

Christine Andrea Johnson

The American Museum of Natural History
Division of Invertebrate Zoology
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Education

Ph.D. Psychology, Biopsychology, January 2000

The Graduate School & University Center of The City University of New York

Dissertation Thesis: Mechanisms of dependent colony founding in the slave-maker ant, *Polyergus breviceps*.

M.A. Psychology, Biopsychology, June 1997

The Graduate School & University Center of The City University of New York

Master's Thesis: Effects of maternal separation and milk ingestion on the isolation distress response in rat pups.

B.A. Psychology, May 1992

New York University

Positions

The American Museum of Natural History, NY (2010-present). Curatorial Associate.

The American Museum of Natural History, NY (1997 – 2000, 2007-2010). Scientific Assistant.

The Ohio State University, OH (2003-2006). Post-doctoral Researcher.

Catholic University of Leuven, Belgium (2002-2003). Post-doctoral Researcher.

University of Helsinki, Finland (2000-2001). Post-doctoral Researcher.

Research/Faculty Appointments

Animal Behavior & Conservation Program, Hunter College (2015-present)

The Ohio State University, OH (2005). Co-Principal Investigator, Department of Evolution, Ecology & Organismal Biology.

The American Museum of Natural History, NY (2003-2004). Associate, Division of Invertebrate Zoology.

Publications

Weirauch, C., Seltmann, K. C., Schuh, R. T., Schwartz, M. D., **Johnson, C. A.**, Feist, M. A., Soltis, P. S. (accepted). Areas of endemism in the Nearctic: a case study of 1,339 species of Miridae (Insecta: Hemiptera) and their plant hosts. *Cladistics*.

Johnson, C.A. (2012) Reflections on Toby Schuh: His person, his accomplishments, his ways. *Entomologica Americana* Special Festschrift, 118(1): 25-26.

Henry, T. J. & **Johnson, C.A.** (2012) Randall Tobias Schuh: A celebration of his career and accomplishments on the occasion of his 70th birthday. *Entomologica Americana* Special Festschrift, 118(1): 2-6.

Johnson, C.A. & Sündstrom, L. (2012) Cuticular chemistry in the facultatively polygyne ant *Formica truncorum* (Hymenoptera: Formicidae). *Annales Zoologici Fennici*.

Lommelen, E., Wenseleers, T., **Johnson, C.A.**, Drijfhout, F.P., Billen, J., & Gobin, B. (2010) A combination of fertility signals and aggression regulates reproduction in the ant *Gnamptogenys striatula*. *Journal of Insect Behavior*.

Slater, J. A., Schuh, R.T., Cassis, G., Johnson, C.A. & Pedraza-Peñalosa. (2009) Revision of *Laryngodus* Herrich-Schaeffer, an Allocasuarina feeder, with comments on its biology and the classification of the family (Heteroptera: Lygaeoidea: Rhyparochromidae). *Invertebrate Systematics* 23:111-133.

Johnson, C.A., Phelan, L.P., & Herbers, J.M. Stealth and reproductive dominance in a rare parasitic ant. Accepted in *Animal Behaviour*

Johnson, C.A. (2008). Competition for a shared host: Inter- and intra-specific interactions of two slave-making social parasites and the effect on tripartite co-evolutionary dynamics. *Ecological Monographs* 78: 445-460.

Lommelen, E., **Johnson, C.A.**, Drijfhout, F.P., Billen, J., & Gobin, B. (2008). Egg marking in the queen-less ant *Gnamptogenys striatula*: the source and mechanism. *Journal of Insect Physiology* 54:727-392.

Herbers, J.M. & **Johnson, C.A.** (2007). Social structure and winter survival in acorn ants. *Oikos* 116:829-835.

Johnson, C.A. & Herbers, J.M. (2006). Impact of parasite sympatry on the geographic mosaic of coevolution. *Ecology* 87:382-394.

