Society for Invertebrate Pathology Newsletter

Volume 43 Issue 1 February, 2010

SIP 2010 – Welcome from Organizing Committee

The organizing committee of 2010 SIP meetings would like to welcome you to Karadeniz Technical University in Trabzon, Turkey for the **43th Annual Meeting of the Society for Invertebrate Pathology, 10th International Colloquium on Invertebrate Pathology and Microbial Control**, & **The Final Meeting of COST862: Bacterial Toxins for Insect Control** from July 11-15, 2010.

Important deadlines:

Abstract Submission	January 11 - April 02, 2010
Early Registration	January 11 - May 21, 2010
Late Registration	May 22 - July 09, 2010
On-site Registration	After July 09, 2010
Room Rate Deadline	May 21, 2010
Student Travel Award Applications	March 06, 2010

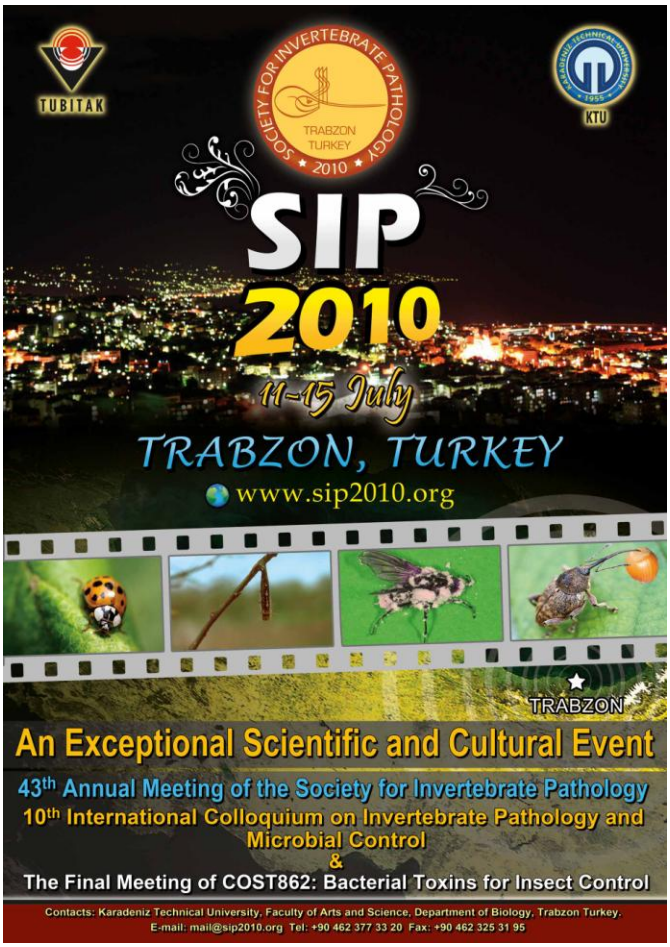
In addition to an exceptional scientific program exploring the most recent findings in invertebrate pathology, you will also have chance to taste the flavors of Turkish culture, history and food during the meeting.

Trabzon is the emerald green city of the Black Sea Coast, spread along the shores of the Eastern Black Sea. Because of its important location on the historic Silk Route between Europe and Asia, Trabzon was the seat of several civilizations throughout history. It is richly adorned with sightseeing areas and precious remains from the Byzantine, Seljuk and Ottoman Empires. The city is now an important port of trade while continuing its traditional historical role.

Trabzon became the home of three Sultans of Ottoman Empires. It was added to the land of Ottoman Empire by Sultan Mehmet the Conqueror, in 1461. The city was governed by Yavuz Sultan Selim, where Kanuni Sultan Suleyman, known as 'the Magnificent' in Europe, was born and raised. That is why the center of SIP 2010 logo contains the seal of Suleyman the Magnificent. Trabzon is also famous for its crafts and craftsmen. Craftsmen have had an eminent place in the art history with their skills in shaping copper utensils with their hands and with their dexterity in weaving gold or silver thread.

Trabzon people are the only ones who wrote a folk song for fish. Anchovy, an important product for Trabzon and its people, has already taken its place in lyrics and in the book 'Hamsiname' written in early 20th century.

Horon and Kemence, a bow instrument used in folk music



in the Black Sea Region, has a special place in rich Anatolian folk dances and reflects the enthusiasm, dynamism, and excitement of Trabzon people with its rhythm and figures.

It is very easy to reach Trabzon by air, bus and ship. Trabzon International Airport is the biggest in the region served by several major airlines. There are plenty of direct flights from major cities of Turkey, some European countries and Russia as well.

Please do not miss this exceptional scientific and cultural event. You are welcome to visit the meeting website (www.sip2010.org) for more detailed information.

We look forward to welcoming you in Trabzon.

Zihni Demirbag, PhD.
(Chair of the organizing committee)

Table of Contents

From the President

It is hard to believe that my term as your President will be coming to an end in Trabzon this July. Vice-President Lee Solter will take over as President while Jeff Lord and Christine Nielsen-LeRoux will continue as Trustees for another two years. The Nominating Committee chaired by Past-President Wendy Gelernter has come up with an excellent slate of candidates for the next Council. I am so pleased that such highly qualified and distinguished people are ready to stand for election to serve the Society. It is up to you, our members, to decide the successful candidates. Please don't forget to vote!

However, in order to vote, you must have renewed your membership in the Society. To date, membership renewals have been coming in slowly while our Emeritus Membership is strong. In order for the Society to survive, we need membership numbers to increase to historical levels. Last year, for example, we had 363 full and 34 student members while in 2008 the numbers were 450 and 63. I challenge each and every member to entice a colleague or student to join the Society today! And, although we like to honor our retired members with Emeritus status, I would like to suggest that financial contributions to the Society are always welcomed. Contributions can be made at www.sipweb.org.

As the recession continues with very low interest rates, the Society remains in a deficit situation, much like governments around the world. However, thankfully due to a healthy treasury, the Society should be able to ride out these difficult times. We need to replenish the treasury in the coming years, however, and your membership and special contributions are very important!

I welcome our new Editor of the Newsletter, Surendra Dara and at the same time thank Paresh Shah and Judith Pell for their dedication and service to the Society as co-editors in the last several years. Thanks Paresh & Judith and good luck Surendra!

I have already booked my flights to Trabzon and look forward to seeing you there. Please note the deadlines for abstract submission, early registration and room reservations on the website and in this Newsletter. Trabzon will be another exciting venue in the long list of interesting SIP Meeting sites!

Cheers,
Mark

Editor's Message

Greetings!

I am very pleased with this new responsibility and will try my best to continue the tradition of bringing out an excellent newsletter for SIP members.

Based on a suggestion, I am trying a single column format in some pages as it is hard to scroll through the two columns of a page in the electronic version. I have incorporated several boxed items to change this. Please give me your feedback on the new format and your choice for one or two columns.

And, don't forget to send your articles and announcements to the newsletter.

Sincerely,
Surendra Dara
(skdara@ucdavis.edu)

Scientific Program at SIP 2010 Annual Meetings

Workshops and symposia have been organized by the various divisions and will be distributed throughout the Scientific Program. In addition, we will have an outstanding all day Sunday hands-on session on Bioinformatics. Details of this workshop are on the website. Please register early as the number of work stations is limited.

Bioinformatics Workshop - *8000 Genomes At Your Fingertips: Comparative Genomics using CoGe.* Organized and lead by Eric Lyons, University of California, Berkeley.

Sunday, July 11, 2010 from 9:00 am to 4:00 pm
Workshop registration fee: €170.00. Students: €110.00.

Plenary Symposium – Tentatively scheduled

Interactions of parasites and symbionts with tsetse flies. Convener: Adly Abd-Alla – International Atomic Agency of the Food and Agricultural Organization.

Divisional Symposia

Bacterial Division

Insecticidal products from bacterial genome sequencing – Organized by Neil Crickmore.

Diseases of Beneficial Invertebrates Division

Pathogens of pollinators: molecular perspectives - Organized by Elke Genersch.

Fungus Division

Environmental Change and Impact on Pathogens **–** Organizer to be announced.

Microbial Control Division

*Biological Control of Corn Rootworm (*Diabrotica *spp.)* **–** Organized by Ken Narva.

Microsporidia Division

Microsporidia and other protists in arthropods from the eastern Mediterranean region **–** Organizer to be announced.

Nematode Division

Biotic and abiotic determinants of entomopathogenic nematode field persistence: Where have all the nematodes gone? **–** Organized by Ed Lewis and Selcuk Hazir.

Virus Division

The application of insect viruses in medicine – Organized by Monique van Oers and Linda King.

