

## DORIS J. WARD, Ph.D.

Voorhees College  
Division of Arts and Sciences  
Denmark, SC 29042  
(803) 780-1069

957 Kensal Green Drive  
Kernersville, NC 27284  
(336) 624-1027

*email:* dward@voorhees.edu

---

### ◆ PROFESSIONAL EXPERIENCE

**Chairperson, Division of Arts and Sciences- Voorhees College ( 2007-present).** Duties include managing resources and personnel in the Division and course scheduling, Duties also including teaching assignments in the Department of Biology.

**Assistant Professor, Bethune-Cookman College (2004-2007)** Major responsibilities include instruction in Microbiology and General Biology for majors and non-majors. Development and implementation of Molecular Biology course.

**Assistant Professor Winston-Salem State University, Winston-Salem, NC (1997-2004)** Major duties included teaching biochemistry, general microbiology for Allied Health, and introductory-level biology courses, and supervision of undergraduate research; Development of Biochemistry laboratory component; Director of NASA-USAR Scholarship Program and other departmental and university services .

**Adjunct Professor, North Carolina A&T University, Greensboro, NC (2003- 2004)** My major duty was instruction of students ( graduates and undergraduates) in Biochemistry.

**Assistant Professor Livingstone College, Salisbury, NC (1994-1997)** Major duties included instruction of undergraduate courses in introductory biology, molecular biology, genetics and biochemistry. Development and implementation of Molecular Biology course; Responsibilities also included development and implementation of undergraduate research, student advisement, and participation in related extracurricular activities. Committee Chairperson of coordination of Honors Award Banquet and ceremonies.

**Research Associate, U.S. Department of Agriculture, Philadelphia, PA (1992-1994)** Research Chemist Research involved the genetic development of food grade microbes (streptococci and lactobacilli) as production systems for enzymes, pigments and antimicrobials. Responsibilities included the identification of restriction endonuclease systems and other nucleic acid modifying systems in streptococci, isolation and characterization of bacteriocins, isolation of major streptococcal secretory proteins and subsequently, the synthesis of oligomers to be used as probes to isolate the respective gene, and the cloning and expression in streptococcal genes encoding for pediocin, a bacteriocin produced by *Pediococcus acidilactici*.

**Doctoral Research, Atlanta University, Atlanta GA (1986-1992)** Investigation of Mechanisms of Estrogen Insensitivity in the Squirrel Monkey; This research entailed determination of estrogen receptor binding parameters, isolation and purification of estrogen sulfotransferases, and collection, extraction, and identification of estrogen metabolites from biological samples.

**Laboratory/Teaching Assistant, Morehouse College, (1991) Atlanta, GA,**  
Co-ordinated and supervised bioinstrumentation laboratory for advanced biochemistry students.

### **Professional Membership:**

- American Society for Microbiology
- American Association for the Advancement of Science
- North Carolina Academy of Science
- National Science Teachers Association
- Applied Research Ethics National Association (ARENA)

### **Academic Services**

- Director of NASA –USAR program 1998-2004
- Chairperson of the institution's Institutional Animal Care and Use Committee (IACUC) 2004
- Active participant in Freshman Orientation Class
- Chairperson of Scholarship Committee 1998-2000
- Committee Chairperson of Honors Achievement Award Program, 1997

### **Training and Seminars**

- Learning Styles in the Classroom, Bethune-Cookman College, 2007
- Integrating Mathematics in Biology Course, QEM Workshop, Atlanta, GA, 2006
- QEM Grant-writing workshop, Memphis, TN, 2005
- Computational Science workshop, NCSI, 2003

### **Grants and Proposals**

- Advancing the Integration of Computational Science into Undergraduate Mathematics, Science, and Engineering Curricula, 2005 ( pending)
- Developing a Thematically Integrated Laboratory for Biochemistry; United States Department of Education, 2000-2002 ; \$50,000 (funded)

