



## Best wishes.....



**Harry Kaya**



**Basil Arif**



**Lerry Lacey**

**..for your happy retirement!**

**President**

Leellen Solter, USA

**Vice President**

Jørgen Eilenberg, Denmark

**Past President**

Mark Goettel, Canada

**Secretary**

Judith Pell, United Kingdom

**Treasurer**

Kelli Hoover, USA

**Trustees**

Regina Kleespies, Germany

Juan Jurat-Fuentes, USA

**Newsletter Editor**

Surendra Dara, USA

**SIP Office**

Society for Invertebrate Pathology

PO Box 11

Marceline, MO 64658, USA

**Email:** sip@sipweb.org**Web:** www.sipweb.org**Phone/Fax:** +1- 660-376-3586 (USA)**From the President**

Sitting here in solidly frozen Illinois, USA, two things (both of which include warm weather) cheer me. One is memories of yet another great SIP meeting in Trabzon, Turkey last summer, and one is preparation for the upcoming meeting in Halifax, Canada. (August 7-11- Save the Date!) We are on our way, with Susan Bjornson and the organizing committee preparing the meeting website and organizing the venue on the campus of St. Mary's University, and Martin Erlandson and the program committee soliciting excellent symposia from Divisions. The website (now ready for your perusal: <http://www.smu.ca/sip/> or from the SIP website) will be open for registration on March 1, with an abstract deadline of April 15. For now, we roll up our sleeves and complete studies to showcase our research, plan to meet with friends and colleagues, and look forward a great time in Nova Scotia!

*OECD Symposium at SIP 2011*

In addition to being treated to a beautiful maritime venue, we are delighted to hear that Grant Stentiford, Chair of the Division of Diseases of Beneficial Invertebrates, was successful in his bid for funding from the Organisation for Economic Co-operation and Development (OECD) for a special symposium on diseases of aquatic crustacea. The symposium will be held on Sunday, August 7- a full day of interesting and timely topics. Those who register for the full SIP meeting will receive a 2/3 discount on the registration fee for the symposium (the fee covers breaks and lunch for the extra day). Please do take advantage of this opportunity to interact with excellent researchers in the aquatic invertebrate pathology community. (SIP Council has agreed to meet on Saturday, August 6 so that no one misses this symposium.) We welcome the participation of the invited speakers and encourage all to attend the full meeting and find a society home in SIP.

*Notes from the Midterm Council Meeting*

Council considered our currently stable SIP budget and unanimously approved funds for 2011 student travel awards at \$750 per Division. Andreas Linde has prepared the guidelines for application for awards and they are posted on the website. We are proud of our student members and look for ways to increase participation. Some suggestions from the Student Affairs Committee were to provide specific information for students and promote participation on the Student Affairs Committee when students apply for SIP membership, possibly as an auto-response email (we'll work with the Committee for text and determine if such a targeted response can be managed on the website). Information about the committee could also be provided at the registration desk at the SIP meetings. A workshop is in the planning stages for 2011 meeting. And, by the way, if senior SIP members would like to participate in judging student presentations or posters, please contact Andreas [Andreas.Linde@hnee.de](mailto:Andreas.Linde@hnee.de) to volunteer. You'll be doing the Society and our students a great service... as well as hearing or reading about some excellent research projects!

Organization is well underway for the 2012 SIP meeting in Buenos Aires, Argentina, and the Meetings Committee is now considering venues for 2013 and 2014. The 2013 meeting is planned for North America, but could be held elsewhere. If you have ideas or would like to submit a proposal, please contact Lerry Lacey [lerrylacey@yahoo.com](mailto:lerrylacey@yahoo.com) for information and guidelines.

**Table of Contents**

From the President	2
SIP 2011 Meeting program	4
Position announcements	10
Book review	11
News and announcements	13
SIP 2010 pictures	14



Cover page: SIP wishes three distinguished scientists, Harry Kaya (UC Davis), Basil Arif (Agriculture Canada) and Lerry Lacey (USDA-ARS) a happy retirement.

An interesting suggestion, initiated by Alicia Siocco-Cap as she worked to make SIP 2012 more appealing to non-members in South America, and brought forward by Mark Goettel in contemplation of future meetings, is to include "International Congress" in the title of every SIP meeting. Doing so should make apparent to all potential participants that the scope of the meetings is much broader than an annual meeting of the SIP membership. Our current meeting title includes "2011 International Congress on Invertebrate Pathology" as will the 2012 meeting. The full title reflects our international research scope and, we hope, will provide a clear statement of what participants can expect when they attend a meeting.

David Shapiro-Ilan reported that members of the Publications Committee have been assigned specific tasks to allow them to work toward updating/reorganizing the website and integrating it more effectively with our Facebook site and the SIP Newsletter. Suggestions include a separate 'Awards' section on the web that includes information and history on the Founders Lecture and the Martignoni and Lomer awards (currently listed under 'Memorial Funds'), and also basic information, application and evaluation criteria for all the student travel awards with links to each of the Divisions for Division-specific details and availability. Andreas Linde and the Endowment and Student Awards Committee have already updated the student awards information. It was noted that the Obituaries section needs to be updated.

Council discussed the advantages and disadvantages of paper vs. electronic abstracts for the SIP meetings. It was

agreed by Council that the 'meeting at a glance' booklet that was provided at the Trabzon meeting was very helpful and something similar should be included in meetings packets. This would include the program and sponsor acknowledgements. A hard copy full abstract book costs approximately \$25 per person to produce – most of this cost could be saved if abstracts were electronic. E-abstracts would be posted online (password protected) before each SIP meeting so that they are accessible and searchable prior to the meeting for those attending. Meeting participants could review the program and print material of interest if desired. At the meeting, a few reference hard copies could be made available at the registration desk and e-copies loaded on all computers available to attendees. A decision has not yet been made, but if you have an opinion concerning this matter that you would like to express, please contact me (Isolter@illinois.edu) or Vice-President Jørgen Eilenberg (jei@life.ku.dk).

We go forward into the New Year with a satisfactory budget and enthusiastic members committing time and experience to create a fantastic 2011 meeting. We look forward to another year of sharing good science and collaborations and, of course, good friendships. To all the northern hemisphere members- keep warm, spring is coming... and to the southern hemisphere members- come to Halifax in August to escape the winter!



