

Anthony C. Zable, Ph.D.

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EDUCATION

- 12/96 to 3/98** **Postdoc**, Vollum Institute, Oregon Health Sciences University
Research: Biophysical and electrophysiological properties of excitatory amino acid transporters
- 12/96** **Ph.D.**, Environmental Sciences and Resources:Physics, Portland State University
Dissertation: "Redox Control of Skeletal Muscle Sarcoplasmic Reticulum."
- 03/96** **M.S.**, Physics, Portland State University
Thesis: "Metabolic End Products Inhibit Sarcoplasmic Reticulum Ca²⁺ Release Channel."
- 09/91** **B.S.**, Physics/Honors, Portland State University
Senior Honors Thesis: "The Effects of Methylxanthines on Anthraquinone-Induced Ca²⁺ Release from Skeletal Muscle Sarcoplasmic Reticulum."

WORK EXPERIENCE

- 07/03-present** *Chair, Physical Science Department*, Cascade Campus, Portland Community College, Portland, Oregon
- 07/98-present** *Instructor of Physics & Chemistry*, Portland Community College, Portland, Oregon
- 08/99-06/00** *Project Manager & Integration Engineer*, BBox Inc., Beaverton, OR 97005
- 02/98-present** *Operations Engineer*, A-Laser, Inc., Beaverton, Oregon
- 09/97-5/98** *Consultant*, AntiVirals Inc.
- 01/97-06/99** *Adjunct Research Associate*, Physics Department, Portland State University
- 06/95-09/96** *Graduate Research Assistant*, American Heart Association Oregon Chapter, Portland State University
- 09/94-06/95** *Graduate Teaching Assistant*, Department of Physics, Portland State University
- 08/93-05/94** *Adjunct Instructor*, Department of Chemistry and Physics, University of Portland
- 06/92-09/95** *Summer Instructor*, Department of Physics, Portland State University
- 09/91-09/93** *Graduate Teaching Assistant*, Department of Physics, Portland State University

AWARDS

- 02/98** *National Research Service Award*, National Eye Institute, National Institute of Health,
Grant #: 1-F32-EY06917-01
- 09/97-02/98** *Postdoctoral Training Fellowship*, National Institute of Drug Abuse, National Institute of Health
Grant #: 5-T32-NS07381-03
- 02/96** *Finalist*, Student Research Achievement Award Competition, Biophysical Society Annual Meeting
- 02/96** *AAAF Travel Funding Award* (PSU) - For Presentation of Abstract/Poster, "Thiol reducing agents antagonize the calcium release mechanism from skeletal muscle sarcoplasmic reticulum", at Biophysical Society Annual Meeting
- 02/95** *AAAF Travel Funding Award* (PSU) - For Presentation of Abstract/Poster, "Thimerosal induces calcium release and inhibits [³H]-ryanodine binding to skeletal muscle sarcoplasmic reticulum", at Biophysical Society Annual Meeting
- 09/93-06/95** *Oregon Laurels Award*, Portland State University
- 09/95-06/96** *Oregon Sports Lottery Scholarship*, Portland State University
- 09/95-06/96** *Elsa Jorgenson Scholarship*, Portland State University
- 09/93-06/94** *Oregon Sports Lottery Scholarship*, Portland State University
- 09/93-06/94** *Elsa Jorgenson Scholarship*, Portland State University

PUBLICATIONS

- Wang, G. J., Chung, H.J., Schnuer, J., Pratt, K., Chung, K. Y., **Zable, A. C.**, Kavanaugh, M. P., and Rosenberg, P. A. (1997) High affinity glutamate transport in rat cortical neurons in culture. *Mol. Pharm.* 53(1), 88-96.
- Zable, A.C.**, Favero, T.G., and Abramson, J. J. (1997) Glutathione modulates ryanodine receptor skeletal muscle sarcoplasmic reticulum: Evidence for redox regulation of the Ca²⁺ release mechanism. *J. Biol. Chem.* 272, 7069-7077.
- Favero, T.G., **Zable A.C.**, Colter, D., and Abramson, J.J. (1997) Lactate inhibits Ca²⁺ activated Ca²⁺ channel activity from skeletal muscle sarcoplasmic reticulum. *J. Appl. Physiol.* 82, 447-452.

- Abramson, J.J., **Zable, A.C.**, Favero, T.G., and Salama, G. (1995) Thimerosal interacts with the Ca^{2+} release channel-ryanodine receptor from skeletal muscle sarcoplasmic reticulum. *J. Biol. Chem.*, 270(50), 29644-29647.
- Favero, T.G., **Zable, A.C.**, and Abramson, J.J. (1995) Hydrogen peroxide stimulates Ca^{2+} release channel from sarcoplasmic reticulum. *J. Biol. Chem.* 270(43), 25557-25563.
- Favero, T.G., **Zable, A.C.**, Bowman, M., Thompson, A., and Abramson, J.J. (1995) Metabolic end products inhibit sarcoplasmic reticulum calcium release and [^3H]ryanodine binding. *J. Appl. Physiol.* 78(5): 1665-1672.
- Liu, G., Abramson, J.J., **Zable, A.C.**, and Pessah, I.N. (1994) Direct evidence and functional role of hyperreactive sulfhydryls on ryanodine receptor/triadin complex selectively labelled by the coumarin maleimide CPM. *Mol. Pharm.* 45, 189-200.
- Hadad, N., **Zable, A.C.**, Abramson, J.J., and Shoshan-Barmatz, V. (1994) Ca^{2+} binding sites of the ryanodine receptor/ Ca^{2+} release channel of sarcoplasmic reticulum: low affinity binding site(s) as probed by terbium fluorescence. *J. Biol. Chem.* 269(40), 24864-24869.
- Zable, A.C.** The effects of methylxanthines on anthraquinone induced Ca^{2+} release from skeletal muscle sarcoplasmic reticulum. Portland State University, Undergraduate Honors Thesis, 1990.
- Zable, A.C.** and Parks, P.I. (1992) Lewis & Clark College: Transportation Survey Report. Lewis & Clark College. Six Traffic Impact Studies while employed with Kittelson & Associates, Inc.

