

## **BOB BAGLEY**

### Biography

Laboratory Director- City of Racine Health Department – 16 years  
Microbiologist- City of Milwaukee Health Department – 17 years  
MS in Zoology (parasitology, medical entomology) – University of Maryland  
MS in Management- Stritch University  
Certificate in Public Administration- UW- Milwaukee  
Member- Wisconsin State Laboratory of Hygiene Board- representing local public health departments- gubernatorial appointment  
Member- South East Wisconsin Beach Taskforce (formerly South East Wisconsin Beach Consortium)  
Former member- Wisconsin Public Health Association Board

### Interest

My interest is in providing relevant laboratory results that allow communities and individuals to make informed decisions regarding the safe use of recreational waters. Our laboratory has been conducting research in the area of indicator organisms, ancillary potentially predictive data, and the effect of *E.coli* loading from beach sand on recreational water for the past four years. Our laboratory will have a paper in the January 2003 issue of Applied and Environmental Microbiology.

## **SHANNON BRIGGS**

Hello, my name is Shannon Briggs and I am the project coordinator for beach monitoring in Michigan. I was nominated for the Board of Directors of the Great Lakes Recreational Water Quality Association and have been asked to provide some background information about myself.

I have a bachelor of science degree in Animal Science and a Ph. D. in Pharmacology & Toxicology from Michigan State University. My husband and I have a son (3 yrs) and a daughter (5 yrs). We spend most of our vacations at a lake in Northern Michigan and we have a well stocked supply of benedryl for swimmer's itch and sunblock to prevent sunburns.

For the past three years, I have been the project coordinator for beach monitoring in Michigan. I am also a toxicologist for human health for the Water Quality Division of the Michigan Department of Environmental Quality. Just about everything that I know about beach monitoring I have learned from staff of health departments and the folks of the Great Lakes Water Quality Association. We are fortunate to have some great minds and energetic folks researching and working on questions about beach monitoring. I am also excited to hear that even more people are interested in developing a rapid *E. coli* test method. My hope is that the Great Lakes Recreational Water Quality Association will continue to serve as a networking tool for sharing ideas and a valuable resource for providing the most recent and practical information.

Shannon Briggs, Ph.D.  
Toxicologist, Water Unit  
Environmental Science & Services Division  
1st Floor, North Tower  
517-335-1214  
517-241-0858 FAX  
[briggssl@michigan.gov](mailto:briggssl@michigan.gov)

### **DONNA FRANCY**

Donna Francy is a hydrologist with the U.S. Geological Survey, Water Resources Discipline, Ohio District Office. She received a bachelor's degree in Biology from Indiana University and a Master's degree in Environmental Science from Rice University, Houston, Texas. She has 14 years experience in environmental microbiology and prior to that worked as a clinical microbiologist. For the past ten years at the U.S. Geological Survey, Ms. Francy has served as project chief on several projects that involve methods and process affecting microbiological indicators and pathogens in the environment. These included studies that addressed recreational water quality in rivers and lakes, virus contamination in drinking-water supplies, or methods for monitoring protozoan and viral pathogens in streams. She is currently working on developing predictive models for E. coli at Lake Erie and other Ohio bathing beaches.

### **TONI GLYMPH**

Hello, My name is Toni Glymph, I am an Environmental Toxicologist in the Water Quality Standards Section of the Wisconsin Department of Natural Resources. I have worked with the Department for 10 years. Prior to transferring to the Water Quality Standards Section I worked for 6 years writing WPDES permits for municipal and industrial WWTP and working as the Region 5 contact for Wisconsin, troubleshooting WWTP compliance problems related to wastewater microbiology. Prior to moving to Wisconsin, I live in Detroit Michigan and worked 16 years as a Water Systems Analyst at the Detroit Water & Sewerage Department. I have traveled extensively throughout the US, lecturing on and assisting with wastewater microbiology issues.