Arthropod transmitted viral diseases - Organized by Hu Zhihong (Rose).

Cross Divisional Symposia

Virus and Diseases of Beneficial Invertebrates Divisions

Viruses of pollinators – Organizer to be announced.

Nematode and Fungus Divisions

Enhancing efficacy of entomopathogenic nematodes and fungi through formulation and environmental manipulation **–** Organized by Lerry Lacey and Steve Wraight

Workshops

Virus Division

Bioinformatics. Organized by Eric Haas-Stapleton.

Speaker Eric Lyons, UC Berkeley, USA. This workshop may appeal to the members of other divisions.

Diseases of Beneficial Invertebrates Division

Histopathology of beneficial invertebrates – Organized by Grant Stentiford.

Microsporidia Division

Genomics in Microsporidiology – Organizer to be announced.

Microbial Control Division

Pathogens of arthropods other than insects **–** Organized by Surendra Dara

Conference Center for SIP 2010

Let's share some memories! — Betty Davidson

Dear Colleagues:

The History Committee would like to remind us of all the wonderful experiences we have enjoyed at previous SIP meetings. Please take a moment and share some of your memories with us. We will put together a talk for our next meeting using some of your thoughts and lots of photos. A list of meeting sites and events can be found at http://www.sipweb.org/history/History_meetings.cfm.

- What was your first SIP meeting?
- Were you a student at your first meeting?
- What was the most beautiful site where you attended an SIP meeting?
- Which site(s) introduced you to a new place and culture?
- What was the most interesting field trip?
- What was your favorite after-meeting tour?
- Where did you meet the most interesting people?
- Where did you learn something new and exciting?
- Where did you have the most fun at a banquet?
- What was the most memorable event at a meeting- planned or not?
- Where would you like to return to for another meeting or to visit?

Please email these or any other SIP memories to e.davidson@asu.edu

Free JIP! Contact Betty Davidson for free issues of Journal of Invertebrate Pathology. Volume 1, Number 1 through Volume 64 (1994) are available for free. You have to pay only the cost of mailing.

Bioinformatics Workshop
8000 Genomes At Your Fingertips: Comparative Genomics using CoGe

Currently, there are genomes available for over 7500 organisms, with new ones being sequenced at an exponential rate. New DNA sequencing technologies make obtaining genome sequences easier and faster, and modern researchers must understand genome biology in order to take advantage of this wealth of data. CoGe, a web-based comparative genomics system, permits researchers anywhere in the world to easily analyze and compare genomes. CoGe maintains a repository of all genomes publicly available, and its suite of interconnected analytical and visualization tools allows researchers to rapidly understand genome structure and evolution from the level of a gene to the genome. This workshop lead by CoGe's creator, Dr. Eric Lyons of the Department of Plant and Microbial Biology at UC Berkeley, provides an introductory description of the structure, evolution, and dynamics of genomes that will be followed by a hands-on *in silico* training session using CoGe to characterize the structure and evolution of genomes. Workshop participants are encouraged to propose their invertebrate pathogens of interest for exploratory *de novo* research.

Specific topics will include:

1. Producing an overview of a genome including GC DNA content bias, amino acid usage, codon usage
2. Whole genome comparisons using syntenic dotplots
3. Visualizing the differences in genome structure and evolution among the major domains of life
4. Identifying ancient whole genome duplications, and regional inversions and rearrangements
5. Gene duplications, translocations, deletions, and conserved non-coding sequences

CoGe is publicly available at: http://synteny.cnr.berkeley.edu/CoGe

When: Sunday, July 11, 2010 from 9:00 am to 4:00 pm

Registration deadline: May 21, 2010

Registration fee: €170.00. Students: €110.00

Full details of the workshop can be found at: http://www.sip2010.org/index.php/Bioinformatics-Workshop.html

Wendy Gelernter, Chair of Nominations Committee presents the following nominees for SIP Council

Jörgen Eilenberg - Nominee for Vice-President

Education: MSc, The Royal Veterinary and Agricultural University (KVL), Copenhagen, Denmark, 1981; Ph.D. KVL, 1985; DSc KVL 2002. The subject for both the PhD Thesis and the DSc dissertation was insect pathology and microbial control.

Experience: 1985-1989: Assistant professor, KVL; 1989-1990: Senior Biologist, The National Environmental Research Institute, Copenhagen; 1990-2002: Associate Professor, KVL; 2003 – present: Full professor KVL, which in 2007 merged to become Faculty of Life Sciences, University of Copenhagen.

Research Interests: Insect pathology and microbial control, insect pathogenic fungi (Entomophthorales, Hypocreales, Ascosphaerales), *Bacillus thuringiensis*, natural occurrence and field ecology, host-pathogen interactions (individual, population and community level), infection processes, co-evolution, biocontrol in practice, teaching curriculum development.

Professional Activities: Since 2010 leader of Zoology Section at our department. 1992-present: leader of research team 'Insect pathology and microbial control; 1993-1997: board member Research Centre Biodiversity in Arable Land; National Society for Pests and Diseases; Chair, Danish Centre for Biological Control (2003-present), www.centre-biological-control.dk. 2003- present nominated and elected member of Academic Council at Faculty Level; Board member, 'Centre for Social Evolution', a national research centre of excellence, 2005 –present (http://www1.bio.ku.dk/english/research/oe/cse/); Board member of ISOBIS (International School of Biodiversity Sciences) a National PhD graduate school, 2006-2007; board member of AGREC, Research School of Agriculture and Ecology, 2009 – present. Appointed member of various steering committees and advisory committees, The Ministry of Environment, since 1992. Since 1999 member of management committees of three EU COST actions dealing with insect pathology/microbial control. Member of editorial board of 'Biological Control' since 2004. Member of advisory board of 'Turkish Journal of Biology' since 2007.

Responsible for teaching curriculum development in biological control at faculty since 1990. Organizer of two international PhD courses: Insect Pathology and Microbial Control", 1999 and 2007. Guest lectures given at universities and research institutes in several countries as well as in other international PhD courses. Leader or co-worker in many externally financed projects since 1984, financed from national research councils, Carlsberg Foundation, Governmental grants from ministries, as well as international grant financed by the European Union. Supervisor of more than 15 PhD students and more than 30 MSc/BSc students.

Memberships: The Danish Entomological Society; The Danish Mycological Society; The Danish Microbiological Society; The Danish Society of Pests and Plant Pathogens; The Danish Pasteur Society; Society for Invertebrate Pathology.

Service to SIP: Member of Society 1982- present; Member at Large, Fungus Division 1996-1998; Chair of Fungus Division, 2004-2006; Trustee 2006-2010; Scientific chair of 37th Annual Meeting, Helsinki, Finland, August 1-6, 2004; Organizer of symposia and workshops at several SIP meetings.

SIP is a wonderful scientific society. It is the natural home for scientists who are dedicated to the studies of invertebrates and their associated pathogens. SIP harbors both scientists who are mainly interested in fundamental aspects, and scientists who has the main interest to either control pests (in agriculture, forestry etc) by using these microorganisms or to control diseases in beneficial invertebrates (honey bees, marine arthropods etc). With respect to fundamental studies SIP should maintain its role as the place where the core discipline, the science of invertebrates and the associated pathogens, is maintained at the highest level, always seeking to include the newest methods and approaches (the 'omics' for example). Concerning practical application, intense collaboration with industrial partners, growers, authorities and the public should be supported. And, with respect to all aspects of the curriculum of the SIP, a strong focus on the upcoming generation of young scientists is needed. This applies both to those who are raised at high profile research teams and to those who origin from less known teams or regions with fewer options for a scientific carrier in invertebrate pathology. From my perspective SIP is doing well, despite the obvious competition among scientific communities to attract people to attend meeting or to become members. Part of this is due to the friendly and open minded attitude within the SIP, which should be maintained. Among recent SIP developments are firstly that more regions and countries than before now successfully apply for and host annual meetings. Secondly, the newly formed Division of Diseases on Beneficial Invertebrates can hopefully bring more members from this interest into SIP.

Juan Ferré - Nominee for Vice-President

Education: B.Sc. (with Honors, 1978) in Chemistry/Biochemistry by the University of Valencia, Spain; Ph.D. (1984) in Chemistry by the University of Valencia. Doctoral thesis: Study of the pteridines and quinolines form *Drosophila melanogaster* eyes.

Academic positions: Assistant Professor (1981-1986), Associate Professor (with tenure, 1986-1999) and Professor of Genetics (2000-present) at the Department of Genetics, University of Valencia. Secretary of the Department of Genetics for 4 years (1989-1993). Head of the Department of Genetics for 7 years (1999-2006).

