

## CURRICULUM VITAE

### Timothy Patton Scott

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### Present Positions at Texas A&M University, College Station, TX:

Associate Dean for Undergraduate Programs, Colleges of Science

CoDirector for Center for Mathematics & Science Education, Colleges of Education/Human Development & Science

Senior Lecturer, Department of Biology, College of Science

Assistant Professor, Department of Neuroscience & Experimental Therapeutics, College of Medicine, Texas A&M Health Science

### Education:

Ph.D. Zoology, Texas A&M University, 1996

Research: Endohelminth Fauna of the American Alligator (*Alligator mississippiensis*)

M.S. Biology, Texas A&M University, 1989

Research: Chemical Ecology of the American Alligator (*Alligator mississippiensis*)

B.S. Louisiana College, Majors: Biology and Chemistry, 1987

### Previous Experience:

#### Courses taught:

Biol 114 Introductory Biology II

Biol 481 Seminar

Caen 101/289 Succeeding in College

Mana 901 Gross Anatomy

Zool 107 Zoology

Zool 219 (319) (Integrated) Human Anatomy/Physiology I

Zool 220 (320) (Integrated) Human Anatomy/Physiology II

#### Advising/Outreach:

Hosted 60 Public School Teachers for day long Workshop in Laboratory to build Vertically Aligned Curriculum, 2000.

Senior Academic Advisor/Director of Undergraduate Programs, Department Biology, Texas A&M University, 1999-2000

University Jump Start Program, Corpus Christi, Houston and San Antonio, Texas. *Instructor and Presenter.* 1999-2000

Teaching Faculty, Bridge to Medicine Program, Texas A&M Health Science Center, Instructor, 1993-1996

**Assistantships:**

Undergraduate Advisor Assistantship, Department of Biology, Texas A&M University, 1988-1989

Teaching Assistantship, Texas A&M University, 1987-1989

Biol 123 Introductory Biology Laboratory I

Zool 220 Human Anatomy/Physiology II Laboratory

Zool 434 Regulatory and Behavioral Physiology

Teaching Assistantship, Louisiana College, Pineville, Louisiana, 1984-1987

General Biology

Human Physiology

General Zoology

General Botany

**Grants and Awards:**

Texas Education Agency Science Initiative – Phase III. \$63,250.00. PI. September 2006 – August 2007.

Texas Regional Collaborative for Excellence in Science Teaching. \$105,000.00. PI. September 2006 – August 2007.

Texas Education Agency Science Initiative – Phase II. \$250,000.00. PI. September 2005 – August 2006.

Texas Regional Collaborative for Excellence in Science Teaching. \$174,000.00. PI. September 2005 – August 2006.

National Science Foundation – Policy Research Initiative in Science Education to Improve Teaching and Learning in High School Science. \$2,492,489.00. Co-PI. March 2005 – March 2010

Texas Education Agency Science Initiative – Phase 1. \$275,000.00. PI. January 2005 – August 2005.

Sid Richardson Gift to support the Center for Math and Science Education – \$190,000.00. PI. April 2005 – April 2007.

Texas Higher Education Coordinating Board Type B Grant for Middle School Science. \$81,632.00. PI. April 2005 – May 2006.

Texas Higher Education Coordinating Board Type B Grant for Middle School Science - \$80,000.00. PI. September 2004 – August 2005.

Texas Higher Education Coordinating Board Type B Grant for Physics. \$80,000.00. PI. September 2004 – August 2005.

United State Department of Agriculture – Agriculture Service Southern Plains Area Future Scientists Student Outreach Initiative - \$360,000.00. PI. 2004 – 2007.

NSF Science, Technology and Engineering Program Retention Through an Applied Physics, Engineering, and Mathematics Model - CoPI \$2,000,000. 2003-2008.

Texas Education Agency Continuation AP Participation and Student Success at Texas A&M University - \$80,000.00. PI. December 2003 – May 2004.

Regents' Initiative Grant to the Center for Science and Mathematics Education - Indicators of Science Excellence Project - \$10,000. CoPI. June 2003 - May 2004.

