# CURRICULUM VITAE – CAROLINA E. REISENMAN

## EDUCATION:

Honor PhD in Biological Sciences (11/2000). School of Exact and Natural Sciences, University of Buenos Aires, Argentina. "Physiology of the visual system of the haematophagous bug *Triatoma infestans*: a behavioral approach".

Honor Graduate in Biological Sciences (12/1995) ("Licenciatura", 6 years). School of Exact and Natural Sciences, University of Buenos Aires, Argentina. Major in Animal Physiology.

## RESEARCH EXPERIENCE AND PROFESSIONAL APPOINTMENTS:

- Since 7/22/2013: Associate Researcher, Department of Molecular and Cell Biology, University of California, Berkeley. Research areas: Insect neuroscience and behavior; vector biology.
- 9/2012 to 6/24/2013: Associate Research Scientist, Department of Neuroscience, University of Arizona. Research areas: Insect neuroscience and behavior; vector biology.
- 7/2007 to 9/2012: Associate Staff Scientist, Department of Neuroscience, University of Arizona. Research areas: Insect neuroscience and behavior; vector biology.
- 8/2001- 7/2007: Research Associate, ARL Division of Neurobiology, University of Arizona. Research area: Insect neuroscience and behavior. Supervisor: John Hildebrand.
- 11/2000-7/2001: Postdoctoral Researcher, University of California, Berkeley. Research area: Insect vision. Supervisor: Alexander Borst.
- 7/96-7/2000: Doctoral thesis work, University of Buenos Aires, Argentina. "Visual Physiology of Insects Vectors of Chagas' Disease". PhD Advisor: Claudio R. Lazzari.
- 7/15/98- 7/15/98: Visiting Researcher, Institüt fur Neurobiologie, Freie Universitat Berlin, Berlin, Germany. "Color vision in the honeybee *Apis mellifera*". Advisor: Martín Giurfa.
- 4/95-4/96: Undergraduate Student Assistant, National Institute of Chagas Disease "Dr. Mario Fatala Chabén", Argentina. "Selection of strains of *Triatoma infestans* of high and low susceptibility to the infection by *Trypanosoma cruzi*". Advisor: Oscar D. Salomón.
- 2/2/94-3/8/94: Undergraduate Summer work, Argentine Centre of Primates, Province of Corrientes, Argentina. "Habitat structure and population characteristics of the black howler monkey (*Alouatta caraya*) in northern Argentina". Advisor: Gabriel Zunino.
- 8/92-1/94. Undergraduate Student Assistant, Laboratory of Steroids, School of Exact and Natural Sciences, University of Buenos Aires. "Enzymes involved in the last steps of aldosterone biosynthesis". Advisor: Carlos P. Lantos.

## RESEARCH INTERESTS

Insect neurobiology and behavior
Vector biology

## ONGOING AND RECENTLY COMPLETED PROJECTS:

- Role of brain-derived insulin in the regulation of feeding behavior in *Drosophila melanogaster*.
- Modulatory effects of hunger and time of the day in antennal responses and olfactory-driven behavior in *R. prolixus*.

- Neural bases of oviposition behavior in *Manduca sexta* moths: neurobiological, behavioral and chemical ecology approaches.
- Olfaction in the blood-sucking bug *Rhodnius prolixus* (a vector of Chagas disease) with the ultimate goal of developing odor-baits that could be using for monitoring/trapping triatomines in endemic areas.
- Vectorial capacity of *Triatoma rubida* (potential vector of Chagas disease) in Southern Arizona
- Analysis of strains of *Trypanosoma cruzi*, causative agent of Chagas disease, present in triatomines from Southern Arizona (in collaboration with Carlos Machado, University of Maryland).
- Analysis of the sialotranscriptome and transcriptome of *T. rubida* with the goal of identifying antigens for desensitization (in collaboration with Jose Ribeiro, NIH).

