

**Crystal NurJhan Johnson, Ph.D.**

Marine Microbiology  
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**ACADEMIC PREPARATION**

B.S. Cell and Molecular Biology, Tulane University, New Orleans, LA, 1997  
Ph.D. Microbiology, University of Alabama at Birmingham, Birmingham, AL, 2004  
Postdoctoral Fellow, Pathology, University of Alabama at Birmingham, AL, 2004

**CURRENT POSITION**

Postdoc, Marine Microbiology, Gulf Coast Research Laboratory, University of Southern Mississippi, Ocean Springs, MS, 2005

**RESEARCH INTERESTS**

Applied and Environmental Microbiology  
Marine Microbiology  
Microbial Ecology  
Bacterial Typing

**HONORS AND AWARDS**

- President's Award for Best Graduate Student Talk at the Southeastern Branch Meeting of the American Society for Microbiology, Statesboro, GA (2000)
- American Society for Microbiology Student Travel Grant (2001)
- National Science Foundation GK-12 Teaching Fellowship (2001-2004)
- National Role Model Award, Minority Access, Washington, DC (2002)
- Minority Trainee Research Forum, San Diego, CA (2003)
- St. Jude National Graduate Student Symposium, Memphis, TN (2003)

**LEADERSHIP**

- African-American Congress of Tulane: 1994-1997
- Community Action Council of Tulane University Students: Tulane University Hospital Emergency Room and Pediatrics Department volunteer, 1995-1996
- Audubon Louisiana Nature Center: Volunteer teacher, 1996
- UAB Graduate School Fairs: Discussion Leader 1999, 2000
- UAB Black Graduate Student Association:
  - Vice President 1999-2000
  - President 2000-2001
- Alabama Alliance for Graduate Education and the Professorate Graduate School Fairs: Discussion Leader 2000, 2001
- Gene-ius and Bio-Teach High School Programs: Lead Facilitator 2002-2004

- Cahaba Valley Health Clinics: Volunteer facilitator for vision and dental screenings for Spanish-speaking clients, 2004
- Annual Biomedical Research Conference for Minority Students: Remote Abstracts Judge, 2005

## TEACHING EXPERIENCE

- NSF GK-12 Gene-ius Program (2001-2004): Teach genetics and microbiology and develop science curricula for public middle schools and high schools; deliver equipment modules to each school; facilitate module labs at the Birmingham science museum (McWane Center).
- NSF GK-12 Summer Science Institute (2002-2004): Lead summer module labs for high school students; teach techniques for use in UAB's research labs.
- Teaching assistant for dental, optometry, and medical student microbiology labs (1998-2001): Teach microbiology techniques and identification of bacteria, tutor individually, and grade lab reports.
- Lab tutor (2001-2002): Teach PCR techniques to pathology residents and first-year graduate students on research rotations.
- Instructor (2006): Microbiology journal club.

## PUBLICATIONS

### Original Articles and Reviews

1. Waites, K.B., **Johnson, C.N.**, Gray, B.M., Edwards, K., Crain, M.C., and Benjamin, W. Use of clindamycin disks to detect macrolide resistance mediated by *ermB* and *mefE* in *Streptococcus pneumoniae* in children and adults. *Journal of Clinical Microbiology*. 38:1731-1734, 2000
2. Zheng, X., **Johnson, C.N.**, Wang, Y., Lu, R., Yangihara, C., Hollingshead, S., Crain, M., Benjamin, W., and Waites, K.B. Clinical isolates of *Streptococcus pneumoniae* resistant to levofloxacin contain mutations in both *gyrA* and *parC* genes. *International Journal of Antimicrobial Agents* 18:373-378, 2001.
3. **Johnson, C.N.**, Benjamin, W.H., Gray, B.M., Crain, M.C., Edwards, K.M., and Waites, K.B. *In vitro* activities of ABT 773, telithromycin and eight other antimicrobials against erythromycin-resistant *Streptococcus pneumoniae* isolates from the respiratory tracts of children in the southeastern United States. *International Journal of Antimicrobial Agents*, 18:531-535, 2001.
4. Chavers, S., Moser, S., Benjamin, W.H., Steinhauer, J., Smith, A.M., **Johnson, C.N.**, Funkhouser, E., Stamm, A. and Waites, K.B. Vancomycin-resistant enterococcus: Fifteen years and counting. *Journal of Hospital Infection* 53:159-171, 2003. Invited Review.
5. Hilliard, N., **Johnson, C.N.**, Armstrong, S., Quarles, S., and Waites, K.B. *In vitro* activities of ertapenem (MK 0826) and other antimicrobials against multi-drug resistant *Streptococcus pneumoniae*. *International Journal of Antimicrobial Agents* 20:136-140, 2002.
6. **Johnson, C.N.**, Benjamin, W., Moser, S.A., Hollingshead, S., Crain, M., Zheng, X., Nahm, M., and Waites, K.B. Genetic relatedness among fluoroquinolone-resistant isolates of *Streptococcus pneumoniae*. *Journal of Clinical Microbiology*. 41:2458-2464, 2003.
7. Waites, K.B., Jones, K.E., Kim, K.H., Moser, S.A., **Johnson, C.N.**, Hollingshead, S.K., Kang, E.S., Hong, K.S., Benjamin, Jr., W.H. Dissemination of macrolide-resistant *Streptococcus pneumoniae* isolates containing both *erm(B)* and *mef(A)* in South Korea. *Journal of Clinical Microbiology*. 41(12):5787-91, 2003.
8. **Johnson, C.N.**, Briles, D.E., Benjamin, W.H. Jr., Hollingshead, S.K., Waites, K.B. Relative fitness of fluoroquinolone-resistant *Streptococcus pneumoniae*. *Emerging Infectious Diseases* [serial on the Internet]. 2005 Jun. Available from <http://www.cdc.gov/ncidod/EID/vol11no06/04-0840.htm>