

Biographical Sketch

Senior Personnel

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| Antonie H. Rice | Chairperson | Department of Chemistry & Physics |
| | Associate Professor | University of Arkansas at Pine Bluff |

(a) Professional Preparation

| <u>Institution and Location</u> | <u>Major</u> | <u>Degree and Year</u> |
|--------------------------------------|--------------------------|------------------------|
| University of Arkansas at Pine Bluff | Chemistry | B.S.- 1996 |
| University of Kansas, Lawrence, KS | Pharmaceutical Chemistry | M.S.- 1999 |
| University of Kansas, Lawrence, KS | Pharmaceutical Chemistry | PhD – 2002 |

(b) Appointments

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| 2008-present | Chair, University of Arkansas at Pine Bluff, Department of Chemistry and Physics |
| 2006-2008 | Associate Professor of Chemistry, University of Arkansas at Pine Bluff |
| 2002-2006 | Assistant Professor of Chemistry, University of Arkansas at Pine Bluff |

(c) Publications

1. **Rice, Antonie**, Silverstein, P., Audus, K.L., Brain Microvessel Endothelial Cell Cultures as In Vitro Models to Study the Blood-Brain Barrier. Blood-Spinal and Brain Barriers in Health and Diseases (Sharma, H.S., Editor), Academic Press, New York, 2002.
2. **Rice, Antonie**, Michaelis, M.L., Georg, G., Liu, Y., Turunen, B., Audus, K.L., Overcoming the blood-brain barrier to taxane delivery for neurodegenerative diseases and brain tumors." Journal of Mol. Neuroscience, Jan.1, 2003; 20(3): 339-43.
3. **Rice, Antonie**, Liu, Y., Michaelis, M.L., Himes, R.H., Georg, G.I., Audus, K.L., Chemical Modification of Paclitaxel (Taxol) Reduces P-glycoprotein Interactions and Increases Permeation across the Blood-Brain Barrier in Vitro and in Situ. Journal of Med. Chemistry, 48, 832-838, 2005.
4. Michaelis, M.L., Chen, Y. Georg, G., **Rice, A.**, Audus, K.L., Amyloid Peptide Toxicity and Microtubule-Stabilizing Drugs. Journal of Molecular Neuroscience, 19(1-2), 101-105, 2002.
5. Spletstoser, J. Turunen, B., Desino, K., **Rice, A.**, et al., Single-site Chemical Modification at C10 of the baccatin III core of Paclitaxel and Taxol C reduces P-glycoprotein interactions in Bovine Brain Microvessel Endothelial Cells. Bioorganic & Medicinal Chemistry Letters, 16, 495-498, 2006.

(d) Synergistic Activities

- **Principal Investigator (2005-present): NIH Arkansas IDeA Networks of Biomedical Research Excellence (INBRE) Research Grant.** This is a 5-year research grant funded by NIH in collaboration with University of Arkansas for Medical Sciences. Goal of project is enhance the research capacity of institutions through collaborative partnerships, the development of areas of potential research, staff development, and access to research resources, so they can participate more fully in the competition for NIH awards; and provide research support to faculty and undergraduate students, to build a “pipeline” toward health research careers, and to provide hands-on research experience to students at undergraduate institutions.

(e) Honors

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|--------------|---------------------------------------|
| 1994-1995 | Russell T. Bennett Scholarship |
| 1994-1996 | MARC Scholarship |
| 1996-1998 | Biotechnology Training Grant |
| 1996-1999 | Merck Fellowship |
| 1998-2001 | AFPE Predoctoral Fellowship |
| 2001-2002 | NIH Supplemental Training Grant |
| Summer 2004 | BRIN/INBRE Summer Research Fellowship |
| Summer 2005 | STEM Summer Faculty Fellowship |
| 2005-present | NIH INBRE Research Grant |
| 2007 | INBRE Instrument Grant |

(f) Collaborators

Dr. Steven Barger- Associate Professor of Geriatrics, University of Arkansas for Medical Sciences

Dr. Howard Hendrickson- Assistant Professor in Department of Pharmaceutical Sciences, University of Arkansas for Medical Sciences

Dr. Paul Adams- Assistant Professor of Chemistry, University of Arkansas at Fayetteville

Dr. Alvin Holder- Assistant Professor of Chemistry, University of Southern Mississippi