**FELLOWSHIPS AND HONORS:**

- Award by the Foreign Travel Grant Committee (International Affairs) of the University of Arizona. 2005.
- Latin American PEW Fellowship in the Biomedical Sciences. 8/2001-8/2004.
- Best Doctoral Thesis in Entomology (section Ecology and Biology) accomplished in an Argentinean University during 1998-2000 (awarded by the Argentinean Society of Entomology).
- Fellowship for Doctoral Research (advance, University of Buenos Aires). 4/99-11-2000.
- Fellowship for Doctoral Research (beginner, University of Buenos Aires). 3/97-3/99.
- Fellowship awarded by the DAAD for accomplishing research in Germany. 7/98- 10/98.
- Postgraduate Fellowship (Fundación OSDIC, Argentina). 1997-1998.
- Undergraduate Research Fellowship for Outstanding Students in Sciences and Social Studies. (Fundación Antorchas, Argentina). 4/95–4/96.

**PUBLICATIONS (PEER-REVIEWED RESEARCH ARTICLES, REVIEWS AND BOOK CHAPTERS):**

1. Heinbockel T, Shields V, **Reisenman CE** (2013). Signaling mechanisms and glomerular interactions in olfactory processing channels of the antennal lobes. Journal of Comparative Physiology A 199: 929-946. 10.1007/s00359-013-0842-6
2. **Reisenman CE**, Lee Y, Gregory T, Guerenstein PG (2013). Effects of starvation on the olfactory responses of the blood-sucking bug *Rhodnius prolixus*. Journal of Insect Physiology 59: 717-721. http://dx.doi.org/10.1016/j.jinsphys.2013.04.003
3. **Reisenman CE**, Riffell JA, Duffy K, Pesque A, Mikles D, Goodwin B (2013). Species-specific effects of herbivory on the oviposition behavior of the moth *Manduca sexta*. Journal of Chemical Ecology 39: 76-89. DOI 10.1007/s10886-012-0228-1
4. **Reisenman CE**, Gregory TL, Savary W, Cowles J, Hildebrand JG (2012). Distribution and abundance of triatomine insects in a metropolitan area in southern Arizona, USA. Journal of Medical Entomology 49: 1254-1261. http://dx.doi.org/10.1603/ME12139
5. Ribeiro JMC, Assumpção CF, Pham VM, Francischetti IMB, **Reisenman CE** (2012). An insight into the sialotranscriptome of *Triatoma rubida*. Journal of Medical Entomology 43: 563-572.