Entomological Society of America (ESA) recently started several networks that enable students, professionals, enthusiasts and others to interact

with each other to share information and ideas. We now have a network for entomopathologists. You do not have to be an ESA member to join network. Please visit, [www.entsoc.org/new-esa-networks-platform](http://www.entsoc.org/new-esa-networks-platform), join the network and exchange ideas and information about entomopathogens.



## Sixth International Symposium on Molecular Insect Science

2-5 October 2011

NH Grand Krasnapolsky, Amsterdam, The Netherlands



**The Sixth International Symposium on Molecular Insect Science** is the first of the series to be held outside of the USA. Previous Symposia, organized by the University of Arizona's Center for Insect Science, have been met with great enthusiasm. By holding this in Amsterdam, in collaboration with Elsevier, it is hoped that the meeting will be even more accessible to scientists and their students in Europe, in the New World, Asia, Australasia, and elsewhere.

**Poster and abstract submissions on the following topics are invited:** Genomics and Proteomics, Arthropod EvoDevo, Neurobiology, (Antagonistic and Symbiotic) Interactions, Toxicology and Insecticide Resistance, Immunity, Endocrinology, Chemical Ecology and Behaviour, Pest Control Biotechnology, and Disease Models and Drug Discovery.

Check the event's website periodically for more information <http://www.molecularinsectscience.com/>

2011 International Congress on Invertebrate Pathology & Microbial Control, OECD Symposium on Disease in Aquatic Crustaceans & 44<sup>th</sup> Annual Meeting of the Society for Invertebrate Pathology



The 2011 International Congress on Invertebrate Pathology & Microbial Control, OECD Symposium on Disease in Aquatic Crustaceans & 44<sup>th</sup> Annual Meeting of the Society for Invertebrate Pathology will be held at Saint Mary's University in Halifax, Nova Scotia, Canada from August 7 to 11, 2011. Nova Scotia, one of Canada's three Maritime Provinces, is situated on the east coast of Canada. Known as Canada's Ocean Playground, the province is almost surrounded by the Atlantic Ocean. No matter where you travel in the province, you will be no more than 67 km (42 mi) from the ocean. Halifax is located on the eastern coast of Nova Scotia. It has something to offer everyone, including whale watching, boating, kayaking, hiking, camping, fishing, and biking, as well as the urban pleasures of fine dining, shopping and cultural and historic attractions. Plan to stay a few extra days to explore other sites in Nova Scotia, including the Bay of Fundy (with the highest tides in the world) or the natural beauty of the Cape Breton Highlands. Visit Lunenburg, a UNESCO World Heritage Site that was established in 1793 as a British Colonial settlement, or Fortress Louisbourg, a reconstructed fortification founded in the 17<sup>th</sup> century to protect France's interest in newly discovered North America.

**Location:** Nova Scotia (Latin for *New Scotland*) is one of three Canadian Maritime Provinces (and one of four Atlantic Provinces). Nova Scotia has its share of natural beauty, with about 7500 km (4600 mi) of shoreline, numerous sandy beaches, valleys and forests. The province is comprised of the mainland (a peninsula surrounded by the Atlantic Ocean) and Cape Breton Island (situated to the northeast). There are two National

Parks (Cape Breton Highlands and Kejimikujik National Park) and provincially, there are more than 3800 coastal islands and 3000 small lakes. Halifax (est. 1871), the capital city, is located on the east coast and is a major economic centre for Atlantic Canada. In 1996, Halifax was amalgamated with neighbouring municipalities into the Halifax Regional Municipality (HRM) with a population of almost 350,000.

**Venue:** The scientific program and housing for most delegates will be on the campus of Saint Mary's University (SMU), 923 Robie Street, Halifax (university website: <http://www.smu.ca>); alternative accommodation is also available at The Lord Nelson Hotel & Suites (1515 South Park Street, Halifax; hotel website: <http://www.lordnelsonhotel.ca>), a short distance (1.3 km/0.8 mi) from SMU. The university campus is within walking distance to local shops restaurants, pubs and amenities, cultural venues, the Halifax Harbour and some local historic sites. The city is well equipped with buses and taxis for convenient travel.

All scientific sessions will be held in a group of campus lecture halls, classrooms, and a large 800-seat auditorium that once served the university as a chapel. Conference delegates and guests have access to SMU computers, located in the Atrium Learning Commons and elsewhere on campus. Computers are PCs with Internet access. Wireless is also available for those that prefer to use their own laptops.

Delegates that choose to stay on-campus (*Loyola Residences*) have free access to *The Tower Fitness & Recreation Centre*, which includes a cardio room,

individual strength circuit and multi-unit cable machines, light weights, stretching area and group cycling, plate-loaded machines, squat racks, barbells and dumbbells, 4 squash courts, co-ed spa area with sauna and steam room facilities, changing rooms and towel service. The residence complex houses a full-service ATM (Royal Bank), hair salon, barber shop, convenience store, coffee shop, dining hall and two coin-operated laundry rooms. SMU has a compact campus and most buildings on campus connect to one another through internal walkways. Parking is provided at no additional charge for on-campus guests. For those delegates staying off campus, fitness centre and parking passes are available at a small cost. The *Dockside Restaurant* is situated at the base of the *Loyola Residences* and is where hot breakfast (free for on-campus delegates) and lunches will be served.

**Scientific Program:** The 2011 International Congress will begin with afternoon registration and an evening welcome mixer on Sunday, August 07, 2011, followed by a full scientific program Monday through Thursday. A special OECD symposium entitled "Diseases of Crustaceans: Problems and Solutions for Global Food Security" will be held throughout the day on Sunday, prior to the evening welcome mixer. The scientific program will open Monday morning with the Founder's Lecture and Plenary Session, followed by afternoon symposia and contributed papers. The excursion and BBQ will be on Tuesday afternoon and the meeting will close with a banquet on Thursday evening. Symposia and contributed paper sessions will be conducted throughout the meeting (with the exception of Tuesday afternoon). Contributed papers are being solicited on all topics related to invertebrate pathology. Posters will be displayed on Monday and remain posted until Thursday. The Division business meetings are slated for Monday and Wednesday evenings, to be followed by Division and student workshops. The Society's business meeting will be held late Wednesday morning.

