

## GENE E. ROBINSON

**Personal:** Born in Buffalo, New York, 9 January 1955; married, three children

### Appointments

1989	Assistant Professor, Department of Entomology, University of Illinois at Urbana-Champaign (UIUC)
1994	Associate Professor, Department of Entomology, UIUC
1996	UIUC Center for Advanced Study
1997	Professor, Department of Entomology, Fulbright Senior Research Fellow, Visiting Professor, Hebrew University
2001	Director, Neuroscience Program
2003	G. William Arends Professor of Integrative Biology
2004	Theme Leader and Professor, Institute for Genomic Biology (IGB)
2008	Swanlund Chair of Entomology

*Other campus appointments:* *Affiliate*, Neuronal Pattern Analysis Group, Beckman Institute; *Affiliate*, Department of Cell & Developmental Biology; Department of Animal Biology (UIUC); Department of Political Science; Center for Economic Entomology, Illinois Natural History Survey; Biotechnology Center; *Board of Advisors*, Keck Center for Comparative and Functional Genomics; *Faculty Member*, Developmental Neuroscience and Psychobiology Training Grant; Sensory Neuroscience Training Grant; Genomic Policy and Science Training Grant

### Education

B.S.	Cornell University (Life Sciences), 1977
M.S.	Cornell University, Entomology, 1982 (1980 - 1982)
Ph.D.	Cornell University, Entomology, 1986 (1982 - 1986)

### Awards and Honors

1982-83	Lady Davis Graduate Fellowship, Hebrew University, Israel
1985	Student Award, Eastern Apicultural Society (EAS)
1985	Griswold Award, Cornell University, (grad. student award)
1986	First Prize, Sigma Xi-Cornell Popular Science Writing Contest
1986	Ohio State Postdoctoral Fellowship
1986	NIMH NRSA Postdoctoral Fellowship (declined)
1988 - 1990	NSF Environmental Biology Postdoctoral Fellowship
1990	Beckman Award for Outstanding Research Promise, UIUC Res. Bd.
1993	Hambleton Award for Outstanding Research, EAS
1993 - 1996	University Scholar (UIUC award for research excellence)
1995 - 1996	Beckman Associate, Center for Advanced Studies (UIUC)
1995 - 1996	Fulbright Senior Research Fellowship
1996	Fellow, American Association for the Advancement of Science
1997, 98, 00, 02	List of Teachers Ranked Excellent by Their Students
2000	Certificate of Distinction, International Cong. Entomology, Brazil
2000	Burroughs Wellcome Innovation Award in Functional Genomics
2003	Founders Memorial Award, Entomological Society of America (ESA)
2003	Guggenheim Fellowship
2003	G. William Arends Professor in Integrative Biology
2004	Founding Chair, Gordon Conf., Genes and Behavior
2004	Fellow, American Academy of Arts & Sciences

2004	Recognition Award in Insect Physiology, ESA
2005	Member, National Academy of Sciences (NAS)
2005	Inaugural Speaker, Chancellor's Center for Advanced Study Special Lecture Series, (UIUC)
2006	Thomson-ESI Highly Cited Researcher (top 1%)
2006	Excellence in Graduate Teaching Award, Honorable Mention (UIUC)
2006	Fellow, Animal Behavior Society
2008	Swanlund Chair of Entomology

### **Honorific Lectures**

1997	Charles D. Michener Lecture, University of Kansas
1999	Kenneth Roeder Lecture, Tufts Univ.
2002	Distinguished Lecturer, University of Puerto Rico
2002	Miller Lecture, Iowa State Univ.
2003	Founders Memorial Lecture, ESA, Cincinnati, OH
2004	Hopkins Lecture, Kansas State Univ.
2005	K.C. Fisher Lecture, Univ. Toronto
2006	Keynote Lecture, Brains and Behavior Program Retreat, Georgia St. Univ.
2006	LeConte Lecture, Georgia Southern Univ.
2007	Givaudan Lecture, American Chemical Society
2007	Boyce Lecture, Univ. California at Riverside
2007	Bauer Lecture, Brandeis Univ.
2007	Special Lecture, Univ. California at San Diego
2008	NC State Univ. Dept. of Genetics 50 Year Anniversary Lecture
2008	Keynote Lecture, Genes & Behavior Gordon Research Conference

### **Plenary Lectures**

1992	International Union for the Study of Social Insects (IUSSI), German Section, Blauberen, Germany (keynote speaker)
1993	11 <sup>th</sup> International Congress, IUSSI, Paris, France
1996	Museum of Natural History Symposium, Hebrew Univ., Jerusalem
1998	5 <sup>th</sup> International Congress of the Soc. for Neuroethology, San Diego
1998	26 <sup>th</sup> Gottingen Neurobiology Conference, Goettingen, Germany
2000	12 <sup>th</sup> Int. Genome Sequencing and Analysis Conference, Miami, FL
2001	Japanese Soc. for Neuroscience, Minibrain Meeting, Sapporo, Japan
2002	German Science Found. Symp. on Mechanisms and Evolution of Insect Behavior, Univ. Würzburg
2008	Genetic Society of America, "Genetic Analysis: Model Organisms to Human Biology," San Diego, CA
2008	Keynote Lecture, Genes & Behavior Gordon Conference, Italy

### **Grant Support**

#### Extramural

#### Current

2008-2011	"Re-wiring of brain gene regulatory network in a model system," NIH, \$1.5M (submitted with S. Zhong, PI and C. Mizzen)
2008-2011	"Comparative genomics, molecular evolution, and the evolution of bee society," NSF, \$515,000 (with M. Hudson)
2007-2008	"Addressing Colony Collapse Disorder: Initial Response," USDA-CSREES, \$60,000 (with M. Berenbaum and S. Ratcliffe)

2007-2010 “Comparative genomics and the evolution of social behavior,” NSF, \$300,000 (with J. Hunt, M. Henshaw, M. Hudson)

2006-2009 “Muscarinic regulation of plasticity in the brain,” NIH-NIGMS, \$1.5M (with S. Fahrbach)

2005-2010 “BeeSpace: An interactive environment for analyzing nature and nurture in societal roles,” NSF Frontiers in Biological Research, \$5M (B. Schatz, PI, with C. Bruce, S. Fahrbach, S. Rodriguez, C. Zhai)

2004-2007 “Pheromone regulation of gene expression in the brain,” NIH-NIDCD, \$1.3M (with T. Lee)

2005-2007 “Neuromodulation of excessive reward-directed behavior,” NIH-NIDA, \$306,000

2005-2010 “UIUC Neuroproteomics Center on Cell-Cell Signaling,” NIH-NIDA, \$5M (J. Sweedler, PI, with D. Clayton, M. Gillette, P. Gold, H. Gutstein, W. Greenough, N. Kelleher, L. Moroz, S. Rodriguez)

2003-2007 “Microarray analyses of pheromone-mediated gene expression in honey bees,” USDA, \$225K

Previous

2003-2007 “Molecular mechanisms of queen bee longevity,” NIH-NIA, \$1.2M

2003-2007 “Mathematical descriptions of multifactorial gene expression in social behavior,” NIH-NSF, \$1.1M, (Sandra Rodriguez-Zas, PI)

2003-2006 “Development of a whole genome honey bee array,” USDA, \$1M (with M. Band, J. Evans, G. Hoffman, K. White)

2003-2005 Lead author, White Paper to Sequence the Honey Bee Genome, NHGRI (accorded high priority status; project managed and performed by Baylor Coll. Med. Human Genome Sequencing Center)

2002-2005 “Organization of behavioral plasticity by neurochemicals,” NSF Behavioral Endocrinology and Animal Behavior, \$450K

2000-2003 “Sociogenomics: Analyses of social behavior with microarrays, Burroughs Wellcome Fund Innovation Award in Functional Genomics, \$400K + University matching funds (\$100K)

2002-2004 “Octopamine-mediated behavioral development in honey bees: Social and endocrine regulation of the *tyramine beta-hydroxylase* gene,” NSF Behavioral Endocrinology and Animal Behavior, \$450K (H. Lehman PI)

2000-2003 “Social and neuroendocrine regulation of *period* gene expression,” NIH-NIGMS, \$1M

2000-2002 “Biogenic amines and division of labor in honey bee colonies,” NSF Behavioral Neuroscience and Animal Behavior, \$256K

1999-2002 “Neuroanatomical basis of endocrine-mediated behavioral development in honey bees,” NSF Behavioral Neuroend., \$300K (S. Fahrbach PI)

1999-2000 “Manipulation of honey bee gene expression by RNAi,” NSF Animal Behavior, \$75K

2000 “Biogenic amines and division of labor in honey bee colonies,” NSF REU Supplement, \$5,000

1999-2000 “Biogenic amines and division of labor in honey bee colonies,” NSF Behavioral Neuroscience and Animal Behavior, \$70K

1996-1999 “Pheromone control of behavioral development in a model system,” NIH-NIDCD, \$900K

1996-1997 “*Period* gene expression and endocrine-mediated behavioral development,” NSF Exploratory Grant, \$50K