International Training: Ph.D. fellow, Biology Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee, U.S.A. (1982-83); Postdoctoral Research Fellow, Department of Reproductive Genetics, Magee Womens Hospital, Pittsburgh, Pennsylvania, U.S.A. (1985-86); Consultant Professor, Department of Medical Genetics, West Penn Hospital, Pittsburgh (3 months in 1987 and 2 months in 1988); Visiting Professor, Plant Genetic Systems, Gent, Belgium (3 months in 1989-90); Visiting Professor, Department of Entomology, University of Hawaii at Manoa, U.S.A. (1 month in 1993); Visiting Professor on sabbatical leave, Department of Entomology and Plant Pathology, University of Tennessee at Knoxville, U.S.A. (3 months).

Membership of Scientific Societies and international groups: Member of the Spanish Society of Biochemistry (1985-present), Spanish Society of Genetics (1985-present), International Society of Pteridinology (1988-present), Spanish Society of Biotechnology (1989-present), Society for Invertebrate Pathology (1992-present) and American Society for Microbiology (2001-present). Spanish representative in the Management Committee of COST (European Cooperation in the field of Scientific and Technical Research) Action 862 “Bacterial Toxins for Insect Control” from 2005 to 2010.

Service to SIP: Vice Chair (2001-2003) and Chair (2003-2005) of the Bacteria Division. Co-organizer of Symposia at the SIP meetings in Cordoba (Spain, 1996: “Mode of Action and Resistance Management”), Guanajuato (Mexico, 2000: "Bt Resistance"), Foz do Iguaçu (Brasil, 2002: "Bt Transgenic Plants and Insect Resistance to Bt Toxins"), Helsinki (Findland, 2004: "Risk assessment and non-target effects of Cry toxins in sprays and transgenic plants"), Wuhan (China, 2006: “Monitoring and managing for Bt-resistance: The challenges for the next decade” and “Genetics and characterization of mechanisms of Bt-resistance”), Quebec (Canada, 2007: “Mode of action of toxins”).

Editorial Board Member: Editorial Board Member of the journal Pteridines (1993-present); Associate Editor of the Journal of Invertebrate Pathology (September 1999-present); Editorial Board Member of the journal Applied and Environmental Microbiology (2001-present).

Interests: Biochemical and genetic bases of insect resistance to *Bacillus thuringiensis* (Bt) and mode of action of its insecticidal proteins (since 1990). Research on novel Bt strains and insecticidal protein genes for the development of Bt-based insecticides to control agricultural insect pests (since 1994). Molecular markers for Bt resistance genes (since 2002). Genes of response in insects to bacterial and viral pathogens (since 2005).

Secretary Nominations

Judith K. Pell – Nominee for Secretary

Education: BSc 1984 Zoology including Applied Zoology, University College of North Wales, Bangor, UK; PhD 1989 Imperial College at Silwood Park, Ascot, UK. Thesis title: ‘The biology of dimorphic microsporidian parasites of mosquitoes’.

Experience: Research Assistant, Coypu Research Laboratories, Norwich, UK, ‘84; Research Scientist, Zeneca, Bracknell, UK, ’88-‘89; Postdoctoral Researcher, ‘89-‘97 and Group Leader, Rothamsted Research, Harpenden, UK, ‘97-present.

Memberships: Society for Invertebrate Pathology since mid ‘80’s, Royal Entomological Society, British Mycological Society, British Ecological Society, Bedfordshire Beekeepers Association.

Professional Activities: *For SIP*: Microbial Control Division Member at Large ‘97-’99; Fungus Division Organizing Committee ‘99-‘00; Chair Elect, '00-'02; Chair, '02-'04; Co-

editor of the Newsletter '07-'09; Local Organizing Committee Annual Meeting, Warwick '08; Editorial Board Journal of Invertebrate Pathology '08 onwards. *For BMS*: Committee of the Special Interest Group on Fungus-Invertebrate Interactions '00-'02; Joint Editor Mycological Research '05-Present.

Research Interests: My interests have always been in understanding the intricate biology and ecology of pathogens, particularly entomopathogenic fungi, and the role they play in host population regulation and pathogen-induced host behavioral change. My belief is that ecological understanding is essential to inform the development of effective control strategies, particularly conservation biological control approaches. Most of the research in my group has been on entomophthoralean fungi (they are fascinating!) but we are increasingly drawing parallels with species from the Hypocreales. Target pests include aphids, lepidopterans and, most recently, the varroa mite. Pathogens are not active in isolation within the ecosystem and so particular research foci have been: intraguild interactions; the relationships between guild diversity, habitat diversity and ecosystem function; pathogen-pathogen competition/ co-existence.

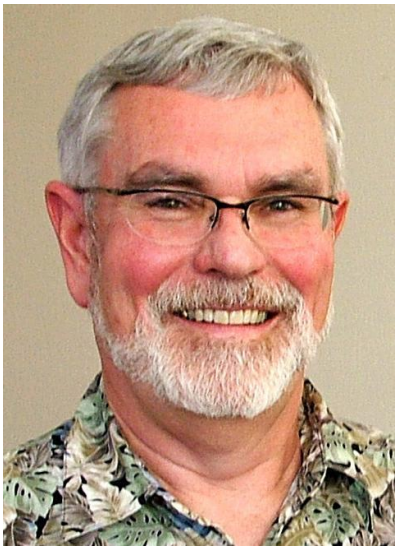
Richard Humber – Nominee for Secretary

Education: B.S. 1969, Stanford University (with Honors, Biological Sciences); M.S. 1970, University of Washington, Seattle (Botany/Mycology); Ph.D. 1975, University of Washington, Seattle (Botany/Mycology).

Experience: 1982-Present: Microbiologist/Insect Mycologist, USDA-ARS, Ithaca, NY. 1977-Present: Curator, ARS Collection of Entomopathogenic Fungal Cultures (registered officially as ARSEF in 1985). 1988-Present: Adjunct Associate Professor, Dept. of Plant Pathology and Plant-Microbe Biology, Cornell University, Ithaca, NY. 1979-1982: Research Associate, Boyce Thompson institute, Ithaca, NY. 1978-1979: Postdoctoral Fellow, Dept. of Plant Pathology, Cornell University, Ithaca, NY. 1976-1978: Postdoctoral Fellow, Dept. of Entomology, University of Maine, Orono, ME.

Professional Activities (selected): *Society for Invertebrate Pathology*: Annual meetings—Local Arrangements 1983; Program Committee and prepared Program/Abstracts books 1995, 2003; ad hoc Journal Advisory Committee, Chair 1986-1987; Database and Electronic Communication Committee 1998-2002; SIP Logo Selection Committee 2002-2003; *SIP Division of Fungi*: Initiated/processed petition to establish this division 1997; Organizing Committee 1999-2000; Member-at-Large 2001-2003; Student Travel Award Committee, Chair 2003. *Mycological Society of America*: Graduate Research Prize 1975; Journal Modernization Committee, Chair, 1991-1993, (completely redesigned Mycologia); Culture Collection Committee 1988-1992, 1996-1999, Chair (1988-89, 1991-1992, 1998-1999); Designed official MSA logo, adopted 1992. *Editorial*: Mycologia Editorial Board/Associate Editor 1988-1999; Journal of Invertebrate Pathology Editorial Board 1985-1987; Inoculum (Mycological Society of America newsletter), Editor 1992-1995; Mycopathologia, Editor 2003-present; Mycological Research (now Fungal Biology), Editor 2004-present. *Amer. Soc. for Microbiol./US Federation of Culture Collections*: J Robert Porter Award Selection Committee 1991-1994. *Other Major Activities*: Chair of Executive Committee to revise ARS guidelines for microbial pathogens of arthropods for ARS/APHIS/CSRS Workshop 'Biological Control Quarantine: Needs and Procedures' 1991. Honorary Foreign Scientist, Rural Development Administration (Suwon, Rep. of Korea) 2003-2005; Fulbright Senior Specialist, Universidad Nacional de La Plata and CEPAVE, Argentina 2006. *Midwest Institute for Biological Control*: fungal content for insect pathology short courses in 2000, 2004, 2007, 2010.

Memberships: Society for Invertebrate Pathology (since 1970) (plus Microbial Control, Fungi, and Microsporidia Divisions), Mycological Society of America (since 1969), International Association for Plant Taxonomy. Past memberships: Botanical Society of America, International Society for Evolutionary Protistology, Sigma Xi.



