

## José G. Crespo

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### Professional preparation

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2007-2013	Ph.D. Biology. Department of Biology, University of Utah, Salt Lake City.
2006-2007	Graduate certificate. Department of Biomedical Informatics, University of Utah, Salt Lake City.
2004-2005	M.S. Biological Sciences (eq.). Department of Biodiversity and Experimental Biology, University of Buenos Aires, Argentina.
1999-2005	B.S. Biological Sciences (eq.). Department of Biodiversity and Experimental Biology, University of Buenos Aires, Argentina.
1997-2000	A.S. Computer Programming (eq.). Department of Engineering and Technology Informatics, University of Belgrano, Argentina.

### Professional positions

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2014-present	Postdoctoral Researcher. Department of Biology, University of Utah, Salt Lake City.
2014-present	Science writer. The Center for Science and Mathematics Education, University of Utah, Salt Lake City.
2007-2013	Research Assistant. Department of Biology, University of Utah, Salt Lake City.
2007-2012	Teaching Assistant. Department of Biology, University of Utah, Salt Lake City.
2006-2007	Research Assistant. The Center for High Performance Computing: University of Utah, Salt Lake City.
2004-2006	Research Assistant. Department of Biodiversity and Experimental Biology, University of Buenos Aires, Argentina.
2003-2004	Technician. University of Buenos Aires, Buenos Aires, Argentina.
2003(1 mth)	Field Research Assistant. University of Buenos Aires, Argentina.
2002(5 mths)	Research Assistant. University of Buenos Aires, Argentina.
2001-2002	Research Assistant. University of Buenos Aires, Argentina.

### Grants, Scholarships & Awards

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2014	Riser Award for outstanding graduate research in the Department of Biology, University of Utah.
2012	Best paper. JEB 215:2203-2209. Appreciation for the Biology of Insect Pests. Ambrosia Symbiosis Research Group and TREE Foundation.
2012	Sigma Xi: Grant in Aid of Research Grant.
2011-2013	National Science Foundation: Doctoral Dissertation Improvement Grant. (Co-PI Neil J. Vickers).
2011-2012	University of Utah Graduate Research Fellowship.
2011, 2012	Open Access Publishing Fund. J. Willard Marriott Library, University of Utah (4 times).
2011	Best Student Poster. Society for Integrative and Comparative Biology (Division of Comparative Physiology and Biochemistry), Salt Lake City, Utah.

### Peer-reviewed Scientific Publications

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- **Crespo, J.G.**, Goller F. & N.J. Vickers. 2014. Male moths optimally balance take-off thoracic temperature and warm-up duration to reach a pheromone source quickly. *Animal Behaviour*, 98: 79-85.
- Minoli, S., Palottini, F., **Crespo, J. G.** & G. Manrique. 2013. Dislodgement effect of natural semiochemicals released by exocrine glands of disturbed adult triatomines (Hemiptera:

Reduviidae). *Journal of Vector Ecology*, 38: 353-360.

- **Crespo, J. G.**, Vickers, N. J. & F. Goller. 2013. Female pheromones modulate flight muscle activation patterns during preflight warm-up. *Journal of Neurophysiology*, 110: 862-871.
- **Crespo, J. G.**, Goller, F. & N. J. Vickers. 2012. Pheromone mediated modulation of pre-flight warm-up behavior in male moths. *Journal of Experimental Biology*, 215:2203-2209 (Cover).
- **Crespo, J. G.** & N. J. Vickers. 2012. Antennal Lobe Organization in the Slender Pigeon Louse, *Columbicola columbae* (Phthiraptera: Ischnocera). *Arthropod Structure and Development*, 41(3): 227-230.
- **Crespo, J. G.** 2011. A review of chemosensation and related behavior in aquatic insects. *Journal of Insect Science*, 2(62): 1-39. Available online: [insectscience.org/11.62](http://insectscience.org/11.62).
- **Crespo, J. G.** & G. Manrique. 2007. Mating behavior of the hematophagous bug *Triatoma infestans*: Role of Brindley's and metasternal glands. *Journal of Insect Physiology*, 53(7): 708-714.

