

JOURNAL OF THE Tennessee Academy of Science

VOLUME 84

NUMBER 3

CONTENTS

Oxytocin Receptor (OXTR) mRNA Expression in Human Amnion-Derived WISH Cells. <i>Amy E. Chall, Edmund D. Hadley, and Sarah Lundin-Schiller</i>	41
Stream Quality Assessment on Military Training Grounds near Waverly, Tennessee. <i>Mark D. Farr, Mark D. Antwine, and Laura P. Lecher</i>	47
Salamanders as Fishing Bait in the Blue Ridge Physiographic Province of East Tennessee. <i>John E. Copeland, George L. Mears, and Ronald S. Caldwell</i>	52
Tennessee Academy of Science 2009 Collegiate Meetings	
Abstracts of Papers Presented.	55
Student Presentation Awards.	72
Science Teacher Awards.	74
Call for Reviews of Books and Software.	75
Announcement.	76

JULY 2009

Tennessee Academy of Science

EXECUTIVE COMMITTEE

President

Dr. M. Gore Ervin
Department of Biology, Box 60
Middle Tennessee State University
Murfreesboro, TN 37132
Office Phone: 615-898-2045
FAX: 615-898-5093
Email: mervin@mtsu.edu

Past-president

Dr. Cindi Smith-Walters
Department of Biology, Box 60
Middle Tennessee State University
Murfreesboro, TN 37132
Office Phone: 615-898-5449
Home Phone: 615-848-0327
FAX: 615-217-7865
Email: csmithwa@mtsu.edu

President-elect

Dr. Michael A. Gibson
Department of Geol., Geog., and
Physics
Univ. of Tennessee, Martin
Martin, TN 38238
Email: mgibson@utm.edu

Secretary

Ms. Teresa Fulcher
Department of Natural and
Behavioral Sciences
Pellissippi State Technical
Community College
10915 Hardin Valley Road
Knoxville, TN 37933
Office Phone: 865-539-7048
Home Phone: 865-457-4065
Email: tfulcher@pstcc.edu

Treasurer

Dr. C. Steven Murphree
Department of Biology
Belmont University
1900 Belmont Boulevard
Nashville, Tennessee 37212-3758
Office Phone: 615-460-6221
Email: murphrees@mail.belmont.edu

Managing Editor

Dr. Stephen J. Stedman
Department of English and
Communications, Box 5053
Tennessee Technological University
Cookeville, TN 38505
Office Phone: 931-372-3763
Email: sstedman@tntech.edu

Department of Education Liaison

Dr. Linda Jordan
8th Floor, Gateway Plaza
710 James Robertson Parkway
Nashville, TN 37243-0379
Office Phone: 615-532-6285
Home Phone: 615-790-4981
Fax: 615-532-8536
Email: Linda.K.Jordan@state.tn.us

Director, Junior Academy

Dr. Jack Rhoton
East Tennessee State University,
Box 70684
Johnson City, TN 37614-0684
Office Phone: 423-439-7589
Home Phone: 423-323-5924
Fax: 423-439-8362
Email: rhotonj@etsu.edu

Director, Collegiate Division

Dr. Fred Matthews
Department of Chemistry
Austin Peay State University
Clarksville, TN 37044
Office Phone: 931-221-7622
Fax: 931-221-6261
Email: matthewsf@apsu.edu
website: www.apsu.edu/matthewsf

Director, Electronic Communication

Dr. James (Jim) Howard
Department of Chemistry, Box 410
Middle Tennessee State University
Murfreesboro, TN 37132
Office Phone: 615-898-2079
Home Phone: 615-890-0142
Email: jhoward@mtsu.edu

Director, Visiting Scientist Program

Dr. Michael L. Daley
Department of Electrical Engineering
The University of Memphis
Memphis, TN 38152
Office Phone: 901-678-3254
Fax: 901-678-5469
Email: mdaley@memphis.edu

Member-at-large, 2007-2009

William H. Andrews
Engineering Science Technology Div.
Oak Ridge National Laboratory
Oak Ridge, TN 37831

Member-at-large, 2008-2010

Mr. Bryan Kent Wallace
Director, Physics Laboratories
Department of Physics
1000 Seventeenth Avenue North
Fisk University
Nashville, TN 37208
Office Phone: 615-329-8623
Fax: 615-329-8634
Email: bwallace@fisk.edu

Member-at-large, 2009-2011

Dr. Gilbert Pitts
Department of Biology
Austin Peay State University
P.O. Box 4718
Clarksville, TN 37044
Phone: 931-221-7777
Fax: 931-221-6323

The TENNESSEE ACADEMY OF SCIENCE was founded in 1912 at Nashville, Tennessee. Membership is open to all teachers and professors of science, research workers in science both in educational institutions and industrial establishments, and all others who are interested in some phase of science. Annual dues for various categories of membership follow: student member — \$10; emeritus member — \$10; regular member — \$40; sustaining member — \$50; supporting member — \$100; life member — \$400 (single payment). Applications for membership should be addressed to the Treasurer.

The *Journal of the Tennessee Academy of Science* (ISSN 0040313X) is published by the Tennessee Academy of Science, Department of Biology, Belmont University, 1900 Belmont Boulevard, Nashville, TN 37212-3757, for all members not in arrears for dues. Back issues, if available, are \$10 per copy. Whole sets of back issues on microfilm are available from AMS Press, Inc., 56 E. 13th St., New York, NY 10003. Postage paid at Nashville, TN, and at other mailing offices. Send address change to the following: *Journal of the Tennessee Academy of Science*, c/o Dr. Steven Murphree, Department of Biology, Belmont University, 1900 Belmont Boulevard, Nashville, TN 37212-3757.

This journal is abstracted in *Biological Abstracts*, *Chemical Abstracts*, and the *Zoological Record*, and is indexed by *Science Citation Index* and *Agricola Citations*.