# Vakka Institute of Food and Agricultural Sciences



Spring 2007

# STRATEGIC PLAN: ROAD MAP TO PREEMINENCE

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The Soil and Water Science Department (SWSD) ranks among the largest and one of the most prestigious departments in the nation. With a distinguished record of accomplishments in teaching, research, and extension, the Department has made a remarkable impact on the soil and water science discipline. The Department has been the leader in graduate education with innovative programs that reach a wide range of students. The Department has an outstanding record of meeting the needs of clientele through teaching, research, extension and outreach programs. Overall, accomplishments of faculty, staff, and students in the past few years have continued to elevate the Department's stature at national and international levels. We are not satisfied with reflecting on past achievements, and strive for higher goals to reach preeminence in the field of soil, water, and environmental sciences. To stay on track, the Department must take advantage of opportunities that enhance the effectiveness of its academic programs, while maintaining the relevance and impact of teaching, research, and extension/ outreach programs. The Department must have a vision to address the critical future needs of our clientele. The Department has developed an adaptive road map as presented in the following pages and we are committed to follow the strategies presented in this road map to achieve preeminence.

In this newsletter, we present a summary of the strategic plan including goals and strategies to accomplish these goals. The Department plans to hold a planning meeting with the clientele to seek their input into the strategic plan. The plan is adaptive in nature, and will go through continuous changes to ensure that the Department's vision, core values, and goals remain relevant to meet the changing needs of our clientele.

# FROM THE CHAIR









# Strategic Plan

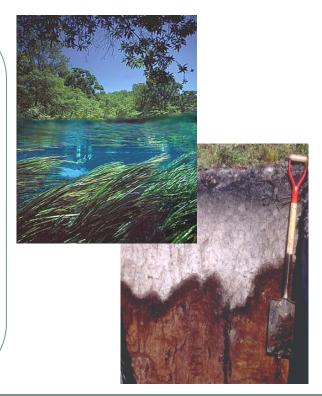


The SWSD at the University of Florida offers one of the strongest and most prestigious programs in soil, water, and environmental sciences in the nation. To build on the reputation of its faculty and programs, the Department must pay particular attention to future needs/opportunities, while maintaining current strengths. The road map presented in the Strategic Plan functions as a guide to accomplish the Department's goals in the coming years. The plan includes 8 goals and 30 strategies aimed to achieve preeminence. The plan also includes a brief discussion of the Department's mission, vision, core values, program priorities, and constraints. For the plan to be successful, the faculty must be prepared to think innovatively and to be open to change, especially to capture unexpected opportunities and address future challenges. Because the Department is committed to the strategic process, the plan will be reviewed regularly and changed as needed to respond to future challenges and opportunities, and to provide vision and guidance for the growth and improvement of the Department.

### Goals

The goals supporting the Department's mission and vision to achieve preeminence in soil, water, and environmental sciences are:

- 1. Attain preeminence in quality and effectiveness of academic programs
- 2. Attain preeminence in research programs
- 3. Attain preeminence in extension/outreach programs
- 4. Foster excellence in international programs
- 5. Foster excellence in service and core laboratories
- 6. Promote excellence in service to discipline(s), profession(s), institution, and community
- 7. Foster excellence in administration
- 8. Commit to continuous quality improvement in all programs



# Join us at ...

# The 8th Annual Soil and Water Science Research Forum

The 8th Annual Soil and Water Science Research Forum (http://soils.ifas.ufl.edu/forum/) is scheduled for September 14, 2007, in Gainesville, Florida. The forum is designed to bring together representatives from state and federal agencies as well as private industry, faculty and graduate students, and prospective students interested in soil and water science. The forum will provide an opportunity for all those interested in soil and water science to interact with our students, faculty, and administrators on campus. This year, Dr. Kenneth Nealson, Wrigley professor of Geobiology, Department of Earth Sciences, University of Southern California is the featured keynote speaker at the forum. We look forward to your participation in the forum. If you are planning to attend, please register at http://soils.ifas.ufl.edu/forum/. For additional information, contact Lena Ma at Igma@ufl.edu.

# **Strategies**

The following strategies will be used to accomplish the goals described in the strategic plan.

