

Curriculum Vitae - 2001  
**James Martin Barbaree, Ph.D.**

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### **Education**

**Ph.D.**, Bacteriology, 1967; **M.S.**, Microbiology, 1964; **B.S.**, Zoology, 1963

### **Current University Position**

Tenured Full Professor (Microbiology), Biological Sciences Dept., College of Sciences and Mathematics, Assoc. Dir. for Auburn University Detection and Food Safety Center, and Adjunct Professor, Pathobiology Dept., College of Veterinary Medicine, Auburn University, Auburn, Alabama

### **Responsibilities**

Teaching: Clinical and Pathogenic Microbiology, General Microbiology, Thesis/Dissertation Research, & Special Problems in Microbiology

Research: Primary focus on molecular methods for detection and fingerprinting food- and waterborne pathogenic bacteria, development of a microchip for detection of pathogens

Committees: Various departmental and university committees

Advisement of students: 4 graduate and 20 undergraduate Microbiology majors

### **Courses Taught During Career**

Bacterial Physiology, Biochemistry, Biological Science, Cell Biology, Clinical & Pathogenic Microbiology, Food Microbiology, General Biology, General Microbiology, Environmental and Applied Microbiology, Microbiology for Engineers, Microbiology for Nurses, Microbiological Methods, Physical Science, Thesis, Dissertation, & Special Problems Research

### **Workshops Given**

- *Legionella*/Legionnaires= Disease Outbreaks
- Polymerase Chain Reaction (PCR) & Pulsed-Field-Gel-Electrophoresis (PFGE)
- Handling Pathogens in a Laboratory
- Freeze-drying Biological Reagents and Cultures



## Chronologic Work History

Employer/Dates	Title/Duties
Auburn University	Visiting Asst Prof. 1991-1992, Assoc. Prof. 1992 - 1999, Full Prof. 1999- to date; teaching, advising and research
Centers for Disease Control & Prevention (CDC) (1985 to Oct., '91) Atlanta, Ga.	Chief, Respiratory Diseases Epidemic Investigations Laboratory (Capt./06 rank, US Public Health Service Commissioned Corps) Duties/Appointments: -Management of laboratory for legionellosis and pertussis epidemic investigations and research -Research on molecular and classical microbiologic techniques for rapid antigen detection, bacterial isolation and identification, disinfection and serologic procedures -Interaction with epidemiologists and outside personnel on clinical and environmental issues -Preclinical and clinical pertussis vaccine trial studies -Adjunct Professor, Georgia Tech -Part-time Instructor, DeKalb College
CDC (1982-1985)	Title: Chief, Environmental Control Laboratory, Field Investigations Laboratory Sect., Div. of Bacterial Diseases Section, (Cmdr./05, USPHS); responsible mainly for research on <i>Legionella</i> and laboratory support of legionellosis epidemic investigations.
CDC (1975-1982)	Chief, Product Services Branch, Biologic Products Division (Cmdr./05 in USPHS); responsible primarily for cryobiology research and preservation of biologic products at the CDC .
CDC (1971-1975)	Asst. Chief, Proficiency Testing Section, Licensure and Proficiency Testing Division (Lt. Cmdr./04, USPHS); responsible for planning and preparing of Microbiology and Immunology Proficiency Testing samples and evaluating results from clinical laboratories.
University of West Florida, Pensacola, Florida (1969-1971)	Assistant Professor, taught Biochemistry, Cell Biology, and General Microbiology; Consultant to Pen Bay Labs; Clinical Microbiologist at Sacred Heart Hospital in summers

<b>Employer/Dates</b>	<b>Title/Duties</b>
United States Army, Medical Service Corps, Ft. Bliss, Texas (1967-1969)	Chief of Clinical Microbiology and Immunology Laboratory, William Beaumont General Hospital (03-Army Captain)
University of Texas, El Paso, Texas (1968)	Lecturer (part-time); taught Microbiology for Engineers
University of Georgia, Athens, Georgia (1964-1967)	Teaching Assistant; taught General Bacteriology Laboratories
University of Southern Mississippi, Hattiesburg, Mississippi (1963-1964)	Instructor; taught General Biology, Zoology, and Bacteriology
University of Southern Mississippi, Hattiesburg Mississippi (1963)	Teaching Assistant; taught Biology and Bacteriology Laboratories
Mississippi Game and Fish Commission (1962)	Biologist Assistant; sampled rivers and lakes for assessment of of pollution