- 1995-1998 "Neuroanatomical basis of endocrine-mediated behavioral development in honey bees," NSF Behavioral Neuroendocrinol., \$300K (S. Fahrbach PI)
- 1994-1997 "Hormonal and pheromonal regulation of reproduction in the bumble bee *Bombus terrestris*". US-Israel USDA-BARD, \$300K (with A. Hefetz)
- 1994-1996 "Honey bee behavior and neurobiology program," NSF REU Site, \$60K (S. Fahrbach PI)
- 1991-1996 "Mechanisms of behavioral plasticity in a model system," NIMH FIRST award, \$525K
- 1994-1996 "Endocrine basis of differences in behavior between Africanized and European honey bees," USDA, \$120K
- 1992 - 1994 "Neuroanatomical basis of endocrine-mediated behavioral development in honey bees," NSF Behavioral Neuroend, \$90K (with S. Fahrbach)
- 1993-1996 "Effects of increased UV radiation on plant-pollinator interactions," USDA, \$200K (with J. Conner & J. Cane)
- 1993-1995 NIMH, Supplement for Underrepresented Minorities, \$22K
- 1992-1993 "Honey bee behavior and neurobiology program," NSF Research Experiences for Undergraduates (REU) Site, \$30K (S. Fahrbach PI)
- 1992-1994 "Genetic and physiological determinants of honey bee division of labor," USDA, \$100K
- 1993 "Neuroanatomical basis of endocrine-mediated behavioral development," NSF REU Supplement, \$5,000 (with S. Fahrbach)

#### Intramural

- 2002-2003 "Nutritional influences on division of labor in honey bee colonies," \$16K, UIUC Research Board
- 1999 -2001 "Honey Bee Brain EST Project," UIUC Critical Research, \$200K
- 1998-1999 "Socioneurogenetic analyses of the *period* gene," \$15K, UIUC Research Board
- 1997-1998 "Radar tracking of honey bees," UIUC Research Board, \$7500 (with S. Fahrbach)
- 1997-1998 "Implementation of Cyberprof for Biology 346, "Animal Behavior," \$10K (with S. Beshers)
- 1996-1997 "Division of labor in carpenter ant colonies," UIUC Research Board, \$5000 (with S. Beshers)
- 1996-1997 "Effect of PCBs and TCDD on honey bees," UIUC Research Board, \$7500 (with S. Fahrbach)
- 1995 "Molecular genetic analyses of plasticity in behavioral development, UIUC Research Board, \$8000
- 1994 International Program Development Travel Fund, Midwest Universities
- 1993-1994 "Molecular genetic analyses of plasticity in behavioral development," UIUC Research Board, \$11,000
- 1991-1992 "Effect of social interaction on plasticity in endocrine-mediated behavioral plasticity," UIUC Research Board, \$5000
- 1990-1991 "Endocrine and genetic basis of behavioral plasticity in a model system," UIUC Biomedical Research Support Grant, \$12,000
- 1990-1991 "Mechanisms of behavioral plasticity in the honey bee," Beckman Research Award, UIUC Research Board, \$15,000
- 1990 International Program Development Travel Fund, Midwest Universities Consortium for International Activities, \$500

#### **Symposia and Meetings Organized**

- 1990 Program Symposium, ESA National Meetings, New Orleans, LA: "Physiology of Insect Colonies" (with M. Winston)
- 1993 Program Symposium, ESA National Meetings, Indianapolis, IN: "Insects as Models in Behavioral Neuroscience" (with S. Fahrbach)
- 1995 Nalbandov Symposium, "Development and Evolution of Brain Centers for Learning," University of Illinois (with S. Fahrbach)
- 1996 "Bees, Beekeeping, and 40 years of Graduate Education: Roger A. Morse," Informal Conf., ESA National Meeting, Las Vegas, NV (with T. Seeley)
- 2000 "Building a Community to Foster New Approaches to the Study of Genes, Brain, and Behavior with Honey Bees," Rockefeller Found., Bellagio, Italy
- 2001 "Comparative Insect Genomics," USDA International Workshop (member, steering committee)
- 2002 "Genes and Social Behavior," Soc. for Neuroscience (with T. Insel)
- 2003 "Chemical Ecology in a Post-Genomic World," NAS Sackler Colloq., (with M. Berenbaum)
- 2003 "Genetics of Social Behavior," Int. Cong. Genetics (with R. Crozier)
- 2004 "Genes and Behavior," Gordon Research Conference, Chair
- 2007 "Genetics and Genomics of Social Behavior," NIH-NIDA/NIMH Workshop
- 2007 "Honey Bee Genomics and Biology," Cold Spring Harbor

#### **Invited Talks at Symposia**

- 1985 "Hormonal Regulation of Insect Behavior," ESA Eastern Branch Meetings, Williamsburg, VA
- 1986 "Neurobiology and Behavior of Honey Bees," IUSSI, 10th International Congress, Munich
- 1987 "The Genetics of Social Evolution" Program Symp., ESA National Meetings, Boston
- 1988 "Competition and Cooperation in Insect Colonies" Program Symp., ESA Natl. Mtgs., Lexington, KY (with R. Page)
- 1989 Workshop Discussant, International Congress of Endocrinol., Spain
- 1990 "Behavioral Genetics," IUSSI, 11th Int. Congress, Bangalore, India
- 1990 "Sociogenesis: Behavioral Ontogeny in Insect Colonies," IUSSI, 11th Int. Congress, Bangalore, India
- 1990 "Behaviour and Physiology of the Honeybee" Colloq Royal Ent. Soc., London
- 1990 "Physiology of Insect Colonies" Program Symp., ESA Natl. Mtgs., New Orleans
- 1992 "Socioethology of Honey Bees" 3<sup>rd</sup> Int. Neuroethol. Cong., Montreal
- 1992 "Integrative Mechanisms of Division of Labor in Insect Colonies," ESA Natl. Mtgs., Baltimore
- 1993 "Insects as Models in Behavioral Neuroscience," Program Symp., ESA Nat. Mtgs., Indianapolis (with S. Fahrbach & G. Withers)
- 1993 "Caste Ergonomics," Section Symp., ESA Natl. Mtgs., Indianapolis (with S. Trumbo)
- 1994 "Insect Colonies: Adaptive Design and Self-Organisation" Symposium, IUSSI, 12th Int. Cong., Paris (with Z. Huang)
- 1995 "Juvenile Hormone Revisited: Dynamics of its Involvement in Insect Reproduction," ESA Natl. Mtgs., Las Vegas
- 1995 "From Behavior to Genes," ESA Natl. Mtgs., Las Vegas (with T. Giray)
- 1996 "Evolution of Insect Societies," Int. Congr. Evolutionary Biology, Budapest
- 1997 "Behavioral Modulation," Int. Soc. Neurochemistry, Israel (with D. Schulz)
- 1998 "From Mechanism to Evolution," An. Behav. Soc. Natl. Mtg, Carbondale, IL

- 1998 “Lifespan Actions of Developmental Hormones,” Behav. Neuroendocrinol. Soc. Natl. Mtg, Atlanta
- 1998 “Genetic Analysis of Behaviour,” Zoological Soc. of London
- 1998 “Forty Years of Bees, Beekeeping and Graduate Education: A Tribute to Roger A. Morse,” ESA Natl. Mtgs., Las Vegas
- 1999 Neuroethology Gordon Conference, Oxford Univ., UK
- 1999 “Self-organization and the evolution of social behavior,” Santa Fe Institute
- 1999 “The Insect Societies – 100 years of contributions to the biological sciences,” ESA Natl. Mtgs. Program Symposium, Atlanta
- 1999 “Biotechnology and Animal Behavior” NSF Workshop, Wash. DC
- 1999 “Neuroethology: behavior, evolution, and neuroscience,” Gordon Conference, Oxford, UK
- 1999 “Workshop on organisms with negligible senescence,” University of Southern California, CA
- 2000 “Biological Rhythms,” Int. Cong. Entomology, Brazil
- 2000 “Gene Expression,” Int. Cong. Entomology, Brazil
- 2000 “Insect Chemical Ecology in the Molecular Era,” Max-Planck, Germany
- 2001 “New Directions in Behavior Genetics,” An. Behav. Soc. Mtg, Corvallis, OR
- 2001 “Neuromodulation,” Neuroethology Int. Cong., Bonn (with D. Schulz)
- 2001 “Proximate and Ultimate Mechanisms of Caste Differentiation,” ESA Natl. Mtgs., San Diego
- 2001 “Ecological and Evolutionary Genomics,” University of Lusanne, Switzerland (with C. Whitfield)
- 2001 “Genomics,” ESA Natl. Mtgs., Program Symposium, San Diego
- 2001 “Evolutionary Neuroscience,” Simpson Science Symp, UI Chicago
- 2001 “Comparative Biology of Aging,” NIH Symposium
- 1998 Chronobiology Gordon Conference, Rhode Island
- 1999 Neuroethology Gordon Conference, Session Co-Chair, Oxford Univ., UK
- 2002 “Growing Points in Insect Sociobiology,” IUSSI, International Congress, Sapporo, Japan
- 2002 “Mechanisms of Social Behavior,” IUSSI, International Congress, Sapporo, Japan (with A.M. Cziko & S. Fahrbach)
- 2002 “Mechanisms of Social Behavior,” IUSSI, International Congress, Sapporo, Japan (with Y. Ben-Shahar)
- 2002 “Chemical Communication,” IUSSI, International Congress, Sapporo, Japan (with A. Barron & D. Schulz)
- 2002 “Genes and Social Behavior,” Soc. for Neuroscience, Orlando
- 2003 “Emerging Genomes,” Advances in Genome Biol. & Tech., Marco Is., FL
- 2003 “Genetics of Social Behaviour,” Int. Cong. Genetics, Melbourne, AU
- 2003 “Chemical Ecology in a Post-Genomic World,” Sackler Coll., Natl. Acad. Sci.
- 2003 “Genetics of Behaviour,” Soc. Integ. and Compar. Biol., Toronto (with M. Sokolowski and Y. Ben-Shahar)
- 2003 “Behavioural Endocrinology,” Soc. Integ. and Compar. Biol., Toronto (with C. Grozinger)
- 2003 Mitchell Conference, Department of Human Genetics, Univ. Chicago
- 2003 Japan Molecular Biology Meeting (with M. Sokolowski & Y. Ben-Shahar)
- 2004 “Advances in Insect Endocrinology,” ESA Natl. Meetings, Salt Lake City, Utah
- 2004 “Neuromodulation,” International Congress of Neuroethology, Denmark (with A. Barron)
- 2004 “Hymenopteran Semiochemicals: In Honor of Keith Slessor,” Int. Soc. Chem. Ecol., Ottawa, Canada