I have a science degree, with a double major (BS Chemistry and Biology), from Tennessee State University and have attended two years of Medical School on a full 4 year scholarship (I voluntarily dropped out of the medical program because it broke my heart to see sick people all the time). I live in Waunakee, WI (the only Waunakee in the world), outside of Madison, with my husband, 13 year old son, dog Max, and cat Tiger. (all males and lots of testosterone). My 18 year old son is a Freshman at Oral Roberts University in Tulsa, OK.

I would like to see the Great Lakes Recreational Water Association as a mechanism for sharing new information, upcoming research, what works and what hasn't. Also, to develop some congruency with how we manage the Great Lakes, keeping in mind the uniqueness of each area.

Toni Glymph, Environmental Toxicologist  
Water Quality Standards Section  
Wisconsin Department of Natural Resources  
(608) 264-8954

### **SHERIDAN HAACK**

US Geological Survey  
6520 mercantile Way, Suite 5  
Lansing, MI 48911  
517-887-8909  
Fax: 517-887-8937  
[skhaack@usgs.gov](mailto:skhaack@usgs.gov)

I am a Research Hydrologist with the US Geological Survey, and I have worked in this capacity in the Michigan Water Discipline Office for the past 9 years. I have a PhD in Microbiology from

Michigan State University, and an MS degree in Environmental Engineering Sciences from the University of Florida. [And, just to make my life more challenging, my BS degree was in English Literature and Art History!]. I am married and my husband, Bob, is a Research Entomologist with the US Forest Service, where he studies introduced/exotic forest pests in the Great Lakes area. Whenever possible I'm outdoors, where I love to garden, canoe, hike and otherwise enjoy (and study) nature.

I have 20 years experience in aquatic microbiology, including studies conducted in lakes, streams, rivers, wetlands and ground water in Michigan, Florida and New Hampshire. I am a member of the American Society for Microbiology, the American Water Resources Association, the International Association for Great Lakes Research and the American Association for the Advancement of Science. My primary research interests include 1) the effects of soil, subsurface and aquatic microbial activities on surface water and ground water quality and 2) environmental factors affecting the survival and distribution, in natural waters, of bacteria of public and ecosystem health significance. I am particularly interested in helping to advance the application of new biological technologies for beach monitoring and pathogen detection.

I would like to see the Great Lakes Recreational Water Quality Association develop along the lines exemplified by our recent meeting. We have an excellent group of individuals with both practical experience and scientific expertise. I really believe we have the chance to lead the way regarding freshwater recreational water quality monitoring and scientific understanding, and to make outstanding contributions to the protection of public health in the Great Lakes Region!

#### **JULIE KINZELMANN**

- Microbiologist - City of Racine, WI Health Department Laboratory - 12 years
- Clinical Assistant Professor - University of Wisconsin Milwaukee, College of Health Sciences
- Laboratory Technologist/Assistant Laboratory Manager - Chem.-Bio Corporation - 5 years
- MS Clinical Laboratory Sciences (Thesis: Microbiological Examination of Recreational Water, Sand, and Sediment at North Beach, Racine, WI) - University of Wisconsin Milwaukee
- Certificate in Supervisory Management - University of Wisconsin Management Institute
- BS Medical Technology - University of Wisconsin Parkside
- Member/Co-Chair - Root-Pike Water Initiative Network, Communication & Education Task Force
- Member - University of Wisconsin Parkside, Department of Biological Sciences, Biosafety Committee
- Member - Midwest Water Analysts Association
- Member - American Society for Microbiology
- Member - American Society of Clinical Pathologists
- Member - Southeast Wisconsin Beach Task Force

#### **Publications:**

*Enterococci* as Indicators of Lake Michigan Fresh-Water Recreational Water Quality; Comparison of Two Methodologies and Impact on Public Health Regulatory Events, Appl. Environ. Micro., 69:1 (in press)

*E. coli* Densities in Sands of Two Southwestern Lake Michigan Beaches: Implications for Beach Management - Presented at the Sediment Quality Assessment-SQA5 conference, Chicago, 2002.