## Symposia

**Special OECD Symposium** (Sunday, 7 August): "Disease in Aquatic Crustaceans: Problems and Solutions for Global Food Security" Organizer: Dr. Grant Stentiford

**Bacteria Division:** "Resistance to Bt crops" Organizers: Juan Ferre and Juan Luis Jurat-Fuentes

**Fungus Division:** "Fungal associations with mites and ticks" Organizer: Ingeborg Klingen

**Microbial Control Division:** "Microbial Pest Control Agents in IPM systems" Organizer: Stefan Jaronski

**Microsporidia Division:** "Microsporidia-Induced Effects on the Host" Organizer: Steven Valles and Dörte Goertz

**Viruses Division:** "Pathology of Insect-Virus Interactions" Organizers: Eric Hass-Stapleton and Bryony Bonning



**Special Viruses Division Symposium** in Honour of Basil Arif: "Forest Insect Viral Diseases" Organizers: Peter Krell and Kelli Hoover

**Cross-Divisional Symposium** (Viruses/ Diseases of Beneficial Invertebrates Divisions): "Viruses of Aquatic Invertebrates" Organisers: Karyn Johnson and Grant Stentiford

**Cross-Divisional Symposium** (Fungi/ Nematodes Divisions): "The careers of Harry Kaya and Lerry Lacey: High Impacts on Science and Scientists" Organisers: Ed Lewis and Steven Arthurs

## Workshops

**Cross-Divisional Workshop** (Bacteria/Microbial Control Divisions): "Industry Innovation in Biocontrol" Organizer: Kenneth E. Narva, Dow AgroSciences

**Microsporidia Division:** "Revisiting the Microsporidia-Fungi connection" Organizer: Carlos Lange

**Viruses Division:** "Invertebrate Virus Taxonomy" Organizer: Peter Krell

**Special Presentation** (prior to the SIP Business Meeting, Thursday, August 11, 2011): "Pioneer Women in Invertebrate Pathology and Their Influence on the Field" Presenter: Dr. Elizabeth (Betty) Davidson

## Deadline for abstracts: April 15, 2011

The program committee solicits your contribution of abstracts for presentations at the meeting. Instructions for abstracts will be available online from 1 March. Contributed oral presentations will be limited to 12 minutes with an additional 3 minutes for answering questions. Moderators will be instructed to keep to the scheduled times to allow delegates to attend concurrent sessions. Digital projection and PC computer equipment will be available in presentation rooms. PowerPoint presentations will be loaded on site. Bring your presentation (and a backup) with you. The maximum size for posters is 107 cm (42 inches) wide by 107 cm (42 inches) tall. Velcro, pins or tacks will be provided for mounting posters.

Participants in the Student Competition will be limited to one presentation, either a poster or a contributed paper but not both.

April 15 is the deadline for the receipt of abstracts for the symposia, contributed papers, poster sessions. Abstracts received after the deadline will not be printed and late submissions will be scheduled as posters if space permits. The Program Committee reserves the right to request that some contributed papers be presented as posters, although this will only be done if absolutely necessary. The advance program will be available only to those registered for the meeting. A PDF file of the Program & Abstracts will be available on the web.

## Deadline for registration

Early registration: March 01 to 03 June  
Late Registration: June 4 to August 5  
Walk-in registration: After August 5

## On-line registration is strongly encouraged and will begin March 01, 2011:

The registration fee includes access to the scientific and social program, Program & Abstracts, mixer (Sunday evening), barbeque with entertainment (Tuesday evening), banquet dinner (Thursday evening), refreshments during the conference and transportation to and from the special events described above. Hot breakfast is included with on-campus accommodations only. All lunches and one dinner (Monday evening) are included in the registration fee. Delegates that stay off campus must arrange transportation to and from SMU campus to attend the scientific sessions. Please note that the hotel is (1.3 km/0.8 mi) from SMU (walking distance). Non-members who wish to benefit from the lower membership registration fee, must submit a membership application (and appropriate fees) prior to registration.

**Cancellation policy:** Refunds for cancellations will be provided before July 4, 2011 (less 25%) or July 22, 2011 (less 50%). Refunds will not be made after July 22, 2011.

## Social program

**Mixer:** The welcome mixer will be held in the McNally Theatre Auditorium on campus on the evening of Sunday, August 7. Extra tickets are available for guests.

**Excursion (Peggy's Cove):** The excursion will be to Peggy's Cove, an idyllic fishing village and one of the most popular stops in Atlantic Canada. Set on rocky shores, a picturesque original lighthouse (built in 1868) is the center piece of the historical, artisan village. Located 43 kilometers (27 miles) southwest of downtown Halifax, visitors may explore the historic lighthouse and granite outcrop on Peggy's Point. Despite its popularity, the tiny fishing village of Peggy's Cove has been able keep the same relaxed atmosphere that has made it famous. Transportation will be aboard luxurious coach buses on the afternoon of Tuesday, August 9. The tour will include a scenic and informative tour through part of Halifax and neighbouring seaside communities, and a visit to Acadian Maple where you will learn about Canada's maple syrup industry. The optional excursion fee is \$50 CDN.

**5K walk/run (Point Pleasant Park, Halifax):** At 75 hectares (185 acres), Point Pleasant Park is the largest forested park on the Halifax Peninsula. Founded in 1749, this park once formed part of the fortified defense system for Halifax. Several artillery batteries and an eighteenth century tower remain as historical artifacts. The park is a popular recreational site with forested walkways that offer a panoramic view of the Atlantic Ocean. The terrain is fairly flat, with a couple of mild slopes.

## Barbeque (Halifax Citadel National Historic Site)

Following the excursion, the barbecue will be held at the Halifax Citadel National Historic Site. The citadel, completed in 1856, is an excellent example of a 19th-century bastion fortification complete with defensive ditch, ramparts, musket gallery, powder magazine and signal masts. It is a symbol of Halifax's role as a principal naval station in the British Empire and of the city's importance to Canada's development and evolution from colony to a nation. The Citadel was designated a National Historic Site in 1951. Located atop a small hill in the heart of the city, the citadel overlooks Halifax Harbour and is one of a series of fortifications located in (or near) the city. We will be greeted at the front gate by highland soldiers and be treated to a military reenactment. The cost of the barbeque is included in the registration fee. Extra tickets for guests are available during registration. Price includes transportation to and from the venue, entertainment, drinks and an east coast lobster dinner (chicken and vegetarian options are available). The 5K awards will be presented at the barbeque. Note: The BBQ will be held outdoors. Please dress accordingly. We recommend a hooded, weatherproof jacket and/or umbrella.