- 2004 Understanding Complex Systems: Networks,” UIUC.  
 2005 “Behavioral Genomics,” UK Genetics Soc., Edinburgh, Scotland  
 2005 “Phenotypic Diversity and Evolution,” Wenner-Gren Foundation, Stockholm, Sweden  
 2005 Symposium in honor of Rüdiger Wehner, Univ. Zurich, Switzerland  
 2006 “Molecular Insect Science,” Student-Selected Symp., ESA Natl. Mtgs., Indianapolis  
 2006 “Social Insect Genomics,” ESA, Natl. Mtgs., Indianapolis (with A. Toth)  
 2007 “Genetics and Genomics of Social Behavior,” NIH-NIDA/NIMH Workshop  
 2008 “Genetics and Genomics of Behavior,” American Genetic Association, Raleigh

### Invited Seminars

- 1982 Dept. of Entomology, Cornell Univ., Ithaca, NY  
 Rocky Mountain Biological Lab., Colorado  
 Weizmann Inst. of Science, Rehovot, Israel  
 1983 Dept. of Entomology, Hebrew Univ., Rehovot, Israel  
 1984 Dept. of Environmental Biology, Univ. of Guelph, Ontario, Canada  
 1985 Student Award Lecture, Eastern Apicult. Soc., Lancaster, PA  
 1986 Section of Neurobiology and Behavior, Cornell Univ., Ithaca, NY  
 Dept. of Entomology, Ohio State Univ., Columbus, OH  
 1988 Dept. of Entomology, Univ. of California, Davis, CA  
 Dept. of Biological Sciences, Simon Fraser Univ., Canada  
 1989 Dept. of Entomology, UIUC  
 Dept. of Entomology, Univ. of California, Riverside, CA  
 Dept. of Entomology, Ohio State Univ. Wooster, OH  
 1990 Dept. of Physiology and Biophysics, UIUC  
 Dept. of Biology, Indiana Univ. (student selected)  
 Section of Neurobiology & Behavior, Cornell Univ., Ithaca, NY  
 Dept. of Biology, Northern Illinois Univ., Dekalb, IL  
 1991 Neuroscience Program, UIUC  
 Dept. of Biology, Univ. of Wisconsin, Kenosha, WI  
 Dept. of Entomology, Univ. of Wisconsin, Madison, WI  
 1992 Center for Economic Entomology, Illinois Natural History Survey  
 Dept. of Biology, Illinois State Univ., Normal, IL  
 Zoology Institute, Univ. of Würzburg, Germany  
 Neurobiology Institute, Freie Univ., Berlin, Germany  
 Comparative Neurobiology Inst., CNRS, Bures Sur Yvette, France  
 Center of Ethology and Sociobiology, Univer. Paris  
 Invertebrate Physiology Inst., CNRS, Marseille, France  
 Dept. of Mol. & Cellular Biology, Colorado State Univ., Ft. Collins  
 Dept. of Env., Pop. & Organismal Biol., Univ. of Colorado, Boulder  
 Dept. of Biology, Lake Forest College, Lake Forest, IL  
 Center for Complex Systems, Beckman Inst., UIUC  
 Learning and Memory Seminar; Beckman Inst., UIUC  
 Dept. of Cell and Structural Biology, UIUC  
 1993 Dept. of Organismic Biol., Univ. of Chicago, Chicago  
 Dept. of Biology, Univ. of Iowa, Iowa City, IA  
 Dept. of Zoology, Michigan State Univ., E. Lansing  
 Rockefeller Univ., New York, NY  
 1994 Dept. of Entomology, Univ. of Minnesota, St. Paul

Dept. of Zoology, Eastern Illinois Univ., Charleston, IL  
 Dept. of Biology, Indiana Univ.  
 Dept. of Zoology, Univ. of Washington, Seattle  
 1995 Center for Population Biology, Univ. of California, Davis  
 Dept. of Animal Sciences, UIUC  
 Dept. of Entomology, Cornell Univ., Ithaca, NY  
 Dept. of Entomology, Univ. of Mass., Amherst  
 Dept. of Biology, Boston Univ., Boston  
 Dept. of Organismic Biol., Harvard Univ.  
 Behavior Club, Harvard Univ. Medical School  
 Dept. of Psychology, Univ. of Maryland, College Park  
 Dept. of Entomology, Purdue Univ., IN  
 1996 Dept. of Zoology, Tel Aviv Univ., Tel Aviv, Israel  
 Dept. of Biological Chemistry, Hebrew Univ., Jerusalem  
 Dept. of Cell and Animal Biol., Hebrew Univ., Jerusalem  
 Dept. of Entomology, Hebrew Univ., Rehovot, Israel  
 Brain Research Center, Weizmann Inst., Rehovot, Israel  
 Dept. of Parasitology, Hadassah Medical School, Jerusalem  
 Dept. Entomology, Cornell Univ., Geneva, NY  
 1997 Center for Insect Science, Univ. of Arizona, Tucson  
 Dept. of Zoology, Arizona State Univ., Tempe  
 Dept. of Entomology, Iowa State Univ., Ames  
 Dept. of Entomology, Univ. of Kansas, Lawrence  
 Dept. of Ecology, Univ. of Kansas, Lawrence  
 Dept. of Entomology, Univ. of Georgia, Athens  
 Center for Advanced Study, UIUC  
 Neuronal Pattern Analysis Group, Beckman Institute, UIUC  
 Neuroscience Program, UIUC  
 Dept. of Biology, Brandeis Univ., Waltham, MA  
 Dept. of Biological Sciences, Stanford Univ., CA  
 1998 Keck Program in Behav. Biol., North Carolina State Univ., Raleigh  
 1999 Dept. of Ecology, Ethology and Evolution, Univ. of Minn, St. Paul  
 Neuroscience Inst., Univ. of Oregon, Eugene (student selected)  
 Dept. of Physics, UIUC  
 2000 Dept. of Biology, Univ. of Toronto  
 Neuroscience Program Graduate Recruitment Weekend, UIUC  
 2001 Dept. Entomology, UIUC  
 Dept. of Genetics & Development, Cornell Univ., Ithaca  
 Dept. of Entomology, Cornell Univ., Geneva, NY  
 Genome Sciences Dept., Lawrence Berkeley Nat. Lab, Berkeley  
 Division of Integrative Biology, Univ. of Texas, Austin  
 Celera Inc., Rockville, MD  
 2002 Center for Behavioral Neuroscience, Emory Univ., Atlanta  
 Dept. of Biol., Florida State Univ., Tallahassee  
 Genomics Workshop, Iowa State University, Cedar Rapids  
 Dept. Biol., Simon Fraser Univ., Vancouver  
 Dept. Biol., Stanford Univ. (student selected)  
 Dept. Neurobiol. & Behavior, Cornell University  
 Dept. Biology, Univ. Virginia, Charlottesville  
 2003 Ctr. Insect Sci., Univ. Arizona, Tucson (postdocs' choice)  
 Neuroscience Prog., Yale Univ., New Haven

- Dept. Human Genetics, Johns Hopkins Univ., Baltimore  
EcoLunch, UIUC  
Dept. Organismic and Evolutionary Biol., Harvard Univ.  
Program in Ecology & Evolutionary Biol., UIUC  
Dept. Cell & Structural Biol., UIUC
- 2004 BioMath, UIUC
- 2005 Dept. Ecology & Evol. Biol., Princeton Univ.  
Dept. Biol., Univ. Georgia.  
Dept. Biol., Southern Cal. Univ.
- 2006 Dept. Neurosci., Washington Univ. in St. Louis (student selected)  
Center for Brain Behavior and Evolution, Bucknell Univ.  
Dept. Entomol., Pennsylvania, State Univ.  
Dept. Natural Resources and Environmental Sciences, UIUC  
Human Genetics Forum, Northwestern School of Medicine
- 2007 School of Life Sciences, Ariz. St. Univ.  
Dept. Biol., St. Louis Univ.  
Dept. Biol., California Institute of Technology (student selected)  
Dept. Biol., University of California at San Fransisco

