



SIP Newsletter December 2009



Nominations for Council
Round-up of the Utah Meeting
Martignoni and Lomer Award Winners
Industry News

Newsletter for December 2009

Officers and Council for 2008/09

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Cover image - the winning image of the first ever SIP Photo Competition.

The photo shows synnemata of *Hymenostilbe odonatae* emerging from an infected dragonfly and was taken in Ibaraki, Japan, by M. Shimazu.

Newsletter Editorials

Welcome to the latest SIP Newsletter! This issue contains a round-up of the Utah meeting, including the Martignoni and Lomer Award winners, current Division officers and news about SIP members. However, there may be certain things you can't find because of the changes we have made – so Job Announcements, individual Division Business Meeting Minutes and SIP Council Minutes are now only found on the website while Minutes from the general Business Meeting and Obituaries are in both the Newsletter and on the website.

Finally, as much as we have enjoyed putting the Newsletter together, we both feel that this is the right time to step down as Co-Editors and get someone with new ideas for the Newsletter. We are really pleased that Surendra Dara has agreed to help out and we will be making the transition over the next couple of issues.

Paresh Shah & Judith Pell



Over the years, the SIP newsletter has undergone several makeovers and the current editors, Paresh and Judith, have done a wonderful job in morphing this into a colorful and informative publication. As I eventually take up the editorial responsibility, what I would like to see are increased contributions from all you esteemed SIPpers. It can be a scientific article, a research update, your academic achievement, a fond memory of SIP, a picture of you or another SIPper in a compromising situation, or even the announcement of your winning a multi-million CFA/ cedi/ dollar/ euro/ lira/ pound/ rouble/ real/ ringgit/ rupee/ shilling/ yen or yuan lottery. Do not wait until the Annual Meeting to tell your stories ~ in this information age, let us share information!!!

Surendra Dara, Editor-in-Training



Nominations for 2010 now being solicited

The Nominations Committee is soliciting your input on the slate of candidates for the 2010 election. Positions that will be filled are:

- Vice-President
- Secretary
- Treasurer
- Trustee

Do you know of worthy individuals who should be considered? Or perhaps you might be interested in running for office yourself?

The Society's by-laws state that nominations can be contributed by the general membership, following these guidelines:

1. Nominations must be presented to the Secretary, Johannes Jehle (johannes.jehle@dlr.rlp.de) on or before **January 1, 2010**
2. Nominations must be accompanied by a petition with signatures of at least 10 SIP members in good standing. To facilitate electronic communication, these signatures can take the form of a scanned or faxed letter, on institute letterhead, with the petitioner's signature
3. A brief biographical sketch of the nominee should also be included
4. Please also specify the office that the member is being nominated for

All nominations will be announced in the February 2010 SIP Newsletter. Questions? Please contact Wendy Gelernter, Nominations Committee Chair, at gelernter@paceturf.org.

From the President



The Society held another very successful annual meeting, this time in Park City, Utah. As always, it was great to meet up with friends and colleagues. Although we had a lower than expected turnout, the scientific and social events were vibrant and true to the SIP spirit. Congratulations and thanks to the Co-chairs of the Organizing Committee, Rosalind James and Don Roberts.

Year end means that it is time to renew your membership, if you have not already done so. The creation of our new Division on Diseases of Beneficial Invertebrates provides the opportunity for us to invite to our Society our pathologist colleagues who work with marine invertebrates, pollinators, etc. Please also consider providing your students complimentary memberships as a sign of appreciation for their excellent work in your laboratories!

The lower than expected turnout at our annual meetings in Park City, the reduction in membership numbers and rock bottom interest rates have resulted in some important financial challenges. The presently low interest rates do not generate sufficient funds to fully support the Endowment, Martignoni & Lomer Awards. Fortunately, the auction held at Park City raised funds to fully support this year's Martignoni Award and to even add a bit to the endowment principle. And, thankfully, the Society's treasury is able to withstand a deficit, at least for the time being. Treasurer Ann Hajek and Council are doing their best to keep expenditures at a minimum and to invest our endowments as wisely as possible. Kelli Hoover and her Endowment & Financial Support Committee are actively seeking support from industry and sponsors. Please contact Kelli (kxh25@psu.edu) if your company is able to

provide financial support. And please don't forget that there is opportunity to make special contributions to the Society and the Endowments as you renew your memberships!