#### **Awards/Honors**

P. R. Edwards (presented by the Southeastern Branch of the American Society for Microbiology) for achievements and contributions in Microbiology (1999)

Co-principal Investigator on research project chosen as one of the pinnacles of excellence for AU (1999)

*Distinguished Alumni Lecturer* at the University of Georgia Microbiology Department (1996)

*ASM Recognition of Service* for service on the ASM National Branch Organizations Committee (1995)

*J.C. Feeley Award* given by the American Society for Microbiology-Southeastern Branch (ASM-SEB) for outstanding service and accomplishments in Environmental Microbiology and Occupational Health (1993)

*United States Public Health Service (USPHS) Unit Citation Award* at the CDC (1991)

*CDC Don Mackel Memorial Award* for best combination laboratory-epidemic paper at the annual CDC Epidemic Intelligence Service conference (1990)

*USPHS Commissioned Corps Outstanding Service Medal* (1989)

*CDC Don Mackel Memorial Award* (1988- received the award twice)

*Outstanding Leadership Plaque* for term as President of the ASM-SEB (1985-1986)

*USPHS Special Achievement Group Award* at the CDC (1978)

*USPHS Commendation Medal* at the CDC (1978)

### **Personal Description**

Birth date: 6/23/40; U.S. Citizenship; Description: 6' 2" tall, 230 lbs.; wife, 2 sons, and a daughter

### **Educational Background**

Ph.D. (Bacteriology, 1967) - Emphasis in Bacterial Physiology, U. of Georgia, Athens, Georgia;  
Dr. W.J. Payne - Mentor

M.S. (Microbiology, 1964) - Minor in Zoology, U. of Southern Mississippi, Hattiesburg, Miss.,  
Dr. B.Q. Ward - Mentor

B.S. (Zoology, 1963) - minor in Microbiology, U. of Southern Mississippi, Hattiesburg, Miss.,

### **Professional Societies**

American Society for Microbiology (ASM)

ASM Southeastern Branch (SEB)

Sigma Xi

Alabama Academy of Science

American Association of University Professors

The Retired Officers Association

### **Committee Memberships and Offices**

Branch Councilor for SEB-ASM (1995-1998)

American Society for Microbiology (ASM) Branch Organizations Committee (1987-1995)

Alternate Branch Councilor (1992-1994)

Chairman, SEB-ASM Nominating Committee (1992)

Chairman, International Meeting on *Legionella*

National Committee for Clinical Laboratory Standards (NCCLS):

Delegate for the Centers for Disease Control (1986 to 1990)

Subcommittee member for standards regarding volumetric measurements (1980-1985)

Subcommittee member for standards regarding Transportation of Clinical Specimens  
(1977-1978)

President, SEB-ASM (1985-1986)

CDC Liaison to the Environmental Protection Agency Drinking Water Subcommittee, Toxic



## Publications

Vodyanoy, V.J., S.T. Pathirana, M.J. Hartell, E.V. Olsen, **J. Barbaree**, W.C. Neely, and B.C. Chin. 2001. Rapid and sensitive detection of *Salmonella* by an immunosensor. *Biophysic. J.*:Jan. issue.

Wilder, T.D., **J.M. Barbaree**, K.S. Macklen, and R.A. Norton. 2000. Differences in the pathogenicity of various bacterial isolates used in an induction model for gangrenous dermatitis. *Avian Diseases Journal*.

Pathirana, S.T., **J. Barbaree**, B.A. Chin, M.G. Hartwell, W.C. Neely, and V. Voeyanoy. 2000. Rapid and sensitive biosensor for *Salmonella*. *Biosensors and Bioelectronics* **15**:135-141.

Kerr, J.G., S.E. Maslanka, C.L. Hatheway, G. Williams, **J.M. Barbaree**, L.A. Carson, J.M. Miller and B. Swaminathan. 1999. Molecular subtyping of *Clostridium perfringens* using pulsed-field gel electrophoresis. *J. Clin. Microbiol.* **37**:2209-2214.