[www.aehms.org](http://www.aehms.org), Online.

#### **RESEARCH INTERESTS**

Characterizing enterococci in freshwater environments and evaluating their applicability as indicators of Great Lakes recreational water quality.

Evaluating sediment types for the following:

1. Propensity for biofilm formation
2. Facilitation of accumulation &/or replication of indicator bacteria
3. Pathogen habitation
4. Induction and resuscitation of bacteria from viable but non-culturable states based on environmental inducing events
5. Response to grooming treatments for the reduction of non-point pollution
6. Ability to facilitate transport of bacteria to surface waters via groundwater seiche

Assessing risk of human illness when *E. coli* is an indicator of non-human fecal contamination.

I would like to see the Great Lakes Recreational Water Quality Association become a regional and national resource for scientists and policy makers by combining the multi-disciplinary talents of our members into a large database of cutting edge research. As demonstrated at this year's annual meeting, our members individually hold key pieces of knowledge that, when combined, will produce a formidable knowledge base from which to draw upon. In an era where grant monies are often scarce, we can, by combing our talents move forward in the resolution of recreational water quality issues effecting us both locally and regionally. By partnering with government agencies and citizen groups we can actively seek the protection of the Great Lakes, a national resource which we hold in high regard.

#### **WALTER C. JOHNSON, C.A.E.**

Walter C. Johnson has been a staff member of the National Recreation and Park Association for 19 years. Presently he serves as Great Lakes Regional Director serving Illinois, Indiana, Ohio, Missouri, Minnesota, Wisconsin, Michigan, and Iowa. He is the Executive Secretary of the NRPA National Aquatic Branch. His regional office is located in Hoffman Estates, Illinois. Prior to joining the National Recreation and Park Association, Mr. Johnson served as the Executive Director of 4 major park and recreation agencies in the Chicago metropolitan area.

A major accomplishment for the Association was the creation, implementation and administration of the National Aquatic Branch; a membership component designed to provide education and training, networking, new publications, and technical assistance to our nation's aquatic professionals. As a result of this effort, he has conducted 18 Annual National Aquatic Conference/National Aquatic Management Schools, created the Aquatic Facility Operators (AFO) Certification Course, Better Beach and Waterfront seminars, "Start Sailing Smart" Program, "Ride Smart From the Start" Personal Watercraft (PWC) education program, developed numerous Aquatic Education publications, acquired numerous Coast Guard grants and formed many partnerships.

He serves on the ANSI/NSPI Water Recreation Facilities Standards Committee; Illinois Department of Natural Resources Northpoint Marina Advisory Board; Advisory Committee for

International Swimming Hall of Fame; and US Architectural and Transportation Barriers Compliance Board Swimming Pool Accessibility Project. He organized the National Aquatic Coalition, a group of 65 aquatic-related organizations and associations and conducted a National Aquatic Summit in Washington, DC. He formed the Illinois Water Access Coalition and served as Chairman. He also served on the Center for Disease Control (CDC) Recreation Water Illness Review Panel. He received the Paragon Award for contributions to Recreational Swimming from the International Swimming Hall of Fame. He has a Bachelor's and Master's degree from the University of Illinois in Park and Recreation Administration and has served the park and recreation profession continuously for 37 years.