Zihni Demirbag and his Organizing Committee have been very busy organizing our 10th International Colloquium on Invertebrate Pathology and Microbial Control and the 43rd Annual Meetings of the Society in Trabzon, Turkey, July 11 – 15, 2010. Some very exciting pre- and post-meeting social programs are also being offered. More information can be found in this newsletter as well as on the meetings website www.sip2010.org. There is opportunity at Trabzon to provide exhibition space for industry. If interested, please contact Zihni at zihni@ktu.edu.tr

As previously announced, our meetings in 2011 will be held in Halifax, Nova Scotia, Canada, August 7 – 11, with Susan Bjornson chairing the Organizing Committee. I am happy to announce that upon recommendation of the Meetings Committee, Council has selected Buenos Aires, Argentina as the venue for our 45th Annual Meetings, August 5 – 10, 2012, under the chairmanship of Claudia López Lastra & Alicia Sciocco-Cap. Mark your calendars!

I would like to thank all of you for your support of the Society during the past year. Special thanks to the Members of Council, Division and Committee Chairs and Members and of course, our Executive Secretary, Cecilia Schmitt.

Season's Greetings and All the Best in the New Year.

Mark Goettel

SIP President



Bobble-head (on the right) of the President commissioned by Susan Bjornson and Lee Solter and auctioned at Park City

Report on the 42nd Annual Meeting

The 42nd Annual meeting was held at The Canyons Resort in Park City, Utah, USA from Sunday Aug. 16 to Thursday Aug. 20, 2009. The conference was held at a ski lodge that was on summer recess, providing participants with a high elevation experience; an experience that perhaps added to the general excitement of the meeting. A total of 290 people attended, including 51 students. Another 28 companions and sponsors also attended.

Scientific Program

The meeting was officially opened on Monday morning by SIP President Mark Goettel and one of the Program Chairs Rosalind James. Opening remarks were followed by a presentation of the Mauro-Martignoni Award and Chris Lomer Award by Andreas Linde, and a reading of the Division Travel Award Winners.



Don Roberts (left) and Ray St. Leger (right)

The Founders' Memorial Lecture was then given by Raymond St. Leger in honor of Don Roberts, who also happened to be a co-organizer for the meeting. Don Roberts followed the lecture with a few words on the many prominent insect pathologists who have worked in his laboratory over the years. He is well loved by many, especially those working with entomopathogenic fungi. His contributions to the field go well beyond his own significant scientific findings.

The plenary symposium, "The Host Pathogen Dance: Interactions Between Insect Hosts and Their Pathogens," was held Tuesday morning. This symposium highlighted some of the interactions between hosts and pathogens. Michael Bidochka presented new ideas about the evolution of virulence from non-virulent soil fungi. Michael Strand discussed how polydnviruses are used by parasitoids to suppress host immunity, and Bruce Tabashnik presented an evaluation of different strategies to delay Bt-resistance in insect pests exposed to transgenic crops with insecticidal genes. The session was well attended and drew many compliments.

The scientific program included 54 symposia, 11 workshop presentations, 111 contributed oral presentations and 112 posters. In addition, the students held a lunchtime workshop on how to get a postdoc position and enter the scientific network.

A new SIP Division, the Division of Diseases of Beneficial Invertebrates, was officially formed during the course of this meeting. We hope that this Division will help attract new members to the Society, including pathologists studying a variety of invertebrates, such as aquatic invertebrates and

bees. All the Divisions were able to squeeze their Business Meetings in during this busy meeting, and several had workshops that followed, including the new division.

This year, the Virus Division held a Cell Culture Workshop on Sunday prior to the main meeting. This workshop was led by Dwight Lynn, and organized by Byron Adams and Bryony Bonning. Nineteen people attended.



Social Program

The Social kick-off to the meeting was the mixer on Sunday evening. This was held in the Grand Ballroom and included a buffet meal and drinks. Attendees were able to reacquaint with old friends and meet new ones. This year, all the meals were provided as part of the registration fee, giving delegates ample opportunity to meet informally throughout the meeting without having to leave the compound. The mountains rising in the background and the bright sunny weather also gave people an opportunity to occasionally take a break and commune with nature. Due to the elevation, the outdoor temperature was never too hot, but on a couple of the mornings, it was actually quite cold! This was an interesting August experience for those eating in the tent area.

