

Vice President for Agriculture
and Natural Resources

During a period of rapid social and economic change, Florida agricultural and natural resource industries are facing many challenges in meeting their future needs for trained professionals. As we look to the future, the development of human resources continues to be one of our top priorities.

The College of Agricultural and Life Sciences – the teaching arm of the University of Florida’s Institute of Food and Agricultural Sciences – is Florida’s only comprehensive academic program of its kind, providing academic programs in food, agriculture, natural resources, and human and life sciences. UF/IFAS has a mandate to teach courses and offer academic degree programs throughout the state.

With the addition of a new joint academic partnership program at Hillsborough Community College in Plant City, UF’s College of Agricultural and Life Sciences now offers degree programs at six locations around the state. UF degree programs on the Treasure Coast have been enhanced by a new \$3.9 million teaching facility addition at UF’s Indian River Research and Education Center in Fort Pierce. Following dedication ceremonies in April, Treasure Coast newspaper editorials were very supportive of our efforts to expand education programs and partnerships in the region.

The past decade has been one of change for the UF college. Innovation and improvements, including the new Doctor of Plant Medicine program, have helped boost enrollment by more than 150 percent. Women and minorities are now a significant part of the enrollment. Distance education is playing a major role in delivering courses and degree programs to off-campus research and education centers, allowing students to earn degrees from UF without having to take courses in Gainesville. Partnerships with other state universities and community colleges are expanding our ability to serve students around the state.

And our students continue to earn national recognition through various organizations such as NAMA (National Agri-Marketing Association) and MANRRS (Minorities in Agriculture, Natural Resources and Related Sciences).

This issue of IMPACT magazine details some of the many ways UF/IFAS is meeting the human resource needs of the agricultural and natural resource industries – in Florida, the nation and worldwide. UF’s College of Agricultural and Life Sciences, including the School of Forest Resources and Conservation, is dedicated to developing “society-ready” graduates equipped to meet the demands of today’s complex and changing marketplace.



IMPACT is published by the University of Florida's Institute of Food and Agricultural Sciences (UF/IFAS). For more information about UF/IFAS programs, contact **Donald W. Poucher**, assistant vice president of external relations and communications: (352) 392-0437, or e-mail: info@mail.ifas.ufl.edu.

IMPACT is produced by IFAS Communication Services, **Ashley M. Wood**, director.

Editor
Chuck Woods

Contributors
Aimee Huskey
Ami Neiberger
Larry Schnell

Photo Editor
Thomas S. Wright

Photographers
Tara Piasio
Eric Zamora

Designers
Audrey S. Wynne
Tracy D. Zwilling

Change of address, requests for extra copies and requests to be added to the mailing list should be addressed to **Chuck Woods**, PO Box 110025, University of Florida, Gainesville, FL 32611-0025, or e-mailed to ctw@mail.ifas.ufl.edu

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UF/IFAS develops knowledge in agricultural, human and natural resources and the life sciences and makes that knowledge accessible to sustain and enhance the quality of human life.

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As many graduates from UF's College of Agricultural and Life Sciences continue to move into leadership positions in government and business worldwide, 12 recent and past alumni are profiled.

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On the cover:

Students in UF's College of Agricultural and Life Sciences come from increasingly diverse backgrounds. Ten years ago, there were few women and minority students. Now, women are the majority at the undergraduate level, and there is a high percentage of minority students. Total enrollment in the college exceeds 3,700, up more than 150 percent during the past decade. Cover photograph — bottom center: **Wonsook Ha**, a graduate student from South Korea working on his doctorate in soil and water science. Second row, left to right: **Bryan Boynton**, a graduate student from Florida working on his doctorate in food science and human nutrition, and **Daisuke Sano**, a graduate student from Japan working on his doctorate in food and resource economics. Third row, left to right: **Bianca Bradford**, a graduate student from North Carolina working on her master's degree in interdisciplinary ecology, and **Nona Collins**, an undergraduate student from Florida working on her bachelor's degree in microbiology and cell science. Top center: **Gabriel Cosenza**, a graduate student from Honduras working on his doctorate in animal sciences. (Photo by Thomas Wright)

Celebrating Diversity and Leadership

Minorities in Agriculture, Natural Resources and Related Sciences – MANRRS – is the only student organization in UF’s College of Agricultural and Life Sciences that spans all undergraduate and graduate programs.



Marta Hartmann, left, and Laikhe Jones review the annual plan of work for the Florida Chapter of Minorities in Agriculture, Natural Resources and Related Sciences (MANRRS). (Photo by Thomas Wright)

“MANRRS was established to develop a national network between minority students and professionals from academic institutions, government and industry. The organization offers programs to enhance the academic, professional and leadership development of its members,” she said.

In UF’s College of Agricultural and Life Sciences, the student profile has changed dramatically during the past decade, Hartmann said.

As the nation’s population becomes more diverse, students and faculty at the University of Florida reflect those demographic changes. In the College of Agricultural and Life Sciences, leadership and diversity in agricultural, natural resources and related sciences are being promoted by an award-winning student organization.

The UF Chapter of the National Society for Minorities in Agriculture, Natural Resources and Related Sciences is one of more than 50 chapters of the organization. Chartered in 1989 as one of the founding chapters of the national organization, UF’s MANRRS program now includes 35 student and professional members. Nationwide MANRRS membership exceeds 1,200.

“The organization began as a vision shared by a group of agriculture students and faculty members at Michigan State University and Pennsylvania State University,” said Marta Hartmann, who has served as senior faculty adviser to the UF chapter since 1995. She became national president of MANRRS in May 2002.

“Ten years ago, we had very few women and minority students. Now, women are the majority at the undergraduate level, and we have a high percentage of minority students. At the graduate level, 38 percent of our students are women. At the undergraduate level, 24 percent are minorities, and 13 percent of our graduate students are minorities,” she said.

The UF MANRRS chapter also has received numerous regional and national awards, including two Regional Chapter of the Year awards during the past five years. In 1996 and 1997, the UF program was named Chapter of the Year in competition with chapters at other land-grant universities such as the University of California at Davis, Pennsylvania State University, Ohio State University and Texas A&M University, Hartmann said.

Since 1995, the UF chapter also has been involved in Project A-Team, a tutoring/mentoring program for Lincoln Middle School in Gainesville, she said.

Hartmann, a lecturer in the Department of Agricultural Education and Communication, said the UF chapter enjoys



Sally Williams, left, and Keawin Sarjeant, a graduate student working on his master's degree in meat microbiology in the Department of Animal Sciences, examine microbial culturing media for growth of pathogenic bacteria. (Photo by Thomas Wright).

Williams also served as editor of the national MANRRS newsletter and superintendent for the annual graduate student national oral research contest. She recently initiated the national professional development program and serves as program chair.

LaTonya Jones, an undergraduate student majoring in food and resource economics, serves as regional student vice president of the national organization. Laikhe Jones, a graduate student majoring in agricultural education and communication, is the incoming UF chapter president.

“UF’s MANRRS program provides its members with a unique opportunity to establish and maintain business contacts with professionals through academic, career and mentoring relationships,” Laikhe Jones said. — *Editor*

Marta Hartmann (352) 392-0502
mmhartmann@mail.ifas.ufl.edu

Michael Olexa (352) 392-1881
olexa@fred.ifas.ufl.edu

Sally Williams (352) 392-2993
williams@animal.ufl.edu

strong industry support, too. Dow AgroSciences contributed \$10,000 to help sponsor a February 2002 regional conference in Gainesville, attracting student chapters from five other land-grant institutions. The theme of the conference was “Planting Dreamers, Growing Leaders.”

In April, eight students and two faculty advisers from UF attended the national conference in Portland, Ore. The UF attendees were among 900 participants from academic institutions, industry and government agencies across the nation.

Because the development of leadership skills is one of the highest priorities for MANRRS, Hartmann organized a leadership workshop for national student officers in summer 2001. Student leaders from eight land-grant institutions such as UF participated in the workshop, which took place in Puerto Rico. She said the University of Puerto Rico and U.S. Department of Agriculture collaborated in the event.

“The workshop provided student officers with an opportunity to realize the importance of intercultural communication and a global perspective to become effective leaders in the 21st century,” she said.