### Contributed Presentations

- 1982 IUSSI 9th International Congress, Boulder, CO
- 1983 ESA National Meetings, Detroit, MI
- 1984 ESA National Meetings, San Antonio, TX
- 1985 ESA National Meetings, Hollywood, FL
- 1986 ESA National Meetings, Reno, NV
- 1987 ESA National Meetings, Boston, MA
- 1988 ESA National Meetings, Louisville, KY (with R.E. Page)  
Int. Cong. of Entomol., Vancouver, Canada (with M.J. Smirle)  
British and French Sections of IUSSI, London, UK (with C. & A. Strambi)
- 1989 ESA National Meetings, San Antonio, TX (with R. Page)  
"Bug-O'Lunch," Department of Entomology, UIUC
- 1990 ESA National Meetings, New Orleans, LA, (with Z.-Y. Huang)  
Int. Cong. Neuroend., Bordeaux, France (with A. Strambi, M. Renucci, & C. Strambi)  
"Bug-O'Lunch," Department of Entomology, UIUC
- 1991 ESA Natl. Mtgs., Reno, NV (with Z. Huang; with T. Giray; with K. Crailsheim)  
"Bug-O'Lunch," Department of Entomology, UIUC  
Argonne Symp. for Undergraduates in Science, Engineering and Mathematics (with M. O'Neal & Z. Huang)
- 1992 ESA Natl. Mtgs, Baltimore, MD (with Z. Huang; with T. Giray)  
Midwest Neuro. Mtgss, Columbia, MO (with Z. Huang)  
Animal Behavior Society Natl. Mtgs (with F.C. Dyer)  
Neuroethol. Int. Congr., Montreal (with G. Withers & S. Fahrbach)  
Neuroethol. Int. Congr., Montreal (with M. O'Neal & Z. Huang)  
Neuroethol. Int. Congr., Montreal (with T. Giray)  
Soc. Neurosci. Mtg., Anaheim (with G. Withers & S. Fahrbach)
- 1993 Soc. Neurosci. Mtg., Wash., D.C. (with G. Withers & S. Fahrbach)  
ESA Natl. Mtgs., Indianapolis, IN (with T. Giray; with C. Wagener-Hulme & J. Kuehn; with S. Trumbo; with Z. Huang; with S. Collins & J.Conner; with D. Toma)

- 1994 Soc. Neurosci. Mtg., Miami, FL (with J. Strande & S. Fahrbach)  
IUSSSI 12th Int. Cong., Paris (with A. Strambi & C. Strambi)
- 1995 Soc. Neurosci. Mtg, San Diego, CA (with S. Farris & S. Fahrbach)  
Midwest Neuro. Mtg., Madison, WI (with S. Fahrbach & S. Farris)  
Animal Behavior Society Natl. Mtgs. (with S. Trumbo)  
Neuroethol. Int. Cong., Cambridge (with S. Fahrbach & S. Farris; with C. Wagener-Hulme & D. Schulz)  
ESA Natl. Mtgs, Las Vegas (with S. Camazine & K. Crailsheim; with S. Collins & J. Conner; with L. Heuser; with D. Schulz & Z. Huang; with J. Sullivan & S. Fahrbach; with Z. Huang; with S. Beshers; with D. Moore, J. Angel, I. Cheeseman & S. Fahrbach; with J. Pettis & M. Winston)
- 1996 Soc. Neurosci. Mtg, Wash., D.C. (with S. Farris, S. Fahrbach & R. Davis)  
Soc. Neurosci. Mtg, Wash., D.C. (with J. Sullivan & S. Fahrbach)  
Soc. Neurosci. Mtg, Wash., D.C. (with D. Moore & T. Giray)  
ESA Natl. Mtgs., Louisville, KY (with Z. Huang; with S. Beshers; with D. Schulz; with D. Toma)  
Israel Neurosci. Soc. (with M. Shapira, M. Korner & H. Soreq)  
Biological Rhythms Mtg., Georgia (with D. Toma)
- 1997 Animal Behavior Society Natl. Mtg. (with S. Trumbo)  
Midwest Neurobiology Meetings, Minneapolis, MN (with S. Fahrbach & S. Farris; with S. Fahrbach & J. Sullivan; with D. Schulz)  
IUSSSI, North American Section Meeting (with Z.-H. Huang; with S. Beshers; & D. Schulz; with J. Sullivan)  
Animal Behavior Society, Midwest Region (with Y. Ben-Shahar & B. Smith)  
Animal Behavior Society, Northeast Region (with S. Trumbo)  
Society for Neuroscience Annual Meeting, New Orleans (with S. Fahrbach & S. Farris)
- 1998 International Society for Neuroethology Conference, San Diego (with Y. Ben-Shahar)  
International Biological Rhythms Conference (with D. Toma)  
Society for Neuroscience Annual Meeting, Los Angeles (with D. Toma)  
International Society for Neuroethology Conference, San Diego (with D. Schulz; with Y. Ben-Shahar)  
IUSSSI, International Congress (with S. Beshers; with D. Schulz; with Y. Leconte)  
International Biological Rhythms Meeting (with G. Bloch)
- 1999 Society for Behavioral Neuroendocrinology, Virginia (with S. Fahrbach & J. Sullivan)  
Society for Neuroscience Annual Meeting, New Orleans (with G. Bloch & S. Fahrbach; with S. Farris, S. Fahrbach, & N. Strausfeld; with Y. Ben-Shahar & M. Sokolowski)  
ESA National Meetings, Atlanta, GA (with D. Schulz)
- 2000 Society for Neuroscience Annual Meeting, Miami (with E. Capaldi, J. Sullivan, J. Riley & S. Fahrbach)  
International Biological Rhythms Meeting (with G. Bloch)  
ESA National Meetings, Montreal, Canada (with D. Schulz & J. Sullivan; with Y. Ben-Shahar & M. Sokolowski)  
Animal Behavior Society National Meeting (with M. Elekonich)  
Society for Toxicology National Meeting (with K. Seo, S. Fahrbach & L. Hansen)

- 2001 Genetics and Development of the Hymenoptera Meeting, Washington, D.C. (with Y. Ben-Shahar; with G. Bloch; with C. Whitfield)  
 Society for Neuroscience Annual Meeting, San Diego (with Y. Ben-Shahar & M. Sokolowski; with R. Velarde, H. Robertson, & S. Fahrbach; with C. Whitfield)  
 IUSSI, European Section, Berlin (with G. Bloch)  
 ESA National Meetings, San Diego, CA (with A. Barron & D. Schulz; with D. Schulz; with S. Trumbo)  
 Midwest Drosophila Conference, Allerton Park, IL (with H. Robertson & C. Whitfield)
- 2002 International Biological Rhythms Meeting (with G. Bloch)  
 Annual Drosophila Research Conference, San Diego (with H. Robertson & C. Whitfield)  
 Insect Molecular Science symposium, Tucson (with H. Robertson & C. Whitfield)  
 Society for Neuroscience Annual Meeting, Orlando (with Y. Ben-Shahar & M. Sokolowski; with C. Whitfield)  
 ESA National Meetings, Ft. Lauderdale, FL (with A. Toth)
- 2003 American Chemical Society, Sarasota (with C. Grozinger)  
 American Nuclear Society, New Orleans (with S. Landsberger, D. O'Kelly, & Y. Ben-Shahar) Society for Neuroscience (with N. Ismail & S. Fahrbach; with C. Whitfield & Y. LeConte; with R. Velarde & S. Fahrbach); ESA National Meetings, Cincinnati, OH (with A. Toth; with C. Whitfield; with C. Grozinger)
- 2004 Society for Neuroscience (with N. Ismail & S. Fahrbach; American Chemical Society, Sarasota (with C. Grozinger); Gordon Research Conference on Genes & Behavior, Ventura (with C. Grozinger)
- 2005 American Society for Mass Spectroscopy (with T. Richmond, A. Hummon, S. Rodriguez, J. Sweedler); IVth International Conference on Arthropods: Chemical, Physiological and Environmental Aspects, Poland (with P. Verleyan, T. Richmond, S. Rodriguez, J. Sweedler); European IUSSI Congress (with A. Barron); Neuroethology Gordon Research Conference, Cambridge, UK (with M. Sen Sarma; with N. Ismail); Society for Neuroscience (with N. Ismail & S. Fahrbach; with A. Brockmann; with H. Lehman, D.J. Schulz & A. B. Barron; with S.A. Ament)
- 2006 American Statistical Assoc (with S. Rodriguez-Zas & B. Southey); IUSSI, International Congress (with M. Sen Sarma; with A. Toth, J. Hunt, T. Newman & M. Hudson; with S. Fahrbach & N. Ismail; with C. Alaux); Society for Neuroscience (with S. Ament and R. Velarde; with A. Barron)  
 ESA National Meetings, Indianapolis (with R. Palli; with S. Ament; with A. Toth)
- 2007 Cold Spring Harbor Workshop on Honey Bee Genomics and Biology (with C. Alaux; with S. Ament & R. Velarde; with Y. LeConte; with S. Liang; with M. Sen Sarma; with A. Toth, J. Hunt, T. Newman & M. Hudson; with M. Corona, R. Velarde & K. Hughes; with S. Remolina & K. Hughes)  
 Society for Neuroscience (with S. Ament; with S. Liang; with C. Lutz, N. Ismail & S. Fahrbach); Int. Congress for Neuroethology (with A. Brockmann)

