**Speaker Profiles:**

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<tr>
<th>Name</th>
<th>Title</th>
<th>Institution</th>
<th>Contact Information</th>
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<tr>
<td><strong>Dr. Gene Giacometti</strong></td>
<td>Director of the Controlled Environment Agriculture Center (CEAC) at the University of Arizona in Tucson, Arizona, and he is a professor in the Agricultural and Biosystems Engineering Department, adjunct professor in the Plant Sciences Department, and a member of Bio5, the Institute for Collaborative Bioresearch. He is currently developing a Controlled Environment Agriculture program at the University of Arizona, Tucson, which includes: educating undergraduates and graduate students in Engineering, Plant Sciences and Agricultural Education; researching controlled environment plant production systems; outreach through cooperative extension to the citizens of Arizona; and economic development with application of CEA technology.</td>
<td>Controlled Environment Agriculture Center, College of Agriculture and Life Sciences, The University of Arizona</td>
<td>520/626-9566 <a href="mailto:giacomel@ag.arizona.edu">giacomel@ag.arizona.edu</a></td>
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<tr>
<td><strong>Dr. Chieri Kubota</strong></td>
<td>Professor of Controlled Environment Agriculture Center, School of Plant Sciences, The University of Arizona</td>
<td>School of Plant Sciences, The University of Arizona</td>
<td>520-626-8833 <a href="mailto:ckubota@ag.arizona.edu">ckubota@ag.arizona.edu</a> cal.arizona.edu/research/Kubota cal.arizona.edu/grafting</td>
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**Merle H. Jensen, Ph.D.**  
Professor Emeritus, Plant Science  
The University of Arizona  
Tucson, Arizona  
Dr. Merle Jensen has served as an academician and consultant to industry for over forty years, developing agricultural systems for businesses, communities and aerospace application. He was one of the early pioneers in the development of agricultural plastics for greenhouses and brought one of the first Dutch Venlo glasshouses to the U.S. Early in his career, he did extensive research on tomato viruses and mineral nutrition for both horticultural and agronomic crops. He developed many of the cultural systems for controlled environment agriculture in over 50 countries, including drip irrigation, growing media, solar energy, energy alternatives and conservation for greenhouse vegetable production. His programs of research served as a prototype for food support systems for aerospace application.  
Through his fund-raising efforts, he was able to establish the Controlled Environment Agricultural Center at The University of Arizona which serves today as the only such research/education center of its kind for university students in the U.S.  
He has served as a consultant to a number of major corporations and organizations, among which are the American and Chinese Academies of Science, The World Bank, Walt Disney World Co., Tennessee Valley Authority, Desert Glory, Ltd, Eurofresh Farms, and continues today with companies through Central and North America using the system approach in all aspects of greenhouse vegetable production.  

*Email: smjensen1@earthlink.net*

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**Dr. Patricia Rorabaugh**  
Dr. Pat Rorabaugh is currently an Assistant Professor of Practice in the School of Plant Sciences and a hydroponic specialist with the Controlled Environment Agriculture Center at the University of Arizona. She teaches Introduction to Hydroponics and Controlled Environment Agriculture during the Fall Semester and Advanced Greenhouse Crop Production in the Spring. Her appointment also contains an Extension component. She is on the organizing committee and gives presentations for the annual April CEAC Short Course, she created and teaches a week-long intensive program on hydroponic greenhouse tomato production in January, and she provides information to the public on hydroponics and CEA. She is the coordinator for the CEAC volunteer group. Dr. Rorabaugh has been at the U of A since 1990 and, besides Plant Sciences, she has held research appointments in the departments of Plant Pathology and Agriculture and Biosystems Engineering. Dr. Rorabaugh received her BA in Biology from the University of California, San Diego, her MS in Plant Physiology from San Diego State University, and her PhD in Plant Sciences from Utah State University.  

*Phone: 520-626-9953*  
*Email: patrora@ag.arizona.edu*
Dr. Murat Kacira
Dr. Murat Kacira is an Associate Professor in the Department of Agricultural and Biosystems Engineering and also a faculty member in Controlled Environment Agriculture Center program. He has been active in teaching and research related to controlled environment agriculture for the past 20 years with working experiences in academia and research institutions in the US, Turkey, and Japan. His research involves in the area of greenhouse and plant energy balance studies, design and development of computer vision guided autonomous plant health and growth monitoring systems, modeling and simulation for analysis of greenhouse aerodynamics. He teaches both undergraduate and graduate level courses at the University of Arizona and has also been participating in extension activities through lecturing in short courses, invited seminar presentations, and providing technical greenhouse tours to the public.

