

Building Skills, Building Relationships
Engineers Without Borders Great Lakes Regional Workshop

University of Illinois at Chicago

September 28-30, 2007

Speaker Biographies

Bonnie Jean Adams. Bonnie Jean Adams is a native of Chicago, IL who has traveled widely overseas and in the United States. She holds a doctorate degree from Loyola University Chicago in Educational Leadership & Policy Studies, with particular focus upon the philosophical and cultural foundations of education; the study of how culture influences learning methodology and philosophy.

Currently teaching research writing and community communication courses at Benedictine University in Lisle, IL, Dr. Adams has begun teaching writing through the use of interviews at Columbia College Chicago. Her research about culture and communication has been published in articles and presented at conferences. Her research reports about cultural concerns have been published in sociological textbooks.

As she encourages her students to move beyond the classroom, Dr. Adams has her own record of experience "in the field". She has worked with the Houma Indians in Houma, LA and with the Lakota Indians on the Pine Ridge Reservation in South Dakota. Most recently, Dr. Adams has been writing curriculum which focuses upon learning through observational interviews and ethnographical experience. She believes in making communication an ongoing practice through active listening, which she describes as "listening loudly", and she describes her best advice to those who will be opening the dialogue and beginning a relationship of cultural communication is to "First, be uncomfortable..." BonnieEugene@aol.com

Jim Bodenner. Jim and Susan Bodenner are passionate about the plight of developing countries, especially when it comes to the need for potable drinking water in underserved communities.

Four years ago the residents of Bishop Hills Elder Care Community in Rockford, Michigan contributed \$400 to help fund a pilot program designed to test the effectiveness of a practical *BioSand Water Filter* in the Dominican Republic. The pilot was so successful that Rotary Club resources across the United States and Canada, including Michigan, contributed \$300,000 to help fund the program. The success of the *BioSand Water Filter* has been dramatic and this simple affordable technology has now been expanded to include Haiti and Honduras. "It's a story that is worth hearing about," say Jim and Susan, "and we're on a mission to share it."

Jim is employed by International Aid as the Director of Water Initiatives and he holds a masters degree in business and a law degree from Northern Illinois University.

In addition, Jim and Susan own and operate Bishop Hills Elder Care Community in Rockford, Michigan. Susan, who holds a masters degree in social work, is Bishop Hills' administrator. Like Jim, she is an evangelist for clean drinking water in developing countries.

The Bodenners are members of the Rotary District 6290 World Community Service Committee and the Rockford Rotary Club. Jim is the vice chair of the Rotarian

Water and Sanitation Group which was recently formed by Rotary International to assist in coordinating world-wide water projects. bodennerj@internationalaid.org

Sabri Cetinkunt. Dr. Sabri Cetinkunt is a Professor of Mechanical Engineering at the University of Illinois at Chicago. He is the Director of Manufacturing Research Center. He is the founder and chief technology officer of Servo Tech Inc., a start-up high tech company specialized in computer controlled motion systems.

He received his B.S. degree in Aerospace Engineering from Technical University of Istanbul in 1982, M.S. and Ph.D. degrees in Mechanical Engineering from Georgia Institute of Technology in 1984 and 1987, respectively. His research interests include mechatronics, motion control, servo control systems, high speed automated machine design, robotics, nano positioners, precision systems, electro-hydraulic control & applications in earth moving equipment technology, expert systems, neural networks, and real time systems. He has written over 50 technical papers, authored a book titled Mechatronics by John Wiley & Sons, and holds four US patents in electrohydraulic control systems area. scetin@uic.edu

Nancy Cohen. Nancy is the Director of Development for the UIC College of Engineering and formerly the head of Prospect Research for The Rotary Foundation of Rotary International. A self-described "Road Warrior" for the College, her work takes her across Illinois and Texas meeting with alumni to solicit major gifts. The University of Illinois is now in a campaign and it keeps her busy. One of the best things that Nancy has ever participated in was the EWB-UIC work trip to Cerro Alto, Guatemala in January 2007.