Faculty working with Hartmann on the UF MANRRS program include Michael Olexa, a professor in the Department of Food and Resource Economics, and Sally Williams, an associate professor in the Department of Animal Sciences. Williams is co-adviser and co-founder of the UF chapter. Olexa has served as co-adviser since 1998.



Mike Olexa, left, confers with Bianca Bradford, a graduate student working on her master's degree in interdisciplinary ecology. (Photo by Eric Zamora)



Who Ya Gonna Call? The Plant Doctor!

Although farmers can call upon specialists in entomology, plant pathology, soil science and other disciplines, there's a growing need for people trained to be general practitioner "plant doctors."

When UF's College of Agricultural and Life Sciences announced the beginning of the world's first Doctor of Plant Medicine program in 1999, the story landed on the front page of *The Wall Street Journal*. Since then, the DPM program has attracted national and international attention. More than 40 students have enrolled in the program, which trains them to diagnose problems that affect plants and make recommendations to correct those problems.

The idea for the program evolved from a suggestion by a national crop protection consultant, said John Capinera, chairman of UF's Department of Entomology and Nematology in Gainesville.

"In some instances, consultants said the employees they were able to hire were too narrowly trained or focused," Capinera said. "Sure, these young professionals had expertise in entomology, nematology, plant pathology or weed science, but they did not have the range of experience needed to deal with the complex production problems most producers now face."

Capinera credited former UF President John Lombardi for helping persuade the Board of Regents to approve the program in 1999. When the regents' staff had concerns that no other university offered such a program, Lombardi said that was a unique opportunity for UF.

Madeline Mellinger, president of Glades Crop Care Inc., a Jupiter-based agricultural consulting firm, praised UF's "visionary" DPM program. The complexity of modern agriculture requires people to be "systems thinkers" with a broad background, she said.



Daniel Sonke, left, Stacy Strickland and Esther Dunn, students in UF's Doctor of Plant Medicine program, examine a petunia flower with a severe aphid infestation. (Photo by Eric Zamora)



Stacy Strickland, left, Bob McGovern, George Agrios and Osmond Baron examine a squash plant heavily infected with a fungal disease. Strickland and Baron are students in the Doctor of Plant Medicine program. McGovern is the new director of the DPM program, and Agrios is the former director. (Photo by Eric Zamora)

George Agrios, the professor in the Department of Plant Pathology who inaugurated the program and served as its first director, said Florida's hot and humid conditions are favorable to a wide range of crops – and the pests and diseases that attack them. As a result, the state presents an ideal location for offering the DPM program. He said graduates are able to diagnose and treat illness in a plant the same way a medical doctor would diagnose an ailment in a human patient.

“For the first time, we have combined the knowledge and expertise from various disciplines into one degree program that parallels professional programs in human and veterinary medicine,” Agrios said.

The DPM program requires three to four years of course work at the graduate level across various disciplines and departments. He said the program was created to meet the growing demand for professionals who have a broad

range of expertise and experience in producing and maintaining healthy plants for many types of public and private applications, ranging from production agriculture to ornamental horticulture and golf course management.

“Plant doctors offer expert service to rural and urban plant growers alike, and their expertise will help protect the environment and water resources,” Agrios said. “By making the correct diagnosis quickly and prescribing the best, scientifically determined treatment, they will help reduce the use of fertilizers, pesticides and other materials that can harm the environment.”

The DPM program leads to an interdisciplinary, interdepartmental doctorate degree. Courses are provided by many departments, including agronomy, entomology and nematology, horticultural sciences, plant pathology and soil and water science. Students also are required to take courses in agricultural law, agribusiness management and communications.

The program requires 90 semester credits of graduate course work plus 30 semester credits of internship. Students are required to complete internships in soil analysis, pest and disease identification labs, and possibly at UF/IFAS research and education centers, in agribusinesses and with extension specialists.

The DPM program is open to students with a bachelor's degree in any of the biological sciences and appropriate academic credentials. A professional license by a state licensing board is under consideration for the near future.

With Agrios' retirement in June 2002, the DPM program will be directed by Bob McGovern, associate professor of plant pathology.



Nicka Singh, a graduate student in the Doctor of Plant Medicine program, examines corn damaged by wildlife. The trap will be used to catch the animal for positive identification. (Photo by Eric Zamora)

In announcing the change, Jimmy Cheek, dean of the college, thanked Agrios for his pioneering efforts in getting the unique program established in 1999.

“As one of the world’s leading plant pathologists, George Agrios contributed significantly to UF’s Institute of Food and Agricultural Sciences, particularly through the development of the Doctor of Plant Medicine program,” Cheek said. “George’s knowledge and expertise were instrumental in the success of the program. As professor emeritus, he will remain a vital part of the UF faculty.”

Cheek also expressed confidence in the leadership of Bob McGovern, who joined the UF faculty in 1990. “Bob McGovern will provide purposeful and important leadership to the program, and we are pleased that he has agreed to accept the role of director, beginning in July 2002.”

McGovern said plant ailments can be particularly challenging to diagnose because of the diverse array of potential causes, and because plant doctors may deal with many different plant species. Living agents ranging from pathogens such as fungi, bacteria and viruses to

insects, mites and nematodes, vertebrate pests such as birds, gophers and mice, and weeds may lead to severe crop losses.

“Plant problems also may be caused by nonliving factors such as nutrient deficiencies/excesses, water imbalances, temperature extremes, air pollution and suboptimal soil pH values,” he said. “UF’s Doctor of Plant Medicine program is uniquely suited to producing individuals who can sort out this complexity.”

McGovern received his bachelor’s degree in history from Fordham University in New York City. He worked as a medical technologist at The New York Hospital-Cornell Medical Center. He completed his master’s and doctoral degrees in plant pathology at Cornell University in Ithaca, N.Y. McGovern established and directed the horticulture and diagnostics department of Frank’s Nursery and Crafts Inc. in Detroit before joining UF.

For more information on the program, visit the following Web site: <http://www.dpm.ifas.ufl.edu/> or contact McGovern at (352) 392-3631, ext. 213 or rjm@mail.ifas.ufl.edu. — *Editor*



With the addition of a new joint teaching program at Hillsborough Community College in Plant City, UF's College of Agricultural and Life Sciences now offers off-campus degree programs at six locations around the state. At the same time, UF degree programs on the Treasure Coast have been enhanced by a new \$3.9 million teaching facility addition (photo above) at UF's Indian River Research and Education Center in Fort Pierce.

New & Improved



Photo by Eric Zamora

From Homestead in South Florida to Milton in the Florida Panhandle, new teaching programs and improvements at existing facilities are giving students more options than ever for completing their degrees in UF's College of Agricultural and Life Sciences.

"Beginning in January 2002, a new joint teaching program between UF's Institute of Food and Agricultural Sciences and Hillsborough Community College at Plant City gives time- and place-bound students another way to complete their degree from UF's College of Agricultural and Life Sciences," said Jimmy Cheek, dean of the college. "The program also will attract students from outside the region and state."

He said Plant City is one of six off-campus sites with teaching programs linked to the main campus in Gainesville

with state-of-the-art distance education facilities. Similar programs are located at the Mid-Florida Research and Education Center in Apopka, the Fort Lauderdale Research and Education Center, the Indian River Research and Education Center in Fort Pierce, the Tropical Research and Education Center in Homestead, and the West Florida Research and Education Center in Milton near Pensacola.

"The Plant City teaching programs will draw upon the academic expertise of faculty in Gainesville and nearby UF/IFAS facilities such as the Mid-Florida Research and Education Center in Apopka," Cheek said. "Programs leading to bachelor's degrees in environmental horticulture, agricultural business, natural resources and conservation, and a minor in agribusiness management will be offered at the Plant City campus."



Alan Corners, left, a student from Tampa majoring in environmental horticulture in UF's College of Agricultural and Life Sciences, and Lori Barber, coordinator of academic support services at the new Plant City campus, visit a greenhouse used by Hillsborough Community College and UF. (Photo by Eric Zamora)

In addition, Cheek said professional master's level programs will be available in the existing UF Master of Agriculture Distance Education program, including specializations in agriculture business management, and agricultural education and communication.

"The College of Agricultural and Life Sciences is Florida's only comprehensive academic program of its kind, providing academic programs in food, agriculture, natural resources, and human and life sciences," Cheek said. "UF/IFAS has a mandate to teach courses and offer academic degree programs throughout the state."

He said the new joint teaching program at Plant City is supported by \$400,000 appropriated by the 2001 Florida Legislature.