Texas Parks and Wildlife Department contract to Analyze Stomach Contents of Alligators from Southeast Texas - \$6,000.00. Summer 2003-2004

Texas Education Agency AP Participation and Student Success at Texas A&M University - \$90,000.00. PI. March 2003 – October 2003.

Sid Richardson Gift to establish Math and Science Scholars Program (Science & Math Teacher Recruiting Effort – \$300,000.00. 2002-2004.

Texas Education Agency Factual Error Identification for Public School Science Texts - \$105,000.00. Director of Project. Summer 2001-2002.

TAMUS Regents Initiative Academy for Educator Development Fellowship - \$20,000.00. Technology-Mediated Instructional Materials in Teaching Mathematics in High Schools. CoPI. 2001.

NSF Texas Collaborative for Excellence in Teacher Preparation Texas A&M University System Grant - \$5 million. CoPI and Campus Leader. Awarded 2001.

NSF Center for Application of Information Technology in Teaching and Learning Science - \$10 million. Assistant Director. Awarded 2000.

TAMUS Regents Initiative Academy for Educator Development Fellowship - \$20,000.00. Development of the Science Classroom Observation Protocol System (SCOPS). CoPI. 2000.

Stuart Products gift to laboratory to study effects of Vitamin E and Thiamin supplementation on growth of juvenile American Alligators - \$3,000.00. 1999.

**Recognition:**

President's Award for Academic Advising. Texas A&M University. 2005

Texas Alliance for Science, Technology and Mathematics Education Advocate Award. 2002

Aggie T-Camp Namesake. 2001.

Aggie Fish Camp Namesake. 1998.

Association of Former Students Distinguished Teaching Award. College Level. 1998.

Association of Former Students Distinguished Graduate Student (Master's Level)

Research Award. Texas A&M University. 1990.

Department of Biology Teaching Assistant of the Year (Master's Level). Texas A&M University. 1989.

### **Manuscripts and Publications:**

Schroeder, C.M., T.P. Scott, H. Tolson, T. Huang, Y. Lee. 2007. A Meta-Analysis of National Research: The Effects of Teaching Strategies on Student Achievement in Science. *Journal of Research in Science Teaching*, volume 44:10.

Scott, T.P., J. Parrott, C. Stuessy, K.P. Blount, A. Bentz. 2007 Math and Science Scholars Program: A Model for the Recruitment and Retention of Preservice Mathematics and Science Teachers.

Preservice Mathematics and Science Teachers. In Press *Journal of Science Teacher Education*.

Schroeder, C.M. and T. Scott. 2006. Effective Instructional Strategies in Science Booklet prepared for the Texas Education Agency.

Schroeder, C.M. and T. Scott. 2006. Rubric to Evaluate Effective Instructional Strategies for Independent School Districts across Texas. Prepared as a result of work with Texas Education Agency.

Schroeder, C.M. and T. Scott. 2006. State of Science Education in Texas. White Paper prepared for the Texas Education Agency.

Scott, T.P., H. Tolson, A. Bentz, and Y. Lee. 2004. Assessment of Advanced Placement (AP) Participation and Success at Texas A&M University. Report for the Texas Education Agency.

West, M., T.P. Scott, and S. Simcik. 2000. New Record of Endohelminths of the Alligator Snapping Turtle (*Macroclémys temminckii*). *Comparative Parasitology* 67(1):122-124.

Scott, T.P., S. Simcik, and T. Craig. 1999. A Key to some Pentastome, Nematode, and Trematode Parasites of the American Alligator. *Texas Journal of Science* 51(2):127-138.

VanDeGraaff, K.M., Scott, T.P., and K. Leiner, 1998. *Human Anatomy and Physiology Laboratory Manual*. McGraw Hill, Dubuque, Iowa. 386 pp.

Scott, T.P., and B.G. Foster. 1997. *Salmonella* spp. in Free Ranging and Farmed Alligators (*Alligator mississippiensis*) from Texas and Louisiana. *Aquaculture* 156:179-181.

Scott, T.P., S. Simcik, and T. Craig. 1997. Endohelminths of American Alligators (*Alligator mississippiensis*) from Southeast Texas. *Journal of The Helminthological Society of Washington* 64(2):258-262.

