

J Vaun McArthur

(i). Professional Preparation

Ricks College, Rexburg, ID		AA	1973
Brigham Young University, Provo, UT	Zoology	BS	1977
Brigham Young University, Provo, UT,	Zoology	MS	1980
Kansas State University, Manhattan, KS,	Biology/Ecology	Ph.D.	1984
Savannah River Ecology Laboratory, Aiken, SC		Postdoctoral Fellow	

(ii). Appointments

1999-present	Senior Scientist, Savannah River Ecology Laboratory
1990-present	Adjunct Assistant Professor, Department of Entomology, Clemson University, Clemson, SC
1992-1998	Associate Research Scientist, Savannah River Ecology Laboratory, University of Georgia
1986-1992	Assistant Research Scientist, Savannah River Ecology Laboratory, University of Georgia

(iii). Publications

(i) Up to five Publications most closely related to proposed project

- McArthur, J V. and R. C. Tuckfield. 1997. Information length: spatial and temporal parameters among stream bacterial assemblages. *Journal of the North American Benthological Society* 16:347-357.
- McArthur, J V., D. A. Kovacic and M. H. Smith. 1988. Genetic diversity in natural populations of a soil bacterium across a landscape gradient. *Proceedings of the National Academy of Science* 85:9621 -9624.
- Leff, L. G., J V. McArthur, and L. Shimkets. 1992. Information spiraling: A new concept in stream ecology. *Microbial Ecology* 24:11-24.
- McArthur, J V., M. H. Smith and L.G. Leff, 1992. Patterns of genetic diversity in bacterial populations along landscape gradients. *Journal of the North American Benthological Society* 11:269-277.
- McArthur, J V. 1998. Physiological and genetic determinants of lotic bacterial distribution and abundance. *Internationale Vereinigung Fur Theoretische und Angewandte Limnologie Verhandlungen* 26:1080-1082.

(ii) Up to Five Other significant publications

- Leff, L.G., R.M. Kernan, J V. McArthur, and L.J. Shimkets. 1993. Identification of Aquatic Burkholderia (*Pseudomonas*) cepacia by hybridization with species-specific rRNA gene probes. *Applied and Environmental Microbiology* 61:1634-1636.
- Wise, M.G., L.J. Shimkets and J V. McArthur. 1995. Genetic structure of a lotic population of Burkholderia (*Pseudomonas*) cepacia. *Applied and Environmental Microbiology* 61:1791-1798.
- Wise, M.G., J.V. McArthur, C. Wheat, and L.J. Skimkets. 1996. Temporal variation in genetic diversity and structure of a lotic population of Burkholderia (*Pseudomonas*) cepacia. *Applied and Environmental Microbiology* 62:1558-1562.
- Wise, M.G., J V. McArthur and L. J. Shimkets. 1999. Methanotroph diversity in landfill soil: Isolation of novel type I and type II methanotrophs whose presence was suggested by culture-independent 16S rDNA analysis. *Applied and Environmental Microbiology* 65:4887-4897.

(iv). Synergistic Activities

Coordinator of Savannah River Ecology Laboratory's Education program, PI on NSF REU proposal, Advisory Board Member to Consortium of 26 HBCUs, PI on NSF UMEB proposal (submitted).

(v). Collaborators and Other Affiliations

(a) Collaborators and Co-Editors over the last 48 months (and their affiliations)

Dr. Carl B. Fliermans (Savannah River Technology Center (SRTC)), Dr. Laura G. Leff (Kent State University), Dr. Michael Lemke (Pace University), Dr. Russell B. Rader (US Forest Service Research Laramie), Dr. Larry Shimkets (University of Georgia), Dr. Robert Sinsabaugh (University of Toledo), Dr. R. Cary Tuckfield (SRTC)

(b) Advisor

Dr. G. Richard Marzolf

(c) Thesis Advisor and Postgraduate-Scholar Sponsor

Persons with whom the individual has had an association as thesis advisor:

Laura G. Leff (PhD) 1992. University of Georgia, Coadvisor,
Michael Floyd (PhD) 1994. Clemson University, Coadvisor,
Julie Weis (PhD) (left program for law school) University of Georgia, Coadvisor,
Suzzane Stibbe (MS) 1995. University of Georgia, Co-Advisor
Jim Lovell (M.S.) 1992. University of North Carolina-Chapel Hill Coadvisor.
Susan Dyer (M.S.) 1990. University of Tennessee, Coadvisor
Mark Wise (M.S.) 1994. University of Georgia, Coadvisor.
Margie Plagwitz (Ph.D.) (left program for health reasons) University of Georgia, Coadvisor.
Gordon Plague (MS) 1995. University of Georgia. Co-Advisor.
Douglas Wymer (MS) 1997. Clemson University. Coadvisor.
Debra Wohl (PhD) 1997. University of Georgia, Advisor.
Michele Lakly (PhD) 1998. University of Georgia, Advisor.
Jennifer Brofft (PhD) University of Georgia, Coadvisor.
Mark Wise (PhD) University of Georgia, Coadvisor..
Gordon Plague (PhD) University of Georgia. Advisor.
Elizabeth Burgess (MS) University of Georgia. Advisor
Elizabeth Richardson (MS) University of Georgia. Co-Advisor

Postdoctoral Scholars Sponsored in last five years

Dr. Russell B. Rader (Brigham Young University), Dr. Peter Koetsier (Boise State University),
Dr. Neal Voelz (St. Cloud State University), Dr. Michelle Lakly (University of Georgia), Dr.
Laura G. Leff (Kent State University)

Total Number of Graduate students advised: 17

Total number of Postdoctoral scholars sponsored: 5