My interest in the water quality of Lake Michigan started when I was Executive Director of the Glencoe Park District (1965-1974) and operated the Glencoe Beach and the Sailing program. My experiences with testing methods, timeliness, closings, public relations have always been with me throughout my career - especially since I have had a boat and fished Lake Michigan for 37 years - It is the most beautiful, gorgeous, wonderful resource a region, state or city could ever have and it is a part of my soul. Now as Great Lakes Regional Director, I serve all of the communities bordering all of the Great Lakes and have developed a Beach and Waterfront Education and Training program for Beaches nationwide. I am not as technically qualified as some but provide an excellent delivery system of disseminating information to all communities that border the Great Lakes. If I am not selected for the Board, I will continue to lend my support to your efforts

#### **KATHY LUTHER**

I have been with the Indiana Department of Environmental Management for seven years. At IDEM I have served as the Lake Michigan LaMP Coordinator, worked with the Interagency Task Force on E. coli, and supported other local and regional watershed planning efforts for five years. I have Masters degrees in Environmental Science and Public Affairs from Indiana University with a concentration in water resources management. I also earned a bachelor's degree in Biology from Hope College in Holland, Michigan.

From the above information you can probably tell that my focus is on Lake Michigan and Indiana. However, through my job I can provide direct linkage between the Great Lakes Recreational Water Quality Association and the Lake Michigan LaMP and the Great Lakes Human Health Network. My only goals for this group are to continue to serve as a forum for sharing information and ideas to better protect the water quality at our Great Lakes Beaches.

#### **JEFFREY MACDONALD**

I'm honored to have been nominated & feel that due to my experience with the Southeast Wisconsin Regional Beach Consortium (dating back to about 1995), and other activities, I could be an asset to the board, but due to reduced staffing here at the Milwaukee Metro Sewerage District Lab I cannot commit the time necessary to carry out the activities associated with this activity.

I do hope to be able to participate in the activities of the Great Lakes Recreational Water Quality Association in the future - regional collaborations of this type are a real asset to attacking the issues before us.

Jeffrey J. A. MacDonald, MS, Microbiologist  
Milwaukee Metropolitan Sewerage District  
250 West Seeboth Street  
Milwaukee, WI 53204

(414) 277-6361

[jmacdonald@mmsd.com](mailto:jmacdonald@mmsd.com)

**MARK A. PFISTER, MSES, BA**

Telephone: 847.377.8028

Fax: 847.249.4972

E-mail: [mpfister@co.lake.il.us](mailto:mpfister@co.lake.il.us)

Aquatic Biologist

Lake County Health Department and Community Health Center

Environmental Health Services/Lakes Management Unit

3010 Grand Avenue

Waukegan Illinois 60085

As an Aquatic Biologist, Mark's primary responsibilities include managing Lake County's Lakes Management Unit through a Delegation Agreement with the Illinois Department of Public Health and directives from the County Board and Board of Health. He has been Supervisor of the Lakes Management Unit for the past 11 years. He coordinates intensive limnological assessments of 32 lakes per year, the bacterial monitoring of 95 bathing beaches and recreational areas and prepares and manages the program's budget. Mark is also responsible for directing GIS mapping for the Service Area. Mark was recently on the Executive Board of the North American Lake Management Society as Treasurer and is an active member of the Illinois Lake Management Association. Mark completed a BA program with a major in Biology, Psychology and Environmental Science at Augustana College in Rock Island, IL and a MSES in Water Resources (Limnology) at Indiana University in Bloomington, IN.

He desires the Great Lakes Recreational Water Quality Association to be a major player in improving monitoring, research, public education and outreach, source reduction and the overall quality of the beaches of the Great Lakes.

I am a Research Hydrologist with the US Geological Survey, and I have worked in this capacity in the Michigan Water Discipline Office for the past 9 years. I have a PhD in Microbiology from Michigan State University, and an MS degree in Environmental Engineering Sciences from the

**SHARYL RABINOVICI**

Physical Scientist

USGS Western Geographic Science Center

345 Middlefield Rd. MS531

Menlo Park, CA 94025

(650) 329-4225

[srabinovici@usgs.gov](mailto:srabnovici@usgs.gov)

I have been a Physical Scientist with the USGS Western Geographic Science Center for the past three years. I have been working on beach closure issues in the Lake Michigan area since 1999, and have given talks and posters at several recent conferences (e.g. URISA, GLRWQA, BEACH). My research on beach closure issues has focused in two areas: the economic implications of swim closure policies and on the use of geographic technologies to make forecast models that are sensitive to the variability of *E. coli* in the near shore environment. Two publications from this research are forthcoming. Academically, I hold a Master of Public Policy degree from the University of Chicago and a B.S. with distinction in Geologic and Environmental Science from Stanford University.