Lommelen, E., **Johnson, C.A.**, Drijfhout, F.P., Billen, J., Wenseleers, T. & Gobin, B. (2006). Cuticular hydrocarbons provide reliable cues of fertility in *Gnamptogenys striatula*. *Journal of Chemical Ecology* 32:20023-2034.

O'Hara, B., Fowler, M.S., & **Johnson, C.A.** (2006). Why negatives should be viewed as positives. *Nature Correspondence* 439:782 (non-refereed).

Johnson, C.A., Sundström, L., & Billen, J. (2005). Development of alary muscles in single- and multiple-queen populations of the wood ant *Formica truncorum*. *Annales Zoologici Fennici* 42:225-234.

Johnson, C.A., Topoff, H., Vander Meer, R.K., & Lavine, B. (2005). Do these eggs smell funny to you?: A study of egg discrimination by hosts of a slave-maker ant. *Behavioral Ecology & Sociobiology* 57:245-255.

Kotze, D.J., **Johnson, C.A.**, O'Hara, R.B., Vepsäläinen, K., & Fowler, M. (2004). The need for a journal of negative results in ecology & evolutionary biology. *Journal of Negative Results – Ecology & Evolutionary Biology* 1:1-4.

Johnson, C.A., Lommelen, E., Allard, D. & Gobin, B. (2003). The emergence of collective foraging in the arboreal *Gnamptogenys menadensis*. *Naturwissenschaften*, 90:332-336.

Johnson, C.A., Topoff, H., Vander Meer, R.K., & Lavine, B. (2002). Host queen killing by a slave-maker ant queen: when is a host queen worth attacking? *Animal Behaviour*, 64:807-815.

Johnson, C.A., Vander Meer, R.K., & Lavine, B. (2001). Changes in the cuticular hydrocarbon patterns of a slave-maker queen after killing a *Formica* host queen. *Journal of Chemical Ecology*, 27:1787-1804.

Johnson, C.A., Agosti, D., Delabie, J.H., Dumpert, K., Williams, D.J., von Tschirnhaus, M. & Maschwitz, U. (2001). *Acropyga* and *Azteca* ants with scale insects: 20 million years of intimate symbiosis. *American Museum Novitates*, 3335:1-18.

Johnson, C.A. (2000). Responses of two potential host species to pupae of the obligatory slave-making ant, *Polyergus breviceps*. *Journal of Insect Behavior*, 13:711-720.

Manuscripts in preparation (available upon request)

Johnson, C.A., Greenberg, Les, Trager, James, McElfresh, J. Steven, Rodstein, & Millar, Jocelyn G. Queen sex pheromones of two sympatric slave-maker ant species: a sufficient isolating mechanism?

Johnson, C.A. & Eslava, D. Evolution of prudence in the slave-maker ant *Polyergus breviceps*: Limitations on raiding pupae of the sexual caste. For *Behavioral Ecology*.

Manuscript Reviewer for:

Animal Behavior, Annales Zoologici Fennici, Apidologie, Applied Soil Ecology, Behavioral Ecology, Behavioral Ecology & Sociobiology, Ecological Entomology, Ecology, Ethology, Ethology Ecology & Evolution, Insectes Sociaux, Journal of Insect Physiology, Journal of Negative Results – Ecology & Evolutionary Biology, Molecular Ecology, Naturwissenschaften, Proceedings of the Royal Society, Biological Sciences, Psychological Reports/Perceptual & Motor Skills

Grants (Academic)