**Banquet (Pier 21 National Historic Site):** Also known as Canada's Immigration Museum, this newly restored historic site and museum pays tribute to the 1.5 million immigrants, war brides, displaced people, evacuee children and Canadian military service personnel who passed through its doors between 1928 and 1971. The museum at Pier 21 has a display of artifacts of those who immigrated to Canada during this period: it includes the broader story of nation building and showcases exhibits that highlight the early beginnings of Canada (including first contact) and immigration from 1867 to the present day. This national centre commemorates Canada's rich culture and diversity. Extra guest tickets for guests are available during registration. Price includes transportation to and from the venue, drinks, dinner with wine service and a live band for after dinner dancing. Student poster and paper awards will be presented at the banquet.

## Companion, pre- and post-conference tours

Planning activities for yourself or your companion in and around Halifax? There is a wide variety of activities to partake in within the city and farther afield. Here are some suggestions to make planning easier for you. For further information on these and other activities, please visit our conference website. For tour information and arrangements, visit [Destination Halifax](http://www.destinationhalifax.com) (<http://www.destinationhalifax.com>).

Nova Scotia's highway system enables one to drive around the perimeter of the province. This provides an opportunity to admire the ocean views and visit small fishing villages and artisan shops. There are many historical sites in Nova Scotia that one may visit and many activities including visits to wineries, whale watching, sailing, hiking, kayaking and others. The following sites are major Nova Scotia tourist attractions that are located outside of Halifax:

**Annapolis Royal & Annapolis Valley:** The town of Annapolis Royal, located in the western part of Annapolis County, served as the capital of Acadia/Nova Scotia for almost 150 years, prior to the founding of Halifax in 1749. Known as Port Royal until the Conquest of Acadia by Britain (1710), it is the oldest continuous European settlement in Canada. The original French settlement (1605), known as the Habitation at Port-Royal, is located about 10 km (6.2 mi) west of present-day Annapolis Royal at the mouth of the Annapolis River.

**Bay of Fundy:** Nowhere else in the world will one find a more extraordinary tidal environment than Nova Scotia's Bay of Fundy where 14 billion tonnes (14 cubic kilometers) of seawater flows into the Bay's Minas Basin twice daily. Walk the ocean floor and visit the site of the highest recorded high to low tide range in the world at Burncoat Head Park or visit the Hopewell Rocks in neighboring New Brunswick.

**Cape Breton Highlands National Park:** Located at the eastern edge of Nova Scotia, this national park sits on a plateau which falls off precipitously into the Atlantic Ocean. The Cape Breton Highlands is known for its thundering ocean surf and stunning scenery. It is renowned as a cyclist route and is a haven for hikers and experienced kayakers. This 950 square kilometer area also attracts hikers, campers and mountain bikers.

**Fortress of Louisbourg National Historic Site (Cape Breton Island):** Fortress Louisbourg was originally built in the 17th century to protect France's interest in newly discovered North America. Located on the eastern shore of Cape Breton Island in the north of the province, this historic site is the largest reconstruction in Canada. Actors in period costumes re-enact history and theme centres and exhibits provide insight into the role of this historic fortification.

**Lunenburg:** This maritime town was established in 1753 as the first British Colonial settlement in Nova Scotia outside of Halifax. Located 90 km southwest of Halifax, Lunenburg is a UNESCO World Heritage Site but many houses, businesses, churches and public buildings from the late 1700s and early 1800s are still used today. Lunenburg is a National Historic Site and due to its strong Maritime culture, the town has retained close ties with fellow Maritimers in the New England states.

**Travel among the Maritime Provinces:** Staying a few extra days? Road travel is straightforward if you plan to travel around Nova Scotia or if you plan to visit New Brunswick and Prince Edward Island, our neighboring Maritime Provinces. Plan a trip across the Confederation Bridge, the world's longest bridge (12.9 km/8 mi) to span ice-covered water (in winter) to visit Prince Edward Island via New Brunswick. The crossing takes approximately 10 minutes at the posted 80 km/hr (50 mph) speed limit. Alternatively, you can take the ferry between the waters of Caribou, Nova Scotia and Wood Islands, Prince Edward Island. The trip takes about 75 minutes and offers you a unique opportunity to park the car, relax and enjoy the beauty of the sea and the sky. Regardless of the number

of passengers in your car, the trip costs about \$64.00 CDN. There are up to seven crossings scheduled each day in high season. Ferry schedule & fares can be found at <http://www.peiferry.com>. Several ferries allow travel to Newfoundland and Labrador, Canada's easternmost Atlantic Province. For further information, see the websites for Marine Atlantic Ferries (<http://www.marine-atlantic.ca>) and Northumberland Ferries (<http://www.peiferry.com>).

**Accommodations – SMU Residence**

Although there are a variety of on-campus accommodations available, SMU residences consist primarily of single and twin rooms. These are arranged in suites (four single rooms & one double room) with the 6 occupants sharing adjacent washroom (WC) facilities.

*Single rooms* have a single bed, a study desk with a hutch, one chair and free local phone service. Shared washroom facilities are located in the hallway within each suite of rooms. *Twin rooms* have two single beds, two study desks with hutches, two chairs and free local phone service. Shared washroom facilities are located in the hallway within each suite of rooms. Apartments accommodate up to three persons. Each apartment has two bedrooms, a kitchen and private bathroom.

**Residence room rates (\$CDN)**

Accommodation type	Rate (per person per night)	Total room rate
Single room	\$43.70	
Double room	\$33.73	\$67.46
Apartment	\$38.62	\$115.85



Single (top) and double (bottom) rooms

Note: Total room rates apply to those staying in twin and double rooms when fewer than 2 or 3 persons occupy these rooms, respectively. Room rates for apartments are charged to one occupant. If you wish to stay with a particular delegate(s) or require multiple receipts, enquire upon booking.

On campus accommodation rates include housekeeping, linens, towels, a hot breakfast, parking, athletic pass (to *The Tower Fitness & Recreation Centre*) and taxes. Delegates should check in at the front desk, located at the base of the *Loyola Residence Building*. Check-in after 15:00. Check-out by 11:00 on the day of departure. Early arrivals or late departures can be accommodated with sufficient advance notice. Irons and alarms clocks can be signed out at the front desk.