### Other Scientific Publications

- **Crespo, J.G.** 2014. Hot or Cold: How temperature affects sports (Technical). *Sports'N Science: Science Behind the Sport*, Utah Athletics and the Center for Science & Math Education, University of Utah. Available at: <http://sportsnscience.utah.edu/hot-or-cold-how-temperature-affects-sport-in-depth/>
- **Crespo, J.G.** 2014. Hot or Cold: How temperature affects sports (Basics). *Sports'N Science: Science Behind the Sport*, Utah Athletics and the Center for Science & Math Education, University of Utah. Available at: <http://sportsnscience.utah.edu/hot-or-cold-how-temperature-affects-sport/>
- **Crespo, J.G.** & G. Manrique. 2010. Comunicación intraespecífica y comortamiento sexual de *Triatoma infestans* (Translation: Intraspecific communication and sexual behavior of *Triatoma infestans*). *Boletín de la Sociedad Entomológica Argentina*, 21(1): 7-9.
- **Crespo, J.G.** & G. Manrique. 2010. Comportamiento de apareamiento de la vinchuca *Triatoma infestans*: Papel de las glándulas de Brindley y metasternales (Translation: Mating behavior of the kissing bug *Triatoma infestans*: Role of Brindley's and Metasternal glands). *Actualizaciones en Artrópodos de Interés Sanitario II*, 87-88.

### Invited presentations

2014	Guest speaker ME EN 6960(University of Utah, Salt Lake City, UT): Thermal effects and temperature regulation in insects.
2012	Seminar speaker (University of Washington, Seattle, WA): Pre-flight warm-up behavior is modulated by sensory input.
2012	Guest speaker BIOL 5445 (University of Utah, Salt Lake City, UT): Moth olfaction and thermoregulation.
2011	Seminar speaker (CICyTTP, Entre Ríos, Argentina): La influencia de estímulos olfativos en el comportamiento termoregulador de las polillas.

### Other presentations

2014	5th International Conference on Phthiraptera (Park City, UT): Antennal lobe morphology of the pigeon louse <i>Columbicola columbae</i> (Talk).
2014	Society for Integrative and Comparative Biology (Austin, TX): Influence of ambient temperature on the pre-flight and flight activities of pheromone-stimulated male moths (Poster).
2013	Entomological Society of America 61st annual meeting (Austin, TX): Effects of environmental temperature on pre-flight and flight activities in pheromone-stimulated male <i>Helicoverpa zea</i> (Poster).
2012	Tenth International Conference of Neuroethology (Baltimore, MD): Recruitment of motor units in flight muscles accounts for pheromone-mediated modulation of pre-flight heating rates of males moths (Poster).
2012	Department of Biology seminar (University of Utah): Moth pre-flight warm-up is influenced by olfactory stimuli.
2012	Society for Integrative and Comparative Biology (Charleston, SC): Female

	pheromones modulate muscle activation patterns for pre-flight warm-up in male moths (Talk).
2011	Intermountain Graduate Research Symposium (Logan, UT): Structure of the antennal lobe in the pigeon louse <i>Columbicola columbae</i> (Talk).
2011	Department of Biology seminar (University of Utah): Moth Thermoregulation is Influenced by Olfactory Stimuli.
2011	Society for Integrative and Comparative Biology (Salt Lake City, UT): Olfactory modulation of pre-flight shivering behavior in male moths (Poster). <i>Best Student Poster Award</i> . Available at: <a href="http://content.lib.utah.edu/cdm/singleitem/collection/uspace/id/1466/rec/3">http://content.lib.utah.edu/cdm/singleitem/collection/uspace/id/1466/rec/3</a>
2009	Department of Biology seminar (University of Utah): Hot Moths.
2006	22nd Annual Meeting of the International Society of Chemical Ecology (Barcelona, España): Mating behavior and role of Brindley's and metasternal glands of the blood-sucking bug <i>Triatoma infestans</i> (Heteroptera: Reduviidae) vector of Chagas disease.
2005	IV Encontro Brasileiro de Ecologia Química (São Paulo, Brazil): Mating behavior of the blood-sucking bug <i>Triatoma infestans</i> (Heteroptera: Reduviidae): role of Brindley's and metasternal glands.
2005	VI Argentine Congress of Entomology (Tucumán, Argentina): El papel de las glándulas de Brindley y metasternales en la cópula de la vinchuca <i>Triatoma infestans</i> (Heteroptera: Reduviidae).
2003	XIV National Symposium on Organic Chemistry (Santa Fe, Argentina): Metabolitos secundarios de esponjas marinas patagónicas.