Agricultural and Biosystems Engineering, Controlled Environment Agriculture Center, College of Agriculture and Life Sciences, The University of Arizona, 1951 E. Roger Rd., Tucson, AZ 85719, phone: 520-626 4254, email: mkacira@cals.arizona.edu
http://ag.arizona.edu/research/kacira/

Dr. Ricardo Hernández is currently a Postdoctoral Research Associate at The University of Arizona with an expertise in Lighting in Horticultural Systems. He completed his Ph.D. under Dr. Chieri Kubota at the CEAC center in control environment agriculture. He also completed a Master of Science in Entomology/Integrated Pest Management from Texas A&M University and a Bachelor of Science in Agronomy/plant consulting from New Mexico State University. Dr. Hernández current research area focuses on evaluating plant responses to new lighting technologies including LEDs under both supplemental and artificial lighting. In addition to his academic appointment he is also co-founder of Grafted Growers LLC, the first closed-type production company specialized in the production grafted vegetable transplants.

Dominique-Andre Demers
Biobest Canada Ltd., 2020 Fox Run Rd., Leamington, ON, N8H 3V7, Canada, 519/322-2178 dademers@biobest.ca
Dominique-Andre Demers is a biocontrol/IPM and pollination consultant for Biobest Canada Ltd. His main duty is to advise distributors and customers on the use of biocontrol/IPM products for effective pest management and of bumblebee hives for optimal pollination. He currently works with greenhouse vegetable and ornamental growers, fruit growers as well as with distributors of Biobest’s products throughout Canada and the United States.
Dominique-Andre Demers is a graduate from Laval University in Quebec City, QC, Canada where he obtained a B.Sc. in agronomy and a Ph.D. in plant biology (greenhouse vegetable production). He also worked at the Greenhouse and Processing Crop Research Centre in Harrow, ON, Canada before starting to work for Biobest in 2002.
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<tr>
<th><strong>Karin H. Tifft, MS Entomology</strong></th>
<th><strong>Myles Lewis, MS</strong></th>
<th><strong>John Hoogeboom</strong></th>
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<tr>
<td>Greenhouse Vegetable Consultants, LLC</td>
<td>Founder of Verdant Earth Technologies and the Arizona Vegetable Company.</td>
<td>Has been involved in the greenhouse industry since 1972.</td>
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<td>Consultant, Integrated Pest and Disease Management</td>
<td>He is a graduate of the University of Arizona’s Professional Science Master's and undergraduate agriculture programs in Controlled Environment Agriculture.</td>
<td>John was employed by some of the leading support companies in the greenhouse industry, including Van Vliet Pijnacker, B.V. of the Netherlands, Glasshouse Automation, Ltd. of England and Van Wingerden Greenhouse Co. of the USA.</td>
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<td>Karin Tifft (M.S.) is the Integrated Pest and Disease Management Consultant for the group Greenhouse Vegetable Consultants (<a href="http://www.greenhousevegetableconsultants.com">www.greenhousevegetableconsultants.com</a>). She has 18 years’ experience in rearing and using natural enemies for greenhouse pest management. As a consultant for GVC, she has worked in large greenhouse conglomerates as well as small greenhouses, helping tomato, pepper, lettuce and herb growers develop and implement a pest management strategy appropriate for their size, location and marketing strategy. Prior to partnering with Dr. Merle Jensen and Ken Gerhart in Greenhouse Vegetable Consultants she worked for 6 years for Eurofresh Farms, the largest producer of hydroponic tomatoes and cucumbers in the United States where she revamped the IPDM department by developing new scouting guidelines, mapping, record keeping and training procedures. She designed methods to accurately budget and allocate costs to determine the most cost-effective pest and disease management strategies. She researched the diseases common in greenhouses vegetables and developed disease management techniques resulting in significant production increases due to reduction in crop loss. In addition to crop pest and disease management, she also improved the end-of-crop and during-crop hygiene procedures, post-harvest quality issues and bumblebee pollination.</td>
<td>Mr. Myles Lewis is founder of Verdant Earth Technologies and the Arizona Vegetable Company. He is a graduate of the University of Arizona’s Professional Science Master's and undergraduate agriculture programs in Controlled Environment Agriculture. During his tenure at the University of Arizona, Mr. Lewis trained graduate and undergraduate students in greenhouse vegetable production and established a program for students to sell the produce they had grown at local farmers markets. These sales fund student activities and provide support for agriculture students to attend the industry’s annual Horticulture fair in The Netherlands. Mr. Lewis has 9 years of experience in Controlled Environment Agriculture having worked in greenhouses growing crops such as tomatoes, peppers, lettuce and herbs. In between degrees, he worked with his family's real estate development company in Las Vegas, NV. <a href="mailto:myles.lewis@verdantearthtech.com">myles.lewis@verdantearthtech.com</a></td>
<td>John was involved in greenhouse projects in several countries, including Holland, England, Ireland, Denmark, Greece, Spain, Soviet Union, Libya, Kuwait, Saudi Arabia, Venezuela, Colombia, Costa Rica, Japan, Korea and Taiwan. In 1995 John started Agronomico International, Inc. to provide greenhouse operators with consultancy services relating to the design, construction and operation of state-of-the-art greenhouse facilities for the production of vegetables and (cut) flowers. During the next 8 years John worked on greenhouse projects in the USA, Mexico, Costa Rica, India and Columbia. In 2003 John joined Rough Brothers, Inc. as a greenhouse project development engineer, responsible for designing medium and large scale vegetable production facilities, both for US and overseas customers.</td>
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**Dr. Kevin Fitzsimmons**