6. Martin J, Dacks AM, Beyerlein A, **Reisenman CE**, Riffell J, Lei H, Hildebrand JG (2011). The neurobiology of insect olfaction: sensory processing in a comparative context. Progress in Neurobiology 95: 427-447.
7. Lei H., **Reisenman C.E.**, Wilson C., Gabbur P, Hildebrand JG (2011). Spike patterns and their functional implications in the antennal lobe of the tobacco hornworm *Manduca sexta*. PLoS ONE 6(8): e23382. doi: 10.1271/journal.pone.0023382
8. **Reisenman CE**, Gregory T, Guerenstein PG, Hildebrand JG (2011). Feeding and defecation behavior of *Triatoma rubida* (Uhler, 1894) (Hemiptera: Reduviidae) under laboratory conditions, and its potential role as vector of Chagas disease in Arizona, USA. American Journal of Tropical Medicine & Hygiene 85: 648-656.
9. **Reisenman CE**, Dacks A, Hildebrand JG (2011). Local interneuron diversity in the primary olfactory center of the moth *Manduca sexta*. Journal of Comparative Physiology 197: 653-665.
10. Dacks AM, **Reisenman CE**, Paulk AC, Nighorn AJ (2010). Histamine-immunoreactive local neurons in the antennal lobes of the Hymenoptera. Journal of Comparative Neurology 518: 2917-2933.
11. Kalberer N, **Reisenman CE**, Hildebrand JG (2010). Male moths bearing transplanted female antennae express characteristically female behaviour and central neural activity. Journal of Experimental Biology 213: 1272-1280. *(This article was recommended by Faculty of 1000).*
12. **Reisenman CE**, Riffell JA, Bernays E, Hildebrand JG (2010). Antagonistic effects of floral scent in an insect-plant interaction. Proceedings of the Royal Society of London B 277: 2371-2379.
13. **Reisenman CE**, Lawrence G, Guerenstein PG, Gregory T, Dotson E, Hildebrand JG (2010). Infection of kissing bugs with *Trypanosoma cruzi*, Tucson, Arizona, USA. Emerging and Infectious Diseases 16: 400-405. *(Highlighted in the March 2010 issue. http://www.cdc.gov/media/eid/2010/e0310.htm)*
14. **Reisenman CE**, Riffell JA, Hildebrand JG (2009). Neuroethology of oviposition behavior in the moth *Manduca sexta*. Annals of the New York Academy of Sciences 1170: 462-467.
15. Strausfeld N, **Reisenman CE** (2009). Dimorphic olfactory lobes in the arthropoda. Annals of the New York Academy of Sciences 1170: 487-496.
16. Dacks AM, Guerenstein PG*, **Reisenman CE***, Martin JP, Lei H, Hildebrand JG (* equal contribution) (2009). Olfaction in Invertebrates: *Manduca.* In: Squire LR (ed). Encyclopedia of Neuroscience, vol 7, pp 49-57. Oxford: Academic Press.
17. **Reisenman CE**, Heinbockel T, Hildebrand JG (2008). Inhibitory interactions among olfactory glomeruli do not necessarily reflect spatial proximity. Journal of Neurophysiology 100: 554-564.
18. **Reisenman CE**, Giurfa M (2008). Chromatic and achromatic stimulus discrimination of long wavelength (red) visual stimuli by the honeybee *Apis mellifera*. Arthropod-Plant Interactions 2: 137-146.
19. **Reisenman CE,** Lazzari CR (2006). Spectral sensitivity of the photonegative reaction of the blood-sucking bug *Triatoma infestans* (Heteroptera: Reduviidae). Journal of Comparative Physiology A 192: 39-44.

20. **Reisenman CE**, Christensen TA, Hildebrand JG (2005). Chemosensory selectivity of output neurons innervating an identified, sexually isomorphic glomerulus. The Journal of Neuroscience 25: 8017-8026. *(Highlighted article; J Neurosci 45: 10339, 2005)*
21. **Reisenman CE,** Christensen TA, Francke W, Hildebrand JG (2004). Enantioselectivity of projection neurons innervating identified olfactory glomeruli. The Journal of Neuroscience 24: 2602-2611. *(Cover article; recommended by Faculty of 1000)*
22. **Reisenman CE,** Haag J, Borst A. (2003). Adaptation of response transients in fly motion vision. I. Experiments. Vision Research 43: 1291-1307.
23. Borst A, **Reisenman CE**, Haag J (2003). Adaptation of response transients in fly motion vision. II. Model studies. Vision Research 43: 1309-1322.
24. Giurfa M, Schubert M, **Reisenman CE**, Gerber B, Lachnit H (2003). The effect of cumulative experience on the use of elemental and configural visual discrimination strategies in honeybees. Behavioural Brain Research 145: 161-169.
25. **Reisenman CE**, Insausti TC, Lazzari CR (2002). Light-induced and circadian changes in the compound eye of the haematophagous bug *Triatoma infestans* (Hemiptera: Reduviidae). The Journal of Experimental Biology 205: 201-210. *(Highlighted; J Exp Biol 205: 2)*
26. **Reisenman CE**, Lorenzo Figueiras AN, Giurfa M, Lazzari CR (2000). Interaction between visual and olfactory cues in the assembling behaviour of the haematophagous bug, *Triatoma infestans*. Journal of Comparative Physiology A 186: 961-968.
27. Lazzari CR, Diotaiuti L, Pires HH, Corchs JM, Guarnieri AA, Nunez CMS, **Reisenman CE**, Lorenzo Figueiras AN, Lorenzo MG (2000). Microenvironments and spatial distribution of Chagas disease vectors. Memorias do Instituto Oswaldo Cruz 95 (Suppl II): 86-88.
28. Lorenzo MG, Flores GB, Lazzari CR, **Reisenman CE** (1999). Chapter 24: Sensory Ecology; Orientation. In: Atlas of Chagas Disease vectors in America, Volume 3, pp: 1071-1087 (Ed. by: RU Carcavallo, I. Galindez Girón, J. Jurberg, H. Lent). Editora Fiocruz - Rio de Janeiro.
29. **Reisenman CE**, Lazzari CR, Giurfa M (1998). Circadian control of photonegative sensitivity in the haematophagous bug, *Triatoma infestans*. Journal of Comparative Physiology A 183: 533-541.
30. Lazzari CR, **Reisenman CE,** Insausti TC (1998). The role of the ocelli in the phototactic behaviour of the haematophagous bug *Triatoma infestans*. Journal of Insect Physiology 44 (12): 1159-1162.
31. Lorenzo MG, **Reisenman CE,** Lazzari CR (1998). *Triatoma infestans* can be captured under natural climatic conditions using yeast-baited traps. Acta Tropica 70 (3): 277-284.
32. Zunino GE, Bravo SP, Ferreira FM, **Reisenman CE** (1996). Characteristics of two types of habitat and the status of the howler monkey (*Alouatta caraya*) in northern Argentina. Neotropical Primates 4 (2): 48-50.