### University Teaching Experience

2012	Lecturer (1 class). Entomology (BIOL 5445)
2010 - 2012	Teaching Assistant. Entomology (BIOL 5445)
2008 - 2011	Teaching Assistant. Comparative Physiology Laboratory (BIOL 3325)
2010	Teaching Assistant. Comparative Physiology (BIOL 3320)
2008	Teaching Assistant. Behavioral Neurobiology (BIOL 3330)
2005	Teaching Assistant. Introduction to Zoology ( <i>Contest based</i> )

### Professional Service

- *Ad hoc* reviewer – Research Grants:  
2013-present Grants-in-Aid of Research for Sigma Xi: The Scientific Research Society.
- *Ad hoc* reviewer – Scientific Journals: Journal of Insect Science(2); PloS one(2); Journal of Economic Entomology(1); Recent Patents on Food, Nutrition and Agriculture(1); Journal of Parasitology and Vector Biology(1); Bulletin of Entomological Research(2); Journal of Insect Behavior(1); Animal and Veterinary Sciences(1); Journal of Chemical Ecology (1); Pan-Pacific Entomologist (1).
- *Ad hoc* reviewer – Science Books: The Insects: Structure and Function. Chapman, Simpson and Douglas (eds.) 5<sup>th</sup> ed. New York: Cambridge University Press.
- University of Utah service:
 

2012	Panelist for Open Access Week event (Marriott Library)
2011-2012	Student Advisory committee chair (Department of Biology)
2010-2011	Graduate Retention/Promotion/Tenure Committee (Department of Biology)
2009-2010	Graduate Retention/Promotion/Tenure Committee (College of Science)
- Expert interviewee for The Salt Lake Tribune. Available at:  
<http://www.sltrib.com/sltrib/news/58060289-78/moths-sheena-com-sltrib.html.csp>
- Wikipedia webpage creator: Insect Thermoregulation (Spanish & English).
- Other service: Science fair judge for Elementary and High schools. Salt Lake City, Utah (multiple years).

### Professional memberships

2013-present	Full Member of Sigma Xi: The Scientific Research Society.
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2013-present	Member of National Society of Leadership and Success.
2008-present	Member of Golden Key International Honour Society.
2013-2014	Member of the Entomological Society of America.
2011-2014	Member of the Society for Integrative and Comparative Biology.
2012-2013	Member of the International Society for Neuroethology.
2012	Associate Member of Sigma Xi: The Scientific Research Society.

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### **Broader Impact of Research Activities**

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■ 2012 Coverage of Crespo *et al.* 2012(JEB 215:2203-2209) in the following: Inside JEB: 215: doi:10.1242/jeb.075226, University of Utah News (June 6), NSF Notes from the Field (June 6), Science Daily (June 7), The Epoch Times (June 7), International Business Times (June 7), Environmental News Network (June 8), Asian News International (ANI) via Newstrack India (June 8), The Salt Lake Tribune (June 9 online; June 11 printed), Scientific American (June 11), etc.

■ 2011 Crespo 2011 (JIS 2(62): 1-39) featured in the Royal Institute of Navigation Online News.