**Accommodations – Lord Nelson Hotel & Suites**

The Lord Nelson Hotel & Suites is located opposite the Halifax Public Gardens (a formal Victorian public garden) near Spring Garden Road (near restaurants, shopping, pubs). It is a short walk from this hotel to the historic waterfront. Walking distance to Saint Mary’s University: about 1.3 km (0.8 mi). Delegates that choose to stay off campus must make their own travel arrangements to and from the conference venue. Transportation will only be provided from the hotel to the BBQ and Banquet venues (on Tuesday and Thursday evenings).

There are a limited number of rooms. **Reservations at the conference rate will be accepted until Saturday, 25 June 2011.** After this date, conference room rates and room availability cannot be guaranteed.

**\*\*REGISTER BY FRIDAY APRIL 30, 2011... to have your name included in a draw to receive a complimentary one night stay provided by The Lord Nelson Hotel & Suites!\*\*** The winner will be determined by an Early Bird Draw made by the hotel in early May 2011. The winner will be provided with a certificate that will be used to offset accommodation fees that are accumulated during the meeting.

**Hotel room rates (\$CDN)**

<i>Single occupancy</i>	\$169
<i>Double occupancy</i>	\$169

Reservations may be made by sending an Individual letter addressed to the hotel, by phone (1-902-423-5130; 1-800-565-2020 toll-free in North America), fax (1-902-491-6113) or by going online ([www.lordnelsonhotel.com](http://www.lordnelsonhotel.com)). Online registrants should go to the Rates and Reservation Section and select “Make a Group Reservation”. Enter the Group ID number (19342) and the password (124).

**Travel to Halifax (by air or land)**

*Travel by air.* Halifax Stanfield International Airport (YHZ) is the Atlantic Canadian centre for domestic, regional and international flight service. Stanfield International Airport is a full-service airport that welcomes over 3.5 million passengers annually. You can travel by air to Halifax on

direct flights from many Canadian, U.S., European, and Caribbean destinations. Add to that hundreds of connecting flights and it’s easy to get to Halifax from just about anywhere in the world. Air carriers serving Halifax include: Air Canada, Air St. Pierre, Air Transat, American Airlines, Continental Airlines, Delta Airlines, Icelandair, Porter Airlines, Sunwing Airlines, Thomas Cook, United Airlines, US Airways, and Westjet Airlines.

*Travel by land* The TransCanada Highway (Highway 102) enters Nova Scotia from the neighboring province of New Brunswick, providing a connection to all points in the United States and Canada. Car travel around the province is made available through several highways that cut through the interior of the province and other, more scenic ocean routes that are located around the perimeter of the province. Having an elongated shape, there is no place in Nova Scotia that is more than 67 km (42 mi) from the ocean. Traveling by car along the scenic routes provides a unique opportunity to visit fishing villages, lighthouses, historical sites (Louisbourg and Annapolis Royal), an UNESCO World Heritage site (Lunenburg), The Bay of Fundy (boasting the highest tides in the world) and the beautiful Cape Breton Highlands... to name a few!

**Ground transportation (from Stanfield International Airport to SMU)**

The airport is located about 35 km (22 mi) from downtown Halifax and takes about 30 to 45 minutes to drive from the airport to Saint Mary’s University by car. There are several types of ground transportation to take you into the city: limousine (approx. \$53 CDN), taxi (\$53 CDN), and Airporter Shuttle (\$18 one-way, \$36 return). The shuttle will stop at most major hotels in downtown Halifax (including The Lord Nelson Hotel & Suites, for those staying off campus) but does not stop at the university campus. If you are staying on campus, you may take the Airporter Shuttle to the Lord Nelson Hotel, and then a taxi to the Loyola Residence on the Saint Mary’s University campus.

We recommend that delegates staying at SMU take a taxi from the airport. Car rental companies (Alamo/National, Avis, Budget, Dollar/Thrifty, Enterprise, Hertz) are also available at the airport. For further information, visit the Halifax Stanfield International Airport website (<http://hiala.ca>). Limousine and taxi service is accessible at the airport upon arrival. Inquiries regarding travel from the airport to the venue can be made at the Visitor Information Desk on the main floor of the airport. It is recommended that you prearrange taxi or limousine service for your return trip to the airport (24 hrs before departure from the city after the conference). Transportation arrangements may be made at the Reception Desk of Loyola Residence or at the front desk of the Hotel.

**Getting around Halifax**

Like any metropolitan city, there are many transportation options within Halifax, including taxicabs and limousines, rental cars, and public bus service. Metro Transit route numbers 9, 10, 14, 17 and 18 have stops adjacent to Saint



Mary's University. A one-way trip costs \$2.25. Details on stops and schedules are posted on the Metro Transit website: <http://www.halifax.ca/metrotransit>.

### Other useful information

**Banking and Currency Exchange.** It is recommended that you purchase Canadian Funds prior to departure or upon arrival at the Halifax Stanfield International Airport. Many vendors will accept American Dollars but bear in mind that they may not offer optimal exchange rates. Saint Mary's University has two bank machines (ATMs) that dispense Canadian currency to those with compatible banking cards (Interac, PLUS, Cirrus). Bank machines are operational 24 hours each day. ATMs are also available at several banks in downtown Halifax (within walking distance of the University). Major credit cards are accepted in most places.



**Time zone.** Canada is a large country with 4½ time zones. Nova Scotia and most of the neighboring Atlantic Provinces (New Brunswick, Prince Edward Island and most of mainland Labrador) conform to Atlantic Standard Time (AST), which is 4 hours behind Greenwich Mean Time (GMT).

**Weather.** Situated on the eastern shore of Nova Scotia, Halifax tends to have a mild summer climate. Average August temperatures in Halifax are 13/23°C (55/73°F). Halifax weather conditions are known to change quickly and it is advised that travelers come equipped to deal with windy and rainy conditions. Under such conditions, you may find that a weather proof jacket (with hood) and/or umbrella to be welcome items. The BBQ will be held outdoors and although a tent will be provided, it is advisable to bring some protective clothing.