Interests: I have specialized in the developmental, organismal, and systematic biology of entomopathogenic fungi since 1969, initially centered on Entomophthorales and then expanding to the full spectrum of fungi affecting invertebrates. I assumed responsibility for RS Soper's small culture collection in Orono, Maine, but the collection expanded rapidly after our move in 1978 to the Boyce Thompson Institute on the Cornell campus where our USDA-ARS labs associated closely with Don Roberts and his staff and programs. The ARSEF collection (officially registered since 1985) now maintains nearly 10000 accessions from about 650 fungal taxa, more than 1200 host species, and 1900 globally distributed sites and provides cultures and services to a global clientele. I am actively and enthusiastically provide consultation and training in insect mycology and pathology throughout the world, and am an author on >130 publications and 80 abstracts.

Treasurer Nominations

Kelli Hoover – Nominee for Treasurer

Education: B.S. (1979) in Biology of Natural Resources from University of California, Berkeley; M.S. (1992) in Biology from California State University, San Jose; Ph.D. (1997) in Entomology from University of California, Davis.

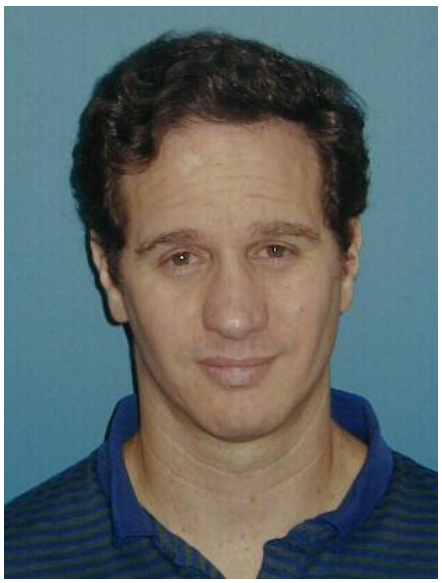
Experience: 1997-98: University of California President's Postdoctoral Fellow, UC Berkeley (Plant & Microbial Biology); 1998-2004: Assistant Professor of Entomology, Penn State University, University Park, PA; 2004-2010: Associate Professor of Entomology, Penn State University; 2007: 3 month sabbatical at Laboratory of Virology, Wageningen University, The Netherlands.

Professional activities: *Editorial*: Associate Editor for Insect-Symbiotic Interactions section of Environmental Entomology (2009-present). *Society for Invertebrate Pathology*: Member-at-Large of the Virus Division (2002-2004); Chair of the Organizing Committee for SIP annual meeting in Anchorage, Alaska (2005); Member of the SIP Meetings Committee (2006-present); Treasurer/Secretary of the Virus Division (2008-10); Chair of the Endowment and Finance Committee (2009-present). *Entomological Society of America*: Member of the International Congress on Insect Neurochemistry and Neurophysiology (ICINN) Student Recognition Award in Insect Physiology, Biochemistry, Toxicology, and Molecular Biology (2009-2011)

Memberships: Entomological Society of America (since 1995), Society for Invertebrate Pathology (since 1997), International Forestry Quarantine Research Group (since 2006)

Interests: I have broad interests in insect pathology and microbial-insect symbioses. I'm intrigued by the complex co-evolutionary relationships between baculoviruses and their insect hosts, especially mechanisms of resistance and the role of viral genes in overcoming host defenses. These studies may lead to improvements in the use of baculoviruses as microbial control agents. I'm also studying gut microbial symbionts of wood-boring beetles, which include a diversity of bacteria and a symbiotic fungus in the *Fusarium solani* clade. The goal of this project is to determine how phytochemicals in resistant tree species impact the structure and functions of the beetle's gut microbial community.

David Shapiro-Ilan – Nominee for Treasurer



Education: 1994: Ph.D. Entomology, Iowa State University, Ames (Major Advisor, Les Lewis), Dissertation: The Effects of Earthworms and Fertilizers on Entomopathogenic Nematodes. 1989: M.S. Entomology, Louisiana State University, Baton Rouge (Major Advisor, Jim Fuxa), Thesis: Variation in DNA of Wild Isolates of *Spodoptera frugiperda* Nuclear Polyhedrosis Virus. 1984: B.S. Biology, University of Michigan, Ann Arbor.

Experience: 2000 to present: Research Entomologist and Lead Scientist, SE Fruit and Tree Nut Research Unit, Byron, GA. 1999: Assistant in Entomology, University of Florida, Citrus Research and Education Center, Lake Alfred, FL. 1996-1998: Research Insect Pathologist, Integrated BioControl Systems, Inc., Lawrenceburg, IN. 1994-1996: Fulbright Postdoctoral Researcher, Volcani Center, Israel (in lab of Itamar Glazer). Other: Served as Peace-Corps Volunteer in Niger West Africa (1984-1986) and Organic Farm Apprentice near Viroqua, WI (1990).

Professional Activities/Service: *For Society of Invertebrate Pathology (SIP)*: Associate Editor, Journal of Invertebrate Pathology (2010 to present). Chair of the SIP Publications Committee (2008-Present). Chair of SIP Nematode Division (2006-2008). Editorial Board, Journal of Invertebrate Pathology (2007 to 2010). Member of Nematode, Fungus, and Microbial Control Divisions. Authored (with Wendy Gelernter and additional input from SIP council) a "Guide to SIP Division Chairs". Co-organizer and primary coordinator for the First International Forum on Entomopathogenic Nematodes held at the annual SIP meeting in Quebec, 2007 (the program contained four special symposia). Organizer/Chair or Co-Chair of four symposia at annual SIP meetings (Finland, China, Warwick, Utah). Co-author: An Abridged Glossary of Terms Used in Invertebrate Pathology. Presented more than 15 invited and submitted

papers at annual SIP meetings. Served as judge of student presentations at several meetings.

Other Professional Service: Chair S-1024 Microbial Control Working Group (2010 to 2012). Editor: Journal of Nematology (2009 to present). Editorial Board: Biological Control (2004-present). Editor: Journal of Economic Entomology (Biological Control-Microbial section) (2005-2009). Associate Editor: Environmental Entomology, Biological Control-Microbials section (2002-present). Trustee & Vice-Chair S-1024 Microbial Control Working Group (2006 to 2010). Competitive Grant Panel Member: USDA-NRI (1996 & 1997); USDA-SBIR (2001, 2002 & 2005). Chair: Entomophilic Nematode Committee, Society of Nematologists (2001-2002). Chair, Insect Pathology and Microbial Control subsection (Ce), Entomological Society of America (2006).

Memberships: Society of Invertebrate Pathology, Entomological Society of America, Society of Nematologists.

Interests: Most of my research has focused on entomopathogenic nematodes with some emphasis on entomopathogenic fungi, yet I have also conducted research on other pathogen groups such as virus (e.g., characterizing genetic diversity in nucleopolyhedrovirus isolates) and bacteria (such as investigating interactions between *Serratia marcescens* and entomopathogenic nematodes).

Currently, my primary research focus is on microbial control in orchard systems; the emphasis is on control of insect pests in peach and pecan using entomopathogenic nematodes and fungi. My research program also includes fundamental components such as developing mass production systems, infection dynamics, host-finding, and genetic/trait stability analysis in entomopathogenic nematodes. I have authored or co-authored more than 90 refereed journal articles pertaining to invertebrate pathology, plus ten book chapters and one co-edited book (Nematodes as Biocontrol Agents).

When I came to my first SIP meeting I realized this is home for me as far as meetings and societies go. As Treasurer I would endeavor to secure and expand SIP's financial interests, and also help the SIP governing council in other capacities as needed.

Trustee Nominations

Susan Bjornson – Nominee for Trustee

Education: 1987-Diploma in Horticulture, Olds Agricultural College (Olds, AB). 1991-Bachelor of Science in Agriculture (Honours), University of Guelph (Guelph, ON). 1998-Doctor of Philosophy, University of Alberta (Edmonton, AB)

Experience: 2007- Present: Associate Professor, Saint Mary's University (Halifax, NS). *Area of Research*: Pathogens of beneficial arthropods used for biological pest control. 2001 – 2007: Assistant Professor, Saint Mary's University (Halifax, NS). 1998 – 2001: Postdoctoral Fellow, Agriculture & Agri-Food Canada (Agassiz, BC). *Area of Research*: Evaluation and improvement of the quality of beneficial arthropods.

Memberships: I have been a member of the Society for Invertebrate Pathology since 1995 when I attended my first SIP meeting in Ithaca, New York. Since then, I have routinely attended and participated at meetings. I encourage my graduate students to join the society and support their attendance at one SIP meeting during their studies. I have been fortunate to serve periodically as an external reviewer for the Journal for Invertebrate Pathology and I have, at one time or another, been a member of the Entomological Society of Alberta, Canadian Entomological Society, and the Acadian Entomological Society.