Mike Martin, UF vice president for agriculture and natural resources, said the statewide UF/IFAS mission in teaching, research and extension is to develop knowledge in agricultural, human, and natural resources and life sciences and to make that knowledge accessible to people to sustain and enhance the quality of human life.

Gwendolyn Stephenson, president of HCC, said the community college is an accredited, public, comprehensive community college, providing a "leadership role in technological training, economic development and community service in the global marketplace."

She said the joint HCC teaching program with UF/IFAS is "an outstanding example of cooperative programs and partnerships that fulfill local needs."

Treasure Coast

Dedication ceremonies for a new \$3.9 million teaching facility addition to UF's Indian River Research and Education Center in Fort Pierce were held in April.

State Sen. Ken Pruitt, R-Port St. Lucie, was the keynote speaker and dedicated the building. Pruitt and State Rep.

groves, horticultural research fields, greenhouses and other support facilities.

The addition, which includes an adjacent 2-acre teaching garden, features distance education facilities, lecture rooms and auditorium for courses, seminars and meetings. The addition has five classrooms, two laboratories, a computer laboratory, a library, greenhouses and office space for faculty and staff.

Martin said the expanded teaching program at Fort Pierce reflects "UF's unique statewide agricultural and natural resource research and education mission" that is mandated in federal laws, beginning with the 1862 Morrill Act that established land-grant universities in every state.

"Providing access to students, conducting research in the public interest and taking new knowledge to the people are more than land-grant traditions – they are legally-binding responsibilities," Martin said.

Cheek said the addition, started in June 1999, will accommodate the center's growing number of students who can earn their bachelor's degrees from UF without having to leave the Treasure Coast. Nearly 500 students have participated in degree and nondegree teaching programs at the center.

He said the cooperative teaching program at the center involves Indian River Community College in Fort Pierce and Florida Atlantic University in St. Lucie West.

"Thanks to the support and collaboration of our legislators, local and state educators, business groups and others, we are able to move forward and expand the statewide teaching programs of UF's Institute of Food and Agricultural Sciences," Cheek said.

The UF/IFAS Indian River Research and Education Center was established in 1947 to serve the research and education needs of Florida with special emphasis on the five-county area comprising St. Lucie, Okeechobee, Martin, Indian River and Brevard counties. — *Editor*

Spring Break in Costa Rica!



During their weeklong visit to Costa Rica, students and faculty visited several ecotourism sites, including this waterfall at Zeta Trece. Those on the study tour included, front row left to right, Kris Grage, John Ricketts and John Hall; second row, Megan McCracken, Erin Eckhardt, John Hooker and Taylor Stein; third row, Brian Myers and Jason Steward.

While many University of Florida students were enjoying their spring break at the beach, students in UF's College of Agricultural and Life Sciences visited Costa Rica to learn about agriculture, natural resources and ecotourism in the Central American nation.

For a week in March, 11 undergraduate and graduate students in UF's College of Agricultural and Life Sciences, accompanied by two faculty members, visited agricultural production and natural resource areas in Costa Rica. They evaluated the sites and compared them to similar enterprises in Florida.

While enjoying hot springs, observing an active volcano, exploring a rain forest canopy and riding horseback, they experienced a culture and natural landscape different from their own in Florida yet with a similar economic base. Students, some of whom had never traveled abroad, welcomed the international experience.

"The trip was a unique experience – a great opportunity to see agriculture, natural resource management and ecotourism in an international setting," said Brian Myers, a doctoral student in agricultural education and communication.

Myers and his classmates visited a Dole Food Co. banana farm, a research station in a rain forest, a cattle ranch that combined production and tourism, and a village that has successfully developed ecotourism.

The Organization for Tropical Studies (OTS), UF's partner in Costa Rica, arranged the travel and educational experiences. Mickie Swisher, an associate professor in the Department of Family, Youth and Community Sciences, and Taylor Stein, an assistant professor in UF's School of Forest Resources and Conservation, accompanied students on the trip. Swisher has extensive experience in Costa Rica and has frequently worked with OTS. It was Stein's first trip to Costa Rica.

"The Costa Rica study tour is a prototype of what the College of Agricultural and Life Sciences plans to offer students in a variety of topics and locations," said E. Jane Luzar, associate dean of the college. "We want to increase international exposure for our students and faculty.

"Many students cannot take advantage of the summer- or semester-abroad opportunities because their programs are highly structured and do not require credits in subjects such as a foreign language typically offered in a study-abroad program," Luzar said. "Many agriculture students find little benefit in these programs because they would accumulate excessive elective credits and delay their graduation."

So the college decided to offer the foreign study tour – a short, relatively inexpensive program scheduled during a break in classes when students could gain exposure to international topics.

“The study tour really isn’t about students needing credits,” said Luzar. “Students want to go overseas and gain international experience.”

Swisher was selected to serve as the college’s globalization coordinator to help develop international tours and assist faculty and students interested in developing similar tours. The Costa Rica study tour was designed to give students exposure to a broad range of academic disciplines to enhance their interest in international issues. A variety of future study tours are being developed that will have more narrow topics, Swisher said.

The tour was well structured for John Hall, a master’s degree student in agribusiness. He wanted international experience to prepare for a career teaching agriculture to high school students, but he couldn’t get away for a semester.

“It’s an ideal way for us to get international experience,” Hall said.

Swisher encouraged students to evaluate places they visited on the tour because the various sites could help them understand Florida’s economic and natural resource issues. The regions have similarities as well as differences. Both depend on tourism and agriculture. Both market their products and services to distant clientele. And both have a strong Hispanic heritage and depend on outside labor for agricultural production – Costa Rican farms employ many Nicaraguans in agricultural labor.

“We asked, what are some of the strategies for development that people in Costa Rica have used, and what are the lessons learned for Florida?” said Swisher.

At La Selva, an OTS research station in a rain forest, students observed a unique ecosystem and learned about research efforts underway to better understand rain-forest ecology. Megan McCracken, a senior in animal sciences, said she had always wanted to visit a rain forest.

“The amount of vegetation is really impressive,” said McCracken. “It’s a totally different type of ecosystem than I’ve experienced anywhere else.”

Zeta Trece, a community near the Nicaraguan border, was a model for student evaluation of ecotourism. The region was not

well suited for agriculture, but its natural setting and out-of-the-way location have become a tourist attraction. Students learned how a group of enterprising women turned the rural environment into an attraction that maintains its natural character.

They said the international experience in Costa Rica would be useful in their careers.

John Ricketts, a doctoral student in agricultural education and communication, plans to train agriculture teachers for secondary school. He would like to arrange similar study tours for them. He plans to continue taking tours to gain more international experience.

Erin Eckardt, an undergraduate in environmental horticulture, plans to work with botanical gardens after her studies. She has worked with many tropical plants but never in their natural habitat.

John Hooker, a UF undergraduate, was interested in how urban areas are managed in a region devoted to conservation. Exposure to the public policies of Costa Rica gave him a broad perspective for his career in political science.

The trip also acquainted faculty with international issues. Costa Rica has adopted some of the most successful conservation measures of any nation. Its policy has kept about a quarter of the land in public ownership.

Stein wanted to learn more about Costa Rica’s conservation and ecotourism efforts so he could incorporate the information into his three UF courses on ecotourism.

In Costa Rica, conservation was in place before ecotourism, Stein said. In the United States, nature-based recreation typically is a reason for adopting conservation policies.

“They protected their land and then brought in recreation,” said Stein. “In many ways, Costa Rica is more advanced than we are in terms of conservation.”

— *Larry Schnell*

Students learn about banana production at a Dole banana processing and packaging facility. (Photo by Taylor Stein)





Students traveled across a bridge at the La Selva Biological Research Station operated by the Organization for Tropical Studies. The hanging bridge is the main access to a well-preserved rain forest, which is used for research. Students visiting the rain forest included, from left, Kris Grage, Cindy Malecki, Megan McCracken, Mary Dyal, Erin Eckhardt, Jason Steward and John Hall. (Photo by Steven Hall)



On a canopy tour, Brian Myers swings through the rain forest. (Photo by Taylor Stein)

HighProfiles

No matter where you go in the United States and other nations, chances are you'll find graduates from UF's College of Agricultural and Life Sciences in a variety of high-profile government and business positions. Some work for large multinational organizations while others use their college skills to build their own businesses. And some graduates go on to other professional programs in areas such as medicine or law.