### Contacts

Susan Bjornson ([susan.bjornson@smu.ca](mailto:susan.bjornson@smu.ca))  
Chair, Local Organizing Committee

Martin Erlandson ([martin.erlandson@agr.gc.ca](mailto:martin.erlandson@agr.gc.ca))  
Chair, Scientific Program Committee



Fisherman's Cove (top), Saint Mary's University (bottom) and Town Clock (left)

## My Memories of SIP



Lerry Lacey

I was welcomed into the Society for Invertebrate Pathology family in 1981 while attending my first SIP meeting in Bozeman, Montana. In addition to the outstanding scientific program, and interaction with scientists, the convivial nature of the meeting (they don't call us *sip* for nothing) made the event the first of many fond memories. Each meeting since then always feels like a family reunion. My participation in the Society has resulted in meeting several future mentors and collaborators including Don Roberts, Denis Burges, Harry Kaya and a huge number of other scientists has strongly influenced the course and content of my research and career. In addition to interacting with our venerated scientists at the annual meetings, becoming acquainted with new student members each year and watching them become successful in subsequent years has been especially enjoyable and rewarding. I am proud to be a member of a Society that has had such profound effect on basic and applied research on entomopathogens and their effect on both beneficial and pest invertebrates. Members of SIP have been on the forefront of development of environmentally friendly means of control of pest invertebrates of medical and agricultural importance. In large part, due to my membership in the Society, I have been fortunate to have been part of this. Thankfully, retirement from the USDA will not affect my continued activity in the Society. The Lacey Foundation (subsidized heavily from the Visa Foundation) will ensure my continued attendance at the annual meetings.

## Position Announcements

**Position title:** Assistant/Associate Professor in Medical/Veterinary Entomology

**Position location:** Knoxville, TN, USA

**Application deadline:** 1 March 2011

**Position description:** The Department of Entomology and Plant Pathology at the University of Tennessee at Knoxville is seeking candidates for a 12-month, tenure-track position at the level of Assistant/Associate Professor in medical and/or veterinary entomology. The successful candidate will establish a sustainable, dynamic, cooperative research program that aims to solve arthropod-related problems in livestock and/or humans, including the epidemiology of vector-borne diseases. Strong basic and applied research components are expected and experience in the application of molecular techniques to problem solving in medical/veterinary entomology is desirable. The successful candidate will advise graduate students and contribute to the overall teaching, research, and outreach programs of the Department. This position will be a 100% research appointment; however, this assignment may change in accordance with the needs of the department.

The Department of Entomology and Plant Pathology includes Faculty with teaching, research, and extension appointments and diverse research interests. Collaboration with existing expertise in insect physiology, proteomics, genomics, chemical ecology, and ecosystem management in the Department of Entomology and Plant Pathology, the College of Veterinary Medicine, or related departments or centers including Forestry, Wildlife and Fisheries, Wildlife Health, Forensic Anthropology, and Animal Science is expected.

**Qualifications:** Candidates should have a Ph.D. or equivalent in Entomology or a related field at the time of the appointment, with emphasis and/or postdoctoral experience in medical or veterinary entomology. Other qualifications include excellent oral and written communication skills, evidence of outstanding scholarly research and productivity, demonstrated ability (or strong potential) to develop a sustainable, grant-driven program, and willingness to work in a team environment. All applicants must be authorized to work in the US on a long-term basis.

**Contact information:** Questions can be directed to the Search Committee Chair, Dr. Kurt Lamour, at [klamour@utk.edu](mailto:klamour@utk.edu) or via phone at 865-974-7954. Interested candidates should email electronic PDF copies of the following documents to Kimberly Campbell, Entomology and Plant Pathology Business Manager, at [kcamp@tennessee.edu](mailto:kcamp@tennessee.edu). If necessary, transcripts can be mailed to Kimberly Campbell, Department of Entomology and Plant Pathology, The University of Tennessee, 2431 Joe Johnson Drive, 205 Ellington Plant Sciences, Knoxville, TN 37996-4560.

- Letter of application
- Curriculum vitae
- Official university transcripts noting date of last degree

- Descriptions of research and teaching interests
- List of 3-5 references containing telephone numbers, addresses, and e-mail addresses.

**Position title:** Assistant Professor and above

**Position location:** Taipei, Taiwan

**Application deadline:** 25 April 2011

**Position description:** The Master Program for Plant Medicine of National Taiwan University seeks faculty candidates with outstanding potential for teaching and research position, one in the area of insect pest management and the other for plant disease management, including administrative and extension service affairs of the master program of plant medicine. The starting date of employment will be Aug. 1, 2011. Please indicate the applying position for insect pest or plant disease management (assistant professor, associate professor or professor) and send four copies of resume (including a photograph, telephone & fax numbers, and an e-mail address), copy of Ph.D. diploma, teaching and research plans, a designated representative publication (after May 1, 2008), reprints of publications (after May 1, 2006), and a complete list of publications; and one copy of two referees' recommendation letters by Mar. 25, 2011, to Professor Wen-Jer Wu, Department of Entomology, National Taiwan University, No. 1, Sec. 4, Roosevelt Road, Taipei 10617, TAIWAN.

**Contact information:** Prof. Wu at [wuwj@ntu.edu.tw](mailto:wuwj@ntu.edu.tw). No. 27, Lane 113, Roosevelt Rd., Taipei, Taiwan 106

**Webpage:** <http://homepage.ntu.edu.tw/~nturcpm/>

**Position Title:** NEMATOLOGY RESEARCH SCIENTIST

**Position location:** Davis, CA, USA

**Application deadline:** 1 March 2011

**Position description:** Plan, conduct, and manage innovative nematicide research; perform lab and plant bioassays; conduct in-depth literature reviews; initiate and present new projects; design field trials; communicate research findings; supervise staff and student interns; monitor project planning and execution; conduct related activities including budgeting.

**Qualifications:** Legally entitled to work in U.S.; MS plus 5 years experience in plant nematology, or PhD and 2 years experience; computer and communication skills; ability to work effectively in a multi-project team environment; experience in industry R&D and bioassay development are desirable.

**Contact information:** P. Himmel, Marrone Bio Innovations, Inc., 2121 Second St., Suite 107B, Davis, CA 95618, USA. Email: [PHimmel@marronebio.com](mailto:PHimmel@marronebio.com). Phone: 1-530-750-2800.