# **Academic Programs**

- 1. Pursue excellence and innovation in learning
- 2. Develop a new process for curriculum evaluation and improvement
- 3. Improve the quality and diversity of students enrolled in our programs
- 4. Maintain relevant course offerings
- 5. Ensure that graduates are appropriately employed
- 6. Foster fundraising for scholarships and fellowships

# Research Programs

- 7. Focus on high quality, scholarly, high impact, and relevant research
- 8. Facilitate and encourage interdisciplinary research
- 9. Aggressively pursue extramural funding
- 10. Engage in technology transfer
- 11. Foster reporting and accountability
- 12. Promote the research forum, workshops, and symposia

# **Extension Programs**

- 13. Ensure that the breadth of our research expertise is covered in our extension programs
- 14. Foster extramural funding
- 15. Foster reporting and accountability
- Increase the number of fee-based short courses on topics related to soil, water, and environmental sciences



# Soil and Water Neces Mayor

# International Programs

- 17. Formalize international contacts
- 18. Expand international opportunities for students

### Service and Core Laboratories

 Maintain commitment to provide service through laboratories of excellence to support soil, water, and environmental sciences programs

# Service to Discipline(s), Profession(s), Institution, and Community

- 20. Serve scientific disciplines and professions
- 21. Provide information, insights, and assistance to citizens

# **Department Administration**

- 22. Evaluate the Department's management and decision-making process
- 23. Formalize contacts and communications with stakeholders
- 24. Improve alumni relations and development
- 25. Increase involvement with practitioners of the discipline/profession

# **Continuous Quality Improvement**

- 26. Assess outcomes
- 27. Promote professional development for faculty and staff
- 28. Seek improvements in current physical facilities
- 29. Develop a strategic plan for future staffing of the department
- 30. Widely disseminate information on Department successes and accomplishments





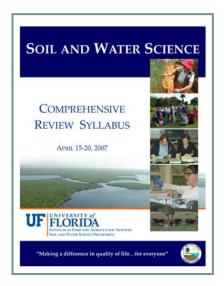
# DEPARTMENT NEWS

# **CSREES Review**

The SWSD went through a 10-year CSREES review during the week of April 15-20, 2007. The review team consisted of Dr. Steven Hodges (Chair of the Committee), Virginia Polytechnic Institute and State University; Dr. Nicholas Basta, The Ohio State University; Dr. John Graveel, Purdue University; Dr. Raina Maier, University of Arizona; Dr. David Radcliffe, University of Georgia; and Dr. Ray Knighton, USDA.

We thank the review team for spending a week with us to review our Department. Once we receive their final report, we will develop strategies to implement the recommendations made by the team.

As a part of the review, we developed a comprehensive review syllabus. This document provides an overview of the SWSD in the context of the University of Florida, the state of Florida, and the discipline of soil and water science. We explain the changes we have experienced since our last Comprehensive Review in 1997, what we currently do, and where we envision going in the future. The heart of the document begins with an overview of the department and its programs, followed by more detailed descriptions of academic, research, extension, international, and outreach programs. The latest version of the departmental



Strategic Plan is included to provide a glimpse of who we think we are, and what we should look like in the near future. The document has been regularly updated since the 1997 review, including several state-wide faculty meetings to address changes in staffing needs, research/extension opportunities, and changes in our discipline. We especially welcome your input to the strategic plan to best position the department for continued excellence, and even preeminence. Detailed document can be viewed at: <a href="http://soils.ifas.ufl.edu/department/publications.html">http://soils.ifas.ufl.edu/department/publications.html</a>.

# International Collaborative Workshop Indo-US Agricultural Knowledge Initiative



Participants in the workshop held at ICRISAT in Hyderabad, India on March 5-9, 2007.

The UF/IFAS in collaboration with International Crops Research Institute for Semiarid Tropics (ICRISAT), Indian Council of Agricultural Research (ICAR), Acharya N.G. Ranga Agricultural University, and Punjab Agricultural University organized a workshop on "Innovative E-technologies for Distance Education, Extension/Outreach for Efficient Water Management". The UF/IFAS project was funded by the USDA. The workshop was held in Hyderabad, India on March 5-9, 2007. The workshop addressed two key components of the India-US Agricultural Knowledge Initiative (AKI), *Capacity Building and Water Management*. The partners are in the process of developing a work plan to develop skills and collaborative digital learning resources to strengthen education and technical training for extension and outreach to maximize the use of innovative tools focused on sustainable management of water resources. Several IFAS faculty participated in the workshop: Janaki Alavalapati, Craig Stanley, Samira Daroub, Jasmeet Judge, Sabine Grunwald, Dorota Haman, Rao Mylavarapu, K. Ramesh Reddy, and Lisette Staal. Kirby Barrick, Dean of CALS presented key note lecture at the workshop. Details on the workshop can be viewed at: <a href="http://akicb.ifas.ufl.edu">http://akicb.ifas.ufl.edu</a>.



