

**40th Annual Meeting of the
Society for Invertebrate Pathology
Quebec City, Quebec, Canada
and
1st International Forum on Entomopathogenic
Nematodes and Symbiotic Bacteria
August 12-16- 2007**

SIP 2007 – Welcome from the Organizing Committee

The Organizing Committee is pleased to welcome you to the Université Laval in Quebec City for the 40th Annual Meeting of the Society for Invertebrate Pathology and the 1st International Forum on Entomopathogenic Nematodes and Symbiotic Bacteria.

This year is also the 40th anniversary of our Society: 40 years of exciting research and outstanding accomplishments, each of these years highlighted by its annual meeting where researchers and trainees from academia, government and industry worldwide exchange ideas with colleagues in their own fields, and learn from others in other areas of invertebrate pathology.

The SIP meetings have all been wonderful gatherings, taking place all over the world, with great science... and great fun! We are determined to include the SIP 2007 meeting in this uninterrupted chain of memorable events and we hope that you will join us from August 12 to

August 16 – and why not for several days before and after? Enjoy a fabulous meeting, experience lively Quebec City (‘Québec’), and visit this wonderful and unique corner of ‘La belle Province’. Welcome to SIP2007, welcome to Québec City, welcome to the Province of Quebec and welcome to Canada!

*Conrad Cloutier and Jean-Louis Schwartz
Co-Chairs of the Organizing Committee*

Logo

The 2007 SIP logo was inspired by majestic stone monuments called “inuksuk” by the Inuits. They are found everywhere in the Arctic.

Venue

The 40th Annual Meeting of the Society for Invertebrate Pathology and the 1st International Forum on Entomopathogenic Nematodes and Symbiotic Bacteria will be held at the Université Laval in the Alexandre-Vachon or Adrien-Pouliot buildings. The university campus is located in the Ste. Foy borough, west of downtown Quebec City,

TABLE OF CONTENTS

40 th Annual Meeting, Quebec City, Quebec, Canada.....	1
Additional Meeting Announcements/Awards.....	8
Honorary Member 2006.....	9
Student Awards 2006.....	10
From the President.....	14
On the Web.....	15
Member News.....	16
Members on the Move.....	16
Obituaries.....	17
Positions Available.....	18
Positions Wanted.....	19
Future Meetings and Workshops.....	19
Past Meetings and Workshops.....	20
SIP History.....	20
Publications.....	21
Errata.....	22
Editors’ Notes.....	23
SIP 2006 Photos.....	24

Deadline for the next Newsletter is June. 1, 2007

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Outside USA Tel and Fax: (919)-841-4133

Note: Toll Free numbers for Canada & USA only

which is only 10 to 15 minutes away by car or public transportation.

The Université Laval campus covers an area of 1.9 km² (0.73 mi²) in a partly forested area with recreational sites, walks, and a small botanical garden devoted to teaching. Various eating amenities (in the Alphonse-Desjardins building), a major bookstore and other services, as well as sports and training facilities in the PEPS building can be accessed on site. To consult a map of the campus and its different buildings, see:
<http://www.ulaval.ca/AI/interne/plan/>



**The Université Laval campus
Downtown Quebec City at top of photo**

SIP NEWSLETTER

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The SIP Newsletter is published 3 times per year and is available on our homepage.

Submissions to the following sections are solicited:

Forum: More substantial articles on current issues of concern, limited to approximately five pages.

Letters to the Editor: Issues of concern can be brought to light here.

Microbial Control News: Information on new discoveries, "News Releases", formation of companies, etc., pertaining to microbial control.

We also depend on our members to supply us with information for the following sections: **Obituaries**, **Member News** (Retirements, Awards, Promotions), **Members on the Move** (New Addresses), **Positions Available/Wanted**, **Meeting and Workshop Announcements**, and other **News Items**.

Send all submissions directly to the Editor. Submissions via e-mail or on computer disk (MSWORD, if possible) streamlines publication and saves on costs. Please include a hard copy with any text sent via computer disk.

Deadline for the next Newsletter is June 1, 2007.

Disclaimer: The information contained herein, including any expression of opinion, and any projection or forecast, has been obtained from or is based upon sources believed by us to be reliable but is not guaranteed as to accuracy or completeness. The information is supplied without obligation and on the understanding that any person who acts upon it or otherwise changes his/her position in reliance

With its own international airport and only a 2½-hour drive northeast from Montreal, a major airline hub in Eastern Canada, Quebec City (or Québec, in French) is the capital of the Canadian Province of Quebec and one of the oldest European establishments in North America. With its 700,000 inhabitants, Quebec City is the first major city encountered when sailing upstream on the St. Lawrence River, one of the largest rivers in the world. Located at the junction of the Canadian Shield and Appalachian geotectonic plates, Quebec City, a UNESCO world heritage site, is best known for its famous Citadel and stone walls, large hotels and religious institutions, towering at the highest point on Cap Diamant.

Quebec City offers a majestic view of the St. Lawrence waterway and the deep-water harbor, a major commercial and tourist point of entry on the North American continent. The city is filled year long with cultural, artistic, scientific and tourist activities of all sorts. Its summer festivals and winter carnival are world-renowned, and so is its gastronomy.



Quebec City from St. Lawrence River

Quebec City, which will celebrate its 400th anniversary next year, has kept much of its original character, including French as the language spoken by the majority of its inhabitants. Quebec City is located in a famous tourist area that offers many possibilities for leisure, culture, history, learning and outdoor life, both on land and water.

Plan to spend some extra time before or after the meeting to explore the multitude of things to do and see in Quebec City and, better yet, plan a trip to explore other parts of this beautiful area of Canada.

For more information on Quebec City and its surroundings consult:

<http://www.ville.quebec.qc.ca/en/accueil/index.shtml>



New France Festival

Call for papers and preliminary program

The Program Committee solicits your contribution of abstracts for presentations at the SIP 2007 meeting. All abstracts must be submitted on-line at the website: <http://www.sip2007quebec.com>. The deadline for abstracts for the symposia, contributed papers, poster and plenary presentations is April 16, 2007. Abstracts received after the deadline will not be printed and late submissions will be scheduled as posters if space permits.

The full program will be posted shortly on the conference website. The overall meeting program will follow a format very similar to that of several past meetings, and will include the sessions of the 1st International Forum on Entomopathogenic Nematodes and Symbiotic Bacteria. In summary:

Sunday, Aug. 12

All day: annual meeting of SIP Council;
Afternoon: registration; Evening: mixer.

Monday, Aug. 13

All day: registration; Morning: Opening Ceremony, Founder’s Lecture, Plenary Session.
Afternoon: symposia, contributed papers, posters; Evening: Division business meetings, workshops.

Tuesday, Aug. 14

Morning: symposia, contributed papers;
Afternoon: 5K run/walk, excursion; Evening: barbecue.

Wednesday, Aug. 15

Morning: symposia, contributed papers;
Afternoon: symposia, contributed papers and posters

Thursday, Aug. 16

Morning: symposia, contributed papers, SIP annual business meeting; Afternoon: symposia, contributed papers; Evening: banquet and awards ceremony.