I am interested in serving on the board of the GLRWQA because I am very excited about the ways that cross-disciplinary organizations can help create and spread new ideas and approaches that will aid our different institutions in achieving more and better results for the public. I think this is a critical time in the evolution of recreational water policy in the U.S. and we have a potential to make a real impact by sharing our practical knowledge with each other and with the rest of the nation. Two important things I feel I can bring to the GLRWQA board are a fresh perspective from my social science and policy background and my research experience with modeling and economic impact assessment. My goals in participating in the leadership of the association would be to help it grow more geographically diverse, to develop new ways for helping members stay current on science and regulatory issues, and to seek a voice for the organization in regional and national affairs.

**JEFFREY RAM**

Professor Jeffrey L. Ram  
Department of Physiology  
Wayne State University  
Detroit, MI 48201

B.A., University of Pennsylvania (physics); Ph.D., Caltech (biology).

Our current research focuses on developing new methods for enumerating and tracking sources of bacteria in rivers and lakes. We work primarily in southeast Michigan, where there is plenty of “raw material” for our research in the Clinton River watershed, Lake St. Clair, and the Detroit River. We have also collaborated in the Muskegon and Grand River watersheds, which terminate in Lake Michigan. Our research has been directly supported by the Macomb County (MI) Department of Public Works, Michigan Department of Community Health, the U.S. Army Corps of Engineers, and (as of 1/1/03) the Michigan Great Lakes Protection Fund, and indirectly (via in-kind and student support) by NIH and the Macomb County Health Department.

Our recreational water research began as an offshoot of our research on zebra mussels in the 1990’s. While investigating the uptake and depuration of bacteria by zebra mussels in a monitoring application, we began developing a new sequence-based molecular method of microbial source tracking. We are interested in identifying the best (fastest, easiest, most economical) method of identifying the sources of bacteria that show up at our beaches and presenting these methods to environmental health managers throughout the Great Lakes. Serving on the board of the Great Lakes Recreational Water Quality Association will provide an opportunity for me to meet and learn from others on the Recreational Water modeling, management and public policy side of the equation, while bringing a molecular and microbiological perspective into the discussion

**GEETA RIJAL**

My background includes Ph.D. and MS in Environmental Microbiology from University of Hawaii and MS in Environmental Science from University of Philippines at Los Banos. After my degree I have been a lecturer at the University of Hawaii, regularly teaching undergraduate and graduate microbiology courses to microbiologists, public health and civil engineers. I was also a researcher at the Water Resources Research Center of University of Hawaii at Manoa. My research focused on assessing the public health significance of pathogenic and indicator

microorganisms in various water sources such as drinking water, groundwater, rainwater catchment systems, sewage water, reclaimed sewage water, streams, marine water, and ocean waters near sewage outfalls. I developed multiple microbial indicator system a reasonable group of microorganisms representing waterborne pathogens such as: 1) Bacterial spores (Bacillus, C. perfringens); 2) Gram positive bacteria (Enterococci); 3) Gram negative bacteria (Fecal coliform, E. coli culture and PCR); 4) Enteric viruses and Fecal viruses(Bacteriophages); 5) Hydrogen sulfide producing bacteria; 6) Bacteroides fragilis group (PCR); and 7) Total Heterotrophic bacteria, to assess the microbial water quality of environmental water and to evaluate water and wastewater disinfection systems (UV, solar, and pasteurization).