Nancy has a degree in political science from Adelphi University, a Master of Public Administration from UIC and a Science Master (SM) degree in American political science and political psychology from MIT. She has been involved in fundraising in one way or another for over 15 years. This includes - of course - grant-writing. njcohen@uic.edu

M. Robin Collins is a Professor of Civil/Environmental Engineering and Director of the EPA-funded New England Water Treatment Technology Assistance Center at the University of New Hampshire. His current research interests have focused on evaluating and modifying several filtration options, but especially slow sand and riverbank filtration, to enhance treatment and operational performance. He has co-organized three international research conferences and two regional workshops on slow sand filtration. His research efforts have been honored by the AWWA by serving as the major advisor to four recipients of the Academic Achievement Award for Best Thesis: two on slow sand filtration, one on precoat filtration and one on riverbank filtration. robin.collins@unh.edu

Julie Henning. Julie works for the Environmental Protection Agency in Region 5, Chicago. She is currently a program analyst in the Water Division for the State Revolving Fund program, which provides funds for waste water and drinking water systems to finance infrastructure improvements. Previously, Julie coordinated the Midwest Clean Diesel Initiative grant competition, to fund the reduction of emissions from diesel engines in the Midwest. She has worked at EPA for 5 years. Julie received her B.A. in Economics and Management from Albion College, and is currently working

on her M.A. in Public Policy and Administration from Northwestern University.
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Steve Hubbs. Steve retired as "Vice President-Water Quality and reduction" from the Louisville Water Company in 2004 after 30 years of service and is currently a graduate-student (for life?) at the University of Louisville pursuing a PhD in Civil-Environmental Engineering. He has done volunteer work in Ukraine, Ghana, Slovakia, South Korea, Honduras, and most recently in an Alaskan Inupiat village near the Arctic Circle. Since retirement he has worked with several engineering firms as a consultant on various aspects of public water supply (fun jobs only!). His current field of study is in riverbank filtration hydrology. stevhubbs@bellsouth.net

Mohsen Issa. Mohsen is a Professor of Structural and Materials Engineering at the University of Illinois at Chicago. His research interests include (1) analysis, design, and testing of structural models and prototypes subjected to static, fatigue and simulated seismic loading, (2) development of experimental and analytical techniques for monitoring and rating existing highway bridges to assess and evaluate their physical condition, vulnerability and reliability, (3) development of an optimum structural bridge deck system for rehabilitation (Rapid Replacement of Bridge Decks) and new bridge construction, (4) size effects, and fractal surface characterization in fracture of cementitious materials, (5) development of High Performance Concrete: mechanical and durability properties, (6) failure mechanisms and damage assessment of materials and structures, (7) strength and durability assessment of advanced composite materials, such as Carbon Fiber Reinforced Polymers (CFRP) for rehabilitation of bridges.
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Cathy Leslie. Cathy is currently the Civil Engineering Manager at Tetra Tech RMC, an engineering consulting firm located in Longmont, Colorado. As engineering manager, Cathy offers her clients strong project management, project coordination, government liaison, and engineering design skills. Cathy is responsible for ensuring the success of projects for both private and governmental agencies by assessing the needs of each individual client and applying current design techniques for long-term sustainable solutions. Cathy's areas of technical expertise include transportation and utility infrastructure design. As engineering manager, Cathy directs the engineering efforts required for master systems planning, feasibility studies, preliminary and final designs, construction engineering and construction management for environmental work, roadways, pipelines, and storm water facilities.

Cathy received a BSCE degree from Michigan Technological University in 1983. Cathy began her work in developing countries as a Peace Corps Volunteer stationed in Nepal where she developed solutions related to drinking water and sanitation projects. Since her return to the United States, Cathy has worked for both the government and private sector. Cathy's technical interest lies in creating solutions for engineering projects which integrate the needs of the client along with the sustainable needs of the environment sustainability needs of each project. Cathy.Leslie@ewb-usa.org

George Jamison, PE. George is a lifelong consulting civil engineer specializing in geotechnical, structures, materials and environmental remediations. He is a Professional Engineer in Illinois and many other states. He is the Vice President of Goodpaster - Jamison, Inc. from Taylorville, IL. Currently, he is the co-chair of the recently formed Great Lakes/South Central TAC. gj@gjinc.com

Colette Martin-Wilde. Colette joined The Rotary Foundation in 2004 as a Program Coordinator on the Asia team, managing the grant activity for the Philippines, Australia, Papua New Guinea, Timor Leste and the South Pacific Islands. When the 3-H program was reactivated in 2005, Colette joined the 3-H team as Senior Coordinator and now works with Rotarians on holistic, community development projects all over the world. Active projects are located in South America, Africa, the Philippines, Eastern Europe and Russia.

Bringing a management skill set to the position, Colette draws on the experience of a decade in customer service management and 11 years in administrative management in the architectural design industry with emphasis in office management, procedures, personnel policy, legal requirements and contract and liability management. She holds an undergraduate degree in Speech from Northwestern and an MS in Management with a focus on organizational behavior and development from National Louis University.

Colette spent several years at home raising her three children, ages 12-19, mastering the art of domestic engineering and negotiation. She has been happily married for 22 years. She likes to take photographs, listen to music and is learning to knit, embroider and has just started Italian classes.

Volunteer work includes producing sign-voice theatre productions with deaf, hearing impaired and hearing students at the Bell school in Chicago and is a member of the Illinois Society for International Development.

