

Last update: December, 2010.

Visitors 2010

Dr. Richard Lee from USDA, ARS, National Clonal Germplasm Repository for Citrus & Dates, Riverside CA.

Dr. Richard Lee is the Supervisory Research Plant Pathologist at the National Clonal Germplasm Repository for Citrus & Dates located in Riverside, California. Dr. Lee stopped in Stillwater while in his way to Kansas the 27th of December, and visited our facilities at the HBRC. During his visit we talked about future cooperation activities and common research interests. Dr. Richard Lee is also my former professor. I value his mentoring and advice during my doctoral studies at the University of Florida, as well as his friendship.



Pictured from right to left Dr. Richard Lee, Francisco Ochoa Junior (center), and Francisco Ochoa Corona.

Last update: December, 2010.

Dr. William (Bill) Schneider from USDA, Ft. Detrick, MD.

Dr. Bill Schneider is a foreign disease-weed science plant pathologist at the USDA Foreign Disease-Weed Science Research Unit, Ft. Detrick, Maryland. Dr. Schneider visited OSU and the HBRC from the 25 to the 28 of October, 2010. Dr. Schneider visited to attend a meeting of the project “Massively Parallel Sequencing As a Diagnostic and Forensic Tool for Plant Pathogens”. This project is seeking the development of reverse search tool, which would allow a sequence database generated by a massively parallel sequencing (MPS) run to be searched with a limited number of key pathogen sequences. This will cut processing time exponentially, increasing efficiency and throughput. MPS is also commonly referred to as 454 sequencing, or pyrosequencing. This technology generates a tremendous numbers of overlapping short sequence reads that are compiled by computer means to generate large contigs of sequence. The most common use of MPS is to generate genomic sequences, but the technology can also be used to create a diagnostic assay with the capacity to detect, and potentially strain type, any and all pathogens in a sample. The project started in January of 2010 and will run until January 2013.



Pictured left to right: Carla Garzon, Tony Stobbe, Bill Schneider, Ulrich Melcher, Jon Daniels, Jacqueline Fletcher, Andres Espindola and Francisco Ochoa Corona.

Last update: December, 2010.

Drs. Maria G. (Lupita) Fabregas, Dr. Oscar Trujillo and Dr. Hugo Ferrer Toledo a Faculty delegation from UPAEP, Puebla, Mexico.

Drs. Maria G. (Lupita) Fabregas, Director of UPAEP-OSU Liaison Office, Dr. Oscar Trujillo Director of UPAEP Academic Support, and Dr. Hugo Ferrer Toledo, Director of the UPAEP Engineering Departments, visited OSU and NIMFFAB October 7, 2010. During the visit they interacted with Dr. Jacqueline Fletcher, Director of NIMFFAB, visited our laboratories and the OSU Core facility. We are looking forward for a more active exchange of students, cooperation and consolidation of the OSU-UPAEP study abroad programs.



From left to right, Dr. Francisco Ochoa Corona, Dr. Oscar Trujillo, Dr. Jacqueline Fletcher, Dr. Maria G. (Lupita) Fabregas and Dr. Hugo Ferrer Toledo.

Last update: December, 2010.

Dr. Bruce Budwole from University of North Texas Health Science Center

Dr. Bruce Budwole is the director of the Institute of Investigative genetics, Dpt. of Forensics & Investigative Genetics at the University of North Texas Health Science Center, Fort Worth, Texas. Dr. Budwole visited NIMFFAB the 29 and 30 of September, 2010. Dr. Budwole visited NIMFFAB invited as a member of NIMFFAB's advisory body. During his visit Dr. Budwole visited our facility at the new HBRC, interacted with faculty, graduate students and postdoctoral associates, and provided valued recommendations. Dr. Budwole offered a seminar entitled "Engaging plant pathologist to meet Law Enforcement needs".



Dr. Budwole and some NIMFFAB members. **Front row:** Francisco Ochoa Corona, Jon Daniels, Bruce Budwole, Jacqueline Fletcher, Li Ma, Sharon Andreason, and Lakmini Wasala. **Back row:** Mindy James, Ian Moncrief, Dhiraj Gautam, Chris Timmons, Ulrich Melcher, and Tony Stobbe.

Last update: December, 2010.

Sota Shimbo, a prospective OSU student visited from Japan

Sota Shimbo visited the Henry Bellmont Research Center during August 2010. Sota is original from Japan and is quite enthusiastic about doing college at OSU. He is 10 years old and six grader at the Matsudo Elementary School near Tokio. He expressed interest in 'accounting' because he would like to follow the steps of his father Toshi Shimbo, who is an accountant. I also enjoyed the visit of his parents Toshi & Yoko Shimbo who liked our campus very much. From our side, we will be patiently waiting for Sota here at OSU until he get ready for college. Maybe by then he will be interested in biosecurity issues and microbial forensics issues related to accounting and the global economy.



Sota Shimbo picture with myself at the Newton's Café just before the opening this summer.