## Graduate Students

Ph.D. students

- Ginger Withers, 1991-93, Neuroscience (co-advisor, S. Fahrbach); Women in Neuroscience Award, 1992; Capranica Prize for outstanding paper in Neuroethology, 1993; Finalist, Lindsley Prize for outstanding dissertation, Society for Neuroscience; *Assistant Professor, Whitman College*
- Tugrul Giray, 1990-96, Entomology; Outstanding Student Award, Eastern Apicultural Society, 1996; George C. Eickwort Award, International Union for the Study of Social Insects (IUSI), 1996; *Associate Professor, University of Puerto Rico*
- Christine Wagener-Hulme, 1992-00, Entomology; (ret. Air Force Entomologist; ESA Student Talk Award, 1993)
- Daniel Toma, 1992-99, Ecology, Ethology and Evolution; NIMH NRSA predoctoral fellowship, 1995-1998; Edwin M. Banks Memorial Award, 1999; 1999-2005, Postdoc. Associate, The Neuroscience Institute; left science
- Sarah Farris, 1993-99, Entomology (co-advisor, S. Fahrbach), Cell and Molecular Biology Training Grant; *Assistant Professor, W. Virginia Univ.*
- David Schulz, 1995-2001, Entomology, Developmental Psychobiology and Neurobiology Training Grant, 1997-00; ESA Student Talk Award, 1999; Procter & Gamble Doctoral Student Research Award, 2000; Dorothy Feir ESA Travel Grant for Insect Physiology; 2001 Emerson Award (outstanding graduate student in the School of Integrative Biology); 2002 Eickwort Award (outstanding student IUSI); *currently NIH-NRSA Postdoctoral Associate with Eve Marder, Brandeis Univ.; Assistant Professor, Univ. Missouri (Aug. 2005)*
- Joseph Sullivan, Entomology, 1999-01 *Loyola Medical School student*
- Yehuda Ben-Shahar, Entomology, 1998-02 ESA Student Talk Award, 2000, Young Investigator Award, Intl. Soc. Neuroethol., 2004, *Postdoctoral Associate, HHMI and Univ. Iowa*
- Amy Toth, Program in Ecology and Evolution, 2001-2006, Founder's Poster Award, Animal Behavior Soc., 2002; ESA Student Talk Award, 2002, Clark Award, UIUC, 2003, 2004; NSF Doctoral Dissertation Improvement Grant, 2004; Genome Sciences and Public Policy fellowship, 2003-05; PEO Scholar Award, 2004; Emerson Award (outstanding graduate student in the School of Integrative Biology), 2006; Procter & Gamble Doctoral Student Research Award, 2006; Runner Up, Eickwort Award (Outstanding Student IUSI), 2007
- Nyla Ismail, Neuroscience, 2001-present (co-advisor, S. Fahrbach) Best Student Poster, Midwest Neurobiology Meeting, 2003; Developmental Psychobiology and Neurobiology Training Grant, 2003-present
- Rodrigo Velarde, Entomology, 2000-present (co-advisor, S. Fahrbach)
- Xu Ling, Electrical Engineering, 2004-present (co-advisors, C. Zeng & C. Whitfield)
- Seth Ament, Neuroscience, 2004-present, Cell & Mol. Biol. Training Grant (NSF Pre-Doctoral Fellowship)
- Sophia Liang, Neuroscience, 2004-present
- Ying Wang, Cell & Developmental Biology, 2004-present (co-advisor, C. Mizzen)
- Silvia Remolina, Animal Biology, 2005-present (co-advisor, K. Hughes), Best Talk, Masters/Early PhD student, GEEB Symposium, UIUC
- Hollis Woodard, Program in Ecology & Evolutionary Biology, 2006-present

Claudia Lutz, Neuroscience Program, 2006-present, Graduate School  
Distinguished Fellowship, 2006-9

Master's thesis Tugrul Giray, 1993, Entomology  
Michael Moore, 1993, Biology (currently employed by U.S. Wildlife Service)  
Sean Collins, 1995, Entomology  
Sarah Farris, 1995, Entomology (co-advisor, S. Fahrbach)  
Laura Heuser, 1997, Entomology  
David Schulz, 1997, Entomology (Clark Research Support Grant, 1997)  
Joseph Sullivan, 1999, Entomology (co-advisor, S. Fahrbach)  
Yehuda Ben-Shahar, 1998, Entomology (winner, Clark Award)  
Maria Vermiglio, 1998, Biology  
Amy Cash, 2002-2003, Program in Ecology and Evolutionary Biology  
Pouya Kheradpour, Computer Science, 2004-2005 (co-advisors, C. Whitfield  
& C. Zeng; currently in Ph.D. program, Massachusetts Institute of  
Technology)  
Nick Naeger, Entomology, 2006- present, NIH-UIUC Sensory Neuroscience  
Training Grant, 2006-8

### **Undergraduate Students**

Scott Sinnott, Entomology 290, 1990  
Naomi Arensen, Hughes Fellow, 1990, co-author of paper published in *Behavioral Ecology and Sociobiology*  
Matthew E. O'Neal, Hughes Fellow, 1991-1992, presenter, Argonne National Labs Conf. Undergrad. Res.  
Kevin P. White, Hughes Fellow, 1991  
Amy Engelmann, Entomology 290, 1992  
Noreen Abassi, Entomology 290, 1992  
NSF Research Opportunities for Undergraduates Site Award, "Neurobiology and Behavior of Honey Bees" (with S. Fahrbach), 1992: Eric Reyes, Darini Nicholas, Robin Mittenthal, Jennifer Strande (continued to Spring, 1994), co-author of paper published in *Neurosciences Letters*, Natasha Leacock (continued to Spring, 1993), Chester Brown  
Beth A. Follman, Entomology 290, 1992 - 1993  
Cathy Sengsouvanh, NIH Minority Biomedical Apprentice Program, 1993  
Kirk Tanka, Hughes Fellow, 1993  
Linda Parent, 1993 - 1994  
Jeffrey Wei, Honors Biology, 1993 - 1994  
De'Avlin Olguin, NIMH Minority Student Award, 1993 - 1994  
Julie Michalczyk, 1993 - 1994  
NSF Research Opportunities for Undergraduates Site Award, "Neurobiology and Behavior of Honey Bees" (with S. Fahrbach), 1994, 1995: Jennifer Angel, Stanford University, co-author of papers published in *Journal of Insect Behavior* and *Behavioral Ecology and Sociobiology*, Cheryl Chavez, UIUC, Iain Cheeseman, Duke University, co-author of papers published in *Journal of Insect Behavior* and *Behavioral Ecology and Sociobiology*, recipient, NSF Predoctoral Fellowship, Shirley Jean-Baptiste, UIUC, Rebecca Martos, UIUC, Jennifer Drew, UIUC, Nick Gomes, Dickinson College, Carol Aron, Mt. Holyoke College, co-author of a paper published in *Behavioral Ecology*, Ben Zelinsky, Lewis and Clark College, nominee Barry M. Goldwater Scholarship, co-author of a paper published in *Behavioral Ecology*, Brendan O'Donnell, Franklin and Marshall College, recipient of the Leser Fellowship in part for his research at UIUC, Tom Hallam, UIUC  
David Schulz, Entomology 290, 1994 - 1995

Omar Jassim, Entomology 290, 1994 - 1997, presenter at Argonne National Labs Conference for Undergraduate Research; winner, Barry M. Goldwater Scholarship; presenter at University of Illinois Medical Scholars Program Research Symposium; co-author of paper published in *Journal of Insect Physiology*

John Harting, Honors Biology, 1995-1996

Animal Behavior James Scholar Program: Noelle Schmidt, 1994; Laura Pawola, 1996; Edwin Lee, 1996; Renee Gamboa, 1996; Cindy Kish, 1999; Kelly Kirby, 1999

Russ Riley, 1999–1998

Ali Syed, 1996

Vincent Cheung, 1997

Meghpara Milan, 1996-1997

Aimee Olson, Hughes Fellow, 1997

Richard Kim, 1997-1999

Shelby Feinberg, 1997, winner, Barry M. Goldwater Scholarship

Christopher Thompson, Hughes Fellow, 1998-1999, Environmental Council Special Undergraduate Research Experience Scholar, co-author of paper published in *Animal Cognition* and to be published in *Molecular Neuroscience*