Contributions to the SIP: 2008-present: Co-Chair of the Local Organizing Committee for the 44th Annual Meeting of the Society of Invertebrate Pathology (Halifax, NS, 07-12 Aug 2011). 2008 –present: Secretary/Treasurer. Society for Invertebrate Pathology. Microsporidia Division. 2008-present: Student Award Committee. Society for Invertebrate Pathology. Microsporidia Division. 2005-2007: Society for Invertebrate Pathology, Microsporidia Division, Member at Large.

Research Interests: My current research program focuses on host-pathogen interactions of microsporidia and other chronic pathogens in commercially-available beneficial arthropods. I am currently working with several species of lady beetles and green lacewings. I have also worked with predatory mites that are used for biological pest control.

Juan Jurat-Fuentes – Nominee for Trustee

Education: 2002: Ph.D. Entomology. University of Georgia, (Georgia, USA). 1997: M.S. Genetics. Universitat de Valencia (Valencia, Spain). 1995: B.S. Biology. Universitat de Valencia (Valencia, Spain).

Experience: Assistant Professor, Insect Physiology (2006-present) Department of Entomology and Plant Pathology, University of Tennessee, Knoxville (USA). Assistant Research Scientist (2004-2006) Department of Entomology, University of Georgia, Athens (USA). Post-doctoral Research Associate (2002-2004) Department of Entomology, University of Georgia, Athens (USA).

Professional activities: I became a member of the SIP in 1996. Since then I have attended and presented at most meetings. I greatly enjoy the friendship and familiarity within the SIP community. I have had the honor to serve in the SIP Membership Committee (2005-2009), and as Member at Large (2008-2009) and Vice-Chair (2009-present) in the Bacteria Division. I have also actively participated in SIP meetings by serving as judge of student presentations, co-organizer of symposia and moderator. As Trustee, I would strive to address the needs of the Society and help promote SIP as a vibrant and welcoming community for invertebrate pathologists worldwide.

Member of the Editorial Board of Applied and Environmental Microbiology (2004-present), Applied Microbiology and Biotechnology (2007-2008), Open Journal of Proteomics (2007-present), and Biological Control (2007-present).

Areas of interest: Since my years as a graduate student, my interest has been focused on the mode of action of Cry toxins from *Bacillus thuringiensis* (Bt) and on the resistance mechanisms insects develop against them. I have had the privilege of working under the direction of two world-renowned experts in the field of resistance to Bt (Juan Ferre) and mode of action of Bt toxins (Mike Adang).
My current research projects continue to be focused on different aspects of the mode of action of Cry toxins. More specifically, I am interested in the identification of functional midgut receptors for Cry toxins across insect orders, the characterization of the midgut defensive response to Cry intoxication, and the physiological alterations of the insect midgut that result in resistance to Cry toxins.

Memberships: Society for Invertebrate Pathology (1996-present). Entomological Society of America (1998-present). American Society for Microbiology (2001-present).

Regina Kleespies – Nominee for Trustee

Education: 1989, Diploma in Biology, Germany: Thesis: “Investigations on the entomopathogenic fungi and surroundings of Darmstadt.” 1993, Biology, Technical University of “Studies on the biology and application *Metarhizium anisopliae* (Metsch.) African locusts”.

Research Experience: 1990- 1991 Pathology, Institute for Biological for Cultivated Plants, Julius Kühn Research Centre for Agriculture and Germany. Since 1991 Research of the “Laboratory for diagnosis, histo-diseases”, Institute for Biological

Professional activities: 2005-2006, Division of the SIP. 2007-2008, Chair of SIP. Organization of Workshops: 2005, Ecology of Microsporidia: A Broad

Technical University of Darmstadt, natural occurrence of nematodes in different soils in the Doctoral Degree, Dr. rer. nat., Darmstadt, Germany; Thesis: of the entomopathogenic fungus Sorokin for biological control of

Research Scientist, Insect Control, Federal Research Centre Institute (JKI), formerly Federal Forestry (BBA), Darmstadt, Scientist, Insect Pathology, Head and cytopathology of arthropod Control of the JKI.

Vize-Chair of the Microsporidia the Microsporidia Division of the Anchorage, “Transmission and Spectrum of Possibilities”; 2006,

Wuhan, "Beneficial and Noxoius Microsporidia of Asia". Organization of Symposia: 2007, Quebec City, “Microsporidia of beneficial and pest insects in greenhouse, nursery and pollination systems”. 2008, Warwick, "Microsporidia of Aquatic Arthropods". 2009-present, Member-at-Large of the Division on Diseases of Beneficial Invertebrates. Since 2006, Convenor of the Commission “Determination and identification of entomophagous insects and insect pathogens” of the IOBC/WPRS. Since 2007, Joint lectures in cooperation with the Department of Biology of the “Technical University of Darmstadt”, Germany, on phytomedicine and biological control. Since 2009, Establishment and maintenance of a “Database on Arthropod Diseases” diagnosed at the Institute for Biological Control of the Julius Kühn-Institute: http://arthropodenkrankheiten.jki.bund.de.

Memberships of Scientific Societies: 1990, International Organization for Biological and Integrated Control of Noxious Animals and Weeds / West Palaearctic Regional Section (IOBC/WPRS). 2004, Society for Invertebrate Pathology.

Research Interests: Broad interest on diagnosis, histo- and cytopathology of arthropod diseases caused by all kind of pathogens (viruses, bacteria, fungi, protists). Use and development of light and electron microscope techniques for basic studies on pathogens, promising in biological or integrated control of pest arthropods, with special attention to invasive species. Monitoring of natural infection rates of all kind of microbial disease agents in gradations of pest arthropods in agriculture and forestry, and their effects on gradation development (prognosis). The diagnostic engagement is also focused on sanitary supervision of arthropod cultures, particularly also of beneficials, for securing the development and efficacy of biological and integrated plant protection measures.

Zihni Demirbag – Nominee for Trustee

Educational Background: B.S. in Biology from Fırat University, Elazığ, Turkey, in 1986. Doctor of Philosophy in Biology, emphasizing microbiology (Comparative replication of AcNPV in Sf and Bm cell cultures), in May, 1993 at Texas Tech University, Lubbock, TX, USA, in 1993. Professor at Karadeniz Technical University, Trabzon, Turkey since 1993.

Professional background: Four-month post graduate research on baculovirus expression vector system at Wageningen Agricultural University, The Netherlands in 1995. 4-month post graduate research on the analysis of the potential immediate-early promoter sequences of iridovirus, Texas Tech University, Department of Biology, Lubbock, TX, USA in 1999. Associated with researche on the molecular aspects of entomopoxviruses as a visiting professor for one year at Department of Molecular Genetics and Microbiology, School of Medicine, University of Florida, Gainesville, FL, USA, 2004-2005.

Established a well equipped research laboratory with group of 27 graduate and post-graduate scientists working on general insect pathology, biology of insect pathogens emphasizing molecular aspects of DNA viruses and microbial control.

Organization of a congress entitled “First Eurasian Congress on Molecular Biotechnology” in 2001, organization of “The Annual Meeting of Turkish Biology” in 2008, organization of the “1st Symposium on Entomopathogens in Microbial Control” in 2007, organization of Spring Schools on Molecular Biotechnology, 2006, 2008, 2009, 2010.

Administrtative experience: Vice Chairman of Department of Biology, Chairman of Biology and Vice Dean of Faculty of Arts and Sciences, Advisor for The President, at Karadeniz Technical University, for 2 years. The coordinator of “Office of International Affairs” at Karadeniz Technical University, 2002-2004. Responsible for research and educational programs of European Union in his university. Served as EU ECTS/DS Consular for one year, 2003-2004, worked on the implementation of FP6 and ECTS/DS in Turkey and Europe.

Awards: Awarded with an *Outstanding Presentation of a Graduate Student Paper,* in 67th annual meeting of American Association for the Advancement of Science May, 1991, and with a *S. E. Sulkins Memorial Award*, American Society for Microbiology, October, 1992.

Memberships: Member of the American Society for Microbiology, (ASM), American Association for the Advancement of Science (AAAS), Society for invertebrate pathology (SIP), American Society for Virology (ASV), Society for Turkish Biological Control and Society for Turkish Biotechnology.

