

**Ronald Jay Cannon Zimmerman**  
Department of Biology  
Presbyterian College, Clinton, SC 29325  
[rzim@presby.edu](mailto:rzim@presby.edu)  
Office: (864) 833-8418, Cell: 864-923-1918

### **Faculty Positions**

1991-Present      Biology Department, Presbyterian College  
Clinton, SC

### **Education**

1991      Research Associate (NIH Postdoctoral Fellowship)  
Department of Microbiology and Immunology  
Vanderbilt University School of Medicine  
Nashville, TN

1990    Ph.D.      Department of Biology, Vanderbilt University  
Nashville, TN

1979    B.A.      Goshen College, Goshen, IN

### **Currently Teaching**

Cell Biology (Biology 209)  
Biochemistry II (Biology/Chemistry 308)  
Immunology (Biology 318)  
General Biology (Biology 101, 102, 105, 106)  
Principles of Biology (Biology 111)  
Natural History and Ecology of the Colorado Plateau (May 1995 and 2003)  
Freshman Seminar: DNA Fingerprinting (2005)  
Safari Serengeti (May 2010)  
Kenya Maymester (May 2012)

### **Areas of Interest**

Cell Biology, Immunology, Molecular Biology, Parasitology

### **Other Teaching Experience**

1980-1983      Secondary School Teacher  
Chikankata Secondary School  
Chikankata, Zambia  
(Biology, Chemistry, Physics, English Literature,  
Acting Head of Science Department)

## Other Professional Activities

2014-2015	External Tenure and Promotion Reviewer, University of South Carolina-Aiken
2014-2015	External Promotion Reviewer, High Point University
2014-present	Chair, Biology Department, Presbyterian College
2013-2015	Faculty Representative, Educational Program Committee, Presbyterian College Board of Trustees
2013-2015	Faculty Status Committee, Presbyterian College
2012-2013	Acting Chair, Biology Department, Presbyterian College, Spring Semester
2012-2013	National Academies Education Fellow in the Life Sciences
2012-2015	Member, Student Life Council, Presbyterian College
1995-Present	Advisor, Tau Psi Chapter, Tri-Beta Biology National Honor Society, Presbyterian College
2010-2011	Member, Absence Committee, Presbyterian College
2010-2011	Member, Honor Council, Presbyterian college
2002-2010	Chair, Health Science Advisory Committee, Advisor for Premedical Students, Presbyterian College
1998-2014	Chair, Institutional Animal Care and Use Committee, Presbyterian College
2007-2010	Member, Academic Affairs Council, Presbyterian College
2009	Presbyterian College Summer Research Program, "Polymerase Chain Reaction Detection of Genetically Modified Foods" with Caitlin Basnight
2008	Presbyterian College Summer Research Program, "Screening for Medium-Chain Acyl-CoA Dehydrogenase Deficiency in Adults in South Carolina" with Caitlin Rintz

2007-2008	Member, Curriculum Subcommittee, Academic Affairs Council, Presbyterian College
2007-2014	Events Coach, Science Olympiad Team, Bell Street Middle School, Clinton, SC.
2001-2007	Science Facility Planning Commission, Faculty Shepherd, Presbyterian College
1999-2006	External Member, Institutional Animal Care and Use Committee, Newberry College
2007	Judge, Laurens School District 55 Science Fair, Laurens High School, Laurens, SC, March 23, 2007
2006	Prospective Student Open House, Spartanburg, SC, October 28, 2006
2006	Sabbatical, Research at Greenwood Genetics Center, Greenwood SC, "Sequencing of PDCD8 Gene " and "Detecting Microduplications in the L1CAM Gene" Spring Semester
2006	Events Coach, Science Olympiad Team, Bell Street Middle School, Clinton, SC, Spring Semester
2003	Significant Student Scholarship Conference, Session Moderator, Presbyterian College
2002	NSF Chautauqua Short Course "Geology and Ecology of the Colorado Western Slope", Grand Junction, CO.
2000-2002	Health Science Advisory Committee, Advisor for Pre-Dental and Pre-Veterinary Students, Presbyterian College
1999	Sabbatical, Research at Greenwood Genetics Center, Greenwood SC, "The Role of Mutations in L1-CAM Gene in X-Linked Hydrocephaly", Spring Semester
1998-2001	Member, Academic Affairs Council, Presbyterian College
1996-2000	Health Science Advisory Committee, Advisor for Pre-Pharmacy Students, Presbyterian college
1996	NSF Chautauqua Short Course "The Biology of Cancer", Orlando, FL

1992-1995 Member, Student Affairs Council, Presbyterian College

### **Awards and Honors**

2012-2013 National Academies Education Fellow in the Life Sciences

1991-1994 Belk Fellowship, Presbyterian College

1989 Ph.D. Dissertation Enhancement Award,  
Vanderbilt University

1985-1989 Harold Sterling Vanderbilt Graduate Fellowship,  
Vanderbilt University

### **Professional Societies**

South Carolina Academy of Science

### **Publications**

Suann Yang, Tarren Shaw, and Ronald Zimmerman (2014), Faculty and Student Perceptions of Learning in an Inquiry-based Introductory Biology Course, *American Biology Teacher*, (in press).