As a Research Fellow at Water Resources Research Center at University of Hawaii, I was involved with State of Hawaii, participating in many of the water quality research and workshops on latest water quality regulations. I completed three months of intensive training on detection of waterborne protozoa (Giardia and Cryptosporidium) at Centers for Disease Control, Atlanta. My duties were to assess water quality characteristics of the Georgia Rivers to identify indicator tests of potential to be used in evaluating recreational water safety and to evaluate the effectiveness of best management practices in reducing the transfer of pathogens from non-point sources. State of Georgia Department of Natural Resources used my expertise of multiple microbial indicator system. I then returned to Hawaii after my training at CDC and was assigned to train personnel at the City and County of Honolulu (CCH) and Hawaii Department of Health using PCR and probe hybridization assays for water quality analysis. I also participated as an observer in the USEPA organized workshop on Tropical Indicator in Hawaii.

I have an extensive experience in teaching and research (9+ years) both in environmental microbiological research and in teaching/training students & city personnel. I was also actively involved in Hawaii branch of American Society of Microbiology as branch secretary and treasurer. I am enthusiastic about community outreach program and education and would like to work with others in a team environment.

Currently I am working for the Chicago District ( Metropolitan Water Reclamation District of Greater Chicago) pursuing research/biomonitoring in the area of environmental microbiology, particularly wastewater and freshwater resources.

## **DAVID ROCKWELL**

U.S. Environmental Protection Agency  
Great Lakes National Program Office  
Chicago, Illinois

### **Education**

**MS:** Geophysical Sciences. 1965. University of Chicago, Chicago Illinois

**MBA:** Business Administration 1979. University of Chicago Business School, Chicago Illinois

**CHMM:** Certified Hazardous Materials Manager 1999, Institute of Hazardous Materials Management

### **Current Position**

**Environmental Scientist**, U.S. Environmental Protection Agency, Great Lakes National Program Office, 77 West Jackson Blvd., Chicago, Il. 60604. Phone (312)-353-1373. Fax (312)-353-2018. Email <Rockwell.david@epa.gov> 1977 to present.

## **Current and Recent Assignments**

**U.S. Quality Program Manager** for Trophic Status of Lake Erie:  
Investigating Mechanisms -and Extent of Internal Phosphorus Loading in  
Support of Modelling Quality Management Plan for Lake Erie Trophic  
Study 2000.

### **Project Officer.**

Multi-Beach Mapping and Modeling of E. Coli with the Chicago  
Department of Environment.

Rapid E. Coli Tests Using Flow Cytometry: Suitability for Swimming Beach  
Areas with USGS.

Lake Erie Total Phosphorus Loads 1996-2000 with University of Wisconsin-  
Green Bay.

Lake Guardian Limnology Course with three successful academic institutions  
in 2002.

**Member** GLNPO Environmental Monitoring and Indicators Team

**Chief Scientist** and past Project Officer for the research vessel R/V Lake Guardian

## **Selected Publications**

Rockwell, D.C., G.J. Warren, R. P. Barbierro, D. K. Salisbury. 2002. Limnology report  
for Great Lakes National Program Office's Indicators Monitoring Program 1983-2000. paper  
presented at the 45<sup>th</sup> IAGLR Conference on Great Lakes Research, Winnipeg, Manitoba (June,  
2002).

Barbiero, R. P., M. L. Tuchman, G.J. Warren, and D. C. Rockwell. 2002. Evidence of  
recovery from phosphorus enrichment in Lake Michigan. Can. J. Fish. Aquat. Sci./J. Can. Sci.  
Halieutiques Aquat. 59(10): 1639-1647 (2002)

Rockwell, D.C., D.K. Salisbury and B.M. Lesht. 1989. Water Quality in the Middle  
Great Lakes: Results of the 1985 USEPA Survey of Lakes Erie, Huron and Michigan. U.S.EPA  
Report: EPA-905/6/89-001.

## **Awards and Honors**

Recipient of five bronze metals and two Regional Administrator's Awards for Excellence.  
Nomination for a gold metal and Regional Administrator's Award for Excellence in 2003.