Meitz, A.K., **J.M. Barbaree**, R.F. Breiman, R.A. Charles, J.D. Millar, B.G. Shelton, L.S. Staples, and L.E. Witherell. 1998. *Legionellosis Position Statement and Position Paper*. American Society of Heating, Refrigeration and Air-conditioning Engineers (ASHRAE), Atlanta, Georgia.

Bader, J.A., P.H. Klesius, **J.M. Barbaree**, M.A. Connolly, and C.A. Shoemaker. Genomic subtyping of *Edwardsiella ictaluri* isolated from diseased channel catfish by arbitrarily primed polymerase chain reaction. 1998. *J. Aquatic Animal Health* **10**:22-27.

Oyazabal, O.A., I.V. Wesley, **J.M. Barbaree**, L.H. Lauerman, and D.E. Conner. 1997. Specific detection of *Campylobacter lari* by PCR. *J. Microbiol. Methods* **29**:97-102.

Oyazabal, O.A., I.V. Wesley, K. Harmon, L. Schroeder-Tucker, **J.M. Barbaree**, L.H. Lauerman, S. Backert, and D.E. Conner. 1997. Specific identification of *Campylobacter fetus* by PCR targeting variable regions of the 16S rRNA. *J. of Vet. Microbiology* **58**:61-71.

Oyazabal, O.A., I.V. Wesley, **J.M. Barbaree**, L.H. Lauerman, and D.E. Conner. 1997. Specific detection of *Campylobacter lari* by PCR. *J. Microbiol. Methods* **29**:97-102.

Oyazabal, O.A., J. Shireman, D.E. Conner, **J.M. Barbaree**, S. Berkert, and I.V. Wesley. 1997. Genomic variation of *Arcobacter skirrowii* determined by pulsed-field-gel electrophoresis. *J. Ala. Acad. Sci.* **68**:145.

Kerr, J.G., **J.M. Barbaree**, and A.E. Smith. 1997. Use of PCR to detect *Escherichia coli* O157:H7 and enterohemorrhagic *E. coli* in bovine feces. *J. Ala. Acad. Sci.* **68**:150.

Oyazabal, O.A., D.E. Conner, **J.M. Barbaree**, and I.V. Wesley. 1997. Specific identification of the human and veterinary pathogen *Campylobacter fetus* by DNA amplification. *Highlights of Alabama Agriculture Research* **44**:5.

Freije, M.R. 1996. **J. Barbaree** (ed.). *Legionella Control in Health Care Facilities*. HR Information Resources, Indianapolis, Indiana.

Tyndall, R.L., E.S. Lehman, E.K. Bowman, D.K. Milton, and **J.M. Barbaree**. 1995. Home humidifiers as a potential source of exposure to microbial pathogens, endotoxins, and allergens. *Indoor Air* **5**:171-177.

Fields, B.S., **J.M. Barbaree**, W.T. Martin, W.E. Morrill, and G.N. Sanden. 1994. *Procedures for the Recovery of Legionella from the Environment*. U.S. Dept. Health and Human Services, CDC publication, Atlanta, Georgia.

Cassiday, P.K., G.N. Sanden, C.T. Kane, S. M-Boup, and **J.M. Barbaree**. 1994. Viability of *Bordetella pertussis* in four suspending solutions at three temperatures. *J. Clin. Microbiol.* **32**:1550-1553.

**Barbaree, J.M.**, R.F. Breiman, and A.P. Dufour (eds.). 1993. *Legionella, Current Status and Emerging Perspectives*. ASM, Washington, D.C.

**Barbaree, J.M.** 1993. Selecting a subtyping technique for use in investigations of legionellosis epidemics. In *Legionella, Current Status and Emerging Perspectives*, pp. 169-172. ASM, Washington, D.C.

Breiman, R.F. and **J.M. Barbaree**. 1993. Ten years of progress in *Legionella* research: Summary of the fourth international symposium on *Legionella*, pp. 301-302. In *Legionella, Current Status and Emerging Perspectives*, ASM, Washington, D.C.

Marston, B.J., J.F. Plouffe, R.F. Breiman, T.M. File, R.F. Benson, M. Moyenudden, W.L. Thacker, K. Wong, S. Skelton, B. Hackman, S.J. Salstrom, **J.M. Barbaree**, and the Community-based Pneumonia Study Group. 1993. Preliminary findings of a community-based pneumonia incidence study. In *Legionella, Current Status and Emerging Perspectives*, pp. 36-37. ASM, Washington, D.C.