Amy Barbour, Hughes Fellow, 1998

Asmita Patel, 1998-1999

Antonia Tam, 1998-1999

Paul Stortz, 1998

Michael Vieth, 1999-2000

Katrina Jez, 1999-2002 (Entomology Undergraduate Award)

Sonya Solomon, 1999-2001

Kimberly Crocker, 1999-2000

Matt Gill, 1999-2000

Lisa Pellegrinetti, 1999-2000

Dyann Wade, 1999-2000

Dustin Rubinstein, Hughes Fellow, 2000 – 2002 (Colgate-Palmolive Fellowship; Environmental Council Award)

Amy Cash, 2000 – 2001

Anne-Marie Cziko, 2000-2001

Theresa Hong, 2000 – 2001

Jinny Oh, 2000-2001

April Stetler, 2000-2003

Nichole Dudek, 2001-2002

Sean Sivin, Hughes Fellow, 2002

Carolyn Schook, Columbia University, 2002-2003

Adam Meisel, Hughes Fellow, 2003

Sara Kantarovich, 2003-present

Pouya Kheradpour, 2003-2004

Kenny Roman, 2004-2006

Katrina Thomas, 2004-present

Mira Kolodkin, 2005-present

Victor Chan, 2004-present

Linda Qi, 2004-2007

Dan Hafetz, 2004-present

Nicole Betenia, Swarthmore College, summer 2006

Henry Pollack, Washington University, summer 2006

Hadley Meyers, Mt. Holyoke College, summer 2006

Roxanne Mangus, Southwest Missouri Univ., McNair Scholar, summer 2006

Daniel Moyses, 2006-2007

### Senior Theses

Matthew E. O'Neal, B.S. with High Distinction, 1992  
Natasha Leacock, B.S. with High Distinction, and Helen Hess (Outstanding Biology Student Award, 1993 (co-advisor S. Fahbrach)  
Jennifer Strand, B.S. with High Distinction, and Outstanding Undergraduate Award in Cell and Structural Biology, 1994 (co-advisor, S. Fahbrach)  
Jennifer Angel, B.S. with honors, Stanford University (outside advisor), 1994  
David Schulz, B.S. with Highest Distinction, and Helen Hess (Outstanding Biology Student Award, 1995  
Omar Jassim, B.S. with Highest Distinction, and Harriett Long Award (Outstanding Academic Record), 1997  
Russ Riley, B.S. with Distinction, 1998  
Christopher Thompson, B.S. with Distinction and winner Department of Ecology, Ethology and Evolution Outstanding Student Award, 2000  
Dustin Rubinstein, B.S. with Distinction, Integrative Biology, 2002  
Mira Kolodkin, B.S. with High Distinction, Molecular and Cellular Biology, 2006

### Postdoctoral Associates

Z.-Y. Huang, Ph.D. Guelph Univ., March, 1990–93, *Associate Professor, Mich. St. Univ.*  
Stephen Trumbo, Ph.D. SUNY Binghamton, NIH Trainee and NSF Postdoctoral Fellow, 1991-1994, *Associate Professor, Univ. Connecticut*  
Samuel Beshers, Ph.D. Boston Univ., USDA Postdoctoral Fellow, 1995–97, *UIUC Lecturer and Neuroscience Program Coordinator*  
Elizabeth Capaldi, Ph.D. Michigan State Univ., NIH-NRSA Postdoctoral Fellow, 1997-2000 (co-supervised by S. Fahrbach), *Assistant Professor, Bucknell Univ.*  
Guy Bloch, Ph.D. Tel Aviv Univ., BARD Postdoctoral Fellow, 1997–00, *Senior Lecturer, Hebrew Univ.*  
Michelle Elekonich, Ph.D. Univ. Washington, NIH-UIUC Training Grant in Developmental Psychobiology and Neuroscience, 1997–00, USDA Postdoctoral Fellow, 2000–2 *Assistant Professor, Univ. Nevada, Las Vegas*  
Charles Whitfield, Ph.D. Stanford Univ., NSF Postdoctoral Fellow in Bioinformatics, 2000-04, *Assistant Professor, UIUC*  
Miguel Corona, Ph.D. Mexican National Univ., CONACyT Mexican Fellowship, 2000-07  
Andrew Barron, Ph.D. Cambridge Univ., Fulbright Distinguished Fellowship, February 2001–02; Postdoctoral Associate 2002-3; *Assistant Professor, Macquarie Univ., Sydney, Australia*  
Christina Grozinger, Ph.D. Harvard Univ., Beckman Fellow, September 2000-04, *Assistant Professor, North Carolina St. Univ.*  
David Schulz, Ph.D. Univ. Illinois, 2001-02; NIH-NRSA Postdoctoral Fellow, Brandeis Univ. 2002-2005, *Assistant Professor, Univ. Missouri, 2005-present*  
Yehuda Ben-Shahar, Ph.D. Univ. Illinois, 2002-3, HHMI Postdoctoral Fellow, Univ. Iowa, 03-08 *Assistant Professor, Washington University, Aug. '08*  
Moushumi Sen Sarma, Ph.D. Indian Institute of Science, 2004-present  
Adrienne Moran Lauter, Ph.D. Univ. Minnesota, NIH-UIUC Training Grant in Developmental Psychobiology and Neuroscience, 2003-5, *Lab manager, Iowa St. Univ.*  
Axel Brockmann, Ph.D. Univ. Wuerzburg, 2004-present  
Amanda Hummon, Ph.D. Univ. Illinois, 2004-5 (with S. Rodriguez and J. Sweedler)  
Cedric Alaux, Ph.D., Univ. Paris, Fondation Fyssen Fellow, 2005-present

Scott Kreher, Ph.D., Yale Univ., 2006-present, NIH-UIUC Training Grant in Sensory Neuroscience, 2006-7

Amy Toth, Ph.D. Illinois, 2007-08, *USDA National Needs Postdoctoral Fellow*, North Carolina St. Univ., 2008-present

### **Research Associate**

Z.-Y. Huang, 1993–98 *Associate Professor*, Mich. St. Univ.

### **Research Assistant Professor**

Tom Newman, 2004-present

### **Visiting Scientists**

Karl Crailsheim, Professor of Zoology, Univ. of Graz, Austria, 1991

Yves Le Conte, NATO Fellow, Research Scientist, INRA, Avignon, France, 1993-1994

### **Courses Taught**

Psych./Bio. 342	Genes and Behavior, Spring (S) '98, S00, S02, S04, S07
Biol./Pol. Sci 490	Genes and Behavior: From Science to Society, Fall (F) '99 (co-taught with I. Carmen)
Entomology 199	Genes and Behavior, Freshman Discovery Course, S97
Physiology 490B	Topics in Neuroethology, F96 (team-taught)
Entomology 301	Introduction to Entomology, F91 (with J. Sternburg); F92, 93, 94, 96 (with E. MacLeod)
Biology 346	Animal Behavior, F92, 93, 94, 96, S99
Biology 104	Animal Biology; 8 lectures, F89; 9 lectures, S91
Entomology 490	Biology of the Honey Bee seminar; S90
Entomology 426	Biology of the Honey Bee seminar, S91
Entomology 426	Pollination Biology seminar, S92 (with M. Berenbaum)
Entomology 426	Evolution of Eusociality seminar, S94 (with E. Macleod & D. Pfennig)
Entomology 426	Communication in Insect Societies seminar, S98 (with G. Bloch)
Entomology 426	Social Regulation of Insect Behavior seminar, F00
Neuroscience 420 (500)	Current Topics in Neuroscience, S01, F01, S02, F02, S03, F03, S04, F05 S06, F06
Entomology 426	Insect Societies as Models in Integrative Biology Seminar, S03
Guest Lecturer	Special Topics in Biology (Bio. 390), S90 Honor's Program: Adventures in Life Sciences (Bio. 123), F90 Insects and People (Ent. 105), yearly since 1991 Agricultural Entomology (Ent. 120), F91 Chemical Ecology, F96 Behavioral Ecology, F98 Molecular Neurobiology, S99, 00, 01 Insect Genomic Analysis, S99, 01, 03 Introduction to Ecology and Evolutionary Biology, F02, F03 Honors Biology, S04 Topics in Biology, Carl Woese, S03, 04 Sensory and Developmental Neuroscience Training Grant Course, F05 Ethics in Biotechnology, ANSC 465, F06