SIP Plenary Sessions

Year	Meeting Location	Plenary Session
2009	Utah, USA	Host-pathogen dance
2008	Warwick, UK	Colony Collapse Disorder
2007	Quebec, Canada	1. Historical perspectives on this 40th anniversary 2. Chemical ecology and invertebrate pathology
2006	**Wuhan, China**	**Microbial Control in Asia**
2005	Anchorage, AK, USA	Invertebrate Pathogens: Evolution and Impact
2004	Helsinki, Finland	SIP- the Past, Present and Future
2003	Burlington VT, USA	Pathogen-Midgut Interactions
2002	**Iguassu Falls, Brazil**	**Baculoviruses and the Bonus of Biotechnology**
2001	Noordwijkerhout, Netherlands	1. Host/pathogen interactions (Sun 10:30-12:30)
2000	Guanajuato, Mexico	No Plenary
1999	Irvine, CA, USA	Efficacy of Bt Transgenic Crops in the Field
1998	**Sapporo, Japan**	**1. Drug Design Based on Insect Defense Molecules (Mon am)** **2. Structure and Function of Bt Toxins and their Receptors (Mon am)**
1997	Banff, Canada	No Plenary
1996	Cordoba, Spain	1. Ecology and Diversity of Entomopathogens (Mon) 2. Strategies for the Utilization of Entomopathogens in the Future (Tues) 3. Molecular Genetics of Entomopathogens (Thurs)
1995	Cornell, USA	No Plenary
1994	**Montpellier, France**	**1. Symbionts and endosymbionts** **2. Molecular genetics of invertebrate pathogens** **3. Mode of entry of pathogens** **4. Invertebrate resistance to pathogens** **5. Strategies for the utilization of pathogens**
1993	Asheville, NC*	1. Mechanisms of microbial development in the insect gut (Mon. 10:30-12:30) 2. Insect immunity (Mon. 1:30-3:30) 3. Bt toxin receptors and mode of action (Tues 8-10:15am) 4. Viruses as insect control agents (Thurs 8-10) 5. Molecular and biochemical systematics of insect pathogens (Fri 8-10)
1992	Heidelberg, Germany**	1. Mechanisms of fungal invasion; biological control of locusts and grasshoppers; genetically engineered viral insecticides (Mon 11:15-12:30) 2. Peritrophic membrane, entomopathogenic fungi today; entomopathogenic nematodes: current status; inducible antibacterial polypeptides of insects (Tues 8:30-10:10am) 3. Biocontrol of vectors; scarab pathogens; bee pathology; tumor suppressor gene mutations (Thurs. 8:30-10:40am)
1991	Flagstaff, AZ	No plenary
1990	**Adelaide, Australia**	**Bright horizons for invertebrate pathology**

1989	University of Maryland*	1. The origins of invertebrate pathogens 2. Molluscan pathobiology 3. Membrane interactions with insecticidal bacterial proteins 4. Bioassay of biological control agents

*In these years, there were no sessions that were titled as “plenary” sessions, but there were symposia scheduled with no simultaneous scheduling of any other sessions. These resemble plenary sessions, so I’ve listed them here.

**In Heidelberg, plenary sessions were 1.5 to 2 hours long and were composed of 3 -4, 40 – 50 minute presentations that were not necessarily related to one another; however, all represented major topics of general interest to attendees.

Years in **bold** are also international colloquia.

Division Update-Fungus Division

Rosalind James, Fungus Division Chair

The Fungus Division would like to give an update on some sequencing projects for three honey bee pathogens. The genome of the fungal pathogen *Ascosphaera apis* (the cause of chalkbrood in honey bees) was sequenced and annotated in draft form (Qin et al., 2006, Insect Molecular Biology 15:715-718) at the Baylor College of Medicine Human Genome Sequencing Center. Sequence data. Gene prediction tracks for this *A. apis*, and for the honey bee bacterial pathogen *Paenibacillus larvae* (the cause of American foulbrood in honey bees, Qin et al., ibid.) and the microsporidial pathogen *Nosema ceranae* (Cornman et al., PLoS Pathog. 2009 Jun; 5(6):e1000466) are all available at the US National Institutes of Health-NCBI Genome Project sites and via the Beebase Honey Bee Pathogen server (http://genomes.arc.georgetown.edu/drupal/beebase/?q=bee_pathogens). Data are free for public use without restrictions. All three microbial sequencing projects are ongoing at several institutions. For recent updates contact Jay Evans (USDA/ARS Beltsville, MD, jay.evans@ars.usda.gov).

got Humber number?

Did you notice that Ray St Leger coined the term Humber Number *in his Founder’s Lecture at the 2009 meetings? It is easier and more fun to say than ARS Entomopathogenic Fungal Collection number. And it also recognizes years of hard work by the Numbers Humber.*


Trabzon by the Black Sea


Sumela Monastery

Obituary

Dr. John Cunningham, a member of the Society for Invertebrate Pathology for most of his career and a Research Scientist at the Great Lakes Forestry Centre passed away on April 6, 2008 in Sault Ste. Marie Ontario, Canada. John was born in Aberdeen, Scotland on January 28, 1942 and obtained most of his education in Scotland then to Oxford for his PhD in Entomology. Following his doctorate program, he immigrated to Canada to join the Insect Pathology Research Institute (IPRI) of Canadian Forest Service in Sault Ste. Marie as a Virologist. During his earlier career at IPRI, John conducted research on the basic properties and electron microscopy of insect viruses and published key paper in various entomology journals. Soon, John moved to investigating the bahaviour of viruses in the field and dedicated the rest of his career to finding biological alternatives in the control of forest insect pests such as the eastern spruce budworm, the redheaded pine sawfly, the gypsy moth, etc. John was instrumental in the registration of insect viruses as biological control agents in Canada. Those were the pioneering days when regulatory agencies did not have clear guidelines on the process and John had to wade through muddy waters to achieve his goals, but succeed he did. He registered the *Neodiprion lecontei* nucleopolyhedrovirus against the redheaded pine sawfly under the label "Lecontvirus" and the *Orgyia leucostigma* nucleopolyhedrovirus against the whitemarked tussock moth under the label "Virtuss".

John was an active member of the SIP and chaired the committee that brought the Annual SIP meeting to Sault Ste. Marie. He was a most affable man, well liked by all his colleagues and friends and highly respected by his fellow scientists. He enjoyed gourmet foods and was a connoisseur of Scotch Whiskey. He will be missed not only by his family and friends in Canada but by his science colleagues throughout the world.

Enter 2010 SIP Photographic Competition

(Sponsored by Elsevier Science & Technology)

Send in your invertebrate pathology pictures to win prizes in the following categories.

A) Pathogen Biology
B) Invertebrate Pathology in Action
C) Invertebrate Pathology in the 21st Century
D) Best Collection
E) Student Category

Best pictures in each category will receive $50 and the overall winner will receive and additional $100. Please see Members Only section at www.sipweb.org for additional details.

Apply for SIP Student Travel Awards

SIP 2010 - Student Travel Award Application

General instructions

Please note!! These instructions apply to both the Martignoni Student Award and the Division-sponsored Travel Awards (for the Chris J. Lomer Award, see information below).

1. Mauro Martignoni Student Award 2010

All students of invertebrate pathology are invited to compete for the 9th Annual Mauro E. Martignoni Student Award, the Society's premier award for student research. An award certificate and cash prize of $ 1,000 will be presented at the 43rd Annual Meeting in Trabzon/Turkey (to be held July 11-15th, 2010). The applicant is required to submit an abstract of his/her research to be presented in an oral presentation at the meeting. Specific application details are as described below for SIP Division Travel Awards.

2. Division Travel Awards 2010

All poster travel award applications and, with the exception of the Martignoni Award winner, all oral presentation travel award applications will be forwarded to appropriate divisions for consideration for the Division Travel Awards. Travel awards will be available for the 2010 meeting from Bacteria, Fungus, Microbial Control, Microsporidia, Nematode,Virus, and Beneficial Invertebrates Divisions.

To apply, you must be a student enrolled in a university degree program (B.S., M.S., Ph.D.) or have graduated from a M.S. or Ph.D. program during the 2009-2010 academic year. You need not be a member of the SIP or of any division sponsoring a travel award. Award applicants must submit an abstract of their work to be presented in person at the Society's Annual Meeting.

Visit the SIP Website (www.sipweb.org) for details on how to apply for all travel awards, both poster and oral presentations. An application form is available on the SIP website, or can be obtained by contacting the SIP headquarters at sip@sipweb.org.