SIP 2007 Symposia

Bacterial Division Symposium: *Mode of action of toxins*
Jeroen Van Rie and Juan Ferré, conveners

Fungi Division Symposium I: “*Are entomopathogenic fungi only entomopathogens?*” Mark Goettel and Jacques Brodeur, conveners

Fungi Division Symposium II: *Fungal secondary metabolites; knowns and unknowns.* John Vandenberg, Alice Churcill and Donna Gibson, conveners

Microsporidia Division Symposium: *Microsporidia of beneficial and pest insects in greenhouse, nursery and pollination systems* Regina Kleespies and Lee Solter, conveners

Virus Division Symposium I: *Symposium in honor of Bob Granados* Just Vlak, convener

Virus Division Symposium II: *Symposium to honor Loy Volkman* Linda Guarino, convener

Cross-Divisional Symposium: *Advances on microbials in orchards* Lerry Lacey and Charles Vincent, conveners

Cross-Divisional Symposium: *Current situation on the biological control of turfgrass insects* Guy Bélair, convener

Cross-Divisional Symposium: *Entomopathogens against invasive insects* Louela Castrillo, convener

Cross-Divisional Symposium: *Is there room for new Bt's on the market?* Ole Skovmand and Trevor Jackson, conveners

1st International Forum on Entomopathogenic Fungi and Bacterial Symbionts

Harry Kaya, Parwinder Grewal and David Shapiro-Ilan, conveners

Session I: *Symbiosis*

Session II: *Virulence*

Session III: *Stress Biology*

Session IV: *Ecology*

Registration

Delegates are invited to register on-line: <http://www.sip2007quebec.com> and to take advantage of the reduced rates offered to SIP members and early registrants (see rate schedule below). It is also possible to register by mail using the forms provided in this newsletter. On-site registration will be accepted on Sunday, Aug. 12 and Monday Aug. 13.

The registration fees include access to the scientific and social programs, health breaks during the conference, program and abstracts book, mixer, barbecue with entertainment and banquet dinner with entertainment. Registration to the optional activities (excursion, 5K run/walk) and the purchase of companion tickets can also be completed on-line. Extra tickets for various events will be available at the conference registration desk during the meeting.

Registration rates (in US currency)

SIP members

Early registration- by April 29, 2007	\$350
Late registration – by August 5, 2007	\$400
On-site registration	\$425

Non-members

Early registration –by April 29, 2007	\$400
Late registration –by August 5, 2007	\$450
On-site Registration	\$475

Students

Early registration- by April 29, 2007	\$150
Late registration –by August 5, 2007	\$200
On-site registration	\$225

Optional:

Excursion–received by August 5, 2007	\$65
Excursion on-site registration	\$75
5K run/walk (includes T-shirt).	\$18
T-shirt only	\$15

Companion tickets:

Mixer	\$35
Excursion	\$65
Barbecue	\$70
Banquet	\$75

Social program

The welcome mixer will take place on Sunday evening, on campus at the conference location. This is an excellent opportunity to meet colleagues, and

also to become acquainted with the site and its neighborhood. The Tuesday break will start with the 5K run/walk to be held in the Plaines d'Abraham Park (Battlefields Park- See http://www.ccbn-nbc.gc.ca/_en/index.php), overlooking the St. Lawrence River, at the doors of the Old City. The 'Club de course à pied' (track and field running club) of Université Laval will help organize the event.

The Battle of the Plaines d'Abraham was a major battle that sealed the fate of Canada. Visit: <http://www2.marianopolis.edu/quebechistory/encyclopedia/SevenYearsWar-FrenchandIndianWar-BattleofthePlainsofAbraham.htm>

We will then take you either on a St. Lawrence River cruise (more information available shortly) or on an excursion by bus to Duchesnay Recreation Park on St. Joseph Lake, a 89 km² (approx. 34 mi²) of wooded area 20 min.



Plains of Abrams

from Quebec City. Swimming, canoeing and kayaking, hiking, all-terrain cycling, all-wood labyrinth, tree top adventure, and a rock climbing wall are only a few of the 'plein-air' activities you will be able to enjoy. Have a look at: <http://www.tourisme.gouv.qc.ca/it-it/fiches/en/attraits/2057258.html>

The famous SIP barbecue, with entertainment, will be held in the evening either near the landing site of the cruise or at the Duchesnay Recreation Park.

And finally, we will close the meeting on Thursday evening with the traditional SIP banquet. You will be treated to a meal of fine French Cuisine at the Hotel Delta Québec, downtown Quebec City. As usual Student Awards and the Founders' Lecture Awards will be presented, and of course, music and dance will follow.

Note: Extra guest tickets will be available at the conference registration desk throughout the meeting.

Accommodation and meals

Housing

Delegates and their companions and families may wish to stay on the Université Laval campus where the conference will take place, in hotels near the conference site or, a little further away, in downtown Quebec City at the Hotel Delta Québec, where the conference banquet will be held. Blocks of rooms have been reserved at these three locations. Rates are given in Can \$. Approximate rates in US currency are also provided; they were calculated using the exchange rate on February 10, 2007. You may check the current rates on: <http://www.oanda.com/convert/classic>.

Housing on campus. At the Résidences de l'Université Laval, the room rate for students will be Can \$38 (approx. US \$32), single occupancy and Can \$52 (approx. US \$44), double occupancy. For other delegates, they will be Can \$42 (approx. US \$36), single occupancy and Can \$52 (approx. US \$44), double occupancy. Breakfast is included. Instructions for reservation will be given shortly on the conference website: <http://www.sip2007quebec.com>

Hotels nearby. Four hotels have been selected to accommodate delegates who wish to stay close to the Université Laval campus. Details will be given shortly on the conference website, where it will be possible to reserve on-line. Rates will range between Can \$ 120 and 143 (approx. US \$ 100-122).

Hotel Delta Québec - downtown

(<http://www.deltaquebec.com>). Room rate is Can \$159 (approx. US \$135), single or double occupancy. Reservations will be on-line at the SIP 2007 conference site.

Alternate housing facilities can be found both near the university and downtown, and include low cost motels, bed and breakfast private homes, and a multitude of hotels from basic to luxurious. You may want to visit the following websites and make your own arrangements:

<http://www.quebecregion.com/e/hotels.asp>

<http://www.quebecweb.com/entreprises/tertiaire/hebergement/quebec/introang.html>

Lunches and dinners

Meals are available in the conference building and in buildings nearby (Charles-De Koninck, Alexandre-Vachon and Adrien-Pouliot buildings). The close-by Alphonse-Desjardins building, located at walking distance (less than 5 min.) offers a larger choice of restaurants, food kiosks and more elaborate meals. There is also a nice “café”, a bar and other meeting places (see map at: <http://www.ulaval.ca/Al/interne/plan/>).

The Université Laval is also surrounded by a large variety of restaurants inside neighboring shopping centers and elsewhere in the area, several of which are at a short (10-20 min) walking distance. They serve meals ranging from French “Haute Cuisine” and Quebec chefs' specialties to all sorts of exotic or fast food. You may want to visit:

<http://www.quebecregion.com/e/restaurants.asp>

Pre- and post-conference activities

In addition to attending the social activities organized during the SIP meeting, delegates and their companions are invited to enjoy Quebec City and its region before and after the meeting. See the following sites to find out about the many things you can do in Quebec City and in the Province:

<http://www.ville.quebec.qc.ca/en/exploration/index.shtml>

<http://www.quebecregion.com/e/index.asp>

<http://www.bonjourquebec.com/qc-en/regions0.html>

Visiting the north shore of the St. Lawrence River:

<http://www.bonjourquebec.com/qc-en/charlevoix0.html>

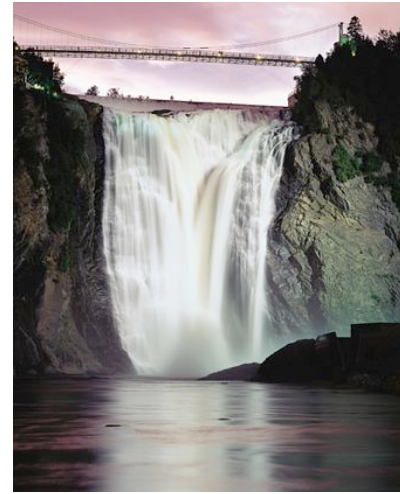
<http://www.bonjourquebec.com/qc-en/saguenaylacstjean0.html>

<http://www.bonjourquebec.com/qc-en/manicouagan0.html>



Small streets and squares in Quebec City

If you have a car or decide to rent one, you may decide to drive along the north shore of the St. Lawrence to Baie St. Paul, a picturesque village with many art galleries and excellent Charlevoix region cuisine, then take the free ferry (a 10-min.