### **National and International Service**

Member-at-Large, Gordon Research Conferences Council, 2006-  
 Editorial Board Member, *Journal of Insect Physiology*; *Journal of Insect Biology*; *Genes, Brain, and Behavior*; *Journal of Experimental Zoology, Gene Regulation and Systems Biology*  
 Ad hoc Advisory Committee, Center for Brain Science, Harvard University, 2005  
 Program Committee, "Cholinergic Signaling: from Gene to Environment," Symposium in honor of Hermona Soreq, Hebrew University, Jerusalem, 2006-  
 Reviewer, Elsevier Press, 2006  
 Reviewer, Indiana 21<sup>st</sup> Century Research & Technology Fund, 2004  
 Program Committee, 15th International Congress of IUSSI, 2004-2006  
 Consultant, Songbird Genomic Initiative, 2003-present  
 Advisory Committee, NSF Center for Behavioral Neuroscience, Emory Univ, 2002-2006  
 President-Elect and President, IUSSI North American Chapter, 2000-2002  
 Reviewer, Sinauer Associates Publisher, 2000  
 Judge, Student Competition, ESA, 2000  
 Travel Support Committee, IUSSI North American Chapter, 1988 - 1989  
 Associate Editor, *Annual Review of Entomology*, 1998 - present  
 Nominating Committee, IUSSI North American Chapter, 1987 – 1988, 2005-6  
 Member, Beckman Scholars National Advisory Panel, 1998  
 Travel Grant Awards Committee, IUSSI, 1998  
 Referee, Killiam Program, Canada Council for the Arts, 1998  
 Conference Organizing Committee, IUSSI North American Chapter, 1997  
 Referee, Humboldt Foundation, 1994, 1995, 2002  
 Chairperson, Sub-section Cb, ESA, 1995  
 Travel Grant Award Selection Committee, IUSSI North American Chapter, 1994  
 Panel Member, USDA Competitive Grants Program, Entomology, 1994  
 Reviewer, John Simon Guggenheim Memorial Foundation, 1994  
 Reviewer, Princeton Univ. Press, 1993  
 Outside Member of Doctoral Committee, Gui Deng, Univ. of Miami, 1993 - 1995  
 Awards Committee, Eastern Apicultural Society, 1993 – 2000  
 Secretary, Chair-elect, Chair, Sub-section Cb, ESA, 1993-1995  
 Reviewer, NSF, Animal Behavior, Population Biology and Physiological Ecology, Neurobiology of Learning and Memory, Behavioral Neuroscience, Behavioral Neuroendocrinology, Postdoctoral Fellowships; USDA Competitive Grants Program; Natural Sciences and Engineering Research Council of Canada; NIMH, Psychology and Behavior Committee, Start program; Israel Science Foundation; National Geographic Society, Austrian Science Foundation; NIH Molecular, Cellular and Developmental Neurosciences Integrated Review Group SSS-P Special Emphasis Panel; Indiana Genomics Initiative  
 Reviewer, *American Naturalist*, *Animal Behaviour*, *Annals of the ESA*, *Apidologie*, *Archives of Insect Biochemistry and Physiology*, *Behavioral Neuroscience*, *Biology of Reproduction*, *Behavioral Ecology*, *Behavioral Ecology and Sociobiology*, *Behavioral and Neural Biology*, *BioScience*, *Brain and Behavior*, *BMC Biotechnology*, *BMC Molecular Biology*, *Environmental Entomology*, *Ethology*, *Evolution*, *Genome Biology*, *Genome Research*, *Journal of Comparative Neurology*, *Journal of Comparative Physiology*, *Journal of Economic Entomology*, *Journal of Experimental Zoology*, *Insect Biochemistry and Molecular Biology*, *Insectes Sociaux*, *Journal of Insect Physiology*, *Journal of the Kansas Entomological Society*, *Nature*, *Neurobiology of Learning and Memory*, *Proceedings of the National Academy of Sciences*, *Revista Brasileira de Genetica*, *Science*; *PLOS Biology*  
 Reviewer, National Academy of Sciences-National Research Council Report, 2007

### Professional Affiliations

American Association for the Advancement of Science  
American Association for Behavioral Neuroendocrinology  
Animal Behavior Society  
Entomological Society of America  
International Bee Research Association  
International Society for Neuroethology  
International Union for the Study of Social Insects  
Sigma Xi  
Society for Neuroscience  
International Behavioural and Neural Genetics Society

### Public Policy

“Status of Pollinators in North America,” NAS-NRC Committee, 2005-06

### Public Service

1989	Speaker, IL State Beekeeper's Association Mtg., Springfield
1990	Speaker, IL State Beekeeper's Association Mtg., Springfield Consultant, National Wildlife Federation Speaker, IL State Beekeeper's Association Mtg., Springfield Presentation, Playtime Preschool class
1991	Appeared in " <i>Infinite Voyage</i> ," PBS documentary on insects, 1992 Speaker, IL State Beekeeper's Association Mtg., Champaign Reviewer, <i>The New Book of Knowledge</i> Speaker, IL State Beekeeper's Association Mtg., Springfield Presentation, Playtime Preschool class
1992	Speaker, Cook-Depage County Beekeeper's Association Speaker, IL State Beekeeper's Association Mtg, Springfield Member, Advisory Comm. on Apiary Regulations, Ill. Dept. Ag. Speaker, Eastern Apicultural Society Annual Meeting, Ontario Presentation, Colonel Wolfe Kindergarten class
1993	Speaker, Eastern Apicultural Society Meeting, Orono, Maine Speaker, IL State Beekeeper's Association Mtg, Springfield Member, Advisory Comm. on Apiary Regulations, Ill. Dept. Ag. Presentation, Colonel Wolfe 1 <sup>st</sup> grade class Presentation, Playtime Preschool class
1994	Advisor, Chicago Museum of Science and Technology Speaker, Ill. State Beekeeper's Assoc. Winter Mtg., Springfield, IL Member, Advisory Comm. Apiary Regulations, IL Dept. Ag. Presentation, Playtime Preschool class Presentation, Southside Elementary School second-grade class Presentation, Doctor Howard Elementary School 3 <sup>rd</sup> grade class
1995	Presentation, Playtime Preschool class Presentation, Yankee Ridge Elementary School 3 <sup>rd</sup> grade class Presentation, Champaign Public Library Presentation, Clark Lindsey Senior Citizens Home Presentation, Insect Expo '95 Presentation, Jefferson Middle School Presentation, Southside Elementary School kindergarten class Presentation, Doctor Howard Elementary School 4 <sup>th</sup> grade class Presentation, Parkland College, "College for Kids" program

- 1996 Judge, American Embassy Scholarship Competition, Israel  
 Consultant, Israel National Museum of Nature  
 Presentation, Nayot Kindergarten class  
 Presentation, Early Learning Pre-school  
 Presentation, Washington Elementary School 1<sup>st</sup> grade class
- 1997 Presentation, Doctor Howard Elementary School fifth-grade class  
 Presentation, Parkland College, "College for Kids" program  
 Organizer, UIUC "Bees and Beekeeping" Short Course  
 Presentation, Washington Elementary School 2<sup>nd</sup> grade class  
 Appearance, "Prizma," German science program
- 1998 Organizer, UIUC "Bees and Beekeeping" Short Course  
 Presentation, Home Schooling Project, Springfield, IL  
 Presentation, Washington School 3<sup>rd</sup> grade and Kindergarten  
 Presentation, Howard Hughes Undergrad. Res. Fellows (HURF)
- 1999 Organizer, UIUC "Bees and Beekeeping" Short Course  
 Presentation, Colonel Wolf K-1<sup>st</sup> grade  
 Presentation, Washington Elementary School 4<sup>th</sup> grade class  
 Presentation, HURF
- 2000 Organizer, UIUC "Bees and Beekeeping" Short Course  
 Presentation, Home High School  
 Appearance, Chicago WGN radio, with Milt Rosenberg  
 Filmed for Discovery Channel *Twisted Tales*, Animal Planet  
 Presentation, Howard Hughes Undergraduate Research Fellows
- 2001 Presentation, Pack 11 Cub Scouts  
 Presentation, 2<sup>nd</sup> grade, Doctor Howard Elementary School  
 Organizer, UIUC "Bees and Beekeeping" Short Course  
 Presentation, Montessori Habitat School  
 Presentation, HURF
- 2002 Organizer, UIUC "Bees and Beekeeping" Short Course  
 Bee lab tour, HURF  
 "The Opportunistic Mentee", HURF
- 2003 Bee lab tour, HURF  
 Organizer, UIUC "Bees and Beekeeping" Short Course  
 Bee lab tour, YMCA Science Summer Program
- 2004 "Weekend Wizards," Orpheum Science Museum Exhibit  
 "Biology Lab Organization," HURF  
 UIUC-Howard Hughes Medical Institute Biotechnology Education and Outreach Program  
 Presentation, Champaign-Urbana Montessori School  
 Organizer, UIUC "Bees and Beekeeping" Short Course
- 2005 Interviewed for Science Show, Newstalk 890 KDXU, Phoenix, AZ (3 times)  
 Interviewed for Wisconsin Public Radio  
 UIUC-Howard Hughes Medical Institute Biotechnology Education and Outreach Program  
 Interviewed for NPR Science Program  
 Interviewed for WCIA Morning News television show  
 Presentation, Home High School
- 2006 Bee lab tour, Education Staff, Spurlock Museum of World Cultures  
 Bee lab tour, Howard Hughes Undergraduate Fellows Program  
 Interviewed for world-science.net

2007 Champaign-Urbana Rotary Club  
 Interviewed for Focus 580, WILL  
 Champaign-Urbana B'nai Brith  
 Bee lab tour, 4<sup>th</sup> grade class, Thomas Paine Elementary School

**University Service**

1990 - 1991 School of Life Sciences (SOLS) Distinction Committee  
 Entomology Graduate Student Administration Committee