Mamolen, M., R.F. Breiman, **J.M. Barbaree**, R.A. Gunn, K.M. Stone, J.S. Spika, D.T. Dennis, S.H. Mao, and R.L. Vogt. 1993. Use of multiple molecular subtyping techniques to investigate a Legionnaires' Disease outbreak due to identical strains at two tourist lodges. *J. Clin. Microbiol.* **31**:2584-2588.

Sanden, G.N., P.K. Cassiday, and **J.M. Barbaree**. 1993. Rapid immunodot technique for identifying *Bordetella pertussis*. *J. Clin. Microbiol.* **31**:170-172.

Mahoney, F.J., C.W. Hoge, T.A. Farley, **J.M. Barbaree**, R.F. Breiman, R.F. Benson, and L.M. McFarland. 1992. Community wide outbreak of Legionnaires' disease associated with a grocery store mist machine. *J. Infect. Dis.* **165**:736-739.

Sanden, G.N., W.E. Morrill, B.S. Fields, R.F. Breiman, and **J.M. Barbaree**. 1992. Incubation of water samples containing amoebae improves detection of legionellae by the culture method.

Appl. Environ. Microbiol. **58**:2001-2004.

Sanden, G.N., B.S. Fields, **J.M. Barbaree**, W.E. Morrill, and J.C. Feeley. 1992. Bactericidal activities of tri- and penta-iodinated resins against *Legionella pneumophila*. Wat. Res. **26**:365-370.

**Barbaree, J.M.** 1991. Legionnaires' disease: Factors affecting the transmission of *Legionella* species from aerosol-emitting equipment to people. ASHRAE Journal **33**:38-42.

CDC publication. 1990. Legionnaires' disease outbreak associated with a grocery store mist machine - Louisiana, 1989. MMWR **39**: 108-110.

Fields, B.S., T.A. Nerad, T.K. Sawyer, C.H. King, **J.M. Barbaree**, W.T. Martin, W.E. Morrill, and G.N. Sanden. 1990. Characterization of an axenic strain of *Hartmanella vermiformis* obtained from an investigation of nosocomial legionellosis. J. Protozool. **37**:581-583.

Fields, B.S., **J.M. Barbaree**, G.N. Sanden, and W.E. Morrill. 1990. Virulence of a strain of *Legionella anisa* associated with Pontiac Fever. Infect. Immun. **58**:3139-3142.

Morrill, W.E., **J.M. Barbaree**, B.S. Fields, G.N. Sanden, and W.T. Martin. 1990. Increased recovery of *Legionella micdadei* and *Legionella bozemanii* on buffered charcoal yeast extract agar supplemented with albumin. J. Clin. Microbiol. **28**:616-618.

Fields, B.S., G.N. Sanden, **J.M. Barbaree**, W.E. Morrill, R.M. Wadowsky, E.H. White, and J.C. Feeley. 1989. Intracellular multiplication of *Legionella pneumophila* in amoebae isolated from hospital hot water tanks. Cur. Microbiol. **18**:131-138.

Sanden, G.N., B.S. Fields, **J.M. Barbaree**, J.C. Feeley, and R.C. Good. 1989. Viability of *Legionella pneumophila* in chlorine-free water at elevated temperatures. Cur. Microbiol. **18**:61-65.

Morrill, W.E., **J.M. Barbaree**, B.S. Fields, G.N. Sanden, and W.T. Martin. 1988. Effects of transport temperature and medium on recovery of *Bordetella pertussis* from nasopharyngeal swabs. J. Clin. Microbiol. **26**:1814-1817.

**Barbaree, J.M.**, W.E. Morrill, B.S. Fields, W.T. Martin, and G.N. Sanden. 1988. Detection and recovery of *Legionella* in water. Toxicity Assessment **3**:479-485.

**Barbaree, J.M.**, W.T. Martin, and R.M. McKinney. 1987. Comparison of monoclonal antibody typing of *Legionella pneumophila* serogroup 1 by IFA and a simple dot blot procedure. *IN*: Colloque *Legionella*, Faculte de Medicine Alexis Carrel, Lyon, France, pp. 51-55.

**Barbaree, J.M.** 1986. Perspectives on the ecology and control of *Legionella*. *IN*: Proc. Internat. Symp. on Water-related Health Issues, American Water Resources Assoc., pp. 51-55.