# Change in Leadership of Graduate Coordinator

### Nick Comerford - Graduate Coordinator

Nick Comerford served as the SWSD Graduate Coordinator for the past seven years (July 2000 to June 2007). During his tenure, on-campus graduate enrollment increased by 40%. Combined with the distance education graduate students, the total enrollment in the Department is at 125 students. Nick streamlined the operating procedures for graduate students and has been excellent mentor for students. We would like to express our thanks to Nick for an outstanding job as the graduate coordinator and his dedicated service to the Department. Nick plans to focus on his research program and leadership in developing a core faculty group to conduct research on carbon sequestration.





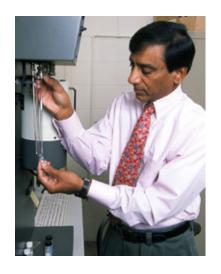
### James Jawitz - New Graduate Coordinator

James Jawitz has been appointed as the SWSD Graduate Coordinator. Jim is an associate professor of hydrology. Jim brings a wealth of experience in working with graduate students. He worked very closely with the Hydrologic Science Academic Cluster which promotes interdisciplinary graduate program. He is one of the most popular professors in the department with respect to advising graduate students and serving on their committees. He was selected by SWSD students in 2005 as Outstanding Teacher/Advisor of the Year. Jim was selected for the Alpha Zeta Professor of the Year Award for UF College of Agriculture and Life Sciences. He serves as an advisor for the American Water Resources Association UF Student Chapter.

# **Hubbell Seminar Speaker**

Dr. Shridar Komarneni, Distinguished Professor, Penn State University presented the 2007 Hubbell Seminar entitled "Novel Synthetic Clays for Remediation of Metal Ion Contamination" on March 26, 2007. Dr. Komarneni has distinguished himself with research into both basic and applied aspects of clay mineralogy, including the study of nanostructures of clays and other minerals, and ascertaining the origin of clay and quartz minerals in soils. His research interests include: Cation Exchange Processes; Nuclear and Hazardous Waste Disposal; Ultrafine particles (powders); and Sol-Gel Chemistry. Additional information on Dr. Komarneni can be found at: <a href="http://cropsoil.psu.edu/people/faculty/komarnenis.cfm">http://cropsoil.psu.edu/people/faculty/komarnenis.cfm</a>

The David Hubbell Seminar Series was established to recognize the research and education contributions by the late Dr. David H. Hubbell. Dave Hubbell was a soil microbiologist whose research interest focused on the biology of nitrogen fixation. His laboratory laid the basis for much of what is now known of the very complex communication between Rhizobia and legumes during the infection process. He was a dedicated educator and spent much of his career promoting soil and water science at all levels including: undergraduate and graduate education both in Gainesville and in Latin America. During the latter part of his career, Dave Hubbell was a staunch and very active supporter of the SWSD seminar series.





# **New Faculty**

Patrick Inglett joined the department as Assistant Professor of Biogeochemistry of Wetlands and Aquatic Systems. Patrick earned his B.S in Applied Biology from the Georgia Institute of Technology before coming to UF for his masters in Soil and Water Science in 1997. He completed his Ph.D. in the department in 2004, and continued on as a Post-doctoral research associate. In 2006, Patrick received the Emil Truog award from the Soil Science Society of America for his dissertation work on stable nitrogen isotopic ratios. Patrick's research primarily focuses on the coupling of C, N, P, and S cycles in wetlands and aquatic systems including both fresh and saltwater marshes, estuaries, lakes, rivers, and springs. He uses a combination of traditional nutrient and flux analyses, enzyme activities, and novel microscopic and isotopic (natural abundance and tracer) approaches. The ultimate goal of Patrick's research program is to better understand how process coupling controls biogeochemical reactions in landscape settings. Patrick can be reached at: pwinglett@ifas.ufl.edu





Gurpal Toor joined the SWSD as an Assistant Professor of Soil and Water Quality at the Gulf Coast Research and Education Center, Balm, Florida. Gurpal's research focus will be on nutrients and emerging contaminants in the urban landscape. Gurpal received both BS (Hons.) in Agriculture and Chemistry (1993) and MS in Soil Science (1996) from Punjab Agricultural University, and a Ph.D. in Environmental Soil Science (2002) from Lincoln University, New Zealand. He was awarded the United Nations Development Program (UNDP)

and University Merit Scholarship for MS study and a Commonwealth Fellowship for PhD study. Gurpal's previous research appointments were at the

University of Delaware and at the University of Arkansas. During this period, his research has addressed agriculture and industry's most formidable problems on surface and sub-surface water pollution. Gurpal's research interests include waste management, nutrient and trace metals dynamics in waste-soil-water continuum, and fate and transport of nutrients, metals, and emerging contaminants in the environment. He has published 33 peer-reviewed articles and book chapters and presented his research in over 30 regional, national, and international meetings, workshops, and conferences. Gurpal is a member of the Soil Science Society of America (SSSA), American Society of Agronomy (ASA), American Water Resources Association (AWRA), and Sigma Xi. Gurpal can be reached at <a href="mailto:gstoov@ufl.edu">gstoov@ufl.edu</a>.