**Montmorency Falls
Higher than Niagara!**

Ride) close by and cross the river to Ile-aux-Coudres. There you can rent a bicycle (<http://www.laurentians.worldweb.com/IsleAuxCoudres/Rentals/Bicycles/>) and ride around the island, a 26-km trip. Alternatively, you may just decide to continue along the north shore towards Tadoussac to watch the whales where the Saguenay River meets the St. Lawrence, and even explore the Saguenay Fjord up to Lake Saint-Jean, or sail the Saguenay River on a cruise boat. This is a breathtaking route with many unforgettable places to visit.

You may decide to go for a hike or a canoe trip in the Jacques-Cartier River National Park or the Parc des Hautes Gorges, where the panoramas will leave you speechless...

<http://www.sepaq.com/pq/hgo/en/>

<http://www.sepaq.com/pq/jac/en/>

Visiting the south shore of the St. Lawrence River:

<http://www.bonjourquebec.com/qc-en/chaudiereappalaches0.html>

<http://www.bonjourquebec.com/qc-en/basstlaurent0.html>

<http://www.bonjourquebec.com/qc-en/gaspesie0.html>

You may, of course, want to explore the other bank of the St. Lawrence River, following the

Navigators' route, and even drive around the Gaspé Peninsula where you will find the famed "Rocher Percé" (Percé Rock), a 470-m-long (1,540-ft.) rock with fossils that date back 400 million years, and observe the largest colony of Northern gannets in North America. The Gaspé Peninsula will charm you with its pebble beaches, its spectacular cliffs and its tranquil coves. At Forillon National Park of Canada (http://www.pc.gc.ca/pn-np/qc/forillon/index_e.asp), which stretches 244 km² (94 mi²), you'll be staggered by the impressive scenery. Discover a veritable sea of mountains at the Réserve faunique des Chic-Chocs and the Parc national de la Gaspésie, two exceptional sites for observing moose and caribou. The latter can be seen at the summit of Mont Albert: <http://www.sepaq.com/pq/gas/en/> <http://www.sepaq.com/rf/chc/en/>.



Percé Rock, Gaspé Peninsula

What about a cruise on the majestic St. Lawrence River (<http://www.circuitsaint-laurent.com/en/>)?

And finally, why not go west and have a good time in Montreal (only 2 ½ hours from Quebec City), where there is so much to see and to do? Start your trip to Montreal by visiting: <http://montreal.worldweb.com/>



Montreal

Useful information

Visas. If you need a visa to come to Canada start now! If you travel via other countries before entering Canada, make sure that you have the necessary documents. Invitation letters to obtain a visa or for other reasons will be sent upon request (see the conference website for more information: <http://www.sip2007quebec.com>). For more information about requirements to enter Canada, consult the Citizenship and Immigration Canada website: <http://www.cic.gc.ca/english/visit/index.html>).

Language.

The official language in Quebec is French, but you will not experience any difficulty. This is a tourist area where people are very friendly, helpful and are usually bilingual, especially those in the tourist trade. No doubt, you will all manage in this French city, but you may still want to consult a small English French lexicon provided at the link below: <http://www.tripadvisor.com/Travel-g153339-s604/Canada:Important.Phrases.html>

Other useful tips. To find out about climate and temperature, taxes and tipping, buying alcoholic beverages, store business hours, legal holidays, medical services and emergencies, currency and credit cards, electricity, metric system, and much other useful information, visit:

<http://www.trailcanada.com/canada-guides/quebec-city-weather.asp>

<http://www.bonjourquebec.com/qc-en/infospratiques0.html>

****Important dates to remember****

Submission of Abstracts April 16, 2007

Regular registration April 29, 2007

Deadline for cancellation with a 25% cancellation fee July 15, 2007

Deadline for late registration (walk-in rates thereafter) August 5, 2007

Deadline for uploading presentation August 8, 2007

Walk-in registration August 12-16, 2007

ADDITIONAL MEETING ANNOUNCEMENTS

SIP Student Travel Award Application General Instructions

Please Note!! These instructions apply to both the **Martignoni Student Award and the Division-sponsored Travel Awards**. 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 2006-2007 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 at the Society's Annual Meeting.

Applications for all travel awards, both poster and oral presentations, should be sent to the Chair of the Awards and Student Contest Committee, Andreas Linde, email: <alinde@fh-egerswalde.de>. 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 2007.

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 a 1) 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 application must include a one-page summary of the presentation including title, authors, and affiliations. The 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 defense 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. Brief (one page) description of experimental and analytical methods employed in conducting the research reported in the presentation abstract.

6. Name one Division that you wish to consider your application (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 or registration forms.

Deadlines

Deadline for submission: **April 1**

Committee decisions: **May 1**

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.

Mauro Martignoni Student Award

All students of invertebrate pathology are invited to compete for the sixth annual Mauro E. Martignoni Student Award, the Society's premier award for student research. An award certificate and cash prize of \$750 will be presented at the 40th Annual Meeting in Quebec, Canada (to be held 12th – 16th August, 2007). 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 described in the section on SIP Student Awards.

2007 Division Travel Awards

All poster travel award applications and, with the except of the Martignoni Award winner, all oral presentation travel award applications will be forwarded to appropriate Divisions for consideration for the Division Travel Awards.

Bacteria Div.:	2 \$500 awards
Fungi Div.	1 \$750 award or 1 \$500 award + 1 \$250 award
Microbial Control Div.	2 \$500 awards or 1 larger award
Microsporidia Division	1 \$500 award, 1 \$350 award
Nematode Division	1 \$750 award <u>or</u> 1 \$500 award + 1 \$250 award
Virus Division	2-3 awards up to \$500

**Chris J. Lomer Memorial Award
Application Instructions**

Qualified applicants are now invited to apply for the Chris J. Lomer Memorial Award for financial support of scientists from the developing world who wish to travel to the 2007 Society for Invertebrate Pathology meeting in Quebec, Canada. This award, which honors the late Chris J. Lomer’s memory and leadership role in microbial control research in the developing world, provides \$750.00 to partially cover travel costs to attend the SIP Annual Meeting.

The successful applicant will be required to make an oral or poster presentation at the Annual Meeting on their work in invertebrate pathology. A certificate will be presented at the Annual Meeting. An application form is available on the SIP website, or can be obtained by contacting the SIP headquarters at sip@sipweb.org.

Required Information

1. Completed Application Form
2. Curriculum Vitae. This should include the applicant’s name, address, institution, earned degrees, current degree program (if relevant), honors 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.sipweb.org/meetings.cfm>.

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

If you wish to present work that does not fit within a standard experimental format then please discuss your ideas by emailing Dr. Paresh Shah (paresh.shah@bbsrc.ac.uk) before making an application.

Please send completed applications to Dr. Paresh Shah, paresh.shah@bbsrc.ac.uk.

Deadline for submission: May 1, 2007

Criteria

Applicants for the SIP Lomer Committee Award should:

- 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 centers, 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 members of SIP

2006 SIP HONORARY MEMBER



SIP President Wendy Gelernter congratulates Dr. Robert Granados on his election as Honorary Member of the Society in 2006

2006 STUDENT AWARDS

Congratulations to the 2006 student award winners! We wish you the best in your future endeavors.

Student Travel Awards

Bacteria Division



Mark Bruce, Department of Biochemistry, School of Life Sciences, University of Sussex, Falmer, Brighton, United Kingdom. Mark is in the second year of his Ph.D. program under the supervision of Dr. Neil Crickmore. His primary research aim is to characterize a Cry1-Ac mutant and understand what is causing the increased toxicity. This could

potentially lead to new mutants being developed with even higher toxicity or with a defined insect specificity. Mark's presentation was titled "Cry1Ac N-terminal mutants with increased toxicity towards the diamondback moth".