**Barbaree, J.M.**, G.W. Gorman, W.T. Martin, B.S. Fields, and W.E. Morrill. 1987. Protocol for sampling environmental sites for legionellae. Appl. Environ. Microbiol. **53**:1454-1458.

Friedman, S., K. Spitalny, **J. Barbaree**, Y. Faur, and R.M. McKinney. 1987. Pontiac Fever associated with a cooling tower. *A.J.P.H.* **77**:568-572.

**Barbaree, J.M.**, B.S. Fields, J.C. Feeley, G.W. Gorman, and W.T. Martin. 1986. Isolation of protozoa from water associated with a legionellosis outbreak and demonstration of intracellular multiplication of *Legionella pneumophila*. *Appl. Environ. Microbiol.* **51**:422-424.

Fields, B.S., **J.M. Barbaree**, E.B. Shotts, J.C. Feeley, W. E. Morrill, G.N. Sanden, and M.J. Dykstra. 1986. Comparison of guinea pig and protozoans models for determining virulence of *Legionella* species. *Infect. Immun.* **53**:553-559.

Markowitz, L.E., N.A. Hynes, P. Cruz, E. Campos, **J.M. Barbaree**, B.D. Plikaytis, D. Mosier, A. F. Kaufmann. 1985. Tick-borne Tularemia: an outbreak of lymphadenopathy in children. *JAMA* **254**:2922-2925.

**Barbaree, J.M.**, A. Sanchez, and G.N. Sanden. 1985. Problems in Freeze-drying: II. Cross-contamination during lyophilization. *Dev. Indust. Microbiol.* **26**:407-409.

Garbe, P.L., B.J. Davis, J. Weisfeld, L.E. Markowitz, P. Miner, F. Garrity, **J.M. Barbaree**, R.K. McKinney, B.J. Plikaytis, A.W. Hightower, and A.L. Reingold. 1985. Legionnaires' Disease: epidemiologic demonstration of cooling towers as a source, Providence Rhode Island. *J.A.M.A.* **254**:551-554.

**Barbaree, J.M.**, A. Sanchez, and G.N. Sanden. 1985. Problems in Freeze-drying: I. Stability in glass-sealed and rubber-stoppered vials. *Dev. Indust. Microbiol.* **26**:397-405.

Mangione, E.J., R.S. Remis, K.A. Tait, H.B. McGee, G.W. Gorman, B.B. Wentworth, P.A. Baron, A.W. Hightower, **J.M. Barbaree**, and C.V. Broome. 1985. An outbreak of Pontiac Fever related to whirlpool use, Michigan, 1982. *J.A.M.A.* **253**:535-539.

Towns, M.L., **J.M. Barbaree**, J.C. Feeley, and E.O. Hill. 1984. Comparison of the rapid tube test, paper chromatography, and gas liquid chromatography for the detection of hippurate hydrolysis by *Legionella* species, pp. 91-93. *IN*: C. Thornsberry, A. Balows, J.C. Feeley, and W. Jakubowski (eds.), *Legionella*. ASM, Washington, D.C.

Jones, E.E., P.J. Checko, A.F. Dalton, C.B. Cope, **J.M. Barbaree**, G.C. Klein, W.T. Martin, and C.V. Broome. 1984. Nosocomial Legionnaires' disease associated with exposure to respiratory therapy equipment, pp. 225-227. *IN*: C. Thornsberry, A. Balows, J.C. Feeley, and W. Jakubowski (eds.), *Legionella*. ASM, Washington, D.C.

Martin, W.T., **J.M. Barbaree**, J.C. Feeley. 1984. Detection and quantitation of *Legionella pneumophila* by immune autoradiography, pp. 299-300. *IN*: C. Thornsberry, A. Balows, J.C. Feeley, and W. Jakubowski (eds.), *Legionella*. ASM, Washington, D.C.

**Barbaree, J.M.**, A. Sanchez, and G.N. Sanden. 1985. Differences in the tolerance of *Legionella*

species to sodium chloride. *Cur. Microbiol.* **9**:1-5.

**Barbaree, J.M.** and A. Sanchez. 1982. Cross contamination during lyophilization. *Cryobiol.* **19**:443-447.

**Barbaree, J.M.**, F. Thompson, and S.J. Smith. 1982. Use of thermal stability studies to compare *Bacteroides fragilis* lyophilized in skim milk and polyvinylpyrrolidone solutions. *Cryobiol.* **19**:92-98.

