

**Sarah A. McIntire**  
**Biology – Sept, 2005**

**Education:**

B.A. -1963	Miami University, Oxford, OH, Zoology
M.A.-1965	Miami University, Oxford, OH, Genetics
PhD -1973	University of Cincinnati, Cincinnati, OH, Microbiology

**Prior Academic Employment and at TWU:**

1973-1976	Postdoctoral Fellowship, Department of Molecular Biology, University of Edinburgh, Edinburgh, Scotland.
1976-1989	Research Chemist and Microbiologist, General Medical Research, Veterans Administration Medical Center, Dallas, TX
1986-1988	Associate Professor of Molecular Biology, Bishop College, Dallas
1990-2002	Associate Professor, Biology Department, TWU
2002-present	Professor, Biology Department, TWU
2003-present	Chair, Biology Department, TWU

**Teaching:**

Undergrad Courses: BACT 3113 (every semester) and BACT1003 (occasionally)  
Grad Courses: BIOL 6734 (Adv. Genetics – every other Spring semester)  
More than 70 undergraduates have participated in undergraduate research in my lab.  
Dissertations directed: 5                      Theses directed: 10 (plus 2 in progress)

**Research Interests:**

We study the role of plasmid DNA in the biology of the microorganism, *Helicobacter pylori*, the causative agent of ulcers and gastritis. *H. pylori* is also associated with gastric cancer. My lab has determined the DNA sequence of multiple plasmids and shown that they carry portions of the *H. pylori* chromosome. Each plasmid carries a different segment of the chromosome, indicating, we believe, that the plasmids play a role in the recognized rearrangements of the *H. pylori* chromosome. Most investigators believe that the rearrangements (inversions, deletions, and insertions) are important in this microorganism's ability to evade the human immune system.

My research over 30 years resulted in 4 book chapters, 7 invited presentations, 19 refereed publications and 36 abstracts of presentations at national/international meetings.

**Professional Service (since 1993)**

**National**

1993	<i>ad hoc</i> Sight Visit Team - MBRS program (NIH)
1994-present	Review panel, American Society for Microbiology Undergraduate Research Fellowships
1998	<i>ad hoc</i> MBRS program review (NIH)
1998	Review of Programs, Dept of Biol. Sci., Southeastern Okl. State Univ.
2003, 2004	National Academy of Sciences panel for minority Post-Doc Fellowships

**American Society for Microbiology service:**

1995- 2000	Committee on Divisions
1998-present	Committee on the Status of Women in Microbiology
2005	Organizer for Texas/Missouri Branch meeting of ASM (at TWU)

**TWU service:** multiple search comm., SACS subcomm chair, multiple committees (Federation, Fac Awards, Intell. Property, Graduate Council – chair, Radiation Safety, Recomb DNA safety, Outstanding Grad Student, Honors Program Advisory Council), Phi Kappa Phi president, Program Director for BRIDGES program (NIH funded)

**Faculty advisor** - Environmental Awareness Society. Chinese Student Association, AAUW Student Affiliate, Mortar Board

**Awards and Honors:**

Phi Kappa Phi election, Mary Mason Lyon Award for Outstanding Junior Faculty, Chancellor's Research Fellows Program, Mentor for 2 years