**MANUSCRIPTS IN PREPARATION OR IN FINAL PREPARATION FOR SUBMISSION:**

33. Flores-Lopez CA, Mitchell E, **Reisenman CE**, Williamson P, Machado CA. Description of a new *Trypanosoma cruzi* lineage from the United States reveals an introduction into

North America during the Pleistocene. In final preparation for submission to PLoS Neglected Tropical Diseases.

34. Riffell JA, Constantopoulos E, **Reisenman CE.** Responses of *Manduca sexta* antennal lobe neurons to herbivory-damaged host plant volatiles. In final preparation for submission to Frontiers in Ecology and Evolution.
35. **Reisenman CE.** Hunger is the best spice: effects of starvation and time of the day in the antennal responses of the blood-sucking bug *Rhodnius prolixus*. In preparation for submission to Journal of Experimental Biology.

**PUBLISHED ABSTRACTS:**

1. Hildebrand JG, Martin JP, **Reisenman CE**, Lei H, Riffell JA (2009). Olfactory information processing, odor-modulated behavior, and their plasticity in the moth *Manduca sexta*. Comparative Biochemistry and Physiology A-molecular and integrative physiology 153 (2): S155-S156.
2. **Reisenman CE**, Lawrence GG, Guerenstein PG, Gregory T, Dotson EM, Hildebrand JG (2009). Infection rates of the triatomine bug *Triatoma rubida* with *Trypanosoma cruzi*, the causative agent of Chagas disease, in the Tucson area of Arizona. American Journal of Tropical Medicine and Hygiene 81: 419.
3. **Reisenman CE**, Riffell JA, Hildebrand JG (2008). Neuroethology of oviposition behavior in the moth *Manduca sexta*. Chemical Senses 33: S1-S175.
4. Strausfeld N, **Reisenman CE** (2008). Dimorphic olfactory lobes in the arthropoda. Chemical Senses 33: S1-S175.
5. **Reisenman** CE, Riffell JA, Hildebrand, JG (2007). Importance of odorant chirality in an insect-plant interaction. Integrative and Comparative Biology 47: e1-e152.
6. **Reisenman CE**, Hildebrand JG (2006). Inhibitory interactions among olfactory glomeruli in the moth *Manduca sexta*. Chemical Senses 31: 479 - 493.
7. Lei H, **Reisenman CE**, Christensen TA, Hildebrand JG (2005). Lateral inhibition: it makes sense as a neuronal coding strategy in olfaction. Chemical Senses 30: 265-278.
8. **Reisenman CE**, Stein H, Christensen TA, Hildebrand JG (2004). Olfactory receptor cells of trans-sexually grafted female antennae determine odor responses of output neurons in the antennal lobe of male Manduca sexta. Chemical Senses 30: 265-278.
9. **Reisenman CE**, Christensen TA, Hildebrand JG (2003). Odor responses of projection neurons innervating morphologically identified glomeruli in the antennal lobe of the moth *Manduca sexta.* Chemical Senses 28:551 – 563.
10. **Reisenman CE**, Lazzari CR (2000). What do triatomine bugs see? Memorias do Instituto Oswaldo Cruz, Vol. 94 (Suppl II): 310.
11. Lorenzo Figueiras AN, **Reisenman CE**, Giurfa M, Lazzari CR (1998). Aggregation in *Triatoma infestans*: chemical and spectral interactions. Memorias do Instituto Oswaldo Cruz, Vol. 93 (Suppl II): 321.
12. Guarnieri A, **Reisenman C**, Lorenzo M, Diotaiuti L, Lazzari CR (1998). The daily pattern of locomotion activity of *Triatoma brasiliensis*. Memorias do Instituto Oswaldo Cruz, Vol. 93 (Suppl II): 349.
13. Lazzari CR, **Reisenman CE,** Insausti TC (1997). The role of the ocelli in the phototactic behaviour of *Triatoma infestans.* Memorias do Instituto Oswaldo Cruz, Vol. 92 (Suppl. 1): 275.