Sonia De Costa, Ecologie Microbienne des Insectes et Interactions Hôte-Pathogène, Université Montpellier, Montpellier, France. Sonia's scientific interests are related to the insect innate immune system and the mechanisms by which entomopathogenic bacteria avoid their destruction. Her long-term goal is to build new tools

for use in biological control of agriculture's pests. Sonia presented her work "A second GTPase modifying toxin, named LopT2, is encoded by a remnant prophage in *Photorhabdus luminescens* and produced in insect specific organs" at the Wuhan meeting.

Fungi Division

Carolyn V. Mander, Bio-protection and Ecology Division, Lincoln University Canterbury, New Zealand. Carolyn's specific research interests currently include persistence of different strains of *Beauveria bassiana* in soil and using fluorescence microscopy to investigate conidia viability and germination in soil. She is also interested in developing rapid DNA and fluorescence techniques for application in microbial control and insect pathology. Her long-term goal is to continue applied research in the field of microbial control in New Zealand and to further her knowledge of microbial-insect disease interactions. Carolyn's presentation was titled "Pathogenicity of *Beauveria bassiana* towards Fuller's rose weevil larvae in soil".



Microbial Control Division



Patricia Hernandez-Martinez, Departamento de Genetica, Universitat de Valencia, Valencia, Spain. Patricia presented her work in a paper titled "*Spodoptera exigua* selection using a marginally toxic Cry protein provided a wide range of toxin resistance". She is

currently working on different aspects of *Bacillus thuringiensis* toxicity such as characterization of base line susceptibility in *Spodoptera exigua*, characterization of insect resistance (laboratory selection and gene profile expression), and identification of Cry proteins in *B. thuringiensis* crystals. Her goals after graduation are to continue working on *B. thuringiensis*, focusing on the mechanisms that are involved in insect resistance development.

Microsporidia Division



Thomas Kolling, Dept. of Forestry and Applied Ecology, Fachhochschule Eberswalde, Eberswalde, Germany. The main topic of Thomas' research is the transmission of the microsporidia isolated from *Lymantria dispar*. Transmission under semi-field conditions, and the isolation of different spore-types produced by the genus

Vairimorpha are the salient points of his Ph.D. research. His goals after graduation are the continuation of the work with pathogens or parasites of forest insect pests. Additionally he is going into business for himself, preparing insects for different entomological showcases. Thomas presented his work "Infections experiments with different spore types and different microsporidian isolates of *Lymantria dispar* L." at the Wuhan meeting.

Virus Division

Clare Allen, Oxford Brookes University in collaboration with Natural Environment Research Council (NERC) Centre for Ecology and Hydrology (CEH), Oxford, United Kingdom. *Clare's* scientific interests lay strongly with viruses, in particular the molecular side of their biology such as DNA replication, gene



expression and the consequences on the *cellular host*. *She is studying* examination of two viruses that possess one or two mutations within the Lef-2 gene and subsequently any potential consequences on DNA replication and/ or late gene expression. She is interested in molecular virology as a career. Clare's SIP presentation was titled "Lef-2 dual role in DNA replication and late gene expression during baculovirus infection".

David Carpentier, School of Biological and Molecular Sciences, Oxford Brookes University, Oxford, United Kingdom. David's interest in 'tiny molecular machines'



has developed into studies of insect viruses and their interactions with their host cell and organism to develop models of infection and host cell function as alternatives to the more intensely studied mammalian models. He is specifically looking at the interaction of viruses with the host cell cytoskeleton and its involvement in the process of infection, viral morphogenesis and egress. David presented his work in a paper titled "The baculovirus P10 protein forms two distinct structures with different cellular localisation properties".

Fang Xu, Laboratory of Virology, Wageningen University, the Netherlands. Fang Xu is interested in the molecular mechanisms of the wandering behavior of NPV-infected lepidopteran larvae, and UV resistance of NPV. She is studying *phr* genes coding for putative DNA photo-



lyases to determine the possible role of these DNA photolyases in DNA repair and in UV protection in these baculoviruses. She presented a paper "Functional analysis of baculovirus DNA photolyase genes".



Student Poster Award Winners



First Place: Madoka Kitami, Tokyo University of Agriculture and Technology, Koganei, Tokyo, Japan. Madoka's poster presented at the Wuhan meeting was titled "*Bacillus thuringiensis* Cry toxin's domain III, galactose-binding domain-like fold binds specifically to various proteins".

Second Place: Bo Yeon Kim, Dong-A University, Busan, Korea. Bo Yeon studies the functions/roles of insect transferrin. Her poster at the Wuhan meeting was titled "Transferrin inhibits stress-induced apoptosis in a beetle".



Third Place (tie): Yasushi Hoshino, Tokyo University of Agriculture and Technology, Koganei, Tokyo, Japan. Yasushi works on methods of phage display and screening. His results were presented in a poster titled "An approach to the directed evolution of the insecticidal protein from *Bacillus thuringiensis*".

Third Place (tie) Patricia Hernandez-Martinez, University of Valencia, Valencia, Spain (pictured above). Patricia was also the Microbial Control Student Travel Award winner.



Honorable Mention (tie) Ryoji Shinya, Obihiro University of Agriculture and Veterinary Medicine, Obihiro, Hokkaido, Japan presented a poster "Pathogenicity of hybrid strains of *Verticillium lecanii* (*Lecanicillium* spp.) to eggs of the soybean cyst nematode". Ryoji is an under-

graduate student and is researching biological control of soybean cyst nematode using hybrid strains of *V. lecanii*. He is particularly interested in the mode of infection. After graduation, he plans to enter a Master's course, and would like to study the relationship of nematode structure to function as well as nematode-microbe (particularly nematode-fungus) interactions. He would like to become a nematologist.

Honorable Mention (tie) Xiaoyu Pan, Wuhan Institute of Virology, Chinese Academy of Sciences, Wuhan, Hubei, P.R. China. Xiaoyu Pan's poster at the Wuhan meeting was titled Ha135, a unique non-structural protein of HearNPV, is not essential for viral propagation.



Poster Presentation Winners' Circle

Student Oral Presentation Winners



First Place: Wenbi Wu, State Key Laboratory of Biocontrol, Sun Yat-sen University, Guangzhou, P.R. China. Wenbi Wu used a knockout bacmid to create a defect in the production of budded virus, and a repair bacmid to rescue the defect. Her presentation “38K is required for *Autographa*

californica multiple nucleopolyhedrovirus nucleocapsid assembly” won first place in the student paper competition.

Second Place: Thomas Kolling, Fachhochschule Eberswalde, Eberswalde, Germany (pictured above) Thomas was also the Microsporidia Division Travel Award winner.

Third Place (tie): Carolyn Pritchard, Oxford Brookes University, Headington, Oxford, UK. Carolyn is interested in mutations that reduce production of polyhedra in NPV. Results of her studies were presented in her paper “Characterizing the region of the polyhedrin promoter affected by a few polyhedra mutant baculovirus”.



Third Place (tie): Clare Allen, Oxford Brookes University (pictured above). Clare also was a winner of the Virus Division Travel Award.



Third Place (tie) Wei-Fone Huang, National Taiwan University, Taipei, Taiwan, presented “The comparison of rDNA of *Nosema ceranae* isolates”. Wei-Fone recently graduated and will continue his work on *Nosema* species in the same lab for the next 6 months. He would like to go abroad in a postdoctoral position to broaden his research experience.

