

Megan R. Wise de Valdez, M.S., Ph.D.

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School of Arts & Sciences

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A. EDUCATION

Ph.D. in Zoology - 2005 Colorado State University

M.S. in Biology - 1998 University of Nebraska-Lincoln

B.S. in Biology – 1995 University of Nebraska-Lincoln

B. TEACHING EXPERIENCE

- Assistant Professor – Texas A & M University – San Antonio 2010 - present
- Adjunct Faculty – Front Range Community College - 2002-2009
- Instructor – Colorado State University - 2002 - 2005
- Laboratory Instructor – Colorado State University – 2000 – 2005
- Laboratory Instructor – University of Nebraska-Lincoln – 1994 – 1998

COURSES TAUGHT

- Texas A&M University-San Antonio 2010 - present

Courses Taught

- BIOL 3301 – Evolutionary Theory online
- BIOL 3375 – Economic Entomology
- BIOL 3401 – Invertebrate Zoology with lab
- BIOL 3402 – Genetics with lab
- BIOL 3407 – Ecology with lab
- BIOL 4410 – Topics: Biology of Disease Vectors
- BIOL 4430 – Parasitology with lab

- Front Range Community College - 2002-2009

Courses Taught

- General College Biology with lab
- General College Biology with lab – Online hybrid course
- Biology for non-majors Biology with lab

- Colorado State University - 200 - 2005

Lecture Courses Taught

- Principles of Animal Biology
- Biology of Organisms – Animals and Plants

Laboratory Courses Taught

- Honors General Biology
- Principles of Animal Biology
- Invertebrate Zoology

- University of Nebraska-Lincoln – 1994 – 1998

Laboratory Courses Taught

- Introductory Zoology
- Invertebrate Zoology
- Parasitology
- Biodiversity

C. SELECTED PUBLICATIONS

- Wise de Valdez, M. R.**, D. Nimmo, H-F. Gong, A. A. James, L. Alphey, W. C. Black, IV. 2011 Genetic elimination of dengue vector mosquitoes. PNAS 108:4772-4775.
- Facchinelli L., L. Valerio, G. Bond Campeón, **M. R. Wise de Valdez**, L. C. Harrington, J. M. Ramsey, M. Casas-Martínez, T. W. Scott. 2011 Development of a semi-field system for Contained Field Trials with *Aedes aegypti* in Southern Mexico. American Journal of Tropical Medicine and Hygiene. 85:248-256
- Wise de Valdez, M. R.**, E. Suchman, J. O. Carlson, W. C. Black IV. 2010. A large scale laboratory cage investigation of *Aedes* denonucleosis Virus (AeDENV). Journal of Medical Entomology. 47:392-399
- Suchman, E. L., Piper, J., **Wise de Valdez, M. R.**, Plake, E., Klecker, B., Black W. C. IV, Carlson, J. 2009. *Aedes aegypti* denonucleosis virus(AeDENV) is able to amplify, spread and persist in mosquito populations. Journal of Medical Entomology. 46(4):909-918
- Wise de Valdez, M. R. 2007** Predator avoidance behavior of *Aedes aegypti* mosquito larvae infected with mermithid nematodes (Nematoda: Mermithidae). Journal of Vector Ecology 32:150-153
- Wise de Valdez, M. R. 2006** Parasitoid-induced behavioral alterations in *Aedes aegypti* mosquito larvae infected with mermithid nematodes (Nematoda: Mermithidae). Journal of Vector Ecology 31:344-354
- Poulin, R., **Wise, M.R.**, and Moore, J. K. 2003 A comparative analysis of adult body size and its correlates in acanthocephalan parasites. International Journal for Parasitology 33: 799-805
- Wise, M. R.**, Janovy, J. Jr., and Wise, J. C. 2000 Host specificity in *Metamera sillisenorum*, N. Sp. a gregarine parasite of the leech *Helobdella triserialis* with notes on transmission dynamics. Journal of Parasitology 86: 602-606