14. **Reisenman CE** and Lazzari CR (1997). A circadian rhythm of sensitivity in the eye of *Triatoma infestans* as evinced by a behavioural assay. Memorias do Instituto Oswaldo Cruz, Vol. 92 (Suppl. 1): 276.
15. Lorenzo MG, **Reisenman CE,** Lazzari CR (1997). Capture of *Triatoma infestans* using yeast-baited traps under natural climatic conditions. Memorias do Instituto Oswaldo Cruz, Vol. 92 (Suppl. 1): 276.
16. **Reisenman CE** and Lazzari CR (1996). The phototactic response of *Triatoma infestans*. Memorias do Instituto Oswaldo Cruz, Vol. 9l (Suppl): 138.
17. **Reisenman CE**, Fichera LE, Salomon OD (1996). Time course of the infection by *Trypanosoma cruzi* in: susceptibility and resistance. Memorias do Instituto Oswaldo Cruz, Vol. 9l (Suppl): l34.

**PRESENTATIONS (POSTERS, TALKS AND SYMPOSIUMS) IN SCIENTIFIC MEETINGS AND CONFERENCES: 36.**

**INVITED TALKS:**

12/19/2013: "Neuroetología de olfaction en insectos". Department of Biodiversity, School of Exact and Natural Sciences, University of Buenos Aires, Argentina.

2/13/2012: "Chagas disease and health risks in Southern Arizona". Seminar series organized by the Department of Microbiology, University of Arizona, Tucson, Arizona.

4/19/2012: "Kissing bugs in Southern Arizona: human health risks and Control". Vector Biology control meeting organized by the Pima County, Tucson, Arizona.

4/13/2012: "Olfactory responses of *Rhodnius prolixus*, vector of Chagas disease, to host-derived odors". Medical Entomology Today, meeting organized by the Sonoran Arthropod Studies Institute, Tucson, Arizona.

1/8/2011: "Kissing bugs in Southern Arizona I: Infection rates by *Trypanosoma cruzi*, causative agent of Chagas disease" and "Kissing bugs in Southern Arizona II: Feeding and defecation behaviour of *Triatoma rubida* and its potential role as vector of Chagas disease". Medical Entomology Today, meeting organized by the Sonoran Arthropod Studies Institute, Tucson, Arizona.

7/22/08: "Evolution of pheromonal communication in insects: sexual dimorphism of the antennal lobes". International Symposium in Olfaction and Taste, San Francisco, CA.