1991 - 1992 Procter and Gamble Lecture arrangements (SOLS-Ent.)  
 Reviewer, UIUC-Sigma Xi scientific writing competition  
 Faculty Senate  
 Neuroscience Program - SOLS TA liaison  
 Entomology Seminar Coordinator

1992 - 1993 Entomology Graduate Student Administration Committee  
 Chairperson, Ent. Graduate Student Administration Committee  
 Entomology Seminar Coordinator  
 Search Comm, Ecology, Ethology and Evolution (outside member)  
 Search Comm., Life Sciences journalist, Univ. News Bureau  
 SOLS Fellowship Committee

1993 - 1994 Neuroscience Program Student Admissions Committee  
 Entomology Seminar Coordinator  
 SOLS Courses and Curriculum Committee  
 W.H. Luckmann Award Committee (Center for Economic  
 SOLS Director Evaluation Committee  
 Campus Research Board *ad hoc* reviewer

1994 - 1995 Entomology Seminar Coordinator  
 School Courses and Curriculum Committee  
 W.H. Luckmann Award Comm. (Ctr. Economic Entomology)  
 Neuroscience Program Student Admissions Committee  
 Search Committee, Insect Systematist Position, IL Natural History  
 Survey, Center for Biodiversity (Campus representative)  
 SOLS Review Committee  
 Campus Research Board *ad hoc* reviewer

1996 - 1997 Entomology Seminar Coordinator  
 Chairperson, SOLS Environmental Safety Committee  
 SOLS Distinction Committee  
 SOLS Capricious Grading Committee  
 Executive Committee, Neuroscience Program  
 Dean's Liaison, Ent. Dept. Head Evaluation Comm.  
 W.H. Luckmann Award Comm. (Ctr. Economic Entomology)  
 Campus Research Board *ad hoc* reviewer

1997 - 1998 SOLS Capricious Grading Committee  
 Chairperson, SOLS Environmental Safety Committee  
 Entomology Seminar Coordinator  
 Entomology Graduate Student Administration Committee  
 Entomology Affirmative Action Committee  
 Member, NIH Developmental Psychobiology and Neurobiology Training  
 Grant Faculty (Campus)  
 Graduate College, Biological Sciences Subcommittee (Campus)  
 Search Committee, Behavioral Ecologist (SOLS)  
 Bylaws Committee for new School of Integrative Biology

1998 – 1999  
 Advisory Committee, School of Integrative Biology  
 Campus Research Board *ad hoc* reviewer  
 Liberal Arts and Sciences (LAS) College Executive Committee  
 Advisory Committee, School of Integrative Biology (SOLS)  
 Promotion and Tenure Committee (Ent.)  
 Executive Committee, Neuroscience Program (Campus)  
 Graduate College, Biological Sciences Subcommittee (Campus)  
 SOLS Distinction Committee  
 Entomology Seminar Coordinator  
 Campus Research Board *ad hoc* reviewer  
 Critical Research Initiatives Selection Committee (Campus)

1999 – 2000  
 LAS Executive Committee (College)  
 Entomology Seminar Coordinator  
 Executive Committee, Neuroscience Program (Campus)  
 Promotion and Tenure Committee (Ent.)  
 Campus Research Board *ad hoc* reviewer

2000 – 2001  
 Advisory Comm., Keck Ctr. Functional and Comp. Genomics  
 Campus Research Board *ad hoc* reviewer  
 Chair, Capricious Grading Committee (School)  
 Promotion and Tenure Committee (Campus)  
 Entomology Seminar Coordinator (fall semester)  
 Promotion and Tenure Committee (Ent.)  
 Provost's *Ad hoc* Committee on a Science Center (Campus)  
 Executive Committee, NIH Developmental Neuroscience and  
 Psychobiology Training Grant (DNPTG) (Campus)

2001 – 2002  
 Advisory Comm., Keck Center for Functional & Comp. Genomics  
 Chair, Capricious Grading Committee (School)  
 Promotion and Tenure Committee (Campus)  
 Awards Committee (Ent.)  
 Promotion and Tenure Committee (Ent.)  
 New Biology Working Group, Ctr. Advanced Study (Campus)  
 Evaluation of Department Head Committee (Entomology)  
 Mentor, Teaching Academy (Campus)  
 Mentor, New Faculty (Cell & Structural Biol.)  
 Executive Committee, NIH DNPTG (Campus)

2002 - 2003  
 Advisory Comm., Keck Center for Functional & Comp. Genomics  
 Promotion and Tenure Committee (Campus)  
 Awards Committee (Ent.)  
 Promotion and Tenure Committee (Ent.)  
 Mentor, New Faculty (Cell & Structural Biol.)  
 Fulbright Student Fellowship Selection Committee (Campus)  
 Executive Committee, NIH DNPTG (Campus)  
 Member, Agricultural Genome Sciences and Public Policy Training  
 Grant (Campus)

2003-2004  
 Advisory Comm., Keck Center for Functional & Comp. Genomics  
 Awards Committee (Ent.)  
 Promotion and Tenure Committee (Ent.)  
 Mentor, New Faculty (Cell & Structural Biol.)  
 Executive Committee, NIH DNPTG (Campus)  
 Member, Agricultural Genome Sciences and Public Policy Training  
 Grant (Campus)

2004-2005	Chair, Search Committee, Insect Genomics (Ent. & IGB) (Sabbatical) Committee on Natural Areas (Campus) Mentor, New Faculty (Cell & Structural Biol.)
2005-2006	Chair, Search Committee, Vertebrate behav. genomics (An. Bio. & IGB) Executive Committee, Institute for Genomic Biology (campus) Executive Committee (College; sabbatical replacement) Provost Selection Committee (Campus) Committee on Natural Areas (Campus) Mentor, New Faculty (Cell & Structural Biol.) Awards Committee (Ent.) Executive Committee, NIH DNPTG (Campus)
2006-2007	Executive Committee, Institute for Genomic Biology (campus) Search Committee, evol. genomics human behavior (Psych. & IGB) Committee on Natural Areas (Campus) Awards Committee (Ent.) Promotion and Tenure Committee (Ent.) Executive Committee, Institute for Genomic Biology (campus) Assisted News Bureau in evaluation of job candidate (campus) Chair, Provost's <i>Ad Hoc</i> Committee on BioEd (campus) Executive Committee, NIH DNPTG (Campus)
2007-2008	Search Committee, evol. genomics human behavior (Psych. & IGB) Committee on Natural Areas (Campus) Awards Committee (Ent.) Executive Committee, Institute for Genomic Biology (campus)

## **Publications**

### Peer-reviewed papers

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7. Robinson, G.E. 1985. Effects of a juvenile hormone analogue on honey bee foraging behaviour and alarm pheromone production. *Journal of Insect Physiology* 31: 277-282.
8. Robinson, G.E. 1987. Regulation of honey bee age polyethism by juvenile hormone. *Behavioral Ecology and Sociobiology*: 20: 329-338.
9. Robinson, G.E. 1987. Alarm pheromone perception in the honey bee: evidence for division of labor based on hormonally modulated response thresholds. *Journal of Comparative Physiology A*: 160: 613-619.

10. Robinson, G.E. and F.L.W. Ratnieks. 1987. Induction of premature honey bee (Hymenoptera: Apidae) flight activity with juvenile hormone analogs administered orally or topically. *Journal of Economic Entomology* 80: 784-788.
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12. Robinson, G.E. and R.E. Page. 1988. Genetic determination of guarding and undertaking in honey-bee colonies. *Nature* 333: 356-358. *Cover story.* (reported in the *Chronicle of Higher Education, Discover, Encyclopedia Britannica 1989 Book of the Year, London Times, New York Times, Science News*).
13. Robinson, G.E. and R.E. Page. 1989. Genetic determination of nectar foraging, pollen foraging, and nest-site scouting in honey bee colonies. *Behavioral Ecology and Sociobiology* 24: 317-323.
14. Robinson, G.E., Page, R.E., Strambi, C. and A. Strambi. 1989. Hormonal and genetic control of behavioral integration in honey bee colonies. *Science* 246: 109-112. (reported in *Chicago Tribune, Voice of America*)
15. Smirle, M.J. and G.E. Robinson. 1989. Behavioral status is correlated with detoxifying enzyme activity in worker honey bees. *Journal of Insect Behavior* 2: 285-289.
16. Page, R.E., Robinson, G.E. and M.K. Fondrk. 1989. Genetic specialists, kin recognition, and nepotism in honey-bee colonies. *Nature* 338: 576-579. *Cover story.*
17. Calderone, N.W., Robinson, G.E. and R.E. Page. 1989. Genetic structure and division of labour in the honey-bee society. *Experientia* 45: 765-767.
18. Cameron, S.A. and G.E. Robinson. 1990. Juvenile hormone does not affect division of labor in bumble bee colonies (Hymenoptera: Apidae). *Annals of the Entomological Society of America* 83: 626-631.
19. Robinson, G.E., Page, R.E. and M.K. Fondrk. 1990. Genotypic biases in worker reproduction and intracolony variability for oviposition, oophagy, and larval care in queenless honey bee colonies. *Behavioral Ecology and Sociobiology* 26: 315-323.
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