D. Academic/professional presentations and/or other relevant professional experience

AWARDS and HONORS

- Excellence in Teaching Award – The National Society of Leadership and Success: Sigma Alpha Pi - 2013
- President's Circle Faculty Research Grant – Texas A & M University – San Antonio. \$8900 2013-2015
- Research Opportunity Award – NSF \$25,000. Collaborative Research with University of New Mexico: Unraveling a Gordian knot: Biodiversity of Gordian worms, phylum Nematomorpha, in the New World. 2013
- Faculty Excellence Award – Spring 2012: A Stipend of \$10,000 to conduct faculty-lead undergraduate research in Parasitology.
- Featured in Scientific American November 2011 Issue – The Wipe Out Gene by Bijal Trivedi. Featured in the article for the work I completed on laboratory based trials of genetically modified *Aedes aegypti* mosquitoes while at Colorado State University.
- E. Kika de la Garza Fellow – United States Department of Agriculture: Hispanic Serving Institutions. 2-week fellowship in Washington, D.C. June 26 – July 13, 2011
- Teaching Excellence Award from the Texas A & M University System – Fall 2010 and Spring 2011

PROFESSIONAL DEVELOPMENT

- American Society of Parasitologists Annual Meeting – New Orleans, LA July 2014

- American Society of Tropical Medicine and Hygiene Annual Meeting – Washington, D. C. Nov. 2013
- Southwest Teaching and Learning Conference: Texas A&M University-San Antonio 2013.
- Quality Education for Minorities (QEM) Network. Professional Development Workshop for Minority-serving Institutions and their K-12 Partners focused on the NSF MSP Program October 19-20, 2012
- Hispanic Association of Colleges and Universities (HACU) National Annual Conference: Latino Leadership Institute and Workshop. Fall 2011
- Strategies for teaching large undergraduate science classes with team-based learning and CCRS: 2-day conference hosted by Science Faculty Collaborative and the Texas Higher Education Coordinating Board – Spring 2011
- CCRIFC Mathematics & Science Summit – sponsored by the Texas Higher Education Coordinating Board: September 23-24, 2010
- Teacher Enrichment Activities and Mentoring – (Spring 2004)
- Teachers Helping Teachers Training for Faculty/Instructors – (Spring 2004)
- Curriculum development Workshops – “Backward Design” – (Spring 2004)

PROFESSIONAL SOCIETIES

- American Society of Parasitologists – 1995-2000, 2013 –
- Southwestern Association of Parasitologists – 1995-2003, 2012 – present
 - PRESIDENT ELECT – 2014
- Association of Tropical Medicine and Hygiene – 2006 – 2009
- National Association of Biology Teachers – 2003 – 2004
- Society of Vector Ecology 2002 – 2008
- American Society of Parasitologists 1997 – 2004
- Southwestern Association of Parasitologists 1995 – 2003, 2012

PRESENTATIONS or Student Papers Presented

- Student Presentation at American Society of Parasitologists – 2014: Calling behavior of adult male *Acheta domesticus* crickets infected with *Paragordius varius* (Nematomorpha: Gordiida). **A. Barquin**, B. McGehee, B. Hanelt, **M. Wise de Valdez**
- Student Presentation at Southwestern Society of Parasitologists – 2014: Calling behavior of adult male *Acheta domesticus* crickets infected with *Paragordius varius* (Nematomorpha: Gordiida). **B. McGehee**, A. Barquin, B. Hanelt, **M. Wise de Valdez**
- Student Presentation at Southwestern Association of Parasitologists 2013: Identification of reservoir hosts of *Trypanosoma cruzi* at Joint Base San Antonio-Lackland, San Antonio, Texas. **T. Luepke**¹, C. Soria¹, M. Kramm¹, M. Gutierrez¹, **M. Wise de Valdez**² and R. Lopez¹. ¹Department of Wildlife and Fisheries, Texas A&M University.
- Southwest Teaching and Learning Conference Workshop: “Modifying Team-Based Learning (TBL) to Make it Work for You.” Spring 2013
- Faculty Speaker Series – Mosquitoes of Texas: Know Your Enemy – Disease, Behavior, and Control – April 2011