**Barbaree, J.M.** and S.J. Smith. 1981. Loss of vacuum in rubber-stoppered vials stored in a liquid nitrogen vapor phase freezer. *Cryobiol.* **18**:528-531.

Pine, L., H. Gross, G.B. Malcolm, J.H. Greene, **J.M. Barbaree**, W.K. Harrell, M.T. Suggs, S.O. Blumer, L. Kaufman, L. Ajello, S.J. Smith, and J.C. May. 1981. Evaluation of candidate international reference reagents and a microimmunodiffusion test for the identification of precipitins to H and M antigens of histoplasmin. *J. Biol. Stand.* **9**:513-530.

Pine, L., S.J. Smith, H. Gross, J.M. Barbaree, G.B. Malcolm. 1979. Study of thermal stability of H and M antigens of lyophilized histoplasmin. *Proc. VII Congress ISHAM*, pp. 126-129.

Schable, C.A., **J.M. Barbaree**, W.W. Bond, B.L. Murphy, K.R. Berquist, M.S. Favero, and J.E. Maynard. 1979. Stability of a reference panel of lyophilized hepatitis B antigens and antibodies. *J. Biol. Stand.* **7**:293-299.

**Barbaree, J.M.** 1977. Lyophilization of biological reagents. *IN*: "American Vacuum Society Short Course on Freeze-drying." AVS publication.

**Barbaree, J.M.**, J. Habas, P. Rossing, and J.D. Dobbins. 1977. Comparative statistical study of the Cornwall, LKB, and Micromedic dispensers. *Appl. and Environ. Microbiol.* **34**:484-487.

**Barbaree, J.M.** 1977. Methods for determining favorable conditions for freeze-drying biological reference materials. *Dev. Biol. Stand.* **36**:335-341.

Hall, C.T. and **J.M. Barbaree**. 1974. *Enterobacter agglomerans*. *IN*: "Technical Instruction Service Education Manual," American Society for Clinical Pathologists publication.

**Barbaree, J.M.** and W.J. Decker. 1971. Studies on a fast-migrating bisalbumin. *Biochem. Med.* **5**:181-187.

**Barbaree, J.M.** 1970. Denitrifying bacteria in the soil of the El Verde Rain Forest. *IN*: "Tropical Rain Forest" (annual publication from the Atomic Nuclear Center in Puerto Rico).

**Barbaree, J.M.** and W.J. Payne. 1968. Products of denitrification by a bacterium as revealed by gas chromatography. *Marine Biology* **1**:136-139.

### Abstracts/Presentations at Scientific Meetings

Zeigler, S.D., J. Pruckler, J.M. Barbaree, and B.S. Fields. 2001. Detection of N-Acyl homoserine lactone expression in *Legionella pneumophila*. American Society for Microbiologists annual meeting in Orlando, Florida.

(Three papers at the 1999 Southeastern Branch for the American Society for Microbiologists meeting at Alabama State University in Montgomery, Alabama.)

Salama, E.M. and J.M. Barbaree. 1999. Comparison of the FDA and the new chromogenic Biosynth methods for isolation and identification of *Listeria monocytogenes* from food. ASM meeting, Chicago, Illinois.

Wilder, T.D., J.M. Barbaree, R.A. Norton, and K.S. Macklin. 1999. Bacteria associated with avian gangrenous dermatitis. ASM meeting, Chicago, Illinois.

Timms, B.J., J.M. Barbaree, R.A. Norton, K.S. Macklin, and J.E. Hubbard. 1999. Molecular characterization of *Escherichia coli* associated with avian cellulitis. ASM meeting, Chicago, Illinois.

Kerr, J.G., S.E. Maslanka, C.L. Hatheway, G. Williams, J.M. Barbaree, L.A. Carson, M. Miller, and B. Swaminathan. 1998. Molecular subtyping of *Clostridium perfringens* using pulsed-field-gel electrophoresis. ASM meeting in Atlanta, Georgia, May, 1998.

Barbaree, J.M. 1997. Microbiologic tools for epidemic investigations. Southeastern Branch - American Society for Microbiology annual meeting, Helen, Georgia.