# **SWS Alumni**

In our newsletter, we would like to include news from our alumni and their success stories and accomplishments. Please provide highlights of your current activities, so we can include them in future SWSD newsletters. Please e-mail information and a photograph to Susan Curry at:

scurry@ufl.edu.

# Welcome... Incoming Students Summer and Fall 2007

Kristin Campbell, MS, C. Wilson Aja Stoppe, MS, N. Comerford Rotem Shahar, MS, T. Obreza Rujira Tisarum, PhD, L. Ma Augustine Obour, PhD, M. Silveira (REC) Debolina Chakraborty, PhD, V. Nair Edmund Azah, PhD, L. Ma Ronald Gonzalez, PhD, J. Sartain Shawna Loper, MS, A. Shober Xiaolin Sui, MS, M. Silveira (REC) Laura Paterson, MS, J. Sartain Lori Clark, MS, T. Obreza Matthew Wilson, MS, E. Hanlon (REC) Stephen Hanks, MS, C. Fitz (REC) Robert Compitello, MS, T. Osborne Pauric McGroary, PhD, G. Snyder (REC) Neil Young, MS, G. Snyder (REC) Erin Yancey, MS, J. Thomas Sudarshan Dutta, PhD, L. Ma Melinda Hooper, MS, R. Ellis



# Faculty, Students & Staff News

Willie Harris and Yuncong Li were selected as UF Research Foundation Professors. Willie and Yuncong will hold these appointments for a period of three years (2007- 09). Since the inception of this award program, ten SWSD faculty members were selected as UF Research Foundation Professors.

Sabine Grunwald was selected to receive the 2007 Gamma Sigma Delta Junior Research Award.

Ann Wilkie has been honored by Gov. Jeb Bush and The Council for Sustainable Florida for her contribution and commitment to sustainable practices in Florida. In June, Wilkie and IFAS were awarded the 2006 Sustainable Florida Non-Profit Award to recognize Wilkie's work developing an innovative fixed-film anaerobic digester that treats livestock waste, producing renewable energy and compost while simultaneously protecting the environment and reducing objectionable odors.

Peter Nkedi-Kizza was selected by students to receive the SWSD Outstanding Teaching/Advisor of the Year Award for 2006.

# Alumni Corner

# Emeritus Graduate Research Professor makes a trip around the world.

Suresh and Kieko Rao have undertaken a round-the-world trip, covering four continents (Asia, Australia, Africa, and Europe), some 50,000+ miles, and one year sabbatical

leave. Suresh Rao is currently employed by Purdue
University as Lee A. Rieth
Distinguished Professor of
Civil Engineering. Here is what Suresh said about his world travel. "Imagine:
You're living in the American heartland and planning the trip of a lifetime. Where would you want to go? My inspiration came from
Magellan—Ferdinand, that is, the Portuguese explorer
(1480-1521), who was the first



European to circumnavigate the globe." Suresh and Kieko completed the trip around the world, which covers four continents (Asia, Australia, Africa, and Europe), some 50,000 miles, and one sabbatical. They left the States in July last year and arrived back in the U.S. in May, 2007. A detailed blog can be found at: <a href="https://">https://</a>

engineering.purdue.edu/EngineeringImpact/Issues/2007\_1/
CoE/CoE\_Impact\_Summer07.pdf

# Congratulations... Spring 2007 Graduates

### PhD

Manohardeep Josan, Advisor, V. Nair
Min Liu, Advisor, J. Sartain
Lynette Malecki Brown, Advisor, K. Reddy/White

# Master of Science

Martin Anderson, Advisor, J. Sickman Christopher Chilton, Advisor, M. Collins Sarah Chinault, Advisor, G. O'Connor Adrienne Frisbee, Advisor, M. Clark Victoria Gardner, Advisor, M. Collins Joaquin Jimenez, Advisor, K. Moore Tiffany Kapner, Advisor, S. Grunwald

> Bachelor of Science Rotem Shahar

Sabine Grunwald was invited to serve on the Editorial Board of Geoderma.