PRESENTATIONS AT NATIONAL MEETINGS (Abstracts Published)

- Rosen burg, P.A., Wang, G. J., **Zable, A. C.**, and Kavanaugh, M. P. (1997) Comparison of pharmacology of glutamate transport by GLT1 expressed in oocytes and rat cortical neurons in culture. *Soc. of Neurosci. Abstr.*
- Favero, T.G., **Zable, A. C.**, Thompson, A., and Colter D. (1996) Lactate inhibits excitation-contraction coupling in skeletal muscle. *Medicine and Science in Sport and Exercise*, Vol 28, S98.
- Zable, A.C.**, Favero, T.G., and Abramson, J.J. (1996). Thiol reducing agents antagonize skeletal muscle ryanodine receptor. *Biophys. J.* 70: A282.
- Favero, T.G., **Zable, A.C.**, and Abramson, J.J. (1996) Activation of the skeletal muscle ryanodine receptor by peroxide is inhibited by thiol reducing and alkylating agents. *Biophys. J.* 70: A282.
- Favero, T.G., **Zable, A.C.**, Abramson, J.J., and Salama, G. (1995) Thimerosal induces calcium release and inhibits [^3H]ryanodine binding to skeletal muscle sarcoplasmic reticulum. *Biophys. J.* 68: A51.
- Favero, T.G., **Zable, A.C.**, Thompson, A., Colter, D., and Abramson, J.J. (1995) Lactate inhibits Ca^{2+} release and ^3H -ryanodine binding from isolated sarcoplasmic reticulum vesicles. *Medicine and Science in Sports and Exercise* 27: S121.
- Abramson, J.J., **Zable, T.**, and Favero, T.G. (1994) The effects of reactive oxygen species on skeletal muscle sarcoplasmic reticulum. *FASEB J.* 8(5): A606.
- Liu, G., Abramson, J.J., **Zable, A.C.**, and Pessah, I.N. (1994) Functional hyperreactive-thiols on Ryanodine Receptor-Triadin complex. *Biophys J.* 66: A414.

INVITED SEMINARS

- 05/96** "How anti-oxidants regulate skeletal muscle." Portland State University, Physics Department. Invited by Dr. Carl Bacchuber.
- 07/95** "Redox control of the Ca^{2+} release mechanism of skeletal muscle sarcoplasmic reticulum." University of Pittsburgh School of Medicine, Department of Neurobiology. Invited by Dr. Elias Aizenman.
- 04/95** "Redox control of the Ca^{2+} release mechanism of skeletal muscle sarcoplasmic reticulum." University of Minnesota, Department of Veterinary Pathobiology. Invited by Dr. Charles F. Louis.
- 04/95** "A controversial new theory to describe Ca^{2+} waves in egg cells." Portland State University, Physics Department. Invited by Dr. Carl Bacchuber.

PROFESSIONAL MEETINGS ATTENDED

- 2004** American Association of Physics Teachers, Miami, FL
- 2003** Phi Theta Kappa Western Leadership Conference, The Dalles, OR
- 2000** Oregon Academy of Science, Portland, OR
- 1997** Oregon Academy of Science, Eugene, OR
- 1996** Biophysical Society, Baltimore, MD
- 1995** Biophysical Society, San Francisco, CA
- 1993** American Physical Society, Seattle, WA

WORKSHOPS ATTENDED

2004 Problem-Based Learning in the Physics Classroom, Lee College, Baytown, TX
2001 Using Computer-Based Physics Laboratories, Vernier Software, Beaverton, OR
2001 Active Learning in the Physics Laboratory II, University of Oregon, Eugene, OR
2001 Active Learning in the Physics Laboratory I, Dickinson College, Carlyse, PA

VOLUNTEER ACTIVITIES

2003-2005 *Faculty Advisor, Phi Theta Kappa*, Portland Community College, Portland, Oregon
2004 *Grand Judge*, Physics, Intel Science and Engineering Fair, Portland Oregon
2002 *Local Host*, Science Teacher Workshop, Vernier Software, Portland Oregon
1993-1995 *Coordinator/Senior Lab Instructor*, Summer Session General Physics Lab, Portland State University
1992 *Judge*, Science Olympiad, Northwest Science Expo
1991 *Computer Consultant*, Oregon Chapter, American Heart Association
1988-1990 *President*, Society of Physics Students, Portland State University.

COMMITTEES (PCC)

2003-present Degrees & Certifications Sub-Committee
2001-2005 Teaching Learning Center (TLC) Steering Committee
2001-2002 Anatomy & Physiology Faculty Search Super Committee
2001-2002 New Science Building Design Committee
2000-2001 New Science Building Program Committee
1999-2000 Architectural Review Committee (for Cascade Campus remodel)
1999-2001 Physics Faculty Search Committee
1999-2002 Fragmeier Building Remodel Committee
1998-present Subject Area Curriculum Committee (Physics)
1998-present Subject Area Curriculum Committee (Chemistry)
1998-1999 Subject Area Curriculum Committee (Environmental Science)

PROFESSIONAL AFFILIATIONS

American Association of Physics Teachers (2001-present)
 Biophysical Society (1993-1998)
 American Physical Society (1988-Present)
 Oregon Academy of Science (1997-Present)
 Hilltop Talkers, Toastmasters International (1994-1996)
 Society of Physics Students, Portland State University Chapter (1988-1990)