Kerr, J.G., J.M. Barbaree, S.B. Price, and A.E. Smith. 1997. Use of PCR to detect *Escherichia coli* O157:H7 and enterohemorrhagic *E. coli* in bovine feces. Ala. Acad. Science, Montgomery, Alabama.

Oyarzabal, O.A., J. Shireman, J.M. Barbaree, I.V. Wesley, S. Beckert, and D.E. Conner. 1997. Genomic variation of *Arcobacter skirrowii* as determined by pulsed-field-gel electrophoresis. Ala. Acad. Science, Montgomery, Alabama.

Williams, G., J. Barbaree, and C. Hatheway. 1996. Use of a random amplified polymorphic DNA procedure to subtype *Clostridium perfringens* strains associated with foodborne disease and wound infections. Abst. C282, American Society for Microbiology (ASM) meeting, New Orleans, Louisiana.

Barbaree, J.M. 1995. Methods for fingerprinting bacteria. Southeastern Branch of American Society for Microbiology, Birmingham, Alabama.

Connolly, M. and J. Barbaree. 1995. Genomic Fingerprinting of *Edwardsiella* species using a random amplified polymorphic DNA procedure and Pulsed-Field-Gel Electrophoresis ASM

meeting in Washington D.C., May 24).

Connolly, M., J. Barbaree, and K. Reddington. 1994. Genomic fingerprinting of *Edwardsiella* species using a random amplified polymorphic DNA procedure. ASM.

Ahmed, N.M., D.E. Conner, J.M. Barbaree, J. McInroy, and M.A. Connolly. 1994. Characteristics and biotypes of *Escherichia coli* 0157:H7 isolates exhibiting differences in heat resistance. ASM.

P.K. Cassidy, G.N. Sanden, and J.M. Barbaree. 1992. Evaluation of a rapid immunodot assay for *Bordetella pertussis* cultures. ASM.

Barbaree, J.M. 1992. Selecting a subtyping technique for use in investigations of legionellosis epidemics. International Symposium on Legionella, Orlando, Florida.

Marston, B.J., J.F. Plouffe, R.F. Breiman, T.M. File, R.f. Benson, M. Moyenudden, W.L. Thacker, K. Wong, S. Skelton, B. Hackman, S.J. Salstrom, J.M. Barbaree, and the Community-based Pneumonia incidence study group. 1992. Preliminary findings of a community-based pneumonia incidence study. International Symposium on *Legionella*, Orlando, Florida.

Tyndall, R.L., E.K. Bowman, K.S. Ironside, D. Milton, J. Barbaree, and E. Lehman. 1991. Aerosolization of microorganisms and endotoxin from home humidifiers. ASM.

Reichler, M.R., W.T. Martin, B. Mishua, R.F. Benson, C. Starns, and J.M. Barbaree. 1991. Pseudoepidemic of Legionnaires disease linked to false-positive *Legionella* urinary antigen test results. ASM.

Cassiday, P.K., G.N. Sanden, and J.M. Barbaree. 1991. Comparison of 4 suspending solutions for storage of *Bordetella pertussis*. ASM.

Pang, Y., J. Barbaree, B. Swaminathan, W. Morrill, G. Sanden, T. Mastro, and P. Houck. 1990. Molecular epidemiology of *Legionella pneumophila* serogroup 3 using restriction fragment length polymorphism and ribotyping. ASM.

Sanden, G., W. Morrill, and J. Barbaree. 1990. Incubation of water samples containing amoebae improves detection of legionellae by culture. ASM.

Fields, B.S., J.M. Barbaree, G.N. Sanden, and W.E. Morrill. 1990. Virulence of a strain of *Legionella anisa* associated with pontiac fever: Evaluation using protozoan, cell culture, and guinea pig models. ASM.

Mamolen, M., R. Breiman, J. Barbaree, K. Stone, J. Spika, D. Dennis, and R. Vogt. 1989. Legionnaires disease outbreak due to identical strains at Two lodges. ASM.

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- Sanden, G.N., B.S. Fields, J.M. Barbaree, J.C. Feeley, and R.C. Good. 1986. Viability of *Legionella pneumophila* in chlorine-free water at elevated temperatures. ASM.
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Jones, E.E., P.J. Checko, A.F. Dalton, C.B. Cope, J.M. Barbaree, G.C. Klein, W.T. Martin, and C.V. Broome. 1983. 2nd International Symposium on *Legionella*. Atlanta, Georgia.