Scott, T.P. and R.B. Simpson. 1996. *Scopulariopsis* in American Alligator. Crocodile Specialist Group Newsletter 15(2):24.

Scott, T. P. and P. J. Weldon. 1990. Chemoreception in the Feeding Behaviour of Adult American Alligators (*Alligator mississippiensis*). Animal Behaviour 39:2.

Weldon, P. J., T. P. Scott and M. J. Tanner. 1990. Analyses of Gular and Paracloacal Gland Secretions of the American Alligator (*Alligator mississippiensis*) by Thin-Layer Chromatography: Gland, Sex, and Individual Differences in Lipid Components. Journal of Chemical Ecology 16:1.

### **Reviewed Works:**

Anatomy and Physiology. 1999. Kenneth S. Saladin.

Anatomy and Physiology. 1999. Rod Seeley, Trent Stephens, and Philip Tate.

Status and Conservation of the American Crocodile in Belize. 1999. For publication in Biological Conservation.

Concepts of Human Anatomy and Physiology, Fifth Edition. 1998. Kent M. VanDeGraaff and Stuart Ira Fox.

Determination of Four Fluoroquinolones in Milk by On-Line Immunoaffinity Capture Coupled with Column HPLC. 1998. C.K. Holtzapple, S.A. Buckley, and L.H. Stanker. Reviewed for the U.S.D.A. for publication in the Journal of the Association of Analytical Chemistry.

### **Presentations/Conferences/Reviews:**

Schroeder, C., Scott, T., Tolson, H., Huang, T.-Y., Lee, Y.-H. (2007, April). A Meta-Analysis: The Effects of Teaching Strategies on Science Achievement. Paper presentation at the National Association for Research in Science Teaching (NARST) Annual International Conference, New Orleans, LA.

National Science Foundation Science, Technology, Engineering and Mathematics Expansion Program. 2006. *Invited Reviewer*. Washington, D.C.

Texas Regional Collaborative for Excellence in Science Teaching Annual Meeting. 2006. *Presenter*. Austin, Texas.

Conference for the Advancement of Science Teaching. 2005. *Presenter*. Houston, Texas.

Harris County Department of Education. 2005. *Presenter*. Houston, Texas.

National Assessment of Education Progress. 2005. *Presenter/Host*. Austin, Texas.

Science Education Service Center Specialist Network. 2005. *Presenter*. Austin, Texas.

Texas Science Careers Consortium. 2005. *Presenter*. Austin, Texas

Texas Science Education Leadership Association. 2005. *Presenter*. Austin, Texas.

Texas Urban Science Council. 2005. *Presenter*. Austin, Texas.

Bryan Independent School District Professional Development – Science and Mathematics Excellence for All Students Conference with the Texas Education Agency and the Texas Collaborative for Excellence in Teacher Preparation. 2004. *Host*. Bryan, Texas.

Mexican American Engineers and Scientists Annual Conference Recruiting Day for Undergraduates. 2004. *Host*. College Station, Texas.

Fifth Annual Texas Teacher Forum. 2002. *Panelist*. San Antonio, Texas.

NSF Multiple Dissemination Project Chemistry Workshops. 2002. *Official Host*. College Station, Texas

Texas A&M Regents' Initiative Collaborative Research Conference. 2004. *Presenter*. College Station, Texas.

University Advisors and Counselors Monthly Seminar. 2004. *Invited Speaker*. College Station, Texas.

TAMUS Regents' Initiative Chancellor's Conference. 2002. *Invited Speaker*. Houston, Texas.

TAMUS Regents' Initiative Research Collaborative Conference. 2002. *Invited Speaker*. College Station, Texas.

Texas Education Agency Administrators MidWinter Conference. 2002. *Invited Speaker*. Austin, Texas.

Texas Education Agency Commissioner's Conference on Student Success. 2002. *Invited Speaker*. Arlington, Texas.

Governor's Business Council – Math Initiative. 2000. *Invited Speaker*. Austin, Texas.