“More than ever, ‘society-ready’ graduates from the college are well-prepared to meet the demands of today’s increasingly complex job market and changing societal needs,” said Jimmy Cheek (photo below), dean of the college. “We’re proud of the thousands of



students who have completed undergraduate and graduate degrees in the college. The following profiles on some of our many outstanding graduates highlight their goals and contributions to a better world.”



Adam Putnam

In his freshman year on Capitol Hill, Adam Putnam is more likely to be mistaken for a page or a student than a respected U.S. Congressman from Florida's 12th district. At 27, he is the youngest member of the U.S. House of Representatives.

When asked if his age poses a challenge to get people to take him seriously, the UF College of Agricultural and Life Sciences graduate said, "I could write a book of funny stories about being kicked off the members' elevator or asked to go fetch coffee." He sees being young as a help, not a hindrance.

Putnam, who completed his bachelor's degree in food and resource economics in 1995, said senior citizens are more likely to support young people in leadership positions than many other voters. It's because of their experiences during World War II, he said.

"When they were young, they defeated Nazi Germany and Japan, and then they came home and rebuilt America," he said. He sponsored an event on the 60th anniversary of the Pearl Harbor attack last year, where young people met

veterans and heard their stories firsthand. Did Putnam take the credit? Not a bit. He told *The Ledger* newspaper in Lakeland, Fla., that he wanted to bring young people together with American heroes.

Putnam is modest, but he has played an important role in Washington, D.C., during the past year. He was with U.S. President George W. Bush on Air Force One on Sept. 11 when terrorists attacked the World Trade Center and the Pentagon. Putnam has made his mark on Capitol Hill, playing a critical role in homeland defense against terrorism as vice chairman of a key congressional subcommittee on national security. The Bartow, Fla., native is one of the few congressmen with four committee assignments and is the only freshman to serve on the Joint Economic Committee.

Because he believed it would negatively affect Florida agriculture, Putnam made waves when he broke party ranks and voted against a trade bill giving the president broader authority. The bill passed by a narrow margin, but instead of deflating the young congressman's career, his steadfastness earned the respect of colleagues and even President Bush, who cited Putnam's resolve to do what was right for his district.

The Washington in which Putnam works today is very different from the one he arrived at in 2001. The concrete barricades outside his office and the anthrax scares are reminders of the changes, but Putnam remains optimistic about the future.

That optimism is grounded in old-fashioned values. A fifth generation Floridian who grew up in the citrus and cattle business, Putnam spent 10 years as a 4-H member. He was exposed to UF

early on through 4-H, staying in Gainesville dormitories during Florida 4-H Congress and attending 4-H Camp Cloverleaf for summer camp and 4-H Camp Ocala for state 4-H executive board. He said UF identifies capable young people early in life through 4-H. "Coming up through 4-H exposed me to the opportunities UF had to offer," he said.

Those opportunities help young people develop skills that help them for the rest of their lives, Putnam said. "4-H taught me the citizenship and leadership skills I use today," wrote Putnam in an editorial for the youth development organization's centennial. "From public speaking to leading a meeting, 4-H continues to instill a set of life skills in today's youths."

When it was time to apply for college, UF was the only school to which he applied. Putnam remembers many of his professors and the interest they take in students. "No one falls through the cracks in UF's College of Agricultural and Life Sciences," he said. "Everyone – from the dean down to the 4-H club leader – nurtures students."

He said his experience in UF student government taught him about the nuts and bolts of campaigning and how to represent the interests of a diverse constituency. He was president of Alpha Gamma Rho fraternity his junior year and active in Florida Blue Key.

An agricultural and life sciences degree remains relevant in today's economy, Putnam said. Citing the explosion in biotechnology, he said there is a need for young people to pursue agriculture, biological sciences and the life sciences.

"People are always going to need food," he said. "As our population continues to grow and the number of people working in agriculture declines, we need bright, innovative producers to feed the world efficiently."

Putnam said UF's impact on agriculture is based upon a network of capable alumni from the college. "We have a blending of science, service and academia. The success of Florida's \$54 billion agriculture and natural resources industries depends largely on the ability of UF's College of Agricultural and Life Sciences alumni to address issues with stakeholders, policymakers and county commissioners."

He was "bitten with the bug to do politics" while State 4-H Council president, and his life has never been the same since. His 4-H days saw him building coalitions with 4-H members to pass legislation on the floor of the Florida House of Representatives. Not much changed when he was elected to the Florida Legislature at the age of 22 in 1996. He served in the Florida House of Representatives for four years, proving wrong those who thought that young legislators could not make a difference.

Putnam places great faith in America's young people and their ability to help solve problems through government service and economic life. In a speech to 1,200 people at the National Conversation on Youth Development, Putnam said America is only as strong as the next generation of young people, and he thanked them for being part of the solution.

He also said young people are not the leaders of tomorrow; they are the leaders of today. Putnam is a UF graduate who doesn't just say those words; he lives them.

— *Ami Neiberger*

Majoring in food science and human nutrition in UF's College of Agricultural and Life Sciences helped define the future for Anita Dhople, who is now a doctor of internal medicine at Albany Primary Health Care Inc. and an adjunct clinical instructor in the Department of Internal Medicine at the Medical College of Georgia in Augusta.

By the time she entered her junior year at UF in 1990, Dhople had her eyes set on medical school.

"Early on, the status and income associated with being a medical doctor certainly appealed to me, but all of that changed when my grandfather in India died from lack of access to health care," she said. "The issue of access to medical care in a wealthy country such as the United States also struck me as an important issue. At that point, I decided making health care more accessible to the disadvantaged in this country was more important to me than money or status."

When she completed her bachelor of science degree in food science and human nutrition with honors in 1992, Dhople was recognized as the Outstanding Student of the Year in UF's College of Agricultural and Life Sciences. Her undergraduate education was supported by scholarships from RJR Nabisco Inc. and Procter & Gamble.

She then began the next leg of her journey in UF's College of Medicine with the help of a full scholarship from the National Public Health Service. In addition to her studies, she volunteered at UF's Equal Access Clinic for the homeless and led a Girl Scout troop during her senior year in medical school.

"At the same time, I began using what I learned in the food science and human nutrition program, changing my

own diet and increasing my exercise," she said. "By the end of medical school in 1996, I had earned my degree, gained self-confidence and developed a respect for those less fortunate than me. Since then, my life has been graced by many opportunities."

After completing her residency in internal medicine at the University of Virginia in Charlottesville in 2000, Dhople began to pursue her career dreams. For the past two years, she has been working at the nonprofit community health center in Albany, helping residents whose average income is 200 percent below the poverty level.

"I don't work in a fancy practice or drive a luxury car," she said. "I am thriving on the challenge of helping people who may not have had access to proper medical care in the past. Besides my clinical responsibilities, I have started a hospitalist program in Albany, and I work with a group on diabetes education."

Dhople said the hospitalist program is a relatively new field in medicine. "Hospitalists are physicians whose primary professional focus is the general medical care of hospitalized patients. They may engage in clinical care, teaching, research or leadership in the field of general hospital medicine."

She said her undergraduate education in food science and human nutrition prepared her well for the challenges of her current health-care position. For example, a course in oral communication required for all graduates of the College of Agricultural and Life Sciences has been particularly valuable in her efforts to reach out and establish a dialogue with different audience groups in the community.

While her career in medicine is just beginning, Dhople already has an impressive list of professional awards,



Anita Dhople

Photo by Thomas Wright

including the Infectious Disease Society of Florida Award in 1996 and the Regan Award for Psychiatry in 1996. She was one of 16 chosen from a field of 80 to present a paper on hepatitis C at the Virginia chapter meeting of the American College of Physicians in 2000 in Roanoke.

The author of numerous scientific papers on disease, obesity and nutrition, Dhople also is a member of several professional organizations, including the American Medical Association, American College of Physicians and American Association of Physicians from India. — *Editor*



Betsy Spillers

Photo by Tara Piao

For Betsy Spillers, dreams of owning a business have become a reality. When she came to UF's College of Agriculture and Life Sciences in 1992 to pursue her bachelor's and master's degrees in environmental horticulture, Spillers worked at The Plant Shoppe in Gainesville and thought about having a similar business someday. Now, at age 28, she owns the business.