## **JANET VAIL**

Grand Valley State University Annis Water Resources Institute  
740 W. Shoreline Drive, Muskegon, MI 49441

I became interested in recreational water quality in 1987 when I was a water quality technician for the Santa Cruz County Environmental Health Department in California. I had the enviable task of monitoring for bacteria at the Santa Cruz beaches and in the streams of the redwood forests. In the watershed in the Santa Cruz area, I found sites at the headwaters of streams that had no *E. coli* or fecal coliform bacteria. When I returned to my native Michigan in 1988, I continued my monitoring and noted very few places in west Michigan where counts were zero. This ultimately was the catalyst for my Ph.D. dissertation on fecal coliform bacteria as a water quality indicator. My Ph.D. was granted by Western Michigan University and I hold a B.S. degree from the University of Michigan and a Masters from the University of California at Santa Barbara.

A conclusion of my dissertation research was that neither fecal coliform bacteria nor *E. coli* appears to meet all of the basic criteria for a credible water quality indicator, especially for Michigan. Additionally, misconceptions about indicator bacteria are commonly expressed in educational materials. Further analysis of the efficacy of Federal and State water quality

standards for the protection of human health in recreational areas is needed. Collection of additional epidemiological evidence and consideration of site-specific standards that correlate with precipitation events or other environmental parameters should be part of this analysis. Extensive knowledge about the watershed is a key to interpretation of microbiological monitoring results as they relate to human health considerations (Vail, 1998).

Part of my research interest is testing innovative ways for students and the general public to collect microbiological data. A promising avenue is Petrifilm from the 3M Corporation. Petrifilm is currently used for testing food for bacteria but it has application as a simple, inexpensive water monitoring method. It was pilot-tested on the GVSU vessel's *Making Lake Michigan Great Tour* and in local streams. I have been working with Dr. Jeffrey Ram of Wayne State University and Rod Morgan on validation of Petrifilm for water monitoring. We have a paper that has been submitted to the *Journal of Environmental Quality* and presentations on our research were made at the Great Lakes Beach Conferences in Chicago (February 2001 and October 2002) and Monitoring and Modeling Nonpoint Source Pollution in Agricultural Landscapes in Indianapolis (August 2001).

My current title is Associate Professor of Water Resources and Research Scientist at the Grand Valley State University Annis Water Resources Institute (GVSU-AWRI). I manage the outreach and education program for AWRI along with some teaching duties. The Lake Michigan Center on the shore of Muskegon Lake is the home of GVSU-AWRI. We maintain two research and education vessels that serve over 8,000 people per year. I am co-chair of the U.S. EPA Lake Michigan Forum, the public input group for the Lake Michigan Lakewide Management Plan and am a member of the Lake Michigan Monitoring Coordination Council.

For the Great Lakes Beach Conference in 2001, I served on the planning committee, overview panel, chaired the Lake Michigan breakout session, and was chair of the poster session. A recreational water quality break out session was convened at the *Lake Michigan: State of the Lake 2001* Conference funded by the U.S. Environmental Protection Agency. I served as chairperson of the entire conference (as well as *Lake Michigan: State of the Lake 1999*), which had over 50 speakers and drew over 240 people from around the Lake Michigan basin. The result of the breakout session was the creation of the Great Lakes Association for Healthy Recreational Waters.

The Association serves an excellent venue for information sharing in both the public policy and scientific realms. As a group, we can move forward a recreational water quality agenda in a very effective manner and we have the opportunity to link a variety of interests to achieve common goals.

#### **GARY WHITE**

Hello! My name is Gary White and I have been nominated for the Board of Directors of the Great Lakes Recreational Water Quality Association. I was asked to tell you a little about myself.

I have worked at the Macomb County (Michigan) Health Department for nearly 25 years and I am responsible for all water and waste disposal related programs in the Department. We have a long history in bathing beach monitoring, dating all the way back to the late 1940's. We currently monitor four beaches on Lake St. Clair and two inland beaches. Beach closures have

received a great deal of attention in Macomb County and have resulted in the establishment of additional monitoring and source identification efforts.