- Institute for Museum and Library Sciences \$150,000 (granted September 2016)
- Thematic Collections Network, National Science Foundation \$3.7 million (2011)
- Earth Institute Course Fieldwork Support Grant \$960.00 (2009)
- Huyck Preserve Post Graduate Research Grant \$2500.00 (2009)
- Stiefel Foundation Small Grants for Scientific Research \$5000.00 (2008)
- Huyck Preserve Post Graduate Research Grant \$2000.00 (2008)
- Highlands Biological Station, Grant-in-Aid of Research \$800.00 (2008)
- Spatial Ecology Visitor's Programme, University of Helsinki \$2,400 (2004)
- NAS International Union for the Study of Social Insects Travel Grant to Japan \$1,350 (2002)
- Animal Behavior Society Student Research Grant \$980 (1997)
- Sigma Xi, Grants-in-aid of Research \$1,000 (1997)
- Tithe Funds, Biopsychology, GSUC-CUNY \$3,000 (1997)
- Theodore Roosevelt Memorial Fund, AMNH \$1,200 (1995, 1997)
- T.C. Schneirla Fund \$600 (1997)
- Southwestern Research Station Student Support Fund, AMNH \$600 (1997)
- Helena Rubenstein Fund, GSUC-CUNY \$500 (1995)

Grants (Community Development)

- Fuel Assistance Program (2012, 2013)
- Manhattan Borough President's Office Green Your Block Program Tree Guards (2012)
- Manhattan Community-Scale Composting Grant, Citizens Committee (2011)
- City Chicken Project, Just Food (2011)

Grants (Reviewer)

- National Science Foundation, Philosophical Science

Fellowships & Awards

- Robert Thompson Award for Research & Academic Excellence, Biopsychology, GSUC-CUNY (1998)
- President's Student Award, GSUC-CUNY (1997)
- University Fellowship, GSUC-CUNY (1997)
- Alumni Association Dissertation Support Fund, GSUC-CUNY (1994-1997)

- University Fellowship, GSUC-CUNY (1993-1995)
- University Honors Scholar/Founders Day Honors, New York University (1992)
- Alpha Sigma Lambda, New York University (1991)
- Delta Phi Alpha – Deutsche Ehrenverbindung, New York University (1991)
- Award for Academic Excellence, New York University (1988, 1990)

Invited Seminars

- New York City Beekeeping, Basic Bee Biology, New York, NY (2016)
- STEM (2014)
- Rockefeller University, Kronauer Laboratory, New York, NY (2012)
- Staten Island College (2012)
- Hunter College, Department of Psychology (2008, 2009, 2010, 2011)
- Columbia University E3B, New York, NY (2009)
- Southwestern Research Station, Portal AZ (2010)
- Black Rock Forest Research Symposium, Cornwall, NY (2009)
- The Pavlovian Society. Banquest Speaker Weehawken, NJ. (2008)
- Queens College, Department of Biology, Queens, NY (2008)
- Huyck Preserve, Renselaerville, NY. (2008)
- The Ohio State University, Evolution, Ecology & Organismal Biology, Columbus, OH. (2006)
- Purdue University, West Lafayette, IN. (2005)
- The Ohio State University, Department of Neuroscience Columbus, OH. (2005)
- Indiana State University, Department of Life Sciences. Terre Haute, IN (2004)
- Eastern Michigan University, East Lansing, MI. Department of Biology. (2004)
- University of Illinois, Department of Animal Biology. Urbana-Champaign, IL. (2004).
- The Ohio State University, Evolution, Ecology and Organismal Biology. Columbus, OH. (2003).

Conference Presentations

Johnson, C.A. Entomological Collections Network. *Using digitized data: two examples from North American museum collections*. (2015)

Johnson, C.A. EMu Users Group. *Data Usage – Showing the Value of Collections*. (2015)

Johnson, C.A. & Bartlett, C. Entomological Collections Network. *From Museum Specimen Database to Ecological Statement* (2014)

Johnson, C.A. et al. Society for the Preservation of Natural History Collections. *When Common Species Become Endangered: Changes in Collection Management*. Cardiff, Wales (2014)

Johnson, C.A. et al. Society for the Preservation of Natural History Collections. *From Museum Specimen Database to Ecological Statement*. Cardiff, Wales (2014)

Johnson, C.A. et al. Society for the Preservation of Natural History Collections. *Demo Camp: Arthropod Easy Capture Database*. SD (2013)

