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Citrus Leaves

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University of Florida, IFAS, Citrus Research and Education Center

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CREC POST DOC NAMED RISING YOUNG INVESTIGATOR

Dr. Madhugiri Nageswara Rao, was nominated, selected, interviewed, and featured as one of the Tomorrow's Principal Investigator's: Rising Young Investigators, in a special issue of Genome Technology Magazine and was also featured on the cover.

Rao, a post doc for Dr. Fred Gmitter, traces his longstanding interest in agriculture to his childhood, when he was continually impressed by the diversity surrounding him. That fascination stayed with him throughout his schooling, where he studied genetic and population diversity, and that still plays a role today in his work with plants of agricultural importance.



Dr. Madhugiri Rao

Rao has been involved in a number of programs centering on citrus. As a participant in the International Citrus Genomics Consortium, a group working to obtain a complete genome sequence of the fruit, Rao helped develop and work with the BAC library of Citrus sinensis, the sweet orange, in a project to look for particular markers. "Our team wanted to work on the whole genome sequencing of citrus, so our lab has been involved in that," he said. That work is being done with standard Sanger sequencing as well as a collaboration

See Genomics, Page 3

CREC in COLOR



Check out the newest CREC IN COLOR posters placed around the Center: **TIME!**

Time you enjoyed wasting is not a waste of time.

RETIRED CREC FACULTY MEMBER SELECTED AS ENGINEER OF THE YEAR

The American Society of Mechanical Engineers 54th Florida Section Citrus Engineering Conference was held here March 20. Dr. William Miller, Professor Emeritus of Agricultural and Biological Engineering, received the 2008 Citrus Engineering Award. Miller worked at CREC for more than 30 years and developed control systems to optimize evaporator use plus degreening, refrigeration, and fumigation of citrus. Miller also applied instrumentation and control technologies to advance both the fresh citrus and processing industries in Florida. The award is sponsored by Progress Energy and a \$5,000 Progress Energy Scholarship was designated to CREC.



Dr. William Miller, left, and Steve Rudolph, right

Leaf Image: ©Photographer: Dannyphoto80,
 Agency: Dreamstime.com

NEW FACES!



Samar Singh
Post Doctoral Fellow
Hometown: Karnal, India
Education: B.S. (Honors) in Agriculture; M.S. in Agronomy; Ph.D. in Agronomy, CCS, Haryana Agricultural University, Hisar, India
Research: Various aspects of weed management in citrus including herbicide resistance and precision application of herbicides
Supervisor: Dr. Megh Singh
Hobbies: Reading, walking and yoga
Office Location: Building 7107, Room 2



Antonios Tsagkarakis
Post Doctoral Associate
Hometown: Athens, Greece
Education: B.S. and M.S. in Plant Protection and Environmental Science, Agricultural University of Athens; Ph.D. in Entomology, Agricultural University of Athens
Research: Effect of nutrition and host plant on *Diaphorina citri*
Supervisor: Dr. Michael Rogers
Hobbies: Soccer, running, mountain hiking, walking, reading, studying and listening to music
Office Location: Building 7135, Room 26



Patricia Soria
OPS Lab Assistant
Hometown: Jacksonville, Florida
Education: B.S. in Botany, UF
Research: Seed extractions, bacterial cultures, co-cultivation of explants, GUS assays, and data collection
Supervisor: Dr. Vladimir Orbovic
Hobbies: Tennis, music, baking
Office Location: Building 7124, Room 112



Evan G. Johnson
Post Doctoral Associate
Hometown: Missoula, Montana
Education: B.A. in Biology and Chemistry, Wabash College; Ph.D. Plant Pathology, Cornell University
Research: Studying the effects of different tomato cropping systems on the diversity of the arbuscular mycorrhizal fungi in field soils in collaboration with Dan Chellemi at the USDA-ARS in Ft. Pierce; Working on live-dead GFP labeling *Xanthomonas axonopodis* pv. *citri* for examining survival of canker bacteria on citrus tissue under different conditions and the development of RNA based systems for live-dead assays in naturally infected groves.
Supervisor: Dr. Jim Graham
Hobbies: Cycling, hiking, computers, reading, cross-country skiing, sledding, and snowball fights.
Office Location: 7124, Room 58C



Ekta Pathak
Graduate Research Assistant
Hometown: Hardwar, India
Education: B.S. in Biological Sciences, Chinmaya Degree College, Haridwar, India; M.S. in Environmental Sciences, Gurukul Kangri University, Haridwar, India
Research: Entomopathogenic Nematodes
Supervisor: Dr. Larry Duncan
Hobbies: Sketching, nature photography and playing the guitar
Office Location: Bldg 7124, Room 9


 welcomes story ideas.
 Please contact Christen Johnson, editor, at
 ext. 1248 or e-mail at
chris29@ufl.edu.

NEW FACES CONT'D

Cheryl Graffam Technical Staff

Hometown: Lakeland, Florida
Education: B.S. degrees in Education, Saint Leo University; and Environmental Science and Policy, University of South Florida

Research: Assisting with lab support activities

Supervisor: Dr. Bill Dawson

Hobbies: Rubber stamp craft, cooking and eating, gardening, nature walks, and music

Office Location: Bldg 7124, Room 211



Qiong Ying Liu OPS Lab Assistant

Hometown: Hainan, China

Education: Registered Nurse, College of Nursing at Hainan University

Research: Seed extractions, co-cultivation of explants, media preparation, GUS assays, and grafting

Supervisor: Dr. Vladimir Orbovic

Hobbies: Singing and dancing

Office Location: Building 7124, Room 112



Genomics, continued from Page 1

to use 454's next-gen sequencing platform.