The subject matter of the presentation should pertain to topics in invertebrate pathology and/or microbial/biological control. All individuals submitting oral presentations will automatically be considered for the Martignoni Award (poster presentations are not eligible for Martignoni Award consideration). Following selection of the Martignoni Award winner, all applications will be considered by the appropriate division(s) for travel award competitions. Students and their supervisors are advised to refer to the SIP Newsletter and SIP website for specific information regarding availability of student travel awards for 2010.

There is no limit on the number of awards for which you may apply in a single year. However, while you may be considered for multiple awards (for example, one or more Division-sponsored awards and the Martignoni Award), you will be eligible to receive only one travel award per year. You are eligible to receive the Martignoni Award only once during your student career. Consult Division chairs for current guidelines on Division Travel Awards.

Required information

1. *Curriculum vitae*. This should include your name, address, institution, earned degrees, current degree program, honors and awards, research experience, and a list of publications and previous presentations.

2. *A short biographical sketch and description of scientific interests and goals*.

3. *A letter from your supervisor* providing (1) a recommendation, (2) verification of your student status, and (3) confirmation that the research presented was conducted by you (if you are not listed as the first author of the abstract you submit, your supervisor must explain your specific role in the research and how you have met this requirement).

4. *Presentation abstract*. The body of the abstract should be 200 words or less, as submitted for the program. The abstract should provide a summary of your presentation. The title, authors, and affiliations and presentation category (oral or poster) should be clearly indicated. If your presentation relates to more than one pathogen group or involves fundamental studies such as research on invertebrate immune defence systems, please indicate the division or divisions you feel would be most qualified to judge your work. Your research contribution represents one of the most important selection criteria. Therefore, the abstract should be crafted with care, succinctly describing the research rationale, any unusual or novel methods, and the principal results. An explanation of the significance of the research findings should be offered in conclusion, based on sound interpretation of the results.

5. *Methods.* Brief (one page) description of experimental and analytical methods employed in conducting the research reported in the presentation abstract.

6. *Division.* Name one Division that you wish to consider your application for the travel award (in addition to consideration for the Martignoni Award).

Please note: Submitting an award application does not serve to place your name on the program. To do this, you MUST also submit your abstract to the meeting organizers as specifically instructed on the meeting website. If you wish to participate in the student paper / poster competition during the SIP meeting (where your oral or poster presentations will be judged by a jury), ***be sure to check the "student competition" box when you submit your abstract***.

Deadlines

Deadline for submission: March 15, 2010

Committee decisions: April 12

Successful applicants will receive an official communication from the appropriate Committee Chair and should confirm their acceptance and participation as soon as possible. Award certificates and cash prizes will be presented at the meeting, but if necessary for travel, the cash awards can be provided in advance.

Chris J. Lomer Memorial Award

Qualified applicants are now invited to apply for the Chris J. Lomer Memorial Award, for financial support of scientists from less developed countries who wish to attend the 2010 Society for Invertebrate Pathology meeting in Trabzon/Turkey. The award honors the memory of the late Chris Lomer for his work and enthusiastic leadership while carrying out microbial control research in less developed countries.

The award provides $750.00 which partly covers travel costs to attend the SIP Annual Meeting.

Applicants will be required to make an oral or poster presentation at the Annual Meeting on their work in invertebrate pathology and a certificate will be presented at the meeting.

Required Information

1. Completed application form. An application form is available on the SIP website, or can be obtained by contacting the SIP headquarters at sip@sipweb.org, or from the coordinator, Dr. Patricia Stock (spstock@ag.arizona.edu).

2. Curriculum Vitae. This should include the applicant's name, address, institution, earned degrees, current degree programme (if relevant), honours and awards, research experience and a list of publications and previous presentations

3. A letter from the supervisor, Head of Department or other suitable Director, providing a recommendation and confirmation that the work being presented was conducted by the applicant

4. Presentation abstract. The application must include a summary of the presentation including title, authors, and affiliations. The abstract should follow the format described on the SIP meeting website at http://www.sip2010.org.

5. Brief (one page) description of experimental and analytical methods employed in conducting the research reported in the presentation abstract.

Preference will be given to candidates based in less developed countries at the time of the application.

If you wish to present work which does not fit within a standard experimental format then please discuss your ideas by emailing Dr. Patricia Stock (spstock@ag.arizona.edu) before making an application.

Please send completed applications to Dr. Patricia Stock, email: spstock@ag.arizona.edu.

Deadline for submission: **March 15, 2010**.

Criteria

Applicants for the SIP Lomer Committee Award should:

• normally have at least a B.Sc. or equivalent degree

• be working or studying at a university or research institution that carries out research, this includes field centres, NGO's and museums

• be working in scientific areas within the remit of the SIP (invertebrate pathology and microbial control)

• applicants do not have to be a member of SIP

Preference will be given to candidates who are based in less developed countries at the time of the application.

Would like to hear from you

Please let SIP know of the changes in your contact information or your position. If you would like to share your photos, experiences or stories with SIP members, send in your contribution to the newsletter.

In their email communication early December, 2009, Grant Stentiford, UK (left) and Mark Goettel, Canada (right) exchanged the scenic views from their office windows.

Position Announcements

Insect Molecular Biologist

MONSANTO

Monsanto, an Ag industry leader creating scientific breakthroughs around the world, is seeking a highly motivated individual to work as an Insect Molecular Biologist in our St. Louis, MO location.

We are seeking an experienced molecular biologist or molecular entomologist with leadership skills to lead a cross-functional team within our Biotechnology organization. This person will interact with an established multi-disciplinary team aimed at discovering novel insecticidal proteins and will lead the cross-functional effort to develop transgenic crops protected from Hemipteran feeding damage. The candidate will be responsible for engaging team members and stakeholders in all aspects of project management including communication, budgeting, and strategic planning.

Qualifications: Successful candidates will have a Ph.D. degree in Entomology, Biology, Genetics, Molecular Biology, or other related field with a minimum of 5 years of postdoctoral or industrial experience. Laboratory experience is to include broad experience in biochemistry, molecular biology, genetics and insect physiology. Knowledge of Hemipteran insect biology will be a plus. The candidate must have demonstrated the ability to lead a team and have a good literature and/or patent publication record in the relevant field. The candidate must have excellent verbal and written communication skills and be highly motivated and results-oriented.

Contact information for applicants: Please note that only applications submitted through the Monsanto career website will be considered for this position.

To view a more complete and detailed job description, please visit our website at www.monsanto.com/careers and to apply online select req. # 00191. We offer very competitive salaries and an extensive benefits package. Monsanto values diversity and is an equal opportunity employer. M/F/D/V. Apply by 8/12/10.

Scientist

Position Description: Valent BioSciences Corporation (VBC) is the worldwide leader in the identification, development, commercialization and supply of low-risk, environmentally compatible agricultural, forestry, public health, and environmental health products. Our foundation is science and technology. We use the power of naturally occurring and chemically derived pesticides and plant growth regulators to help solve problems and create value for our customers around the world.
Our Global Research Group has a career opportunity for a Microbiologist in our Long Grove, IL research center, which is located 25 miles northwest of Chicago.

The chosen candidate will be involved in the design and execution of a wide range of microbiology and molecular biology experiments focused on the generation and evaluation of biological and biochemical pesticides.

Principal responsibilities: •Design and implement microbiology and molecular biology experimental protocols for the evaluation and development of new biological and biochemical pesticides.
•Identify and develop ideas for new biochemical and biological pesticides or for improving existing active ingredients.
•Remain current with the latest developments in the field in the scientific literature.
•Conduct microbiology operations including strain maintenance, strain transfers, inoculum preparations, contaminant detection and isolation, mutagenesis, etc.
•Conduct molecular biology procedures involving nucleic acid preparations and analysis, enzymatic manipulations, construction of vectors and libraries, transformations, protein analysis, PCR, Southern, western, and northern hybridizations, nucleic acid arrays, etc.
•Conduct shake flask and small scale fermentation experiments.
•Carry out molecular biology and microbiology related analytical procedures, such as SDS_PAGE, microbial counts and quantitative PCR to support research activities. Implement literature-based analytical procedures and develop in-house procedures as required.
•Maintain detailed accurate records in lab books and computer databases.
•Analyze and interpret data; prepare and present results, conclusions and recommendations in support of research, development, formulations, product registrations, and marketing.

Primary qualifications: The successful candidate will have the following:
•A Ph.D. in microbiology with 4-8 years experience that includes R & D work in microbiology and molecular biology; or a Masters degree with 8-12 years of experience.
•Broad knowledge of microorganisms, an excellent working knowledge and experience in modern molecular biology and traditional microbiology techniques.
•Experience with biological pesticides R&D will be a plus. Prior experience with implementing literature research protocols and developing new protocols will also be considered a plus.