Caitlin Rinz, Ron Zimmerman, Tim Wood (2009), Screening for Medium Chain Acyl-Coenzyme A Dehydrogenase Deficiency in Adults in South Carolina. *Proceedings of the National Conference of Undergraduate Research*.

Matt Madden, Ron Michaelis, Ron Zimmerman (2003), The Involvement of Mutations in G Protein Receptor 50 (GPR50) in X-Linked Mental Retardation (XLMR). *Bulletin of the South Carolina Academy of Science*.

Jenny Bell, Sarah Plank, Ron Michaelis, Ron Zimmerman (2000), Methyl-CpG-Binding Protein 2 and Its Link to Autism. *Bulletin of the South Carolina Academy of Science*.

Sarah Plank, Jenny Bell, Ron Michaelis, Ron Zimmerman (2000), Neurofibromatosis Type 1 Gene and Its Link to Autism. *Bulletin of the South Carolina Academy of Science*.

R.C. Zimmerman and C.E. Carter (1995), *In Vitro* Culture of *Schistosoma japonicum* Eggs: Synthesis and Release of a 140 Kilodalton Glycoprotein with Leucine Aminopeptidase Activity. *Acta Medica Philippina* 31 (3): 87-102.

J.D. Liberatos, R.C. Zimmerman, C.E. Carter (1992), *In Vitro* Culture of *Schistosom japonicum* Eggs: Synthesis of a 70 kilodalton Heat Shock Protein. *Proceedings of the Louisiana Academy of Sciences*.

J.D.Liberatos, R.C. Zimmerman, C.E. Carter (1989), *In Vitro* Culture of *Schistosoma japonicum* Eggs: Synthesis of an Immunogenic 70 Kilodalton Heat Shock Protein (HSP-70). *FASEB Journal* 3 (4):1340.

### **Supervision of Student Honors Research Projects**

Caitlin Rinz (2009-2010) Screening for Medium Chain Acyl-Coenzyme A Dehydrogenase Deficiency in Adults in South Carolina

Sean Foley (2008), Do Mutations in MAGT1 Cause Congenital Disorders of Glycosylation?

Vidya Fleetwood (2007), Do Mutations in SLC35A2 Cause Congenital Disorders of Glycosylation?

Thomas Knackstadt (2007), Identifying Mutations in COH1 that Cause Cohen's Syndrome.

Katie Thomas (2006), Identifying Mutations in CHD7 that Cause CHARGE Syndrome.

Matt Madden (2003), The Involvement of Mutations in G Protein Receptor 50 (GPR50) in X-Linked Mental Retardation (XLMR).

Andrew Evans (2001), Defective Herpes Virus Expressing GAD65 Injected into the Inferior Colliculus.

Jenny Bell (2000), Methyl-CpG-Binding Protein 2 and Its Link to Autism.

Sarah Plank (2000), A Polymorphic Tetranucleotide Repeat Within the NF1 Gene and its Possible Link to Autism.

Julie Adair (1999), Sequencing of the SALL1 Gene for Mutations in Townes-Brocks Syndrome.

Meredith Koegler (1996-97), Determination of the Phylogenetic Relationship between Three Subspecies of Wild Turkey using the Sequence of the 28S Ribosomal RNA Gene D1 Region.

Craig Sanders (1996), Phylogeny of the Family *Ictaluridae* Based on the Nucleotide Sequence of the 28S Ribosomal RNA Gene.

David Wilkes (1996), DNA Nucleotide Sequence and Restriction Enzyme Map of the 28S Ribosomal RNA Gene of the North American Wild *Turkey Meleagris gallapavo*.

Hearon McCravy (1994), Determination of the Relative Phylogeny of the Seahorse (*Hippocampus sp.*) from the Sequence of the 28S Ribosomal RNA Gene.

Andrew Welch II (1994), Phylogeny of the Pipefish (*Sygnathus floridae*) from the Sequence of the 28S Ribosomal RNA Gene.