Johnson, C.A. et al. International Society for Behavioral Ecology, Sweden (2010) *Queen sex pheromone of two sympatric slave-maker ant species: a sufficient isolating mechanism*

Johnson, C.A. XV International Congress of IUSSI, Copenhagen (2010)

Johnson, C.A. International Society for Behavioral Ecology, NY (2008)
Johnson, C.A. Ecological Society of America, CA (2007)
Johnson, C.A. & Herbers, J.M. Ecological Society of America, TN (2006)
Johnson, C.A., Fowler, M., Rankin, D., O'Hara, R. & Kotze, J. Ecological Society of America, TN (2006)
Johnson, C.A. & Herbers, J.M. International Union for Study of Social Insects Congress, D.C. (2006)
Johnson, C.A. & Herbers, J.M. International Union for the Study of Social Insects, AZ (2004)
Lommelen, E., Johnson, C.A. et al. Benelux Congress of Zoology, Belgium (2004)
Sundström, L. & Johnson, C.A. European Society for Evolutionary Biology, UK (2003)
Johnson, C.A. et al. Animal Behavior Society Annual Meeting, Boise, ID (2003)
Lommelen, E., Johnson, C.A. & Gobin, B. Benelux Congress of Zoology, Belgium (2003)
Johnson, C.A. & Sundström, L. UIEIS - Section française, France (2002)
Johnson, C.A. et al. XIV International Congress of IUSSI, Japan (2002)
Johnson, C.A. et al. International Union for Study of Social Insects, Germany (2001)
Johnson, C.A. & Sundström, L. European Union-Research Training Network, Spain (2001)
Johnson, C.A. et al. Graduate School Meeting in Evolutionary Ecology, Finland (2000)
Johnson, C.A. & Topoff, H. Animal Behaviour Society, Lewisburg, PA (2000)
Johnson, C.A., Vander Meer, R. & Topoff, H. International Congress of IUSSI, Australia (1999)
Johnson, C.A. 26th Annual Hunter College Psychology Convention, New York, NY (1998)
Johnson, C.A. Entomological Society of America - Eastern Branch, Burlington, VT (1997)
Johnson, C.A. 25th Annual Hunter College Psychology Convention, New York, NY (1997)

Professional Affiliations

- American Association for the Advancement of Science (2005-2006)
- Association for Women in Science (2005-2006, 2011-2012)
- Animal Behavior Society (1998-2012)
- Behavioral Ecology (2007-2012)
- Ecological Society of America (2005-2007)
- International Union for the Study of Social Insects (2001-2012)
- New York Entomological Society (1994-2000)

Field Experience

Saül, French Guiana (1994, 2007)
Southwestern Research Station, AZ (1993 – 1998, 2003, 2005, 2007, 2008, 2010)
Kraus Preserve & Columbus Metro Parks, OH (2003 – 2006)
Ulu Gombak Field Studies Centre of the University of Malaya, Malaysia (2002)
Santa Rosa National Park, Pitilla & La Selva Biological Field Stations, Costa Rica (2002)
Tvärminne Zoological Field Station, Finland (2001)
Center for Biodiversity & Conservation (AMNH) Ngoc Linh, Tay Con Linh, Vietnam (1999, 2000)

Board & Committee Service (Academic)

Publications Chair/Editor, SPNHC, *Collection Forum* (2014-present)
Managing Editor for *Entomologica Americana* (2008 - present)
Associate Editor for *Annales Zoologici Fennici* (2009 - present)
Scientific Advisory Committee, Huyck Preserve (2009)
Informal Mentor, Richard Gilder Graduate School (2009 - present)
Guest Editor for *Annales Zoologici Fennici* (2008)
Co-founder & Editor for *Journal of Negative Results – Ecology & Evolutionary Biology* (2004 – present)
Judge, Buell & Braun Student Award and SER Student Award, Ecological Society of America (2007)
Judge, Lauritz Muehlbach Memorial Fund, Competitive Research Grants in Vertebrate Ecology, The Ohio State University (2003)
Judge, Robert Thompson Award for Research & Academic Excellence, GSUC-CUNY (1997)
Scientific Advisory Committee, Southwestern Research Station (1997)
First Doctoral Examination Committee, Biopsychology at GSUC-CUNY (1997)
Graduate Admissions Committee, Biopsychology at GSUC-CUNY (1997)