Spillers, who grew up in the nursery industry, is a transplant from Homestead, Fla., and said she's been getting ready for her own business since she was five. She recalled the early days in her dad's greenhouse and helping sell plants at the flea market to pay for nursery equipment.

While her undergraduate and graduate degrees are in environmental horticulture, Spillers said she learned about managing a business and marketing many different products and services by taking courses in UF's Department of Food and Resource Economics.

To gain real-world experience, she interned at garden centers in Texas and Minnesota and worked as a gardener at Walt Disney World. Upon graduation, Spillers opened and managed a garden center for a large chain store in Orlando from July 1998 to May 1999.

At the same time, she and her parents entered negotiations to purchase The Plant Shoppe, closing the deal in the summer of 1999. The 17-year-old store is a full-

service garden center and florist with 20 employees. The store has its own Web site: www.theplantshoppe.com.

In addition to a large selection of plants and garden supplies such as fertilizer and pesticides, the store has bonsai plants and supplies, birdhouses and feeders, garden art and stepping stones, and garden books and gift items. The store even sells ladybugs for biocontrol of pests on plants, she said.

"Almost everyone who works in the garden center either has been or is currently an environmental horticulture student in UF's College of Agricultural and Life Sciences," she said. "Our knowledgeable staff can help diagnose what might be ailing your plants. We also offer seminars and workshops during the spring and fall."

Looking back on her days in the UF college, Spillers said the relationship between faculty and students is excellent. As a student, she had an opportunity to meet many professionals in the environmental horticulture industry – people she now works with in her new business.

And, finally, the latest development in her gardening career is that Spillers got married in January 2002, and her last name is now Gardner. "You could say I am a true Gardner," she said. — *Editor*

Early impressions can make a lasting difference. When Callief Shand and her family moved to Florida from Jamaica in 1984, she was impressed by the high level of health care in the United States. The contrast helped shape her education and career choices at the University of Florida.

“Good, affordable dental care is not always easy to find in Jamaica, so the idea of a dental career appealed to me at an early age,” she said. “In fact, by the time I was 15, I wanted to be a dentist.”

Like many students who go on to professional programs in medicine, Shand pursued a bachelor’s degree in UF’s College of Agricultural and Life Sciences. She received her bachelor’s degree in food science and human nutrition in May 2002 and will enter dental school in Tennessee this fall.

“Beginning this fall, I will attend Meharry Medical College’s School of Dentistry in Nashville, where I will work on my degree in dentistry,” she said. “Thanks to my experience in UF’s College of Agricultural and Life Sciences, I feel well prepared for the challenge of a professional program such as dentistry.”

During her two years at the UF college, she met students destined for professional studies in medicine, dentistry, veterinary medicine and law. Other graduates of the college pursue careers in business, communications, education and agricultural production, she said.

“The College of Agricultural and Life Sciences appeals to such a wide range of students because there are so many degree options available,” she said. “The college offers 20 majors – everything from agricultural and biological engineering to microbiology and cell science. There are also about 50 specializations and 17 minors available for students.”

If Shand sounds well-informed about the college, that’s because she served from 1999 to 2001 as a CALS

Ambassador, speaking to high school and community college students, as well as UF undergraduates about opportunities available in the college.

“As an ambassador you have to answer questions on every aspect of CALS, so it was a great way for me to enhance my own understanding of the college,” she said. “The ambassador training also helped me chart my own course, increasing my awareness of the options.”

After graduating from Orlando’s Maynard Evans High School in 1995, Shand served in the U.S. Army for three years as a supply specialist before earning her associate of arts degree at Valencia Community College. She is currently an active member of the Florida Army National Guard.

When she arrived at UF in fall 1999, Shand entered the college, initially pursuing a degree in agricultural operations management and then changing her major to food science and human nutrition.

“The food science and human nutrition curriculum was more closely related to coursework in dental school, so it seemed like the right choice for me,” Shand said. “Other students in the food science and human nutrition program who were headed for dental school provided a lot of helpful advice.”

To gain experience in her chosen field, Shand worked part-time as a laboratory technician at UF’s College of Dentistry. Her work included sterilization monitoring to make sure dental instruments are bacteria-free after they have been steam-treated in autoclaves.

“The work helped me appreciate the relationship between good dental health and other areas of expertise,” she said. “For example, in food science and human nutrition, various foods can have a major impact on overall dental health.” — *Editor*

Photo by Tara Piaisio





Carl Loop

Photo by Eric Zamora

An industry as large and diverse as Florida agriculture requires strong leadership. Fortunately, the \$54 billion industry has Carl Loop among its leaders.

Recognized throughout the state – as well as nationally and internationally – as a statesman for Florida agriculture, his influence extends from the halls of Washington, D.C., to the grass roots of agriculture.

Born in Jacksonville, Fla., Loop graduated from UF's College of Agricultural and Life Sciences in 1949 with a bachelor's degree in environmental horticulture. He married the former Mary Ruth Forbes. They have three children and five grandchildren.

After college, he started Loop's Nursery and Greenhouses with a borrowed truck and \$1,500. The Jacksonville nursery is now one of the largest wholesale nurseries in the Southeast.

Early in his career, Loop recognized the importance of organization within agriculture. He helped found both the Florida Nurserymen and Growers Association and the Florida Foliage Association (now merged with FNGA).

Loop was a successful businessman when he became president of the Florida Farm Bureau Federation in July 1983. He has been re-elected for eight two-year terms. His leadership put renewed vigor into the state's largest general farm organization, which is based in Gainesville. The

organization's membership has more than doubled since he took office.

During his tenure as president, Loop has worked to foster an atmosphere of cooperation among commodity organizations within the state. That, in turn, has led to a united agricultural community more able to effectively address legislative issues, regulatory matters and environmental concerns.

He has been a member of the American Farm Bureau Federation (AFBF) board of directors since 1983. He was elected vice president of the organization in 1995, serving in that capacity until January 2000. He also is president of the Southern Farm Bureau Life Insurance Company.

Loop has represented the interests of Florida agriculture at the national and international levels. He has appeared many times before congressional committees and regulatory agencies, presenting testimony on behalf of his fellow Florida farmers and ranchers. He has helped shape legislation that reduced the estate tax, improved the availability of health care, and addressed ergonomics, methyl bromide and many other issues of vital importance to Florida producers and rural families.

He has been a strong voice for Florida agriculture in the international trade arena. Three U.S. presidents – Reagan, Bush and Clinton – appointed him to serve on various

advisory boards for the Florida Leadership and Education Foundation Program and the International Studies Program. He has opened his nursery business to researchers and extension staff seeking solutions to production problems, forming close personal relationships with many UF/IFAS leaders, deans and researchers.

In February 2002, a lifetime of service and accomplishment earned Loop a place of honor in the Florida Agricultural Hall of Fame.

“Carl Loop believes in agriculture and the people within the industry,” said Reggie Brown, president of the Florida Agricultural Hall of Fame and manager of the Florida Tomato Committee in Orlando. “He has given freely of his time, talent and treasure to meet with people, to advise and assist people to overcome the challenges they face. His common sense approach to business, problem solving and activities has created personal friendships throughout the state and nation.” — *Editor*

Photo provided by Charles Davis



CharlesDavis

His resume includes some of the nation's top Fortune 500 companies, and his fast track to success began with a bachelor's degree from UF's College of Agricultural and Life Sciences in 1988.

Charles Davis, who transferred to UF from West Point Military Academy in 1984, became interested in sales and marketing, but he wasn't sure about the type of degree to pursue. A meeting with the faculty in UF's Department of Food and Resource Economics convinced Davis that he had "found a new home."

He said the department's academic program offered him "the opportunity to combine business concepts with an applied approach using real scenarios." During his four-year program in the UF college, Davis was an intern at IBM and the brokerage firm of E.F. Hutton.

At the same time, his work as secretary of the Food and Resource Economics Department Club earned him the department's Outstanding Service Award. During his junior and senior years, Davis was a CALS Ambassador, recruiting students for the College of Agricultural and Life Sciences. "That was my first sales job," he said.

Upon graduation in 1988, Davis joined Dun & Bradstreet in Tampa, working as a business analyst in the firm's information resources division.

"Dun & Bradstreet was an excellent opportunity for someone with my background," Davis said. "Their training program reinforced everything I learned in the College of Agricultural and Life Sciences. My responsibilities included meeting with officers of small- to medium-sized firms, writing their business reports and making credit decisions."