### **AWARDS**

- National Research Service Award Fellow (NRSA) :1986-1990
- Commissioned Officer Student Training and Extern (CO-STEP) PHS #56819 Awardee (1987-1990)
- **Food and Drug Administration, (1988)** Laurel, MD, (CO-STEP\* appointee) Research Laboratory Assistant : Research involved the organic extraction and identification of polyanionic compounds in the development of a rapid assay for ornithine decarboxylase. Radioactive handling.
- **National Center for Toxicology Research, (1987-1990)** (CO-STEP\* appointee) Research Laboratory Assistant, Jefferson, AK. Duties included determining the estrogen receptor binding parameters in uterine tissue of New World Monkeys. Determination of estrogen concentrations in blood and urine samples by radioimmunoassays.
- Faculty Research Associate Fellowship: (Summer 1995) University of Helsinki, Helsinki, FINLAND. Research involved determination and analysis of monoamine concentration in rat brain.
- Faculty Research Associate Fellowship: (Summer 1996): University of Helsinki, Biocenter. Research involved regulation and expression of genes associated with nisin synthesis and immunity.
- Brethern Colleges Abroad Fellowship-(Spring 2003) Traveled to Cochin, India to visit Cochin University of Science and Technology.
- Who's Who Among American College and University Teachers
- 2009 NOBLE Teaching and Service Award
- Faculty Summer Research Award, 2009

## EDUCATION

Ph. D., 1993 Atlanta University 1992 The investigation of mechanisms of estrogen insensitivity in the reproductively active female squirrel monkey.

B.S., 1985 Biological Sciences, Rust College

## ABSTRACTS/ PUBLICATIONS

**Doris Ward** and Paul Musey. 17-*B* Hydroxy Sulfotransferase Activity in Liver Cytosol of Female Squirrel Monkey. 1991 Abstract, FASEB, 5 (4): A415.

**Doris Ward**, Paul I. Musey and Daniel Sheehan. Nuclear and Cytosol Estrogen Receptors in Young Non-Cycling Squirrel Monkeys. 1989. Abstract, FASEB, 3 (3): A 592.

**Ward, D.J.** 1992 The investigation of mechanisms of estrogen insensitivity in the reproductively active female squirrel monkey. Ph.D. Dissertation, Atlanta University, Atlanta, GA. (Dissertation)

**D. J. Ward** and G.A. Somkuti. Bacteriocin Production in *Streptococcus thermophilus*. 1993. Abstract, ASM

**D. J. Ward** and G.A. Somkuti. Characterization of a bacteriocin produced by *Streptococcus thermophilus*. ST134. **Appl. Microbiol. Biotechnol** (1995), **43**:330-335.

M. Askikainen, J. Toppila, L. Alanko, **D.J. Ward**, D. Stenberg and T. Torkka-Hieskanen. Sleep deprivation increases brain serotonin turnover in the rat. **Neuro Report** (1997), **8**: 1577-1582.

C. Robinson, L.Harris, and **D. Ward**. Phylogenetic Characterization of Bacterial Strain Isolated from the Dinoflagellate *Alexandrium tamarense*. 2003 Abstract (F99). Ann. Biomed, Conference for Minority Students ; San Diego, CA.

Kuo, W., Guruvadoo, L.K., Sen, S., Green, T., John, M. **Ward, D.**, and Shanbhag, P. Versatile roles of protein nitrosation and denitrosation. **Recent Res. Devel. Mol. Cell Biochem.** **2** (2005), Research Signpost, India.

**Ward, D. J.**, L. Ward., and S. Young. Detection and Characterization of a Novel Bacteriocin form *S. epidermis* that exhibits inhibitory activity against *Pseudomonas spp.* 2007 ( Abstract) **ASM General Meeting**; Ontario, Canada ( May, 2007)

## References

Dr. Donna Durham- Pierre. Interim Chair of Biology Department; Winston-Salem State University; CB 19361, Winston -Salem, NC 27110 (336) 750- 2212; [pierred@wssu.edu](mailto:pierred@wssu.edu)

Dr. E. Witherspoon, Director of Title III, Winston-Salem State University; 601 M. L. King, Jr. Drive; Winston- Salem, NC 27110 (336) 750-2131

Dr. Grace Y. Hung Professor of Chemistry. Livingstone College, Salisbury, NC 28144 [Yhung@livingstone.edu](mailto:Yhung@livingstone.edu) Telephone- 704.216.6123

Dr. Isabella Finkelstein, Director of MARC Program, Clark-Atlanta University 223 James P. Brawley Dr. S. W. Atlanta, GA 30314 ifinkels@cau.edu Telephone (404) 880-8136