Contact information for applicants: For additional information about our company, please visit our website at: www.valentbiosciences.com. Valent BioSciences Corporation is an equal opportunity employer M/F/D/V. Apply by 6/30/10.

Proposals for hosting future meetings are invited. Please contact Lawrence (Lerry) Lacey, Chair of the Meetings Committee with your proposal lerry.lacey@ars.usda.gov

SIP2011

August 7-11, 2011
Halifax, Nova Scotia, Canada

Chairs: Susan Bjornson and Christine Noronha
Contact: susan.bjornson@smu.ca
Department of Biology
Saint Mary's University
923 Robie Street
Halifax, NS
Canada B3H 3C3
Phone: 902 496 8751
Fax: (902) 420-5261
www.smu.ca

SIP2012

August 5-10, 2012
Buenos Aires, Argentina

2009 Student Award Winners

The following are the winners of oral and poster presentations, division travel awards and Mauro Martignoni and Chris Lomer awards at the 2009 SIP annual meetings in Park City, Utah.

Mauro Martignoni Award winner Karolin Eberle

Chris Lomer Award winner Le Thi Thanh Thao

Oral Presentations

•Sastia Prama Putri (sastia_prama_putri@icb.osaka-u.ac.jp) – 1st place

•Nick Jessop (nick.jessop04@imperial.ac.uk) – 2nd place

•Jondavid de Jong (jdejong@uoguelph.ca) – 2nd place

•Karolin Eberle (karolin.eberle@dlr.rlp.de) - honorable. mention

Poster Presentations

•Le Thi Thanh Thao (thanhthao020182@yahoo.com) - 1st place

•Chikako Ono (ckikaono@abs.agr.hokudai.ac.jp) – 2nd place

•Anna Morkeski (morkeski@psis.umass.edu) – 3rd place

•Daisuke Ohtsuka (dohtsuka@agr.hokudai.ac.jp) - honorable mention

•Takaya Tomokiyo (t-470er@orange.agr.hokudai.ac.jp) - honorable mention

•Takuya Yamaguchi (yamagu@abs.agr.hokudai.ac.jp) - honorable mention

Student Travel Award Winners – Bacteria Division

•Sabrina Hayes, Florida A&M University

•Anaïs Castagnola, University of Tennessee

Student Travel Award Winner – FungusDivision

•Sastia Prama Putri, Osaka University

Student Travel Award Winner – Microsporidia Division

•Nils Cordes, University of Illinois

Student Travel Award Winner – Microbial Control Division

•Winner could not attend the meeting

Student Travel Award Winners – Virus Division

•Jianli Xue, Miami University

•Agah Ince, Wageningen University

Sastia Prama Putri received a B.Sc. Biology from Bandung Institute of Technology, Indonesia and a M. Eng. in Biotechnology from Osaka University. She is a Ph.D. student in Osaka University, Japan majoring in Biotechnology. She has received several awards including the P.T. Kondur Petroleum S.A. Indonesia Academic Achievement Award for undergraduate studies, the UNESCO Fellowship from the Japanese Government, and the Japanese Ministry of Education, Sports and Technology Scholarship for postgraduate studies. Sastia plans to characterize metabolites of entomopathogenic fungi and develop these fungi as a resource for novel bioactive compounds. Knowledge about the bioactive constituents of entomopathogenic fungi is also very important in assessing both the potential value and the risks associated with using fungi as biological control agents.

Kelly Sims, a PhD candidate in the Department of Entomology and Nematology at the University of Florida, is studying how parasites/pathogens interface with host insects and elucidating the acute and chronic effects of these biological agents on insect disease vectors. She presented a talk entitled "*Thripinema fuscum* parasitism reduces the vector competency of *Frankliniella fusca* to transmit Tomato spotted wilt virus". Kelly hopes knowledge obtained by her project will provide a platform to develop future management strategies for regulating insect vectors. In the future, she intends to pursue post-doctoral studies on this unique model system with her advisor Dr. Drion Boucias.

John Chaston is a Ph.D. student at the University of Wisconsin-Madison in the laboratory of Dr. Heidi Goodrich-Blair. His research goal is to characterize the role of three bacterial proteins that are required for association of the symbiont *Xenorhabdus nematophila* with its animal host, Steinernema carpocapsae. One result of understanding the molecular characteristics of the association betw een the two will be to better manipulate and control the use of the pair against agriculturally relevant insect pests. John's talk was entitled, "Mutational Analysis Yields Insight into the Role of a Bacterial Host Association Factor in a Model Animal-Bacterial Mutualism".

Daisuke Ohtsuka is a PhD student at the Laboratory of Applied Molecular Entomology, Hokkaido University, Japan working with professor Hisanori Bando. The aim of his work is to generate BmNPV-resistant transgenic silkworms. After the completion of his PhD, Daisuke would like to conduct molecular research in the field of gene regulation.

Nick Jessop

Working hard even after winning the award

Nils Cordes is a PhD student of Dr. Leellen Solter at the University of Illinois at Urbana-Champaign, USA. As part of a nation-wide project on bumble bee decline he studies the pathogens of bumble bees, in particular the microsporidium *Nosema bombi*. With a background in insect behavioral ecology, he is thrilled to be working on ecological questions like pathology and pathogen dynamics. Nils is also very interested in outreach programs to teach about insect conservation and is currently thinking about writing an invertebrate comic strip. At the 2009 SIP conference, he gave a talk entitled "Are microsporidia involved in bumble bee decline?" but still owes an answer.

Sabrina Hayes My first degree was a BS in Microbiology from the University of West Florida in Pensacola, Florida. I'm currently working towards my Master's in Entomology at Florida A& M University in Tallahassee, Fl. My research focuses on the Isolation and Molecular characterization of novel mosquitocidal bacteria. In the not so distant future I'd like to join a PhD program. I'd like to do more research on mosquitocidal bacteria as a way to eliminate Malaria.

Anaïs Castagnola My undergraduate degree was in Biotechnology from Kennesaw State University and I am currently working toward a Ph.D. in Plants, Soils and Insects with a concentration in Entomology here at University of Tennessee, Knoxville. As a graduate research assistant in the Jurat-Fuentes Insect Physiology Laboratory, my research goals are to investigate epithelial regeneration in *Heliothis virescens* and Cry1Ac's mode of action in the primary midgut cell cultures of *H. virescens*.

Takuya Yamaguchi I'm a PhD student at the Laboratory of applied molecular entomology, Hokkaido University, Hokkaido, Japan. For four years, I am studying mode of action of Cry8D having toxicity to adult and larvae of Japanese beetle. I would like to reveal differences of mode of action of Cry8D and the other Cry8 (not having toxicity to adult beetle).

Jondavid deJong

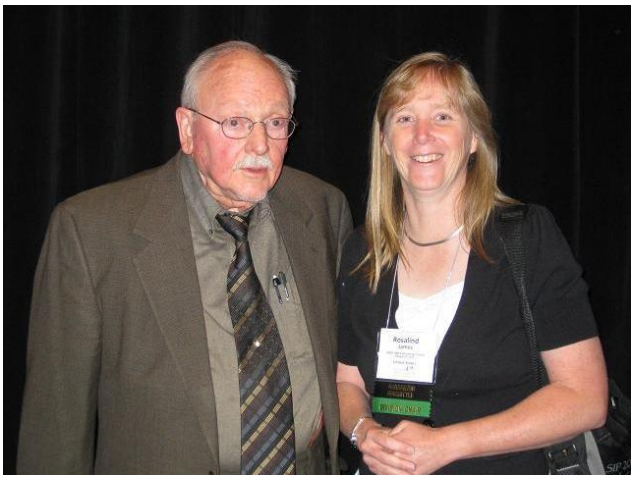
Jianli Xue

Chikako Ono is a second year PhD student in Applied Molecular Entomology in the Department of Agriculture at Hokkaido University in Sapporo, Japan, under the supervision of Professor Bando. Chikako's research deals with understanding the gene regulatory network of baculoviruses using gene knockout. Chikako presented a poster on analysis of AcMNPV immediate-early gene knockout viruses with a focus on the function of *me53*.

Agah Ince

Mark Brown and James Strange

Mark Brown and James Strange



Don Roberts and Rosalind James

Don and Mae Roberts with Mark Goettel

Craig Huntzinger

One of the winning entries from 2009 Photo Contest Mormon cricket killed by *Beauveria bassiana*. Submitted by Stefan Jaronski ▶

It is not just the SIP members who are happy, even the insects that are killed in their hands die happy. Please renew your membership to be a proud part of a great scientific community.