Honorable Mention (tie): Carolyn Mander (pictured above). Carolyn was also a Fungus Division Travel Award Winner-

Honorable Mention (tie): Minggang Fang, University of British Columbia, Vancouver, B.C., Canada, presented a paper “Functional analysis of the AcMNPV budded virus regulatory protein EXON0”. Minggang is in the 4th year of his Ph.D. program at Faculty of Land and Food Systems. His study focuses on the molecular mechanism of the egress and transport of baculovirus budded virus, the last essential step of the virus life cycle. He would like to study more fundamental and important phenomena of life science in the future, such as studies on the cell cycle and regulation of gene expression.



Presentation Winners

FROM THE PRESIDENT

Envisioning SIP's future, with some help from its past



“You have made SIP thrive all over the world. The vision of Ed Steinhaus and the founding members is being realized with your dedication, creativity and wonderful humanity. All your work, our often sad world truly needs. I thank you all.”

These gracious words were addressed to SIP members by Mrs. Marie Louise Martignoni (known to many SIPers as Lu), in a recent letter that accompanied yet another generous donation from her family to the Student Travel Award Fund that is named in honor of her late husband, SIP founder Mauro E. Martignoni.

Mrs. Martignoni's words have stayed with me these last few months because I found myself agreeing with so much of what she said — her admiration of SIP's international spirit, her appreciation for the role of SIP members in helping to solve some of humankind's many problems, and her reminder to us of the vision of Ed Steinhaus, Mauro Martignoni and other SIP founders.

What exactly was the vision that these two men shared with their colleagues at SIP's first annual meeting, held in September 1967, in Columbus, Ohio? And what better time than the celebration of SIP's 40th annual meeting this summer in Quebec (see this edition of the Newsletter for more details), to ask this question?

SIP Honorary Member Bob Granados provided more food for thought on this topic when he kindly sent me copies of several of Dr. Ed Steinhaus' (SIP's 1st President) early articles on the formation of SIP. I was intrigued with several consistent themes that run throughout his writings — themes that are very much echoed in Mrs. Martignoni's comments. These include:

- A commitment to encouraging international science and the free interchange of ideas within the international scientific community.
- The belief that SIP should serve as a common platform that allows scientists from disparate disciplines come together to solve problems. In Steinhaus' words, we need to promote "...the cross fertilization between disciplines (that) can give us

hybrid vigor of the most productive and worthwhile type". (1)

- Invertebrate pathologists have a responsibility to society that is intertwined with their responsibilities as scientists. Or, as Steinhaus says, we have "a responsibility and role to fill in the general betterment of society ... from matters pertaining to (human) health to those relating to the impending world famine, to those underlying the causes of war, to those ensuring man's freedoms and rights everywhere". (3)
- In order to make invertebrate pathology a living, vibrant science, we must avoid succumbing to the trend towards ultra-specialization (it was a problem even 40 years ago, apparently!) by promoting a diversity of thought and ideas in our Society. "Science and technology are today characterized by innumerable specializations and specialists. Unfortunately, these specialists frequently specialize themselves into a rut and overconcentrate on certain subjects while other subjects of equal importance and interest are neglected." (2)

I am impressed at the prescience of Dr. Steinhaus' words, for they are as true today as they were 40 years ago, and perhaps even more important for us to heed.

How well do you think that these principles apply to the SIP of 2007? And how well do you think that we, as a Society, live up to them?

I invite those of you with thoughts on this to share your ideas in the next edition of the SIP Newsletter, which will be published in June 2007 (visit <http://www.sipweb.org/newsletterAbout.cfm> for more information about newsletter submissions) or directly with me (gelernter@paceturf.org) or other members of Council.

Something new in Québec

There will also be several opportunities at the 2007 Québec meetings to reflect on and discuss these issues, including past-President Betty Davidson's plenary lecture on SIP's 40 years of achievement. I look forward to seeing many of you at the meetings, and hearing more of your ideas there.

There are a great many reasons for attending the SIP annual meeting this year. Jean-Louis Schwartz, Conrad Cloutier and their organizing committee have been hard at work for the past year putting

together an exciting and diverse scientific and social program. I had a chance to visit Jean-Louis and Conrad in Québec last year and to tour the conference center at Université Laval. It is an excellent site for the meeting, with ample meeting rooms, pleasant outdoor spaces and several different dining areas on the campus. And Québec itself is a beautiful, historic location with beautiful parks, fantastic restaurants and cozy pubs, all ideal for stimulating conversations and fun.

You will note that we are trying out something a bit different in the meeting program this year. At the request of the Nematode Division, the program will include an emphasis on entomopathogenic nematodes and their symbiotic bacteria. This is reflected in the name of the conference (“The 40th Annual Meeting of the Society for Invertebrate Pathology and the 1st International Forum on Entomopathogenic Nematodes and Symbiotic Bacteria”), as well as in the large number of symposia (four) devoted to this topic. The Society’s nematologists felt that there were many scientists who could enjoy what SIP has to offer, but who do not regularly attend our meetings. By focusing on nematodes and their symbiotic bacteria at the 2007 meeting, they hope to expose more people — both current and future SIP members — to the topic, as well as to the joys of SIP meetings and membership.

In a similar fashion, we have focused our program every other year on *Bacillus thuringiensis* (last year’s Wuhan meeting was also the 8th International Conference on *Bt*), a practice that has attracted *Bt* researchers from diverse areas to SIP meetings.

These additions make our meeting programs exciting and filled with the most current information. But they also raise some questions about whether our schedule is becoming overburdened with sessions (at the expense of more informal discussions) and whether we can maintain the healthy balance between specialized topics and interdisciplinary topics that Steinhaus argues for. Council will review these questions during and after our meetings this year, and will make recommendations for 2008 and beyond. I invite you to contact me with your own questions or ideas about future programming of SIP meetings at gelernter@paceturf.org, and I will be sure to forward your thoughts to Council.

Remembering a pioneer from the past

For a final story that links our past and future together, it is only fitting to honor the memory of Dr. Gernot H. Bergold, whose 2003 death we have only recently learned of. As you read Just Vlak’s obituary of Dr. Bergold’s life in this newsletter, you will learn how this early 20th century scientist adapted modern techniques to

provide some of the most comprehensive ultrastructural and biological descriptions of insect baculoviruses. It is interesting to note that Bergold and Ed Steinhaus were frequent correspondents during the late 1940s, when they were both working on insect baculoviruses — Steinhaus in California, and Bergold in Germany. At the end of World War II, Steinhaus even tried to hire Bergold as a researcher at the University of California Laboratory of Insect Pathology in Riverside, CA, but U.S. government red tape was too much of an obstacle. Instead, Canada became the beneficiary of Dr. Bergold’s presence when he joined the Sault Ste. Marie Lab in 1949, (4) where he stayed until his retirement.

All of my best to all of you, for a healthy, happy and productive year in 2007,



Wendy Gelernter, SIP President

*Articles cited above:

1. Steinhaus, E.A. 1960. Insect pathology: challenge, achievement and promise. *Bull. Entomol. Soc. Of America*. 6, 9-16.
2. Steinhaus, E.A. 1967. Microbial control is not all. *Proc. Join U.S.-Japan seminar on microbial control of insect pests, Fukuoka, April 21 – 23, 1967.*
3. Steinhaus, E.A. 1968. Be favorable to bold beginnings. *JIP*. 12, I – iv.
4. Steinhaus, E.A. 1975. *Diseases in a Minor Chord.* Ohio State University Press, Columbus.

ON THE WEB

SIP membership directory now on-line

A full listing of contact information for all SIP members is now available on the SIP website at www.sipweb.org. Simply go to the "Members Only" section and click on "Membership Directory". The directory has been formatted so that it can be easily printed out, if you wish. By the way, if you have forgotten your member password, you can have it emailed to you by clicking on "Forget password?" on the member login page.

MEMBER NEWS



Dwight Lynn's retirement (and changes at the Beltsville Agricultural Research Center)

After more than 50 years of research on insect cell and tissue culture, the Beltsville Agricultural Research Center (BARC) in Maryland now has no scientist whose primary responsibility is the study and development of insect cell cultures. Dr. Dwight E. Lynn,

Research Entomologist in the Insect Biocontrol laboratory is leaving the USDA after 25 years at Beltsville.