Barbaree, J.M., and A. Sanchez. 1983. Comparison of the stability of 2 *Legionella species* in rubber-stoppered and glass-sealed vials. ASM.

Barbaree, J.M., A. Sanchez, and G.N. Sanden. 1982. Differences in the tolerance of *Legionella species* to sodium chloride. SEB-ASM.

Barbaree, J.M. 1980. Thermal stability of lyophilized bacteria. Society for Cryobiology.

Barbaree, J.M. 1979. Factors affecting the lyophilization of bacteria. ASM.

Barbaree, J.M., P. Rossing, J. Habas, and J.F. Dobbins. 1977. A comparative statistical study of the Cornwall, Micromedic, and LKB dispensers. ASM.

Barbaree, J.M., J. Habas, F. Thompson, and J.S. Smith. 1977. Studies on the use of 50C, 60C, and 70C as accelerated storage temperatures to estimate the stability of lyophilized *Bacteroides fragilis*. SEB-ASM.

LaMotte, L.C., C.T. Hall, and J.M. Barbaree. 1974. The quality of clinical microbiology as judged by performance in the CDC clinical laboratories evaluation programs. American Society for Tropical Med. and Hygiene.



Clonal relationships of *Escherichia coli* causing cellulitis in poultry. Auburn Univ.  
Student: Brandi Timms (**M.S. degree-June 1999**)

Comparison of traditional and molecular methods for subtyping *Clostridium perfringens*. Auburn Univ. (Collaborative project with the Centers for Disease Control and Prevention, Atlanta)  
Student: Glen Williams, M.S., **1998**.

Molecular methods for subtyping *Edwardsiella* using PCR and PFGE. Auburn Univ.  
Student: Michael Connolly, M.S., **1996**.

Lyophilization of *Escherichia coli*. Univ. of Georgia.  
Student: S. Samples, M.S., **1982**.

A vitamin B12 study in portions of Escambia and Blackwater Bays, Florida. U. West Fla..  
Student: C.R. Wilson, M.S., **1972**.

Folic acid levels in various age groups of humans. U. West Fla.  
Student: M. Northup, M.S., **1972**. (Co-directed with Dr. Roger Reid)

Chitinolytic bacteria in marine copepods. U. West Fla.  
Student: S. A. Buck, M.S., **1971**.

#### **Ph. D. Dissertation Research Directed**

Rapid detection of *Legionella pneumophila* using a piezoelectric quartz crystal sensor.  
Student: Jennifer Naylor (Current student)

Quorum Sensing by *Legionella pneumophila*. Auburn Univ.  
Student: Ziegler (Current student)

Genotyping and rapid detection of *Escherichia coli* O157:H7. Auburn Univ.  
Student: Sharon Massingale (**Ph.D., 1999**)

Comparison of *Listeria monocytogenes* genotypes isolated from food in Egypt and the U.S. and efficacy of irradiation of cheese containing *Listeria*. Visiting Scientist and graduate student: Ehab Salama, Suez Canal Univ., Ismailia, Egypt (Pending)

Disinfection of Potable Quality Water Containing *Legionella pneumophila*. Georgia Institute of Technology. Student: Gary N. Sanden, **1990**.

#### **Editorial Activities**

Editor for Journal of Microbiological Methods.

Guest editorships: J. Appl. Environ. Microbiol., Cur. Microbiol., Biotechnology, ASHRAE J., J. Inf. Dis., J. Amer. Med. Assoc., & J. Pub. Health

#### **Peer Review Panels**

NSF – 1999-2000

EPA Grants - 1995-2000; FDA Grants - 1998

EPA Cincinnati Laboratory Peer Review - 1997; EPA Promotion Board Review - 1998

Other grant reviews: VA administration and ASHRAE

### **Television Activities**

2001 – Interview with local TV station

1998 - National TV story about research project concerning detection of food pathogens using a microchip sensor

1995 - Interview on CNN (Future Watch program) about use of PCR to detect *E. coli* O157:H7

1994 - Interview with channel 9 in Columbus, Georgia concerning DNA fingerprinting

1990 - Film concerning work at the CDC on Legionnaires= Disease; presented on ~~A~~Physician=s Journal@on TV