Nine months later, Johnson & Johnson offered Davis the opportunity to become territory sales manager for the firm's McNeil Consumer Products Division in Savannah, Ga. During his stay at McNeil, Davis was promoted and received several national sales achievement awards. After being tapped as an elite member of the firm's "Best of the Best Club," Davis was ready for the challenge of selling highly technical products. In January 1991, U.S. Surgical Corp. in Charlotte, N.C., offered him an opportunity he could not refuse.

The firm was known for its leading-edge technology in wound closure, and Davis sold the equipment to hospitals

and surgeons. "However, when the firm's stock went from 136 to 23 with no splits, I realized it was time to find a more stable work environment, and that's when Mobil Oil Corp. became a major player in my career," he said.

In October 1993, he became a marketing representative for the firm's plastics packaging division in Charlotte. Working for Mobil was a unique opportunity because the firm had the ability to drill, refine and sell to the end user, he said.

"In the plastics packaging division, I learned about all of the manufacturing processes and developing new products for the market," Davis said. "In 1993, we launched two new products, and my work was very instrumental in getting the products to the end user."

After he completed his tour in the plastics division in 1994, Davis went to Mobil's U.S. Marketing and Refining Division in Port St. Lucie, Fla. His responsibilities included developing and promoting company-owned Mobil consumer service stations in South Florida. "The position was great because I had a responsibility for sales as well as operations and human resource development."

Once Davis completed his assignment with the company in Port St. Lucie, he was appointed to work with dealer franchising in Fort Lauderdale. As a sales and business consultant, he counseled independent franchisees on ways to manage and run their businesses.

Since August 1997, Davis has been business development manager for ExxonMobil's Fuels Marketing Division in Fairfax, Va.

His area of expertise is in the industrial fuels business, specializing in commercial fleets. Davis oversees the national fleet portfolio for the entire United States.

"My current job involves lots of coordination with our supply chains, pricing services, transportation/logistics and our legal offices," he said. "Once all the internal hurdles have been handled, the negotiations and meeting the customer's expectations begin. Some deals can take years to close, but the rewards can result in hundreds of millions in revenue."

Davis said ExxonMobil has provided him with an opportunity to work at the highest level of the sales profession. "The factors that have led to my success have been hard work, good education, wonderful people and countless blessings," he said. — *Editor*

"Dun & Bradstreet was an excellent opportunity for someone with my background," Davis said. "Their training program reinforced everything I learned in the College of Agricultural and Life Sciences."
— Charles Davis



Chip Hinton

Photo by Thomas Wright

With three degrees from UF's College of Agricultural and Life Sciences, Chip Hinton is well prepared to represent Florida's \$167 million strawberry industry – the nation's primary source of winter strawberries.

The former Gator football player and lifelong Florida resident became interested in the strawberry business when growers in the Plant City area sought his help in starting and managing the Florida Strawberry Growers Association.

"I remember sitting in an audience of growers at a Hillsborough County Horizon 2000 planning meeting, hearing predictions that the area's huge population growth would push agriculture out of the county by the end of the century," Hinton said. "No one in county government seemed to have the vision to include agriculture in the county's long-range growth plans."

Shortly thereafter, Hinton decided to help the strawberry growers start and manage the new association to make sure the industry would survive and prosper in the coming decades. The association, which now represents 90 percent of all strawberry growers in the state, was officially incorporated in 1982.

"We immediately began working with UF's Institute of Food and Agricultural Sciences to help growers solve various production problems, and we also started to educate government officials and consumers about the advantages of having a viable strawberry industry in west central Florida," Hinton said.

Now, after serving as executive director of the association for nearly 20 years, Hinton said the industry has become much more proactive. "All outside influences being equal, the difference between a prosperous and floundering minor crop is effective leadership. For that reason, leadership development at all levels has been our top priority."

He said a proactive role includes being in the government policy-setting cycle from the beginning to end. That means the association must provide information, gain credibility, build leverage and influence the content of legislation and ordinances in an increasingly urban environment.

Hinton, who completed his doctoral degree at UF in 1972, said the population of Hillsborough County has doubled in 20 years and the number of farm acres has dropped by 20 percent, but the value of agriculture has increased from \$50 million to more than \$500 million.

“Without a doubt, the single greatest reason for the continuing success of Florida’s strawberry industry is the ability of UF’s Institute of Food and Agricultural Sciences to develop and transfer technology that allows us to exploit our marketing window,” Hinton said. “The development of new strawberry varieties for the state’s winter production cycle has increased our acreage by 40 percent and quadrupled our income.”

UF research and education programs also are responsible for the the industry using less water and fertilizer today than it did 15 years ago – even with a 40 percent increase in acreage, he said.

Hinton, recognized by many state and national organizations for his professional contributions to agriculture, said UF’s College of Agricultural and Life Sciences has a unique role in Florida, providing students

around the state with the only comprehensive undergraduate and graduate program in agriculture and natural resources.

“A degree from the UF college opens doors,” he said. “It allows people to contribute to the agriculture and natural resource industries as well as their communities. But, the most important benefit of a UF degree is that it gives you the ability to continue learning, which helps people innovate and remain young at heart.”

Hinton said recruiting, training, mentoring and motivating future leaders is one of the biggest challenges facing Florida agriculture. “Our passion must be to teach our replacements how to teach others. Only then can we hope to meet the challenge of maintaining a viable agricultural community in an increasingly urban environment.” — *Editor*



Photo by Tara Piaso

Laurie Trenholm’s career path began with her own need for information that she now provides to millions of Florida residents.

“To learn about caring for my own lawn, I enrolled in a few horticulture classes at Indian River Community College in Fort Pierce,” she said. “The subject matter was so interesting and challenging that one thing really did lead to another – putting me on the fast track to a career in environmental horticulture.”

In 1991 Trenholm began working on a bachelor’s degree in UF’s College of Agricultural and Life Sciences, taking courses at UF’s Fort Lauderdale Research and Education Center.

“Being a little older than most of my classmates helped me stay motivated and focused – I knew that I wanted a career in environmental horticulture,” she said. “Being able to take courses and complete my UF degree at the Fort Lauderdale campus also was a big help because I could not move to Gainesville at the time.”

After completing her bachelor’s degree in 1994, Trenholm earned a master’s degree in environmental horticulture at UF’s main

Laurie Trenholm

campus in Gainesville in 1996. She received her doctoral degree in crop science from the University of Georgia in 1999.

Trenholm said several UF faculty members at the Fort Lauderdale center were particularly helpful in her undergraduate education, including professors John Cisar, George Fitzpatrick and George Snyder. She said professor Albert Dudeck in Gainesville was a valuable mentor in graduate school.

“Everyone in UF’s College of Agricultural and Life Sciences wants to help students succeed,” she said. “They provide so many opportunities to make students more marketable in today’s competitive job market, whether it’s by attending conferences, networking with people or participating in hands-on research and extension activities.”

Trenholm’s outstanding academic record in Florida and Georgia paved the way for her 1999 appointment as assistant professor of environmental horticulture at UF’s Institute of Food and Agricultural Sciences.

With her responsibilities in research and education, Trenholm is a prime source of lawn care information for Florida homeowners and turfgrass industry personnel. She also trains UF county extension faculty and master gardeners.

“Getting information on proper fertilization, pest control and water conservation out to an increasingly diverse audience in a rapidly growing urban state is a daunting task for the UF extension service,” she said. “Different turfgrass varieties, soil conditions, climatic conditions and limited water resources are all factors we must consider. What works in one area might not work elsewhere.”

Because water conservation is a high priority item, Trenholm is helping to develop best management practices for lawn care and testing new ways to cope with drought conditions.

“We’re particularly excited about a new grass called seashore paspalum that has good tolerance to saline or recycled water,” she said. “The grass may help coastal communities conserve water, and it’s beginning to gain commercial acceptance.”

Trenholm develops educational materials to train landscape professionals who maintain more than 1 million acres of Florida lawns. She also meets with representatives of pest control and fertilizer companies to discuss scientific advances and industry needs.

“Many of the professionals we work with have a great deal of practical experience,” she said. “Their input is crucial, especially in Florida where serious disease and pest pressures must be balanced with equally serious environmental concerns.”