BARC came to prominence in the area of insect cells in the 1960s and '70s when Drs. James L. Vaughn and Ronald H. Goodwin were pioneering researchers in the field. Goodwin joined the lab in 1968 and, through the 1970's, developed cell lines from the corn earworm, cabbage looper, and gypsy moth. His gypsy moth cell lines in particular were the basis of extensive research, because they were the first capable of replicating the nucleopolyhedrovirus from that insect. Goodwin also put considerable effort into developing new cell culture media, with a special focus on developing serum-free formulations. He had a major role in the development of IPL-41 medium that has been the basis of most formulations used in the commercially available serum-free insect cell culture media available today.

Preceding and concurrent with Goodwin's research, Vaughn was also a driving force in the development of cell lines for baculovirus research. His SF-21 fall armyworm cell line (officially designated IPLB-SF21AE) is the parent line that was used for developing the SF-9 cloned line. Both the parent and clone are widely used with the baculovirus expression vector.

Lynn joined the laboratory in 1982 after graduate training with Dr. W. Fred Hink at Ohio State and postdoctoral research with Dr. Herbert Oberlander at the Gainesville USDA. He filled Goodwin's position following Goodwin's transfer to the Bozeman USDA lab. Lynn's efforts also focused on developing new cell lines and included cells from beetles (southern corn rootworm and Colorado potato beetle), parasitic wasps (*Trichogramma pretiosum*, *T. exigua*, and *T. confusum*), as well as many Lepidoptera (cabbage looper, fall armyworm, gypsy moth, whitemarked tussock moth, Indian meal moth,

diamondback moth, tobacco budworm, Mediterranean flour moth, and black cutworm). Much of his research involved comparing the replication of various baculoviruses in cell cultures from different species.

While Lynn's departure may mark the end of the development of new insect cell lines at Beltsville, the insect virus program will remain active through the research of Drs. Dawn Gundersen-Rindal (polydnviruses) and Robert L. Harrison (baculoviruses). Plans are also being considered to create a curator position in the laboratory to manage the insect cell and virus collections.

Lynn will continue research at the laboratory for a few months to complete some ongoing projects, but plans to relocate to Maine sometime in the summer of 2007. He plans to start a consulting firm to advise the biotech and pharmaceutical industries on aspects of insect cell culture related to the baculovirus expression vector system, but also plans to spend much more time outdoors hiking, biking, and kayaking.



**From left: Bob Granados, Tom Grace
(developer of Grace's medium), Dwight Lynn,
Just Vlak, and Karl Maramorosh**

MEMBERS ON THE MOVE

Letter from Jørgen Eilenberg

Dear all

I wish you all the best for 2007. As of January 1, 2007, my university has merged with University of Copenhagen. Our new name is thus:

Faculty of Life Sciences, University of Copenhagen
My new e-mail address: jei@life.ku.dk



Our new web-address:
www.life.ku.dk
My postal address, telephone
numbers and fax stay the same;
see full information below.

All the best,
Jørgen

Department of Ecology, University of Copenhagen
Faculty of Life Sciences
Thorvaldsensvej 40, DK 1871 Frb.C. (Copenhagen)
DENMARK
Phone: +45 35 28 26 92
Fax: +45 35 28 26 70

Mickey McGuire assumes new position

Dr. Michael McGuire was recently selected as the Assistant Director for the Northern Plains Area for USDA-ARS. The Area Office has administrative responsibility for 15 locations in the eight-state area of Montana, Wyoming, Utah, Colorado, North Dakota, South Dakota, Nebraska and Kansas. Dr. McGuire has been with USDA-ARS since 1985 and relocated to Fort Collins, CO to assume his new responsibilities.



Michael R. McGuire
Assistant Area Director
USDA-ARS-NPA, Natural Resources Research Center
2150 Centre Ave., Bldg D, Suite 300
Fort Collins, CO 80526
Ph: 970-492-7058
cell: 970-218-6597
fax: 970-492-7065
michael.mcguire@ars.usda.gov

Roberto Pereira returns to University of Florida

Friends:
I have accepted an Associate Research Scientist position at the University of Florida, Entomology & Nematology Department. (It is great to be a Florida GATOR!)
My position will be 90% research and 10% Extension, and I will be working in the Urban Entomology Laboratory with Dr. Phil Koehler. This is a wonderful chance to go back to a position with more research

responsibilities, and increased opportunity for collaborative work in a greater range of entomological research. My starting date is January 22, and my contact information is as follows:



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Gainesville, FL 32611, USA
Phone: (352) 392-1901
Cell: (352) 226-3886
FAX: (352) 392-0190
rpereira@ufl.edu

OBITUARIES

SIP members recently learned that on February 5, 2003, Dr. Gernot H. Bergold passed away in Caracas, Venezuela, at the age of 91. He is one of the founding fathers of insect virology and deserves to be remembered for his investigations of the structure of baculoviruses and the pivotal observation that the occluded virions are the infectious entities of these viruses. Born in Austria in 1911, he graduated at the University of Vienna in 1935. His thesis was entitled 'Die Ausbildung der Stigmen bei Coleopteren verschiedener Biotope'. He moved to Germany in the early 1940s to take up research in insect virology. In 1942 he joined an interdisciplinary team of researchers at the Kaiser-Wilhelm-Institut für Biologie in Berlin-Dahlem and Oppau to further advance in virology in Germany. During the war his lab was moved to Tübingen, where he continued to work there until 1949¹.

In 1943 Bergold published a seminal paper on the structure of baculoviruses, in which he described the rod-shaped nature of baculovirus virions and contended that 'polyhedral bodies were a crystalline accumulation of the virus'². He exploited novel technologies such as ultracentrifugation, developed by The Svedberg (Nobel Laureate 1927), and electron microscopy,



Gernot H. Bergold (1911-2003)

developed by Ernst Ruska (Nobel Laureate 1986), and showed that the rod-shaped virions were the infectious agents for insects³. The earlier papers, written in German, went unnoticed until 1947, when he made contact with fellow researchers in the US and Canada. He also found that multiple capsids are located in virions. He wrote many (>20) papers on the structure of insect viruses until the late 1950s.

In post-war Germany there was little opportunity for Bergold and he was recruited by the Laboratory of Insect Pathology in Sault Ste. Marie, Ontario, Canada, in 1949, where he met with Tom Angus, Art Heimpel and Ted Bird, among others, and continued to work on baculoviruses. He introduced electron microscopy to the institute and studied the spruce budworm baculovirus⁴, which is 'the Canadian prototype baculovirus' to the present day. He also tutored 'young' scientists such as Peter Faulkner, who remembered the 'German boxes' in the attic of the building as remnants of Bergold's European past, and encouraged many others to follow his path. In 1953 Bergold published a major review on the biology and biochemistry of baculoviruses, which still is a hallmark in baculovirus literature⁵. Bergold had been active in the early days of baculovirus taxonomy (1954-1959) and *Bergoldia* Steinhaus was even proposed as a genus. In Sault Ste. Marie, Bergold, with his European background, provided important stimulation and critiques to others⁶. He was the 1985 Honoree of the SIP Founders Lecture during the annual meeting in Sault Ste. Marie, where Tom Angus highlighted Bergold's scientific achievements. I do not know whether or not he was present in person.

In 1957 he was invited to give lectures on insect viruses in Venezuela at the Venezuelan Institute of Scientific Research (IVIC) and took up another career there in arbovirus research until his retirement. He founded the Center for Virology at the IVIC. He was an expert on

Venezuelan equine encephalitis virus and wrote an authoritative review on Arenaviruses⁷, which is still referenced.