### **Meetings Attended (Papers Presented)**

South Carolina Academy of Science, Charleston, SC, April 2010.  
(Caitlin Rinz, Ron Zimmerman, Tim Wood, Screening for Medium Chain Acyl-Coenzyme A Dehydrogenase Deficiency in Adults in South Carolina.)

National Conference of Undergraduate Research, LaCrosse, WI, April 2009.  
(Caitlin Rinz, Ron Zimmerman, Tim Wood, Screening for Medium Chain Acyl-Coenzyme A Dehydrogenase Deficiency in Adults in South Carolina.)

National Association of Advisors for the Health Professions (NAAHP), Chicago, Ill, June, 2008.

National Association of Advisors for the Health Professions (NAAHP), Washington DC, June 28-July 3, 2004.

The Teaching Professor Conference, Philadelphia PA, May 21-23, 2004.

National Center for Biotechnology Information Workshop, University of South Carolina, Columbia SC, March 16, 2004

South Carolina Academy of Science, Clemson SC, 2003

Southeastern Society of Parasitologists, Boone NC, 2002

South Carolina Academy of Science, Clinton SC, 2000  
(Session Chair)

Planning Facilities for Undergraduate Natural Science Communities, Project Kaleidoscope 2000 Summer Institute, Keystone CO, 2000

South Carolina Academy of Science, Greenwood SC, 1999

Annual Meeting, American Society of Biochemists and Molecular Biologists,  
San Francisco, CA, 1999

Annual Meeting, American Society of Biochemists and Molecular Biologists,  
Washington DC, 1998

South Carolina Academy of Science, Columbia SC, 1997

Southeastern Society of Parasitologists/ Association of Southeastern Biologists,  
Greenville, SC, 1997

American Society of Parasitologists, Nashville, TN, 1997

American Society of Parasitologists, Fort Collins CO, 1994

American Society of Parasitologists, Philadelphia, PA, 1992

FASEB/American Association of Immunologists, Atlanta, GA, 1991  
(Cloning of the 140 Kilodalton Glycoprotein of *Schistosoma japonicum*  
Soluble Egg Antigen.)

Southeastern Society of Parasitologists, Boone, NC, 1991  
(The 140 Kilodalton Glycoprotein of *Schistosoma japonicum* Soluble Egg  
Antigen has Leucine Aminopeptidase Activity.)

American Society of Parasitologists, Vancouver BC, 1989  
(Cloning of a *Schistosoma japonicum* gene encoding a 140 Kilodalton  
component of Soluble Egg Antigen.)

American Society of Parasitologists, Winston-Salem NC, 1988

American Society of Parasitologists, Athens GA, 1985

### **Other Presentations**

Formative Assessments, Teaching Excellence Workshop, Presbyterian  
College, May 2013

STEM (Science, Technology, Engineering and Math) Workshop, Laurens  
County District 55 and 56 K-12 teachers, June 2011 and June 2012 (Planned and  
led morning activities for teachers designed to improve understanding of science  
principles)

Faculty Forum, Presbyterian College, "Tanzania Maymester," Fall, 2010

The Scientific Side of Creation, First Presbyterian Church, Laurens, SC  
Adult Bible School, June 22, 2009

Faculty Forum, Presbyterian College, "My Sabbatical at Greenwood  
Genetics Center," Fall, 2006.

Introduction to Anatomy: The Fetal Pig, South Carolina Academy of  
Science, Western MESAS Fall Workshop, Lander University, Greenwood, SC,  
October 28, 2006

Evolution, Creation, and Intelligent Design, Seven Oaks Presbyterian  
Church, Columbia, SC, October 5, 2005

Animal Cell Tissue Culture Techniques, Biotechnology Workshop for  
Southeastern Community College Faculty and Staff, Erskine College, July 8,  
2005

May Russell Faculty Workshop, Presbyterian College, "Active  
Learning/Active Learners", May 2005

May Russell Faculty Workshop, Presbyterian College, "Fleximester and  
Travel Courses", May 2004 (with Dr. Mike Nelson)

Faculty Forum, Presbyterian College, "Geology and Ecology of the  
Colorado Western Slope", 2002.

Presbyterian College Board of Trustees, "Vision and Needs of the  
Presbyterian College Science Program", 2002.

Presbyterian College Board of Visitors and Parents Council, "Vision and  
Needs of the Presbyterian College Science Program", 2002.

Presbyterian College Alumni Board, "Vision and Needs of the  
Presbyterian College Science Program", 2002.

Faculty Forum, Presbyterian College, "L1-CAM and X- Linked  
Hydrocephaly", 2000.

**References: Available on Request**