Her other responsibilities include serving as co-chair of UF’s Turfgrass Extension Design Team and head of the Florida Residential and Commercial Landscape Program. Trenholm also works with graduate students in the college.

“The College of Agriculture and Life Sciences helped me, and now it’s time to give something back,” she said. “There’s a wonderful opportunity here to help students the way my professors helped me.” — *Editor*

Lynne Middleton

A typical day at work might find UF alumna Lynne Michaels Middleton (right in photo) answering questions about 4-H youth development programs in Putnam County, getting kids ready for summer camp, weighing in hogs for a fair or helping produce a county newsletter.

The UF College of Agricultural and Life Sciences graduate was not aware of 4-H until she began looking for a six-week summer internship in 1999. “At the time, I wasn’t sure what I wanted to do with a bachelor of science degree in food and resource economics,” Middleton said.

With graduation less than two years away, she contacted Austin Tilton, Putnam County extension director in East Palatka, about summer internship opportunities in her home county. Tilton recommended an internship with UF’s extension service and said it would give her an overview of different career opportunities in the statewide educational program.

Photo by Thomas Wright

He also told Middleton to contact Christine Waddill, dean for extension with UF's Institute of Food and Agricultural Sciences, and apply for an internship for the summer of 2000.

The application was successful, and six weeks of work for the Putnam County Extension Service gave Middleton a new perspective on future career options, particularly opportunities with 4-H youth development programs.

"Working with kids during that summer was very rewarding from a personal standpoint, and it became an increasingly attractive employment option for me," she said.

About six months before Middleton's graduation in May 2000, Tilton said there was a full-time 4-H agent position open in the county and urged her to apply for the job.

"The timing was perfect," Middleton said. "The internship experience was excellent, graduation was approaching and there was a permanent position open in my home town. Opportunity was knocking at my door!"

Middleton was hired before she graduated and joined the Putnam County extension office in May 2000. She said working in 4-H has changed her life in more ways than one. Soon after she became an agent in the county, she met her husband while he was coaching the Putnam County 4-H Livestock Judging Team.

In her new position, Middleton coordinates all 4-H programs in Putnam County: managing 15 clubs with more than 350 members; recruiting and training volunteers, leaders and kids; writing the county newsletter, planning 4-H activities and events; and coordinating the Putnam County Fair.

"There may not be a lot of things for kids to do in Putnam County, but we try to give them projects to keep them out of trouble and help them learn and develop life skills," Middleton said. "Our focus is on getting kids involved in 4-H and keeping them involved."

— *Aimee L. Huskey*



Roland Hill,
Jeff Satin &
Howard Satin

Photo by Tara Piaso

Agricultural education is a family affair for Roland Hill, Howard Satin and Jeff Satin – three generations of graduates from UF's College of

Agricultural and Life Sciences who have devoted their careers to teaching agriculture in Florida high schools.

With a combined total of more than 63 years of teaching in the Tampa Bay area, Hill, Satin and his son, Jeff, attribute much of their career success to UF's College of Agricultural and Life Sciences.

"Looking back over the years, working in agricultural education has been very rewarding, and the UF college prepared all of us well for our work," said Hill (left in photo), who started teaching agriculture in 1949. "I'm proud to see that my son-in-law, Howard Satin, and his son, Jeff, have followed in my footsteps."

Hill, 80, who retired in 1979, grew up on a farm in Henderson County, N.C., and chose his career path in the ninth grade. He said the early career choice was inspired by his high school agriculture instructor, H.L. Davis.

"Mr. Davis was one of the finest people I've ever known," Hill said. "He started teaching about 1930, back when agricultural education programs were first introduced in the public schools."

When the United States entered World War II, Hill put his college education on hold and served in the Air Force as a pilot and flight instructor. After the war, he earned a bachelor of science degree in Kentucky. He moved to Florida in 1948 to begin his teaching career in Hillsborough County with Veterans on the Farm, a vocational program designed to help returning soldiers learn about farming.

In 1949, Hill founded the agriculture department at Franklin Junior High School in Tampa and started a similar program at Hillsborough High School in 1952. His final teaching post was at Chamberlain High School, where he helped launch an agriculture program in 1956, remaining on the faculty until his retirement in 1979.

Along the way, Hill earned a master's degree in agriculture from UF's College of Agricultural and Life Sciences in 1967.

"When I first arrived in Florida in 1948, farming was getting established as a viable industry," he said. "The new industry generated many employment opportunities across the state, and our agricultural education programs helped the industry grow."

When Hill started teaching students in Hillsborough County, his future son-in-law, Howard Satin (right in photo), was growing up in Tavares, about 40 miles north of Orlando.

"Citrus farming was the main agricultural industry there, and I was interested in it from a young age," said Satin, now 56.

He entered UF's College of Agricultural and Life Sciences in 1965, majoring in fruit crops, with an emphasis on citrus. When Satin completed his bachelor of science degree in agriculture in 1967, he encountered a tough job market.

"The United States was involved in the Vietnam conflict, and many companies were reluctant to hire young men because they might be drafted," he said. "I started looking at other options and found there was a shortage of

agriculture teachers in Florida public schools, and many counties were hiring."

Satin began working toward his teaching certification and was assigned to Greco Junior High School in Tampa from 1967 to 1971. To gain real-world experience to share with his students, he spent the next two years working for a chemical company in Clermont. He returned to Tampa in 1973, taking an agricultural teaching position at Buchanan Junior High School. In 1984, Satin began teaching at Gaither High School, where he remained until his retirement in 2001.

"Being an agricultural education teacher was an excellent career choice for me," he said. "I retired after 32 years of teaching service, and I may get back into it yet – there are still three years left on my teaching certification."

Like Hill, Satin said one of his most important responsibilities was helping students develop self-confidence and determination, qualities that could benefit them in any walk of life.

"We expected excellence," Satin said. "We wanted students to prove to themselves they were capable of setting and achieving goals. The goals establish positive peer pressure that motivates everybody."

One of Howard Satin's more successful students at Gaither High School was his own son Jeff (middle in photo), now 24, who graduated from the school in 1996 and started teaching agriculture there last year.

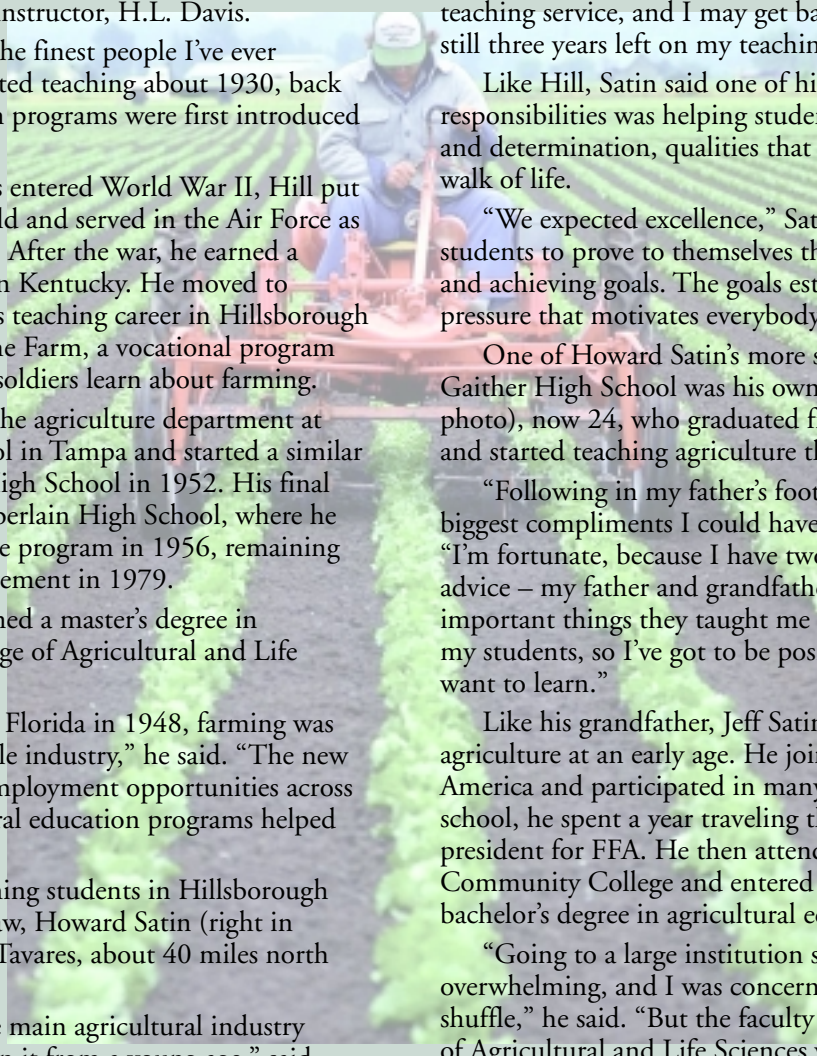
"Following in my father's footsteps was one of the biggest compliments I could have given him," Jeff Satin said. "I'm fortunate, because I have two wonderful sources for advice – my father and grandfather. One of the most important things they taught me is that I'm a role model for my students, so I've got to be positive and help students want to learn."