In Venezuela, he was also attracted by the natural beauty of orchids. The last 30 years of his life Bergold devoted his time entirely to the description and conservation of these plants. He described many new species and one even carries his name (*Coryanthes gernotii*).

Gernot Bergold died while writing his memoirs, which hopefully surface at some point. With Bergold passed away, our scientific community has lost one of his pioneers, who moved insect virology into higher gear.

Just M. Vlák

- 1 Butenandt, A. 1977. Med. Immunol. 164: 3-14
- 2 Bergold, G. 1943. Biol. Zentralbl. 63: 1
- 3 Bergold, G. 1947. Z. Naturforsch. 2b: 122-143
- 4 Bergold, G.H. 1951. Can. J. Zool. 29: 17-23
- 5 Bergold, G.H. 1953. Adv. Virus Res, 1: 91-132
- 6 Wyatt, G. 2004. Gen. Soc. Canada Bull. 35: 30-32
- 7 Pfau, C.J. et al. 1974. Intervirology. 207-214

POSITIONS AVAILABLE

Postdoctoral research associate and/or **graduate student** to work on the molecular biology of insect pathogenic fungi, particularly *Beauveria bassiana* and/or *Metarhizium anisopliae*. The successful postdoctoral candidate should have particularly good knowledge of eukaryotic and prokaryotic expression systems as well as a good background in basic molecular biology techniques such as gene cloning, PCR walking, etc. The graduate student will work on the expression of fungal virulence factors in a model insect system.

Contact information for applicants:

Michael J Bidochka
Department of Biological Sciences
Brock University
St. Catharines, ON
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bidochka@brocku.ca

Postdoctoral associate to work on metapopulation dynamics of *Entomophaga maimaiga*, the major fungal pathogen infecting gypsy moth (*Lymantria*

dispar). This study will involve sampling and conducting experiments in the laboratory and field with gypsy moth larvae and this entomophthorean fungal pathogen. In particular, this fungal pathogen has two types of spores and the persistent azygospores are soil-borne; we will conduct studies with soil-borne resting spores and will quantify them using real-time PCR. This study will also involve synthesizing information we learn using a model, in collaboration with a population modeler. The applicant would not be expected to be a modeler but should have decent mathematical abilities and willingness to learn some modeling. In summary, this position will involve a diversity of types of skills; I do not expect that applicants will already be experienced in all of them but will be willing to work in the field and learn new methods.

Contact information for applicants:

Ann Hajek

Department of Entomology

Cornell University

6126 Comstock Hall

Ithaca, New York 14853-2601

607-254-4902

FAX: 607-255-0939

ah4@cornell.edu

POSITIONS WANTED

Postdoctoral position. I am seeking a postdoctoral position in an invertebrate pathology lab to work with microsporidia or gregarines as model organisms to understand genome evolution. For the past two years I have worked as a postdoc in a collaborative project on molecular ecology and taxonomy. My part in this project is to study the population genetic structure of the paper wasp *Ropalidia marginata* using molecular markers such as microsatellite markers and also assist students who are doing molecular taxonomy of microsporidia. I have isolated and characterized 84 microsatellite markers from *R. marginata*, and 40 microsatellite markers from Lac insects, *Laccifer lacca*, which are being used to study the population genetics. My goal is to make a genome-wide analysis for gregarines and/or microsporidia. I have strong organismal and molecular biology experience. I will be glad to provide any further information that may be needed.

Contact address:

Johny Shajahan

Postdoctoral Fellow

Prof. Raghavendra Gadagkar, s lab

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& Center for DNA Fingerprinting and Diagnostics

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FUTURE MEETINGS AND WORKSHOPS

April 21-23, 2007 Nematode-Bacteria Symbioses Workshop, University of Arizona, Tucson, Arizona. Topics are:

-Beneficial and Pathogenic Interactions between Plant-Parasitic Nematodes (PPN) and Bacteria

-Free-Living Nematodes and Bacterial Symbiosis

-Filarid Nematodes and Bacterial Partnerships

-Entomopathogenic Nematodes and their Symbiotic Bacteria

-Marine Nematodes and Bacteria Associations

For flyer use this link:

<http://www.sipweb.org/2007SymbiosisWorkshop.pdf>

For registration form use this link:

<http://www.sipweb.org/2007NemBactRegForm.pdf>

Registration:	Before March 31 st	\$60
	After March 31 st	\$80

Local Arrangements: S. Patricia Stock

Dept. Entomology, Univ. Arizona

Phone: (520) 626-3854 Fax: (520) 621-1150

Email: spstock@ag.arizona.edu

June 4-7 Midwest Institute of Biological Control Insect Pathology Short Course

The Midwest Institute for Biological Control (NCR-125, North Central Regional Committee on Biological Control of Arthropods) will conduct a Short Course on Insect Pathology, June 4-7, 2007, on the campus of the University of Illinois. The course will summarize the infectious diseases of insects including the bacteria, fungi, nematodes, protozoans, and viruses. The morphological, biological and pathological features of these organisms will be covered, as well as their use and

potential for use in biological control/IPM programs.

The course instructors will be Dr. Rich Humber (USDA/ARS, Ithaca, NY), Dr. Lerry Lacey (USDA-ARS, Yakima, WA) and Dr. Lee Solter (Illinois Natural History Survey/University of Illinois).

For maximum benefit to participants, course enrollment is limited to 20. Registration is \$200 for university students and \$400 for non-students, including post-doctoral researchers. Air-conditioned rooms will be available on campus at a daily rate of \$39.45 per person—all rooms are singles. Registration forms will be available on or before March 15, 2007.

Please address inquiries and requests for registration materials to Dr. Lee Solter, Illinois Natural History Survey, 140 NSRC, 1101 W. Peabody Dr., Urbana, IL 61801, ph. (217) 244-5047, phone messages: Jen Schuster, (217)-333-6680, fax (217) 333-4949, email: lsolter@uiuc.edu (preferred method of contact)



July 23-27, 2007. V European Congress of Protistology and XI European Conference on Ciliate Biology will take place in St. Petersburg in the very heart of the former Russian capital - city of science, museums, channels and white nights.

The scientific program will include sessions devoted to a wide range of problems of modern protistology, several lectures by recognized researchers, poster sessions and discussions. A rich social program, including variety of post-congress tours is offered to participants and accompanying persons.

You will meet many colleagues from European and other countries, and thus find opportunity for communication, discussion and initiation of new research projects.



Come to St. Petersburg and get the protistological feeling!

Dr. Sergei O. Skarlato, Chairman

PAST MEETINGS AND WORKSHOPS

Insect Pathology Workshop in Argentina

Patricia Stock (University of Arizona) organized and lectured a 40-hour workshop on Insect Pathology, which was conducted in Argentina this past June 2006. The workshop was held in the city of Esperanza, home of the Universidad Nacional del Litoral, Santa Fe province. This is a beautiful small town founded 150 years ago by Swiss, German and Italian immigrants and is located in the core of Argentina's dairy and farmland.

This workshop provided basic knowledge on the systematics and biology of entomopathogens and their consideration in integrated pest management strategies. Laboratory demonstrations and a half-day field trip to collect diseased insects were also included. Thirty-three participants attended this workshop representing diverse provinces and regions of Argentina, as well as other South American countries including Uruguay, Colombia and Chile.



SIP HISTORY: CELEBRATING 40 YEARS!

Edward A. Steinhaus Instigator, Catalyst, and Founder

Edward Steinhaus fused his unusual interests in microbiology and entomology when he was a graduate student at Ohio State University. But it was his acceptance of a position at the University of California at Berkeley, and the encouragement of Harry S. Smith, that led him to set up the first laboratory of insect pathology and to teach the first course on the subject in 1945. Out of this laboratory came many of the pioneers of our field; the many scientific descendents of Steinhaus which now number in the hundreds, are spread around the world.

