

**Claressa E. Lucas, Ph.D.**

**Professional Experience:**

- 2000-present Microbiologist: NCID/DBMD Respiratory Disease Laboratory Section,  
ELITE Program Coordinator  
Supervisor: Jonas Winchell, Ph.D.  
Centers for Disease Control and Prevention
- 1996-2000 ASM/NCID Postdoctoral Fellow:  
Advisor: Thomas Shinnick, Ph.D.
- 1992-1996 Doctoral student with dissertation:  
Advisor: William Shafer, Ph.D.

**Education:**

- 1988-1992 University of Alabama, Tuscaloosa, AL  
B.S. in Microbiology, *summa cum laude*, 1992
- 1992-1996 Emory University, Atlanta, GA  
Ph.D. in Microbiology and Molecular Genetics, 1996

**Honors, Awards and, Professional Memberships:**

- 2002 Secretary's Award for Distinguished Service
- 2002 CDC/ATSDR Safety Award
- 2002 CDC/ATSDR Group Honor Award
- 2002 NCID Honor Award
- 2001 CDC Special Act of Service Award
- 1998-2000 Oak Ridge Institute for Science and Education Fellow
- 1996-1998 ASM/NCID Postdoctoral Fellow
- 1995-1996 ASM Pre-doctoral Fellow
- 1992-present American Society for Microbiology (ASM) member
- 1991-1995 Harry S. Truman Fellow

**CDC Activities:**

- 2008-present ELITE Program Coordinator
- 2006-present ASM/NCIRD Post-doctoral mentor
- 2005-present Building Evacuation Leader for Building 18
- 2002-present Ferguson Fellowship co-mentor
- 2002-2005 Building Evacuation Leader for Building 5
- 2001-present ORISE Fellowship co-mentor
- 2001-present NCID/DBMD/RDLS Property Custodial Officer

**Invited Reviewer for the Following Refereed Journals and Grant Agencies:**

- Journal of Bacteriology
- Microbiology
- Molecular Microbiology
- Current Microbiology
- Southeastern Center for Emerging Biologic Threats
- American Society for Microbiology Pre- and Post-doctoral Fellowship Awards

- American Society of Heating, Refrigerating and Air Conditioning Engineers Technical Committee and Standards Committee

### Select Manuscripts:

1. **Claressa E. Lucas**, Thomas H. Taylor, Jr., and Barry S. Fields “Accuracy and precision of *Legionella* isolation by US laboratories in the ELITE Program pilot study.” (2011) *Water Research* 45(15):4428-36
2. Kozak NA, Buss M, **Lucas CE**, Frace M, Govil D, Travis T, Olsen-Rasmussen M, Benson RF, and Fields BS “Virulence factors encoded by *Legionella longbeachae* identified on the basis of the genome sequence analysis of clinical isolate D-4968.” (2010) *Journal of Bacteriology* 192(4):1030-44
3. **Claressa E. Lucas**, Ellen Brown, and Barry S. Fields “Type IV pili and type II secretion play a limited role in *Legionella pneumophila* biofilm colonization and retention.” (2006) *Microbiology* 152(12):3569-73
4. Moore MR, Pryor M, Fields B, **Lucas C**, Phelan M, and Besser RE “Introduction of monochloramine into a municipal water system: impact on colonization of buildings by *Legionella spp.*” (2006) *Applied and Environmental Microbiology* 72(1):378-83
5. Donlan RM, Forster, T, Murga R, Brown E. **Lucas C**, Carpenter J, Fields B “*Legionella pneumophila* associated with the protozoan *Hartmannella vermiformis* in a model multi-species biofilm has reduced susceptibility to disinfectants” (2005) *Biofouling* 21(1):1-7
6. Cowgill KD, **Lucas CE**, Benson RF, Chamany S, Brown EW, Fields BS, Feikin DR “Recurrence of legionnaires’ disease at a hotel in the United States Virgin Islands over a 20-year period” (2005) *Clinical Infectious Diseases* 40(8):1205-7
7. Fry AM, Rutman M, Allan T, Scaife H, Salehi E, Benson R, Fields B, Nowicki S, Parrish MK, Carpenter J, Brown E, **Lucas C**, Horgan T, Koch E, Besser RE. “Legionnaires' disease outbreak in an automobile engine manufacturing plant.” (2003) *Journal of Infectious Disease* 187(6):1015-8

### Select Abstracts and Presentations:

1. *Legionella* 2009, EMBO Conference Series, Institut Pasteur, Paris, France  
**Claressa Lucas**, Thomas Taylor, Nicole Alexander, and Barry Fields “Accuracy of *Legionella* isolation by US Labs in the ELITE Program pilot study.”  
Poster presented October 13-17, 2009
2. *Legionella* 2009, EMBO Conference Series, Institut Pasteur, Paris, France  
Lauri Hicks, Tatiana Travis, Linden Witherell, Nicole Alexander, Thomas Taylor, Dawn Terashita, Matthew Moore, **Claressa Lucas**, and Barry Fields “The impact of

monochloramine introduction on *Legionella* colonization in a hospital potable water system.”

Talk given October 16, 2009

3. ASM 4<sup>th</sup> Conference on Biofilms, Quebec City, Quebec, Canada  
**Claressa E. Lucas** and Barry S. Fields “Comparative proteomic analysis of *Legionella pneumophila* and *Hartmannella vermiformis* in biofilm and co-culture”  
Poster presented March 25-29, 2007
4. American Water Works 2007 Research Symposium, Reno, NV  
Invite speaker “Control of *Legionella* in distribution systems: Lessons from the lab and life” March 3, 2007
5. ASM 104<sup>th</sup> General Meeting, New Orleans, LA  
**Claressa E. Lucas** and Barry S. Fields “Expression of FlaA in a model *Legionella* biofilm” Poster presented May 23-27, 2003
6. ASM 103<sup>rd</sup> General Meeting, Washington, D.C.  
**Claressa E. Lucas**, Terri S. Forster, Ricardo Murga, Rodney M. Donlan, Nicholas P. Cianciotto, Yousef Abu Kwaik, Barry S. Fields. “The role of *Legionella pneumophila* type IV pili and type II secretion in a heterotrophic biofilm.”  
Poster presented May 19-23, 2002