7/25/08: "Oviposition in the sphinx moth *Manduca sexta*: from chemical signals, to neurons, to behavior". International Symposium in Olfaction and Taste, San Francisco, CA.

6/10/2008: "Oviposition in the sphinx moth *Manduca sexta*: from chemical signals, to neurons, to behavior". University Paul Sabatier, Toulouse, France.

6/5/2008: "Oviposition in the sphinx moth *Manduca sexta*: from chemical signals, to neurons, to behavior". University Francois Rabelais, Tours, France.

4/3/2008: "Aspectos neuroetológicos del comportamiento de oviposición en *Manduca sexta*: claves químicas, respuestas neuronales y comportamiento". Department of Physiology and Molecular Biology, School of Exact and Natural Sciences, University of Buenos Aires, Argentina.

3/4/2008: "Oviposition in the sphinx moth *Manduca sexta*: from chemical signals, to neurons, to behavior". Department of Biology, Florida International University, FL.

1/21/2008: "Neuroethology of insect olfaction: from chemical signals, to neurons, to behaviour". Department of Biology, Louisiana State University, LA. **Faculty interview, received offer for Tenure track position.**

1/17/2008: "Neuroethology of insect olfaction: from chemical signals, to neurons, to behaviour". Department of Biology, University of Cincinnati, OH. **Faculty interview, received offer for Tenure track position.**

9/2007: "Floral odors and oviposition in *Manduca sexta* moths: from chemical signals, to neurons to behavior" ARL Division of Neurobiology, University of Arizona.

2/2007: "Encoding sensory information in the brain: insights from an insect olfactory system", Department of Integrative Biology, University of Texas, Austin, TX. **Faculty interview.**

9/2005: "Odor selectivity of output neurons innervating a sexually isomorphic glomerulus". European Symposium in Insect Olfaction and Taste, Cerdeña, Italy.

9/2005: "Odor processing in olfactory glomeruli in the sphinx moth *Manduca sexta*", ARL Division of Neurobiology, University of Arizona.

5/2003: "Mechanismos de procesamiento de información olfactiva en la polilla *Manduca sexta*", School of Exact and Natural Sciences, University of Buenos Aires, Argentina.

9/2002: "Adaptive dynamics of motion detection in blowflies", ARL Division of Neurobiology, University of Arizona.

8/1999: "Circadian control of pigment migration in the compound eye of the haematophagous bug *Triatoma infestans* (Hemiptera: Reduviidae)". V Latin American Symposium of Chronobiology, Buenos Aires, Argentina.

## RESEARCH GRANTS AND FUNDING:

### RECENTLY COMPLETED:

RO-1 R01-DC-0275, Glomeruli as functional units for olfactory coding (8/2008-ongoing), **Role: Senior Personnel.** PI: John Hildebrand.

NSF-BIO IOS 0822709, Neural mechanisms underlying oviposition choice in *Manduca sexta* moths: from chemical signals to neurons (8/2008 to 7/2012), **Role: Principal Investigator** (co-PI: Jeffrey Riffell).

NIH 1R03AI078430-01, Olfactory and behavioral responses of kissing bugs (Reduviidae: Triatominae), vectors of Chagas disease, to odors of vertebrate hosts (5/2009 to 5/2012), **Role: Senior personnel.** PI: John Hildebrand.

Arizona Biomedical Disease Research Commission, Kissing bugs in Southern Arizona: potential risks for human health and developing of tools for monitoring and control (7/2006 to 7/2009), **Role: Senior personnel.** PI: John Hildebrand.