Among his many accomplishments, Steinhaus traveled to conferences in many nations in the 1950's and 1960's, including the first International Conference of Insect Pathology and Biological Control in Prague in 1958, as well as visits with colleagues in Europe and Asia. These contacts led to the international nature of our Society, which we continue to celebrate. He was responsible for bringing together the group of scientists who founded our Society, and was the founding editor of the Journal of Invertebrate Pathology. He wrote or edited four seminal books on the topic, and left us with a treasure of his many

memories in the form of *Disease in a Minor Chord*. In 1963, among his other accomplishments, Steinhaus became founding Dean of the College of Biological Sciences at the University of California, Irvine.

Betty Davidson

(Excerpt of Dr. Davidson's 2005 Plenary Session presentation in Helsinki, Finland)



Sothorn Prasertphon, Wayne Brooks, Don Roberts, Bob Sluss, Ed Steinhaus, B. Thomas, Leo Van Der Geest, Martin Shapiro, Leon Etzell, Bernardo Gabriel, Ron Goodwin (photo provided by Wayne Brooks)

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2007 DUES!!***

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PUBLICATIONS

Catalogue of Introductions of Pathogens and Nematodes for Classical Biological Control of Insects and Mites

Ann E. Hajek, Michael L. McManus and Italo Delalibera Junior
USDA, Forest Service, FHTET-2005-05

This catalogue provides a listing of classical biological control releases of pathogens (viruses, bacteria, fungi, microsporidia, oomycetes) and nematodes against insects and mites. The oldest program listed was 1894-95 and the most recent 2003. The host and microbe are listed as well as

release dates and sites, where the released microbe originated and whether it established, with some notes on effectiveness, when possible. We listed whether the pest was native or introduced and references are listed for each release program. The catalogue is available through the USDA, Forest Service as a pdf file: <http://www.fs.fed.us/foresthealth/technology/pdfs/reardon/catalogue.pdf>.

We have recently summarized the results from this catalogue in a paper to be published in 2007 in *Biological Control*; the catalogue contains the dataset used for this summarization.

ERRATA

A photo of Dr. Toshihiko Iizuka in the November Newsletter was incorrectly identified as Dr. Yu Ziniu. Apologies to both our members for the error.



Professor Yu Ziniu

A “cut & paste” error resulted in the omission of a significant portion of the SIP history submitted by Jim Harper in the November Newsletter (39 (3): pp. 40-41). The full text of the histories of the Microsporidia Division and the Microbial Control Division are reprinted below:

Microsporidia

The SIP Constitution made provisions for divisions to be formed within the Society by groups who had interests in specific disciplines or subject areas within invertebrate pathology. The first division, the Division of Microsporidia, was approved by Council in 1970. An initial meeting of 23 scientists during the annual SIP meeting at the University of Vermont campus in Burlington, Vermont in 1969, organized by Victor Sprague with interest and support by John Kramer, J.

Vavra and others discussed needs facing the field of invertebrate protozoology. They considered common issues in microsporidian identification, need to develop a directory of those interested in microsporidia worldwide, possibility of development of a symposium on microsporidia, and the need for organization of a division on Microsporidia within the Society. An organizing committee to formulate bylaws and a proposal to submit to the SIP Council was established. Dr. Sprague served as chair with Wayne Brooks, Joe Maddox, Roy McLaughlin, Ann Cali, J. Vavra, and Y. “Joe” Tanada as members. There was some concern that the division should be broader and include all Protozoa, but final agreement was met that issues with Microsporidia were of greatest interest and concern for the group.

Initial “Rules for Government” of the proposed Division were submitted to Dr. Mauro Martignoni, chair of the SIP Divisions Committee. The SIP Council approved establishment of the Division of Microsporidia at its annual meeting at College Park, Maryland on August 3, 1970.

The first slate of officers was elected in 1970 with J. Vavra, Chair; Roy McLaughlin, Vice-chair; Ann Cali, Secretary; and John Henry and Ed Hazard as Council Members. Membership was gained by paying dues of one dollar at the 1970 meeting and 32 scientists joined in its first year. Thereafter, the dues were paid annually to the Society Treasurer along with Society membership dues. The minutes of the first business meeting of the Division and its By-Laws were published in the SIP Newsletter Volume III, no. 1, September 21, 1970.

Microbial Control

In the later half of the 1970's, a number of members of the Society who were interested in the use of invertebrate pathogens as microbial pesticides were concerned that this aspect of the discipline was not being sufficiently emphasized within the programming of the annual meetings relative to the more fundamental aspects of the discipline. A workshop, chaired by Jim Harper, during the 12th annual meeting of SIP in Gainesville, Florida in 1979, was held to discuss the possibility of a Division of Microbial Control. Specific justifications for such a division were 1) concern over loss of support of SIP by applied pathologists who might chose other meetings and societies as their principal venues for presenting information that was of value and importance to the SIP membership in general, 2) absence of any other

international forum that specifically represented applied invertebrate pathology, 3) lack of any well defined group that could be approached by outside organizations needing information on microbial control issues, 4) recognition that a division on microbial control would promote one of the original goals of the Society, to develop microbes as biotic control agents of invertebrates. Twenty-nine attendees voted to proceed with development of a new Division of Microbial Control. A committee was named with J. D. Harper (chair), H. D. Burges, J. M. Franz, J. J. Henry, R. P. Jaques, and O. N. Morris as members with the charge to develop ByLaws for presentation to the SIP Council for consideration at the 1980 meeting in Seattle.

A meeting on Microbial control was convened at the Seattle meeting in 1980, and Jim Harper reported that the SIP Council had just approved the ByLaws and that The Division of Microbial Control was officially established. Since there were no official members (membership would be determined through payment of dues of \$1.00 US at the time of Society membership renewal), the organizing committee agreed to continue to function and develop a program for the 1981 meeting and prepare a slate of nominations for officers. The ByLaws for the Division were published in the 1980 SIP Newsletter 12:4, pp. 6-7. Per the ByLaws, Objectives of the Division were 1) To promote scientific knowledge of microbial control of invertebrate organisms through discussions, reports and publications; 2) To stimulate worldwide interaction among biologists who have special interest in the regulation of invertebrate populations with microorganisms; 3) To provide organizational mechanisms through which problems and matters relevant to the study of invertebrate population regulation

with microorganisms may be presented for discussion and action among interested scientists; and 4) To provide an organized body of experts which can be readily identified and accessed by persons or organizations within or outside of the Society who are in need of knowledge or consultation on the subject of microbial control as defined in ARTICLE I (ie. the use of microorganisms (including viruses) to control undesirable populations of invertebrates).

At the 1981 meeting in Bozeman, Montana, a slate of officers was voted on by the members of the Division attending. The First Officers of the Division were Jim Harper (Chair), Denis Burges (Chair-elect), James Fuxa (Secretary-Treasurer), Don Roberts (Member-at-Large, one-year term), and John Cunningham, (Member-at-Large, two-year term). The Division sponsored a symposium on formulation and application of microbial pesticides at the meeting.

EDITORS' NOTE

Many thanks to Betty Davidson for providing the "SIP History article on Edward Steinhaus. Coming in June, the SIP Meetings 1968-2007, Founders' Lecturers and Honorees, "In Memoriam", 1969-2006 and list of officers since SIP's inception.

Please send any information for the SIP meeting or other news by June 1 for the June Newsletter!
Lee, Gernot and Vince

Future SIP Meetings

SIP 2007 Our 40th Year!!



August 12-16, 2007
Quebec City, Quebec, Canada

SIP 2008
August 3-8
Warwick, United Kingdom

SIP 2009
North America- open



A) At the market; B) Sean Marshall with a high-voltage smile; C) at the round table with Roy Bateman, Don Roberts, Tariq Butt, and Richard Hall; D) Suzanne Thiem on the water; E) Herr Doktor Hoch; F) and three magenta-clad ladies with the Yangtze as backdrop.