**Webpage:** <http://tinyurl.com/32np4us>.

**Title:** THE USE AND REGULATION OF MICROBIAL PESTICIDES IN REPRESENTATIVE JURISDICTIONS WORLDWIDE

**Editors:** J. Todd Kabaluk, Antonet M. Svircev, Mark S. Goettel, Stephanie G. Woo

**Publisher:** International Organization for Biological Control of Noxious Animals and Plants (IOBC)

**Availability:** <http://www.iobc-global.org/publications.html>

**Cost:** Free; download from above website.

**Citation:** Kabaluk, J. T., A. M. Svircev, M. S. Goettel, S. G. Woo. 2010. The use and regulation of microbial pesticides in representative jurisdictions worldwide. 99 pp. www. <http://www.iobc-global.org/publications.html>

This free online book examines the regulatory systems of microbial control agents (i.e., pesticides) in selected jurisdictions (i.e., countries or groups of countries) from which similarities and differences in the variety of approaches can be compared and contrasted. The book also lists the pest control products available for use by farmers in the jurisdictions. The microbial pesticides are viruses, bacteria, fungi, and nematodes that are registered and/or used against various pests. The main pests are arthropods, plant pathogens including nematodes, and weeds. The book is interactive and has a very useful feature that allows one to access pages of interest by clicking on the items in the Table of Contents (region, title, table, or figure). Website publications cited in the reference section can also be obtained by clicking on the URL.

The book is organized into sections representing six regions within which there are one or more chapters (jurisdictions). For the purposes of this review, the six regions are denoted in bold with the chapter title(s) in parenthesis and set off by quotation marks: 1. **Africa** ("Africa with special reference to Kenya"); 2. **Asia** ("China," "India," "South Korea"); 3. **Europe** ("European Union with special reference to the United Kingdom," "Ukraine, Russia, and Moldova"); 4. **Latin America** ("Argentina," "Brazil," "Cuba"); 5. **North America** ("Canada," "United States"); and 6. **Oceania** ("Australia," "New Zealand"). There is a concluding chapter entitled "Alternative regulatory models for microbial pesticides."

Each jurisdiction chapter covers historical aspects of the microbial control agents and includes their past and current use, provides a table(s) of currently registered agents (in some cases, a partial list), and discusses the regulatory issues dealing with registration of the microbial control agents. The historical information places events into perspective on a timeline that shows when the first microbial agents were produced in a jurisdiction.

The tables summarize the microbial control agents for a given jurisdiction(s). These tables are useful because they show the wide array of microbial control agents that are registered for various pests. The list of microbial control agents for plant pathogens and arthropod pests can be extensive. For example, the number of microbial control agents registered against plant pathogens (bacterial, fungal, nematode and viral pests) in the European Union (Table 6) and the USA (Table 16) exceeds the number of those registered for arthropod pests. Most of the tables follow a similar format with the first column listing the mode of action (e.g., bactericide, fungicide, insecticide, etc.) under which the scientific name of the microbial control agent is given, the second provides the taxa, the third gives the trade names of the product, and the fourth provides the target pests, either in generic form or by target pest species. The information in some of the tables is not current. In some instances, the old species name of the microbial control agent is given, presumably because that is the way the agent was registered. Thus, in the USA, *Bacillus popilliae* is used rather than *Paenibacillus popilliae* and *Nosema locustae* is still listed as a protozoan, and in China, cytoplasmic polyhedrosis virus is used rather than cypovirus. In another example, the fungal species *Verticillium lecanii* is listed in some jurisdictions, but recently, the genus has been changed to *Lecanicillium* and is listed as such in other jurisdictions. (For some registered products, the species name has been changed to *L. muscarium*, but the nomenclature for the species in this genus still remains to be resolved.) For this reviewer, I found that the use of *Paecilomyces lilacinus* against whiteflies in India is unusual, because this fungus is normally applied for control of plant-parasitic nematodes as cited in other jurisdictions.

The regulatory issues demonstrate the wide variation among the different jurisdictions relative to registration requirements for a microbial control agent and the government agencies and/or entities that are involved. The figures provided for some jurisdictions (South Korea, European Union, Canada, and Australia) greatly clarified the process by which a microbial control agent is registered. Some jurisdictions address indigenous versus non-indigenous microbial control agents and others do not. Some jurisdictions require efficacy testing and others do not. In some cases, the entities that can register a microbial control agent may vary. In China, for example, only a pesticide company can register a microbial control agent, whereas in India, manufacturers and commodity research boards can register microbial control agents.

The final chapter, "Alternative regulatory models for microbial pesticides," highlights several approaches to streamline the registration process for microbial pesticides. These approaches are discussed in publications by Jaronski et al. (2003), Mensink and

Scheepmaker (2007), European Food Safety Authority (2007, 2008, 2009), and Laengle and Strasser (2010). For indigenous microorganisms, Jaronski et al. (2003) suggest that a less stringent process for registration may be sufficient where significant data exist. For non-indigenous microorganisms, laboratory data against non-target organisms are needed and the bioassays should mimic pertinent exposure and environmental conditions. For generalist pathogens, the risk assessment should generally focus on three areas: (a) origin of the pathogen, (b) host, and (c) environment. Mensink and Scheepmaker (2007) suggested a protocol risk decision tree for studies submitted to regulatory agencies. The risk decision tree would include (a) microorganism characterization, (b) identification and efficacy data, (c) emissions data, (d) exposure data, and (e) environmental effect data. These authors caution that data for some parts of the tree (i.e., emissions and exposure) may be limited for pathogens. The European Food Safety Authority (2007, 2008, 2009) promoted the concept of Qualified Presumption of Safety (QPS) in which a microorganism belonging to certain groups be granted QPS status and would not be obligated to undergo individual risk assessments. Granting QPS status to a microorganism would be based on four characteristics which include (a) its taxonomic grouping, (b) sufficient safety information that is available on the taxonomic group, (c) whether the group contains known human pathogens, and (d) the intended end use. Thus, a microorganism given this status can be marketed quickly and the regulatory agencies can focus on those microorganisms that are more likely to be a threat to human health and the environment. Laengle and Strasser (2010) developed an indicator model of environmental risk which can be used for microbial and conventional pesticide products. The method uses a numerical score to represent each product. A numerical score of 1 to 5 is

given for each of five criteria which are (a) persistence, (b) dispersal potential, (c) the range of non-target organisms affected, (d) direct effects, (e) indirect effects. A high numerical score would indicate a high degree of risk. Greater detail for each model can be obtained by reading the original references cited in this final chapter.