- Annual Meeting of the American Society for Tropical Medicine and Hygiene – Nov. 2009 Title: A large scale laboratory cage investigation of the release of mosquitoes carrying a dominant lethal gene (RIDL[®]) for the control of *Aedes aegypti* mosquitoes.
- Annual Meeting of the American Society for Tropical Medicine and Hygiene – Nov. 2007 Title: A large scale laboratory cage investigation of Aedes Densonucleosis Virus (AeDNV) as a sustainable biocontrol method of *Aedes aegypti* mosquitoes.
- **Invited Talk** National Meeting of the Entomological Society of America – Nov. 2004: Symposium: Using principles of Ecology to Understand Populations and Communities of Container Dwelling Mosquitoes. Title: Predator Avoidance Behavior of *Aedes aegypti* Mosquito Larvae Infected with Mermithid Nematodes
- National meeting of the Society of Vector Ecology – Oct. 2003 Title: Predator Avoidance Behavior of *Aedes aegypti* Mosquito Larvae Infected with Mermithid Nematodes
- National meeting of the American Society of Parasitologists – Aug. 2003 Title: Predator Avoidance Behavior of *Aedes aegypti* Mosquito Larvae Infected with Mermithid Nematodes
- National Meeting of the Society of Vector Ecology – Sept. 2002 Title: Behavioral Alterations in Mosquito Larvae Infected with Mermithid Nematodes : **Presentation Award Winner.**
- Regional Meeting of the Southwestern Association of Parasitologist – Apr. 2002 Title: Behavioral Alterations in Mosquito Larvae Infected with a Mermithid Nematode
- National Meeting of the American Society of Parasitologists – Aug. 2000 Title: Coccidiosis Vaccines for Broiler Chickens
- Regional Meeting of the Southwestern Association of Parasitologists – Apr. 1998 Title: Host specificity in *Metamera sillisenorum*, N. Sp. a gregarine parasite of the leech *Helobdella triserialis*

UNIVERSITY SERVICE

Leadership Positions

- Program Coordinator – Biology Program 2010 – present
- President of Faculty Senate – 2012-2013
- Vice President/President-Elect of Faculty Senate – 2011-2012
- Faculty Representative to President's Leadership Council – 2011-2013
- Chair: Search Committee for Tenure-Track Biology Faculty in Animal Physiology – Spring 2013
- Chair: Search Committee for Laboratory Manager – Fall 2011
- Chair of SACS Physical Resource Committee – 2011.
- Coordinator - Biology Adjunct Hiring – 2010-present
- Faculty Advisor of TAMUSA Biology Club - 2010-present
- Chair: Curriculum Committee – 2011-2012

Committee Membership and General Service

- Science and Technology Building – STEM programming team: 2013 - present
- Search Committee for Tenure-Track Biology Faculty in Microbiology – Spring 2013

- Search Committee for Vice President of Student Affairs – Fall 2012
- Search Committee for School Head of Arts & Sciences – Spring 2012
- Biology Program Update Presentation – to Alamo Colleges Advisors Fall 2012
- International Delegate with Texas A&M University San Antonio Trade and Cultural Mission to Israel. Tel Aviv, Bersheva, and Jersulam, Israel. May 2012
- Water Conservation and Technology Committee – science faculty representative 2011- present
- Faculty Senate Constitution committee: Drafted the first Faculty Senate Constitution of TAMUSA – 2011
- Contact person for Texas A & M Agrilife Extension future programs 2011
- Liason – Medical School Recruiting: Universidad Autonoma De Guadalajara School of Medicine (an HSI) 2011-present
- Development of future academic involvement in the Irrigation Research Center planned for the new campus of TAMUSA - 2011

SERVICE BASED ON PROFESSIONAL EXPERTISE

- Coordinator for the San Antonio Regional Science Olympiad held yearly at TAMU-SA – 2012 - 2015
- CORE 4 STEM – Science Olympiad Workshop and Presentation – UTSA November 10, 2012
- Reviewer for Journal of Vector Ecology - 2011
- Visiting Entomologist – KinderCare Learning Center, August 2012
- Volunteer at the State Competition for the Science Olympiad, College Station Texas. May 2011
- Virtual Lab Presentations to each 5th grade class at Steubing Elementary School – 2011
- TAMU-SA Liaison for Native Plant Society of Texas – San Antonio Chapter: Landscape Certification Program 2012
- TAMU-SA Liaison for PEER Perspectives – Partnership for Environmental Education and Rural Health 2012 – Agricultural Teachers Workshop
- TAMU-SA Liaison with AgriLife Extension Renewable and Natural Resources for placement of Student Interns. 2011-
- Science Fair presentation to students and parents at Elm Creek elementary school – 2010, 2011
- Science Fair judge at Elm Creek elementary school – 2010
- Volunteer with biology club members at Botanica at the San Antonio Botanical Gardens – 2010, 2011