Lena Ma was selected to receive the prestigious Yangtze River Professorship awarded to outstanding overseas Chinese professors.

**Daniel Herrera** was selected to receive the Outstanding International Graduate Student Award.

Augustine Obous (Advisor: Maria Silveira) won first place in the graduate student competition (Water, Nutrients, and Environmental Quality) during the 2007 Soil and Crop Science Society of Florida meeting in West Palm Beach, Florida.

Two years after meeting online, Elizabeth Hodges of Gainesville, FL and Samuel Snyder of Midland, TX were married on May 12, 2007 at the Sweetwater Branch Inn in Gainesville, Florida. Liz is a graduate student in the Soil and



Water Science Department, and Sam is a graduate student in the Department of Religion.



# In Memoriam

# Charles F. Eno (1920-2007)

Dr. Charles F. Eno was born May 21, 1920 in Atwater Township, Ohio, and was raised on a farm in that area. He graduated from the Ohio State University in 1942 with a B.S. in Agric. Education, and then served during World War II in Italy with the 604<sup>th</sup> Field Artillery Battalion of the 10<sup>th</sup> Mountain Division. Following the war, he returned to Ohio State University, where he received an M.S. degree in Agronomy in 1948. That same year, he married Fern Imler, a fellow OSU student from Northwest Ohio.

Dr. Eno then proceeded to Purdue University, where he received his Ph.D. degree in 1951, working with Dr. Herbert Reuser. Soon there after, he began working as a Soil Microbiologist in the Soil Science Department of the University of Florida, and he remained with UF throughout his career. During 1951-1953, as part of the Korean War reactivation of his military reserve unit, Charles and Fern lived in Dachau, Germany, where his reserve unit was part of the 201st Armored Field Artillery Battalion. Dr. Eno remained in the U.S. Army reserves, and eventually retired as a Lt. Colonel.

Upon his return to Gainesville, Dr. Eno conducted research in soil microbiology and soil fertility, including various studies on nutrient transformations in soils and land areas receiving wastes. He also conducted a number of studies on earthworms with particular emphasis on the effects of pesticides on earthworm populations.



In 1965, Dr. Eno was appointed chair of the Soil Science Department at UF, a position which he was to occupy for 17 years. By the time his term of office as chairman was completed, the Soil Science Department had grown to 40 faculty members state-wide, making it one of the largest soil science programs in the U.S. During his term as chairman, the department also began the inevitable transformation from primarily a state-funded teaching and research program to a teaching/research unit where substantial amounts of extramural funding were being solicited and received by the faculty as well. During this period Dr. Eno also was elected a fellow of the American Society of Agronomy (ASA) and of the Soil Science Society of America (SSSA), and served as president of SSSA in 1975 and president of ASA in 1983. He was a member of the original advisory committee to the multi-society Council of Agricultural Science and Technology (CAST), an organization with which he was strongly associated for more than two decades subsequently. Dr. Eno also served a 2-yr term as editor of the Soil & Crop Science Society of Florida (SCSSF) Proceedings, and as SCSSF President in 1966. He stepped down as Soil Science Department chairman in 1982, and was then appointed as Asst. Director of the UF/IFAS International Programs Office, a position which he held until his retirement in 1989. During 1987-1989 he served as Chief of Party for the UF delegation involved in intuition building at the University Centre de Dschang, in Cameroon, West Africa.

In retirement, Dr. Eno and his wife, Fern, traveled a great deal, including frequent attendance at the annual 10<sup>th</sup> Mountain Division Association's meetings. Dr. Eno had a long and productive career, served Florida agriculture, the University of Florida, the ASA and the SSSA, international agriculture, and mankind in general extremely well. He is highly deserving of honorary lifetime membership in the Soil and Crop Science Society of Florida.

Dr. Eno is survived by his wife, Fern Imler Eno, two sons, Charles F. Eno Jr., of Gainesville and Mark Imler Eno, of Tucson, Arizona, six grandchildren and three great grandchildren. In lieu of flowers the family requests memorials be made to Hospice of North Central Florida, 4200 NW 90<sup>th</sup> Blvd., Gainesville, Florida 32606 or Alzheimer's Association 988 Wood Cock Road, Ste 200, Orlando, Florida 32803.

Plan to attend...

University of Florida and Progress Energy partner to host the First UF Water Institute Symposium



February 27-28, 2008
Hilton University of Florida
Conference Center
Gainesville, Florida

For additional information visit: http://www.waterinstitute.ufl.edu or contact Lisette Staal at: lstaal@ufl.edu