Dr. Judy Brown from University of Arizona

Dr. Judy Brown is an Associate Professor in the Department of Plant Sciences and the Department of Entomology at The University of Arizona, Tucson, AZ. Research interests include the molecular epidemiology of whitefly-transmitted geminiviruses (Begomoviruses, Family: *Geminiviridae*), the basis for virus-vector specificity and the 'transmission pathway', and the biotic and genetic variation between populations of the whitefly vector, *B. tabaci*, that influence the molecular epidemiology and evolution of begomoviruses. Dr. Brown visited the Ag biosecurity and microbial forensic laboratory last July invited to discuss aspects of a cooperative grant shared with Dr. Astri Wayadande.

Last update: December, 2010.

Drs. Steve Price and Steve Woods from the OSU Office of Intellectual Property

Dr. Steve Price, Assistant Vice President for Technology Development and Director of the Office of Intellectual Property Management, and Dr. Steve Woods, OSU Clinical Faculty for Technology Entrepreneurship, and Cowboy technologies visited the Ag biosecurity and microbial forensic laboratory during 2010 to be informed about the development of the OSU "Rapid microbial collection and nucleic acid recovery device". Drs. Price and Woods have been of great support providing advice after the development of our unique sampler device.

Prof. María Cristina Miranda Vergara from UPAEP, Puebla, Mexico.

María Cristina Miranda Vergara is a Professor at the Universidad Popular Autónoma del Estado de Puebla (UPAEP) and is member of the program of biotechnology engineering (ingeniería en biotecnología). Dr. Miranda Vergara visited the Ag biosecurity and microbial forensic laboratory during the summer of 2010. There is an active and productive study abroad program between OSU and UPAEP and an increasing number of exchange students is expected for 2011. We are organizing a virtual workshop via 'polycom' on 'Primer design using Web interfase software' that will take place in September of 2010. A virtual seminar on 'Global issues in agricultural biosecurity and microbial forensics' was already given in April, 2010, via polycom.



Dr. Russ Bulluck from USDA APHIS PPQ Emergency and Domestic Programs, Raleigh, NC.

Dr. Russ Bulluck is a Plant Pathologist with the USDA APHIS PPQ Emergency and Domestic Programs. He works with Emergency Planning and Preparedness and his responsibilities include developing New Pest Response Guidelines for exotic plant pathogens. Dr. Bulluck's team provide scientific response to plant health emergencies. Facilitates contact with regulators during an emergency. Coordinates national programs during emergencies, and facilitates and manages research and response to emerging plant pests. Dr. Bulluck visited NIMFFAB in April of 2010 and invited to deliver a seminar at the e Department of Entomology and Plant Pathology seminar series. He also delivered a lecture to students of ENTO/PLP 2143 'Global issues in Agricultural biosecurity and microbial forensics'.

Last update: December, 2010.

World Bank “Turan-Profi” Group from Kazakhstan



Marat, Nurzan, Azamat, Rauan, Nargiz, Lyazzat, Samat, Almagul, Aisara, Kairat, Vanera.



Marat, Kairat, Rauan (front), Nargiz, Astri, Francisco, Almagul and Nurzan.

A selected group of enthusiastic young scientists from Kazakhstan visited OSU during the month of November, 2009. During their stage they visited the Ag Biosecurity and Forensic Laboratory. It was a good opportunity to exchange about the two countries, culture, educational systems and common areas of interest in science, biosecurity and agriculture. Oklahoma and Kazakhstan have similar weather, crops (like wheat) and agricultural settings. Kazakhstan and OSU scientists will be looking forward for a more close scientific cooperation and educational exchange. We are optimistic it will be possible to receive trainees and graduate students and to develop diagnostics and detection methods for agricultural biosecurity and microbial forensics applications that will benefit the two countries. The visit of this group was funded by the World Bank and the government of Kazakhstan.

Last update: December, 2010.

Dr. Denica Blazheva



Dr. Denica Blazheva at work in the lab.

Dr. Denica Blazheva, is originally from Bulgaria and is a visiting Borlaug fellow, Dr. Blazheva has been interacting with Dr. Carla Garzon at the Soilborne Plant Pathology laboratory and had also visiting with the Ag Biosecurity and Forensic Laboratory. Dr. Blazheva obtained a Ph.D. at the University of Food Technologies, Plovdiv, Bulgaria. She worked on the production of palatinose with immobilized *Serratia plymuthica* cells and is currently working as an Assistant Professor in the Department of Microbiology, The University of Food Technologies, Plovdiv. She teaches in several courses including General microbiology, Food microbiology, Microbial food technologies and Microbiological Control of Food and Cosmetic Products. Dr. Blazheva shares a common interest with the NIMFFAB Ag Biosecurity and Forensic Laboratory in the area of development of PCR based diagnostics and is currently working on the development of a multiplex and sensitive detection method for *Aspergillus flavus* targeting the beta-tubulin gene and aflatoxin genes (*aflQ*, *aflR*).