Tom O'Brien. Tom is a mechanical engineer, chemist and educator, currently in his sixth year as a Machine Shop, science and math teacher at Tilden High School on the south side of Chicago. Working in this school, he is keeping the Peace Corps ethic of helping those with the greatest need. Tom worked for about 12 years as a mechanical designer and manufacturing engineer before Peace Corps. Eight of these years he was in the electronics field with Motorola and for four years he was either working in the electricity field or consulting. He has visited about 80 countries but settled for 2 years in Malawi, Central Africa, as a Peace Corps Volunteer educator. Tom would like to share some of his experiences in Malawi where he was often referred to as Mr. Project.

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Kurt Paterson. Kurt is an Assistant Professor of Civil and Environmental Engineering at Michigan Tech. Dr. Paterson's interests include cognitive sciences as applied to learning technical subjects, public health as affected by air quality, and life balance as directed towards personal success. Over the past ten years, Dr. Paterson has created more than twelve different courses in a wide variety of engineering topics. He is currently offering courses in *Air Quality Engineering*, *Environmental Measurement Analysis*, and senior design. Dr. Paterson's research foci include air pollution source apportionment, significant learning experience design, and information technologies. Current projects

focus on the identification of sources of particulate matter in several cities around the world, designing educational games, and design of appropriate power systems for developing countries. Dr. Paterson is active outside the classroom and laboratory, donating his time to a variety of on- and off-campus organizations. He is currently Chair of Marketing for the department, and Director of the new Civil and Environmental Engineering Student Success Center. He has served on the Board of Directors for an international professional organization, and currently is partner or owner of three companies. He has received numerous awards for excellence in education, service, and mentoring. paterson@mtu.edu

Urmi Sengupta. ShoreCap Exchange (“SCE” or Exchange) is committed to building the capacity of microfinance institutions and small business banks in emerging economies to increase access to financial services among poor households and underserved entrepreneurs. Exchange helps microfinance and small business banks overcome the various operational challenges they face in lending to less-traditional clients, enabling these organizations to increase scale and outreach. Urmi Sengupta joined ShoreCap Exchange in 2004 to work on capacity building with partner financial institutions, operations and knowledge exchange services. Urmi is currently the Associate Program Director and she is responsible for managing the Peer Learning and Knowledge Exchange Network (KEN), which is focused on strengthening ShoreCap Exchange’s partner banks through banker to banker peer learning mechanisms. The KEN program brings together small business banks and microfinance institutions in developing countries to discuss best practices, learn from each others’ experiences and share tools. Prior to joining the ShoreBank team, Urmi has worked in corporate banking in India and has extensive small business banking experience. She holds a graduate business degree with a concentration in finance from the Indian Institute of Management in Bangalore, India and a graduate degree in public policy from the University of Chicago. Urmi also worked briefly with the United Nations Economic and Social Commission for Asia and the Pacific, Bangkok, Trade and Investment Division in 2003, where she co-authored a publication on trade finance infrastructure based on her experiences in the Indian financial sector. usengupta@shorecapexchange.org

Peter Scheff. Peter is a Professor of Environmental and Occupational Health Sciences at the University of Illinois at Chicago. His research interests include air quality management, development of measurement-based receptor models, characterization and control of indoor air quality, industrial hygiene, occupational and environmental exposure assessment, environmental epidemiology. pscheff@uic.edu

Stephen Silliman. Stephen is a Civil Engineering Professor at the University of Notre Dame. His research interests include groundwater hydrology flow/transport in heterogeneous media; stochastic hydrology; laboratory flow/transport experiments; field studies; groundwater/surface interaction; microbial transport; water source protection; third world water supplies. Silliman.1@nd.edu

Riyaz Shipchandler. Riyaz joined EWB-CPC in 2006. Mr. Shipchandler is a member on the Cuetzala Project Team and traveled with the team's first implementation trip in 2007.

Mr. Shipchandler has worked for the Illinois Department of Natural Resources in a research and consulting group that provides technical assistance to companies in Northern Illinois on pollution prevention, water conservation, energy efficiency and process efficiency issues.

Mr. Shipchandler is a licensed engineer in Illinois, has a MS in Environmental Engineering from the University of Illinois at Chicago and a BS in Chemical Engineering from the University of Illinois at Urbana-Champaign.

Tammy Wergin. Tammy Wergin graduated from the University of Colorado with a BA in communication. She is a trained mediator who provides her coworkers with sound advice as well as frequent practical jokes. With Tammy in the office, the staff has learned to expect the unexpected. Tammy is an avid sports fan -- she loves the CU Buffaloes, NY Yankees, Denver Broncos and her three daughters' softball and basketball teams.

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