### AWARDED BUT RETURNED:

Center for Insect Science Research Seed Grant, Identification of salivary-gland allergens from *Triatoma rubida* (6/13/2012, duration: 1 year), **Role: Principal Investigator.**

## CURRENT COLLABORATORS:

- Jeffrey Riffell, University of Washington

- Jose Ribeiro, NIH
- Carlos Machado, University of Maryland
- Ellen Dotson, CDC
- Claudio Lazzari, Universite Tours, France
- Pablo Guerenstein, CONICET, Argentina

**TEACHING ACTIVITIES:**

- Instructor, Environmental Services Department Training, Maricopa County, Arizona. 10/16/2012.
- Invited Lecturer in the 10th Argentinean workshop of Neurosciences, Huerta Grande, Córdoba, Argentina. 4/2008.
- Invited Lecturer (one class per calendar year) in the course "Medical and Veterinary Entomology", University of Arizona. 3/2007; 3/2008; 3/2009; 2/2010; 3/2011; 4/2012; 4/2013.
- Invited Lecturer (2) in a general Biology class, Pima Community College, Tucson, Arizona. 10/2007.
- Lecturer on a special topic, Tucson High School, Tucson, AZ. 4/2007.
- Lecturer on a special topic, Mountain View High School, Tucson, AZ. 4/2007
- Lecturer (one 2-hour class/calendar year) on a Science Class for a group of Elementary School Teachers from Mexico, Central America and the Caribbean that teach in indigenous communities, and whom are in US as part of their scientific training (2008, 2009, 2010, 2011).
- Postgraduate Teaching assistant for the Department of Biological Science, School of Exact and Natural Sciences, University of Buenos Aires. Subject: Insect Physiology; 1996, 1997, 1999.
- Postgraduate Teaching assistant in the course Functional Morphology of Insects, held at the Department of Biological Science, School of Exact and Natural Sciences, University of Buenos Aires, 1997.
- Lecturer. Behavioral Physiology of Insects. Class for the Animal Care Degree, School of Pharmacy and Biochemistry, University of Buenos Aires. 11/23/97.

**SUPERVISED PERSONNEL:**

- Supervision and direction of the activities of Ms. Teresa Gregory, Research Specialist Sr.
- Training and mentoring of undergraduate students: Yan Lee, Bianca DeMaria, Mr. David Mickles, Mrs. Brenna Goodwin, Mrs. Meredith Matuinst, Mrs. Kristin Duffy and Mr. Adrien Pesque.

**PARTICIPATION AS A REVIEWER:**

- **Reviewer of articles for:** PLoS Neglected Tropical Diseases, Memorias do Instituto Oswaldo Cruz, European Journal of Neuroscience, Journal of Neurophysiology, PLoS ONE, Journal of Comparative Physiology A, Journal of Insect Physiology, Journal of Insect Behavior, Journal of Insect Science, Journal of Experimental Biology, Proceedings of the Royal Society of London B Biological Sciences, International Journal of Pest Management, Arthropod-Plant Interactions, Pan-Pacific Entomologist, Zoological Studies, Vector-Borne and Zoonotic Diseases, Medical and Veterinary Entomology, Journal of Vector Ecology, Chemical

Reviews, PLoS Biology (as a co-Reviewer), The Journal of Neuroscience (as a co-Reviewer), Journal of Chemical Ecology (as a co-Reviewer), Proceedings of the National Academy of Sciences USA (as a co-Reviewer).

- **Reviewer of Grant applications:** National Science Foundation (USA), National Agency of Promotion of Science and Technology (Argentina), University of Buenos Aires (Argentina).
- **Reviewer of Research Scientists applications:** research positions in the National Council of Science and Technology, CONICET (Argentina).

**PROFESSIONAL MEMBERSHIPS:**

- Society for Neuroscience
- American Association of Chemoreception Sciences
- Society of Integrative and Comparative Physiology
- International Society of Neuroethology

**EDITORIAL ACTIVITIES**

- Associate Faculty Member, Sensory Systems, Faculty of 1000.