Transfer Issues Related to PreMed Students. University Advisors and Counselors Symposia. 2000. *Invited Speaker*. College Station, Texas

Parasites and the Natural History of the American Alligator. Texas Herpetological Society. 1999. *Invited Speaker*. College Station, Texas

Disease Surveillance in the American Alligator (*Alligator mississippiensis*). Exotic Wildlife Production Management and Utilization Conference in association with the Veterinary Continuing Education Program. 1995. *Invited Speaker*, College Station, Texas

ExCEL (Excellence in Culture, Education & Leadership) *Panelist*. 1994-2005. College Station, Texas

*Panelist*. Assessing America's Educational System. Hugh O'Brien Youth Foundation - Texas North Leadership Seminar. 1993. *Invited Speaker*. Dallas, Texas.

## **Committees, Panels and Task Forces:**

### **University:**

Maximizing Educational Development through Academic and Leadership Skills. 2007-Present

Academic Scholarship Selection Committee Member. 2006 - Present

College of Science Diversity Committee. 2003-Present.

College of Science Education Committee (Chair). Texas A&M University. 2000-Present.

College of Science Undergraduate Curriculum Committee (Chair). Texas A&M University. 1998-Present.

Health Professions Advisory Committee. Texas A&M University. 1993-Present.

Life Science Task Force for the Career Center. Texas A&M University. 1998-Present.

University Academic Operations Committee. 2003-Present.

University Council on Teacher Education. Texas A&M University. 1999 Present.

University Curriculum Committee Vice Chair. 2003-Present.

Presidential Taskforce on Admissions. 2004

Regents' Initiative Presidential Advisory Council Member. 2004.

University Advisors and Counselors. Texas A&M University. 1994-2004 Present. (Executive Committee 1999-2004; President 2001/2002).

A&M Mentors. Texas A&M University. 1991-2002.

Department of Biology Undergraduate Programs Committee. Texas A&M University. 1998-2001.

TAMU Academy of Educator Development. Texas A&M University. 2000.

Faculty Senate Subcommittee on the Status of Lecturers. Texas A&M University. 1998-2000.

University Exploratory Committee for the Creation of a Interdisciplinary Biotechnology Degree/Professional Program in Biotechnology. 1999-2000.

Mock Interview Panel for Office of Professional School Advising. Texas A&M University. 1997-1998.

Special Task Force to investigate Academic Rigor of Biomedical Science Program. College of Veterinary Medicine, Texas A&M University. 1996 1997.