Board & Committee Service (Community)

Solid Waste Advisory Board, Manhattan Borough President's Office (2016-2018)
President, Housing Development Fund Corporation, 300-302 E. 119th Street Cooperative, (2010– 2015)
President, Pleasant Village Community Garden, Inc. (2010 - 2014)
Events Coordinator, Pleasant Village Community Garden, Inc. (2007 - 2010)
Vice President, Housing Development Fund Corporation, 300-302 E. 119th Street Cooperative, (2007 - 2008)

Documentaries - Scientific Consultation

National Geographic Channel, 'Ant Wars', National Geographic Society (2005)
TV France, 'Animal Politics', Saint Thomas Productions (2003)
Staten Island Children's Museum, 'Great Explorations' Forest Environment Exhibit (2000)
Discovery Channel Australia, 'Desert Defenses', Wild Visual Productions (1997)

Outreach Activities (Science & Community)

Career Day, Irving Washington High School. Irving Washington High School (2016)
HPD Community Garden Lands at Risk. Just Food Conference (2016)
Insecta: Art & Science. Central Booking Art Space (2016)
Fundamentals of Backyard Composting. Pleasant Village Community Garden (2015)
Moth Night Lecture. Pleasant Village Community Garden (2015, 2016)

Speed Science. American Museum of Natural History (2015)
Sawmill River Parkway BioBlitz, NY (2010)
Bedford Audubon BioBlitz, Westchester, NY (2007)
The Nature Conservancy, Ohio Chapter, Volunteer for habitat restoration (2006)
Holden Arboretum, OH, The sinister world of slave-making ants (2005)
Judge, St. Agatha Middle School Science Day, OH (2005)
Jamaica Bay Wildlife Refuge, NY, Enslavement by a homicidal ant queen (1996)
6th & B Community Garden, NY, Enslavement by a homicidal ant queen & ant identification (1996)
Mentor, Pre-college Science Collaborative for Urban Minority Youth, AMNH, NY (1999)

Workshops/Certificates

Master Composter Certificate Course, Lower East Side Ecology Center (2015)
NSF ADVANCE Workshop, Women Evolving Biological Sciences. Selected participant. (2007)

Collaborations

Drs. Jocelyn Millar & Les Greenberg, University of California at Riverside, Mandibular gland sex pheromone of the slave-making ant *Polyergus*
Dr. Randall Schuh, The American Museum of Natural History, Revision of the plant bug genus *Reuteroscopus* (Heteroptera: Miridae)

Teaching Positions

New York Botanical Garden, NY. Insect Systematics (Adjunct Faculty), Spring 2013
Columbia University, NY. Insect Diversity (Adjunct Faculty), Fall 2009
Pace University, NY. Entomology (Adjunct Faculty). Fall 2007
The Ohio State University, OH. Guest Lecturer, Social Insect Biology - 2004, 2005, Evolution -2006
The Catholic University of Leuven, Belgium. Elements of Kin Recognition (Guest Lecturer). Spring 2002.
Hunter College, NY. Psychology (Instructor). September 1996 – December 1997.
Hunter College, NY. Ethology (Instructor). September 1996
School of Visual Arts, NY. Animal Behavior (Adjunct Faculty). September 1996.
Hunter College, NY. Social Psychology (Teaching Assistant). Spring 1997.
Hunter College, NY. Introductory Psychology (Teaching Assistant). Fall 1995 - Spring 1996.
Hunter College, NY. Experimental Psychology (Teaching Assistant). Fall 1993 – Spring 1994.
New York University, NY. Introduction to Statistics (Teaching Assistant). Fall 1992.