**SERVICE AND SYNERGISTIC ACTIVITIES:**

- Participation in science outreach activities for elementary and middle school kids (e.g. visits to the laboratory of elementary and middle schools kids, Daughters on Campus Day, Scientist Kids' Day, outreach at the G.WIZ Science Center in Sarasota, FL).
- Hosting outreach activities for elementary school kids from local schools which involve science demonstrations, hands-on activities with insects, microscope demonstrations, etc…
- Mentoring of undergraduate students, training and assistance of graduate students in the Hildebrand laboratory and other laboratories of the Department of Neuroscience.
- Research with elementary school kids: demonstrations and simple experiments with the moth *Manduca sexta*. Activities with 2$^{nd}$ grade students. Sam Hughes elementary School, Jan 11, 12, 14 and 25$^{th}$ 2011.
- Outreach activities as part of an undergoing project ("Kissing bugs in Southern Arizona: potential risks for human health, and development of tools for monitoring and control") of which I am one of the main investigators. These activities include:
  - Development of an informational interactive website to inform the general public about kissing bugs, their risks for human health, tools for prevention, and resources http://neurosci.arizona.edu/kissingbugproject
  - Classes imparted in High Schools about insects, parasites, and disease.
  - Classes imparted in Pima Community College.
  - Speaker in meetings to inform the general public about the risk of kissing bugs (blood-sucking insects) to human health in Southern Arizona (as part of the aforementioned project).
  - Preparation of and distribution in community centers, Cooperative Extension Offices, Public Libraries, etc… informative fliers (both in English and Spanish) for the general public.
  - Assist Tucsonans with concerns kissing bugs and their risks to human health (e.g. more than 50 calls/e-mails from May-December 2008).

- Speaker in the series "Science Café" for the general public. Topic: "Kissing bugs and allergies". Event organized by John J. Osterhout, Professor, University of Arizona. 6/19/07.
- Talk about research findings to the Pima County Medical Association. July 2010.

**NEWS ARTICLES:**

1) Feature article about our research in kissing bugs in the Arizona Daily Star (most important newspaper in AZ): "Two researchers embracing work to keep kissing bugs from loving you" 6/6/2006.
2) Feature article about our research –and others- in kissing bugs in The Tucson Citizen. "UA targets elite level in research spending". 6/4/07.
3) TV and news article which appeared on CBS Channel 5 (Phoenix, AZ) about our research on kissing bugs and Chagas' Disease. http://www.kpho.com/iteam/13726608/detail.html
4) Feature article about our research in kissing bugs in the Arizona Daily Star (most important newspaper in AZ): "A kiss you don't want". 4/9/08.
5) Article in the UofA News (Newsletter of the University of Arizona). "Insect Lab looking for kissing bugs". 6/4/09. http://uanews.org/printview/25890
6) Feature article (front page) about the involvement of the local community in our research in the Arizona Daily Star (most important newspaper in AZ): "Got kissing bugs? UA will take all you have". 6/16/09. http://www.azstarnet.com/allheadlines/297185.php
7) Article in the front page of the Arizona Daily Wildcat (the official newspaper of the University of Arizona). Bug's "kiss" can bring disease. 11/12/09.
8) Article about our recent findings from Associated Press published in different media. "Disease-causing kissing bugs found in Arizona". 2/10/2010. http://www.azcentral.com/news/articles/2010/02/10/20100210kissing-bug-disease-arizona.html
9) Brief segment news in KUAZ radio about our recent findings. 2/12/2010.
10) Highlight about recent findings in the daily electronic supplement news from the University of Arizona (UA now). 2/12/2010.
11) Article about our recent findings in the Arizona Daily Star (most important newspaper in AZ): "UA insect study finds parasite risk". 2/15/2010. http://azstarnet.com/news/science/health-med-fit/article_94c4cbe0-a27a-5b8d-81ff-aed647898afa.html
12) Article in Yuma Sun. "A kiss you don't want on Valentine's day". 2/13/2010. http://www.yumasun.com/news/want-56281-kiss-day.html
13) Brief news segment in KGUN-9 TV station. 5/26/2010. http://www.kgun9.com/Global/story.asp?S=12547123
14) Article in the Arizona Daily Star: "Human odors make trap for kissing bugs". Appeared in a special supplement on 11/12/2011.