He also works extensively on rootstocks, which contribute to life span, size, and other characteristics of citrus trees. Traditional methods to screen for these rootstocks are time-consuming and tedious. Rao's research in this field has focused on using molecular marker approaches to allow for rapid screening of the key characteristics breeders are looking for in the citrus they will plant. When he is not working on citrus, Rao can be found conducting research on Coreopsis, the Florida state wildflower. Relying on data from proxy genomes, since no sequence data is

Recognized for Excellence

Dr. Dhana Raj Boina, a CREC post doctoral associate, has been featured in the awards section of the American Chemical Society (ACS) Agrochemicals division. He won third place for his poster presentation titled 'Toxicity and mode of action of the anion transporter blockers against the European corn borer' at the Fall 2007



Dr. Dhana Raj Boina

ACS meeting in Boston, Mass. He was also awarded an Education Grant for attending the meeting.

Boina worked on evaluation of the anion transporters as potential target sites for insect and nematode control for his doctoral research, where he employed toxicological, electrophysiological, and RNA interference techniques. At CREC, Boina works for Drs. Stelinski and Salyani on improving chemical control methods for the Asian Citrus Psyllid (ACP) and testing various factors that influence insecticides efficacy against ACP.

Founded in 1876, ACS is the world's largest scientific society with more than 160,000 members.

available for the flower, Rao is working to understand and analyze the genetic diversity of the genus.

Rao headed to the University of Florida from India, where he was previously a research associate at the University of Agricultural Sciences in Bangalore. The work there continued Rao's theme of genetic diversity, and he focused in particular on identifying hotspots of genetic variability as well as on population genetics of forest plants. Congrats, Rao!

*Story Courtesy of:
Meredith Salisbury,
Genome Technology
Magazine*

Rao was selected for ...

- Participating in the International Citrus Genomics Consortium, working to obtain a complete genome sequence of the fruit
- Working extensively on root stocks, which contribute to life span, size, and other characteristics of citrus trees
- Has focused on using molecular marker approaches to allow for rapid screening of the key characteristics breeders are looking for
- Is working to understand and analyze the genetic diversity of the genus of the coreopsis, the Florida state wildflower
- Is working to identify hotspots of genetic variability, as well as on population genetics of forest plants which may one day become a model to promote effective conservation of endangered plant species

FUTCH FINALIST IN NATIONAL RESEARCH COMPETITION



David Futch

David Futch, Dr. Steve and Debbie Futch's son, has been named one of eight finalists nationally for the American Museum of Natural History's Young Naturalist Award.

Futch's essay was based on his award-winning science and engineering fair project, "Providing Habitat for Threatened Drymarchon corais couperi Utilizing Gopherus polyphemus Burrows."

Futch will compete again with his drymarchon corais project at both the 2008 State Science Fair and the 2008 Intel International Science and Engineering Fair. The State Science Fair will be held at the Lakeland Center April 16 to 18 and the International Fair will be held in Atlanta from May 11 to 16.

Futch has researched the drymarchon for the last four years primarily at the Historic Bok Sanctuary located in Lake Wales.

The award is a research-based essay contest for students in grades seven through 12 to promote participation and communication in science. Futch, a senior at Winter Haven High, is one of eight finalists in the 12th grade category.

HOW DID HE GET SO LUCKY?



Julio Bastidas

The Information Systems Department staff members recently attended the 2nd Annual IT Showcase at Polk Community College in Lakeland. For the third time, the very lucky, Julio Bastidas won the door prize. It consisted of a

Garmin GPS, the Rockstar Programmers Book by Ed

Burns, and a Sun Microsystems backpack. At the event, ISD gained knowledge on some of the latest technologies, including Windows Server 2008, Network Associates, VMWare and the famous Windows Vista. Julio also won a free dinner at the next Association of Information Technology Professionals meeting. Way to go, Julio!

DONATE BLOOD

Did you know the Blood Banks of Mid-Florida need to collect more than 15,000 pints of blood a year to meet Eastern Polk County's needs? Donor groups, such as the one here at CREC, provide a much-needed source of blood. Please consider donating.

The 2008 Blood Drives are scheduled for Wednesdays from 8-11 a.m. The dates are:

- May 28, Aug. 6, and Oct. 22

For more information, call Diane Bright at extension 1371. Don't forget that donors receive an original "Art for Life Series" T-shirt and a free cholesterol screening.

RECENT GRADUATE

Deanna, daughter of Gary Coates, graduated from Florida Coastal School of Law in December with a Juris Doctorate in Entertainment and Sports Law. She recently completed an internship with the Tampa Bay Buccaneers legal department, in addition to earlier internships with entertainment law firms in Atlanta and Nashville.

Gary is an employee of the Florida Department of Citrus. Congratulations and best of luck, Deanna!



Deanna Coates

UPCOMING EVENTS

April 10 - Florida Agriculture Literacy Day

April 11 - Plant Production Seminar Series,
10:45 a.m. - noon

April 18 - Plant Production Seminar Series,
10:45 a.m. - noon

April 24 - CREC Faculty Meeting, 8:30 a.m. - 10 a.m.

April 25 - Plant Production Seminar Series,
10:45 a.m. - noon

April 30 - May 2 - HACCP Class (Hazard Analysis and
Critical Control Point)

May 2 - Plant Production Seminar Series,
10:45 a.m. - noon

May 2 - Gainesville Commencement

May 9 - Plant Production Seminar Series,
10:45 a.m. - noon