Dr. Kevin Fitzsimmons is a Professor and Extension Specialist of Environmental Science at the University of Arizona, teaching, conducting research and extension work in aquaculture. His research and extension work have focused on integration of aquaculture and agriculture. He has developed freshwater systems to rear fish and shrimp in irrigation systems with effluents going to irrigate a variety of field and tree crops as well as hydroponic vegetables. Internationally he has developed integrated marine systems to rear fish, shrimp, seaweeds, and halophytes in more sustainable aquaculture. He also serves as the Director of International Programs for the College of Agriculture and Life Sciences at the University of Arizona.

Dr. Fitzsimmons is a Past President of the US Aquaculture Society and World Aquaculture Society. He also serves as the Sec-Tres. of the American Tilapia Society, organizes the biennial International Symposia on Tilapia in Aquaculture, and recently stepped down as Chairman of Aquaculture without Frontiers, a global charity supporting small-scale sustainable aquaculture projects in developing countries. He also holds an adjunct professorship at the Asian Institute of Technology in Thailand where he spent a sabbatical as a Fulbright Fellow in 2004. Kevin also serves as a consultant to the China Department of Agriculture and other groups on the development of tilapia production and processing.

Dr. Fitzsimmons has an international research portfolio of aquaculture research and development with current grants to work in Guyana, Indonesia, Philippines, China, India, Bangladesh, Thailand, Mexico, Saudi Arabia, as well as the US. Research grants come from US government, international agencies, and the private sector. His lab group currently hosts graduate students and visiting faculty from the US, Mexico, Brazil, Eritrea, Vietnam, and Indonesia.

**Wayne & Phyllis Underwood**

Wayne & Phyllis Underwood are co-owners of Shushan Valley Hydro Farm. They have operated the business for 19 years. Wayne in conjunction with the greenhouse operation also operates a construction company, Superior Land Services. Superior Land Services has been in operation for over 25 years. Prior to hydroponics he was a district sales rep for D.A. Lubricants an oil company in Indiana. Wayne and Phyllis were also former dairy farmers. Currently Wayne is the operations manager which includes the nutrient management, repair and maintenance, new construction, and the general plant operations. Phyllis has a BA in Business and prior to the hydroponic business was a management consultant. This business largely involved profit improvement, organization restructure, and improving sales and marketing in financially distressed midsize companies. Currently, she manages the employees, marketing and sales (farmer’s markets and wholesale accounts) and bookkeeping.

Wayne & Phyllis Underwood - owners
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**Lela Kelly** is currently Vice President of Dosatron International Inc., based in Clearwater Florida. Lela and her husband Eddy Kelly, own Dosatron International since 1986. Dosatron fertilizer injectors are the leading fertilizer and chemical injection pumps in the world. Lela's main duties, besides running the company, is to head up the Horticulture/Ag market. Lela has owned a greenhouse operation in Long Island, New York and has been in the horticulture market for over 35 years. Lela is also a graduate of the Harvard OPM program, at Harvard Business School.

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**Dr. James M. Ebeling** is a semi-retired aquaculture engineer, who recently immigrated to Tucson Arizona from New Orleans with tentative plans of doing NOTHING, but.... James has worked in the area of aquaculture engineering for more than twenty five years, written an engineering text book on recirculating aquaculture system design (3rd edition just came out) with Dr. Michael Timmons from Cornell University (“The Yellow Book”), taught numerous workshops and short course and designed both small scale (Boutique) and large scale commercial aquaculture systems both here and abroad. His background in aquaculture engineering comes from both "book learning" (PhD Univ of Maryland) and in the real world having designed and constructed research facilities in Hawaii, Ohio, Maryland and Louisiana. Most recently James worked in New Orleans for Aquaculture Systems Technologies conducting research in commercial algae production, denitrification for marine aquaculture systems and waste management. He is currently working with several high schools to design, construct and assist in management of small teaching aquaponics systems.

James M. Ebeling, PhD  
Research Engineer  
JamesEbeling@aol.com