I hold a Bachelor of Science Degree in Biology from Michigan Tech and a Master of Science in Industrial Hygiene from Wayne State University. I live in St. Clair County with my wife, Candy, and two sons, Patrick (10) and Noah (6). My wife will complete her Secondary Teaching Certificate this fall, with endorsements in general science and biology.

I would like to see the Association become a forum for the dissemination of information obtained from academic research and hands-on experiences of the members. This group will prove to be a good way to link the researchers with the practioners. There are a lot of questions and answers out there; we just have to get the people who have them together more often!

Gary White, Associate Director, Environmental Health Services Division, Macomb County Health Department, 43525 Elizabeth Rd., Mt. Clemens, Michigan, 48043 Ph (586)469-5236 FAX (586)469-6534 gary.white@co.macomb.mi.us

### **RICHARD WHITMAN**

Richard Whitman is the Chief of the Lake Michigan Ecological Research Station, Biological Resources Division, U.S. Geological Survey in Porter, Indiana. Dr. Whitman received a Ph.D. from Texas A&M University in 1979 in Wildlife and Fisheries Sciences. He became a tenured associate professor of biology at Indiana University NW until 1989 where he taught freshwater and field ecology courses. He has extensively researched and published on the ecology of lakes and streams throughout the Great Lakes area. His research focuses on sources of E. coli and enterococci arising from lake and stream watersheds. rapid testing of indicator bacteria, predictive modeling of beach closures, economic impacts of beach closures and understanding the occurrence, persistence and potential growth of indicator bacteria in the Great Lakes sands. He was among the first to discover diurnal rhythms of E. coli in freshwater, did many of the pioneering studies on foreshore sand E. coli as a source of beach contamination, clearly showed relationship between seagulls and E. coli levels, demonstrated the transient nature of E. coli in water, the poor reliable of limited sampling and explaining the ubiquity of E. coli the natural. He is currently studying the regional occurrence of E. coli from Milwaukee, MI to Michigan City, IN. He is author of numerous scientific reports, referred articles, and invited national and international scientific presentations.

As one of the founders of the Great Lakes Recreational Water Quality Association, I have a deep sense of commitment and a shared vision for the growth and well being of its members and mission. I want to help build this organization to be as robust and long lasting as it can reasonably be while maintaining focus on its primary goals: communication and facilitation of information for better managements of Great Lakes beaches consequently, providing for enjoyment and protection of beach visitors while preserving the environment. I am totally committed to the Association as evidenced my efforts over that last two years. There are many fine, able candidates nominated for the board any combination of which would be capable of helping mature into a fully functioning organization. I would be proud to be among them if you so decide.

**HOLLY WIRICK**

Hi. In connection with the nomination for the Board of Directors of the Great Lakes Recreational Water Quality Association, following is a bit of information about me and my thoughts on the Association (not the musical group from the 1960s).

I'm Holly Wirick. I received a BA in Environmental Studies from Northeastern Illinois University in 1991, and I'm just shy of an MAT in Education. I've been with the U.S. EPA since 1991, beginning in the Office of Strategic Environmental Analysis as a National Environmental Policy Act program reviewer, providing comments on Environmental Assessments and Environmental Impact Statements. In 1997, I transferred to Region 5's Water Quality Branch, where I serve as the Regional BEACH Program Coordinator and water quality standards reviewer.

I would like to serve on the board because I think the Association is a great forum for networking, information exchange, and beach water quality problem discussion and solving. Through email exchanges and meetings, this network of beach health professionals will have the opportunity for collaborative discussions which can lead to the development of plans to help direct local, state, and federal agency remediation efforts. In addition, the networking and information sharing reduce the likelihood that research efforts are duplicated, and promote product sharing among beach managers (e.g., beach signs, multilingual educational brochures, etc.)