### **Graduate Committees:**

Rebecca Allen, M.Ed. – EDCI (graduated 2006): Committee Member  
Candice Leigh Appel, M.Ed. – EDCI (graduated 2005): Committee Member  
Danielle Bairrington, M.Ed. – EDCI (graduated 2006): Committee Member  
Timothy Bayliss, M.Ed. – EDCI (graduated 2005): Committee Member  
Jodi Lee Bollinger, M.Ed. – EDCI (graduated 2006): Committee Member  
Jonathan J. Cerny, M.Ed. – EDCI (graduated 2005): Committee Member  
Hollie Chambers, M.Ed. – EDCI (graduated 2005): Committee Member  
Robyn Clemens, M.Ed. – EDCI: Committee Member  
Amber Countryman, M.Ed. – EDCI (graduated 2006): Committee Member  
Jared Crawford, M.S. – ZOOL (graduated 2003): Committee Member  
Marcus Crim, M.S. – ZOOL (graduated 2006): Committee Member  
Lauren Edmonds, M.Ed. – EDCI (graduated 2006): Committee Member  
Christine Farris, M.S. – EDAD (graduated 2003): Committee Member  
Beverly Fennessy, M.Ed. – EDCI (graduated 2005): Committee Member  
Cynthia Fernandez, Ph.D. – EDAD: Committee Member  
Barry Furman, M.S. – ENTO (graduated 2000): Committee Member  
Barry Furman, Ph.D. – ENTO (graduated 2006): Committee Member  
Veronica Garsee, M.Ed. – EDCI: Committee Member  
Amanda Gilliam, M.Ed. – EDCI: Committee Member  
Jill Hafford, M.Ed. – EDCI: Committee Member  
Susan Harvey, M.Ed. – EDCI (graduated 2005): Committee Member  
Alison Hunyar, M.Ed. – EDCI (graduated 2006): Committee Member  
David LaFever, M.S. – WFSC (graduated 2006): Committee Member  
Trey Landers, M.Ed. – EDCI (graduated 2005): Committee Member  
Pablo Lavin-Murcio, Ph.D. – WFSC (graduated 1998): Committee Member  
Clinton Manning, M.Ed. – EDCI: Committee Member  
Dorian Martin, Ph.D. – EHRD: Committee Member  
John Milam, Ph.D. – EDCI: Committee Member  
Andrea Miller, M.Ed. – EDCI: Committee Member  
Anna Murchison, M.Ed. – EDCI (graduated 2004): Committee Member  
Yancey Price, M.Ed. – EDCI (graduated 2005): Committee Member  
Abbie R. Prince, M.Ed. – EDCI (graduated 2005): Committee Member  
Ganiva Reyes, M.Ed. – EDCI (graduated 2006): Committee Member  
Ludivine Russell, M.Ed. – EDCI (graduated 2006): Committee Member  
Rennie Russo, M.Ed. – EDCI: Committee Member  
Jeremy Sexson, M.Ed. – EDCI: Committee Member  
Allia Shelby, M.Ed. – EDCI: Committee Member  
Steven Simcik, Ph.D. – WFSC (graduated 1999): GCR  
Tiffany A Sjogren, M.Ed. – EDCI: Committee Member  
Breana Nicole Smith, M.Ed. – EDCI (graduated 2006): Committee Member  
Shelle Smith, M.Ed. – EDCI (graduated 2006): Committee Member  
Amy Spencer, M.Ed. – EDCI (graduated 2005): Committee Member  
Christopher Stein, M.Ed. – EDCI (graduated 2001): Committee Member  
Jon Swart, M.S. – ZOOL (graduated 2001): CoChair Committee  
Jason Tully, M.Ed. – EDCI (graduated 2006): Committee Member  
Derek Veazey, M.S. – WFSC (graduated 1999): Committee Member  
Jeffrey Layne Wyatt, M.Ed. – EDCI: Committee Member

Tiffany Zinglemann, M.Ed. – EDCI: Committee Member

**State/National:**

Earth and Space Science Texas Summit, Southwest Educational Development Laboratory, *Panelist*, 2007.

Texas Education Agency Commissioner's Science Roundtable Committee. 2003-Present.

Texas Science Careers Consortium. 2004-Present.

State Board for Educator Certification Advisory Committee Member 2005.

State Board for Educator Certification Master Science Teacher Certification Committee. 2004.

Texas Alliance for Science, Technology, and Mathematics Education. *Board Member*. 2000-2004.

State Board for Educator Certification Master Mathematics Teacher Certification Committee. 2003.

Texas Association of Advisors for the Health Professions. 1993-2000.

**University Service:**

Texas A&M Mentors. 1990-Present

Aggie Science. Texas A&M University. Faculty Advisor. 2001-2002.

One Army. Texas A&M University. Faculty Advisor. 2001-2002.

Beta, Beta, Beta. Texas A&M University. Speaker at Induction Banquet. 1994, 1996, 1998, 2001.

Christian Leadership Conference. Faculty Advisor. 1997-2001.

Pre-Medical Society. Texas A&M University. Faculty Advisor. 1994-2000

Zoology Club. Texas A&M University. Speaker. 1996-2000; Faculty Co- Sponsor.

Microbiology Society. Texas A&M University. Faculty Advisor. 1994-1995.

TAMU Cancer Awareness Society. Faculty Advisor. 1992, 1993, 1994.

**Professional and Honorary Societies:**

Crocodile Specialist Group/Species Survival Commission/World Conservation Union – *Elected Member* 2000 – Present

Phi Kappa Phi – Public Relations Officer. 2005

Who's Who among America's Teachers. 1996, 1998, 2000, 2001, 2002

Southwestern Association of Parasitologists. 1995.

American Society of Zoologists. 1988.