In summary, this free online book is a very useful document for researchers, teachers, regulatory agency personnel, biological control company personnel, and all those interested in registering or registered microbial products. It presents an international scope of microbial control agents used against plant pathogens, arthropods, and weeds, and therefore, it has appeal beyond invertebrate pathology. For each jurisdiction, it covers a brief history of microbial control, products that are registered (but some jurisdiction lists are more complete than others), and the regulatory process of registration of microbial control agents. The last chapter summarizes different models for registering microorganisms, but the summary is much too brief, and as one would expect, the original references have a lot more information. For example, the European Food Safety Authority (2007) does not consider *Bacillus thuringiensis* for QPS because it is "...known that the vast majority of strains within this group are toxin producers and thus not meet the required qualifications." There are some problems with the use of scientific names of the registered products and not all microbial products are listed for some jurisdictions. These minor detractions do not take away from the value of the other information that is in the book.

Harry K. Kaya,  
Reviewer

---

## Harry Kaya Steps Down as Biological Control Editor-in-Chief

*After serving more than 20 years with the journal Biological Control, Harry Kaya, will step down as Editor-in-Chief from the end of this year. Harry was one of the founding editors of the journal, and has worked tirelessly for the development of the journal into its pre-eminent position in the field of biological control. Prof. David TeBeest of the University of Arkansas will become the new Editor-in-Chief, from January 1st. We wish to thank Harry for all his service, and are particularly pleased that he will stay connected to the journal, both as an editorial board member, and as a Guest Editor on forthcoming Special Issues. We also greatly look forward to working with Dave.*

*In addition to Biological Control's new editor-in-chief, we would like to welcome two new editors to the editorial team: Dr. Jenny S. Cory, Thelma Finlayson Chair in Biological Control Biological Sciences, Simon Fraser University, Burnaby, British Columbia, Canada and Dr Barry Jacobsen, Department of Plant Sciences and Plant Pathology Montana State University, USA*

*We would also like thank Dr. Bob Larkin, who steps down as Editor for his dedicated work for Biological Control.*

---

### NEWS FROM TUCSON ARIZONA



The Second NEMASYM-RCN (Nematode-Bacteria Symbioses) meeting took place in Tucson Arizona last November 11-14, 2010. NEMASYM is a Research Coordination Network Program funded by the National Science Foundation that fosters growth and advancement of the field of nematode-bacterium symbioses. The theme of this past meeting was: "Contributions of bacterial symbionts to nematode pathogenesis". There were three keynote speakers: John (Jack) Werren, (U. Rochester, NY) who talked about Wolbachia's evolutionary consequences; Raffi V. Aroian, (U. California San Diego, CA, USA) gave a presentation on the use of bacteria to cure human nematode diseases and, David Clarke (University College Cork, Ireland) discusses regulation of pathogenicity and mutualism in *Photorhabdus* symbionts.

A total of 50 participants attended the 2nd NEMASYM Workshop representing various US states and also foreign countries such as: Canada, Mexico, UK, Germany, India and Egypt. A total of 13 graduate students and/or postdoctoral associates attended this meeting. Nine of them received stipends for their attendance at the meeting. There were a total of 30 oral presentations and two discussion sessions.

The 3<sup>rd</sup> NEMASYM-RCN meeting will take place next July in Corvallis, Oregon, US, and in conjunction with the Society of Nematologists 50<sup>th</sup> Annual Meeting. Precise dates are to be set but plan for be a two-day meeting. Theme of this meeting will be "Nematode and Bacteria Symbioses and the Genomics Era". For information for registration and abstract submission please visit NEMASYM website: <http://www.pngg.org/nemasym/>. Those interested in attending this RCN meeting may contact the NemaSym coordinator, Patricia Stock ([spstock@email.arizona.edu](mailto:spstock@email.arizona.edu)). We look forward to continue building a strong nematode-bacterium symbiosis research community with you!

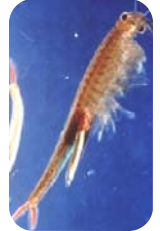
Symbiotically yours,  
S. Patricia Stock,  
NEMASYM Director

### STUDENTS AND POSTDOCS AFFAIRS COMMITTEE



#### Current Officers

- Kelly Bateman, Chair, Diseases of Beneficial Invertebrates Division
- Sabrina Hayes, Bacteria Division
- Sastia Prama Putri, Fungus Division
- Maria Cristina Crava, Microbial Control Division
- Gwyn Puckett, Microsporidia Division
- Amanda Hodson, Nematode Division
- Ikbal Agha Ince, Virus Division
- S. Patricia Stock, Faculty advisor



#### What does the committee do?

- Promotes scientific and social interactions between students and professional members of SIP
- Creates opportunities for education and training
- Encourages networking

#### How can you participate?

- Talk to your division chair or student representative
- Propose ideas for workshops or sessions.
- Help us with and participate in social activities during the meetings



#### Who can join?

- Student representatives are chosen by each Division for 2-year terms but anyone with ideas and enthusiasm is encouraged to be involved and join the committee



#### How to contact?

- Visit [www.sipweb.org/committees.cfm](http://www.sipweb.org/committees.cfm)





Juan Ferre with his students



Nana Goginashvri, Daniela Pilarska and Manana Kereselidze



Eric Lyons and Eric Hass Stapleton



Yi Pang and Chung Hsiung Wang



Natalia Munteanu



Omaththage "OP" Perera



Jeff Lord furious about his salad



Jørgen Eilenberg and now normal Jeff Lord



David Oi and Jimmy Becnel shopping for clothes



Shahina Fayyaz, Salma Javed, Mehreen Gulsher and Omaima Khamis



Andreas Linde, Gernot Hoch, Eva Mersich and Dietrich Stefan



Ali Derakhshan, Ali Mehrvar, Jamie Goettel, Joerg Wennman, Reza Talei-Hassanlou



Martin Andermatt and Italo Delalibera, Jr



Richard Humber and Zongzhi Li



Graciela Quintana and Govind Gujar



Where the future, the present and the past meet



Dirk Ave, Surendra Dara and Omaththage "OP" Perera



Doerte Goertz, Renate Radek, Gwyn Pucket and Nils Cordes

**Dear SIPers!**

Keep sending your articles, announcements, photos or other information for the newsletter. Use Arial font size 10 and single spacing, and minimize other Word suggested formatting. Try to send in a form that requires minimal editing, spelling and grammar check from my end. Deadlines are 15<sup>th</sup> of January and May for February and June issues, respectively, and 1<sup>st</sup> October for November issue.

Thank you,  
Surendra Dara  
skdara@ucdavis.edu