Like his grandfather, Jeff Satin became interested in agriculture at an early age. He joined Future Farmers of America and participated in many activities. After high school, he spent a year traveling the country as Florida vice president for FFA. He then attended Hillsborough Community College and entered UF in 1999, earning his bachelor's degree in agricultural education in 2001.

"Going to a large institution such as UF was a little overwhelming, and I was concerned about getting lost in the shuffle," he said. "But the faculty and staff in UF's College of Agricultural and Life Sciences were very accessible, supportive and knowledgeable."

During his first year at UF, Jeff Satin served as a CALS Ambassador, visiting community colleges and high schools to tell students about opportunities in the college.

"The ambassador program helps students learn about career options," he said. "Now, as an agriculture instructor at Gaither High School, we can do the same thing – encouraging students to consider attending UF to pursue a major in agriculture and natural resources." — *Editor*





TEDCENTER

After completing his doctoral degree in entomology at UF's College of Agricultural and Life Sciences in 1976, Ted Center began a long and distinguished research career on the biological control of aquatic and invasive weeds.

Center's work – including more than 24 years with the U.S. Department of Agriculture's Agricultural Research Service – has taken him to 16 countries and earned numerous professional awards.

As leader of the USDA's Aquatic Weed Research Unit since 1994, Center also is director of the agency's new \$6.2 million Invasive Plant Research Facility now under construction at UF's Fort Lauderdale Research and Education Center.

"The new facility will provide the USDA and UF's Institute of Food and Agricultural Sciences with a valuable resource to help contain melaleuca and other invasive species in South Florida, which will contribute greatly to the restoration of Everglades ecosystems," he said.

In April, USDA and UF researchers released a tiny insect to slow – and maybe stop – the spread of harmful Australian melaleuca trees in South Florida. Center said the melaleuca psyllid, about the size of a gnat or small ant, feeds on the tree's sap, severely damaging seedlings. The psyllid is the second beneficial insect imported from Australia to help control melaleuca. In 1997, a weevil was released and is feeding on tree leaves and flower buds. Seed production has been reduced by about 50 percent on trees they attack.

When he joined the USDA, Center's first assignment was to "revitalize" the biological control portion of the agency's aquatic plant control program. At the time, there were no new effective biological controls on the horizon. The two most important aquatic weeds were submersed species (hydrilla and Eurasian watermilfoil), which were not good candidates for biological control, he said.

Center developed a cooperative project with the U.S. Army Corps of Engineers to conduct research on hydrilla and initiated cooperative agreements with UF and the Commonwealth Institute of Biological Control. To find effective biocontrols for hydrilla, he developed a cooperative program with UF, which provided an assistant research scientist to conduct exploration in Africa, Asia and the Indo-Pacific region. Since then, the aquatic weed control program has been expanded to include other target species.

In 1991, Center received the USDA Distinguished Service Award, the agency's highest professional recognition, for developing the research program.

He has 150 papers published (or accepted) in refereed journals, in proceedings, or as book chapters and technical reports, and has made many presentations at scientific meetings, technical conferences and workshops, including more than 65 by special invitation.

Center's knowledge of and experience with biological control has resulted in international cooperation with organizations such as the Commonwealth Institute of Biological Control, the Commonwealth Scientific and Industrial Research Organization, the Centre for Overseas Pest Research, the Southeast Asian Regional Center for Tropical Biology, the Thailand National Biological Control Research Center, the Sino-American Biological Control Laboratory in Beijing, the Plant Protection and Research Institute of South Africa, the University of Capetown, the United Nations Food and Agricultural Organization, the Puerto Rico Department of Natural Resources, the Mexican Institute of Water Technology, the Panama Canal Zone Company and others.

"He is widely recognized at the local, national and international levels as a trusted and respected colleague," said Jimmy Cheek, dean of the UF college.

"Ted Center is recognized as an authority on the biological control of aquatic weeds, particularly water hyacinth, as evidenced by his selection as keynote speaker for sections of international symposia, invitations to write book chapters, by numerous invitations to speak at conferences, by special assignments, by membership on advisory committees, and by invitations to assist in the

planning or reviewing of aquatic weed projects in other countries such as India, Nigeria, Mexico, Australia and South Africa. His research papers are widely cited in the scientific literature,” Check said.

Prior to his doctoral studies in UF’s College of Agricultural and Life Sciences, Center completed his bachelor’s degree in zoology and his master’s degree in biology at Northern Arizona University in 1971.

“For my doctoral degree program, UF was the logical choice because of the large concentration of entomologists

in Gainesville,” he said. “In fact, there probably are more entomologists in Gainesville than anywhere else in the nation, including researchers with UF, USDA and the Florida Department of Agriculture and Consumer Services.

“For students majoring in entomology at UF’s College of Agricultural and Life Sciences, the various research programs are a real plus,” Center said. “During my doctoral program, I was able to gain practical experience at USDA, and the opportunities for post-doctoral research continue to be excellent.” — *Editor*



Photo by Thomas Wright

Named after world-champion calf-roper Toots Mansfield, Banner is currently in the process of moving his Riverside Equine business from Melbourne to Micanopy near Gainesville. The move will allow him to serve the growing horse farm industry in north central Florida. Another reason for moving the business is to spend more time with his family.

“Equine dentistry is more physically demanding but not subject to the same irregularities in scheduling as in a full-time equine veterinary medical practice,” he said. “At the end of the day, I can go home and be with my wife and three daughters.”

In addition to starting and operating his own practice, Banner was president of the International Association of Equine Dentistry from January 2000 to January 2002, and he currently serves as liaison for the international association and the Florida

Veterinary Medical Association. He also served on the national board exam and clinical competency test review committee of the American Veterinary Medical Association and Professional Examination Service.

He was president of the Florida Association for Equine Dentistry from 1997 to 2000. During his college days at UF, Banner was president of the Student American Veterinary Medical Association from 1985 to 1986.

One of his favorite sayings is: “Don’t let your studies get in the way of your education.” Banner, who attended junior college in Colorado before transferring to UF, said his experience at UF’s College of Agricultural and Life Sciences and College of Veterinary Medicine not only prepared him for an occupation but opened many other doors.

“The friendships and professional relationships that developed during my college years continue to be valuable assets,” he said. — *Editor*

TootsBanner

In a prime example of how graduates from UF’s College of Agricultural and Life Sciences are well prepared to enter professional educational programs in related fields, Toots Banner received his bachelor’s degree in animal sciences and then moved on to UF’s College of Veterinary Medicine.

“Right after I received my first UF degree in 1983, I went directly into the College of Veterinary Medicine, completing my doctor of veterinary medicine degree in 1987,” Banner said. “Then I started my first veterinary job at the Animal Medical Clinic in Melbourne, Fla.”

Banner, who worked in ambulatory equine medicine until June of this year, started his own business, Riverside Equine, in 1989. He said the “ambulatory” term referred to the mobile nature of his services, providing on-site animal care from his truck. During this same period, he developed a growing interest in equine dentistry, primarily through working with other equine dental professionals.



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Beneficial Bugs!



Juan Rodriguez, a horticultural sciences graduate student in UF's College of Agricultural and Life Sciences, drops a handful of lady beetles on a melon plant in a greenhouse. He said the colorful orange and black insects – sometimes referred to as "ladybugs" – are being evaluated for their ability to control insect pests without pesticides. They can be effective natural predators against pests such as aphids and spider mites. Rodriguez came to UF from Honduras and plans to complete work on his master's degree in December 2002. (Photo by Eric Zamora)

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ISSN #0748-23530