This year's excursion was a trip to the Utah Olympic Park on Tuesday afternoon. The Park was the site of the 2002 Winter Olympic Games. Participants went on a guided tour of the park, which included a breath taking view down the ski jumps, where skiers go 35 miles per hour before launching 70 feet into the air before landing in a swimming pool of bubbly water. A couple of brave of SIP attendees even went down the bobsled track with a professional driver. A show was put on by professional ski jumpers at the end of the tour.

The excursion was followed by a trip to Historic Park City for shopping, and then the slightly-less-than-5-K Fun Run, which was organized by Byron Adams and his students. The Fun Run started at the Red Pine Lodge after a ride up the skiers' gondola to approximately 2400 m (8000 ft). It was a beautiful site, and everyone who started the race managed to also complete it. The Fun Run was followed by the BBQ at the Red Pine Lodge. Entertainment at the BBQ was provided by The Fleetwood Duo. An assortment of interesting prizes was given to the race winners at the end of the BBQ, which culminated with an auction of various donated items. Auction proceeds were used to support the Martignoni Award.

The meeting closed on Thursday evening with the banquet held in the Grand Ballroom of The Canyons Resort. Following dinner, a short awards ceremony was held by President Mark Goettel during which the student presentation awards were announced. The President also demonstrated to the students how best not to lose your poster when coming to a meeting, with the aid of a fishing pole shipping tube.

This was followed by announcements for the student presentation awards, and Osaka University students should be proud of the recognition they achieved. Congratulations to these dedicated and hardworking students!



Entertainment was provided by Larry Smith and his band and the dancing was a celebration of the great time with friends and colleagues.

Rosalind James
Co-Chair of the Organizing Committee

SIP 2009 
 Park City, Utah
 Exploring the host/pathogen dance!

Results for the 5 k Fun Run/Walk

Category / Position	Winner
Men / Overall	
1	Neil Crickmore (14 mins)
2	Mark Nielson
3	David Thumbi
Women / Overall	
1	Tarryn Goble (17 mins)
2	Bryony Bonning
3	Joan Cossentine
Men Under 30	
1	Tikaya Tomokiyo
2	John Koch
3	Chad Keyser
Men Under 40	
1	David Thumbi
2	Mark Brown
3	James Strange
Men Under 50	
1	Neil Crickmore
2	Mark Nielson
3	Thomas Mead
Men Under 60	
1	Ken Narva
2	Carlos Blanco
3	Jim Whitefield
Men Under 70	
1	Gerry Carner
2	Peter Krell
3	Richard Humber
Women Under 20	
1	Ann Hajek
2	Miley Cyrus
3	Kristen Stewart
Women Under 30	
1	Tarryn Goble
2	Kelly Sims
3	Karyn Johnson
Women Under 40	
1	Michele Hares
2	Verena Lietze
3	Claudia Rodriguez
Women Under 50	
1	Bryonny Bonning
2	Lorena Passarelli
3	Saskya Van Nouhuys
Women Under 60	
1	Joan Cossentine
2	Karen Toohey
3	Yuliya Sokolova

Martignoni and Lomer Prize Winners

Mauro Martignoni Award

Karolin Eberle

The Mauro Martignoni Award is the most prestigious Award made by the Society for Invertebrate Pathology. For 2009, the award went to Karolin Eberle.

Karolin is in the final year of her doctoral research program at the Agricultural Service Center Palatinate (DLR Rheinpfalz), Laboratory of Biotechnical Crop Protection, working with Dr. Johannes Jehle.



It was important to Karolin to find an area that would combine basic research with practical application of the work. Molecular virology, in particular the problem of codling moth resistance to CpGV-based management products and the search for isolates that overcome this resistance, was the ideal area for this requirement.

Karolin has investigated the diversity and evolution of CpGV by partial and complete genome sequencing, restriction analysis and bioassays. The aim of her work is to explore the molecular mechanism by which CpGV

isolates overcome CpGV resistance in codling moth. After finishing her PhD, Karolin would like to further her research in this area as a postdoctoral researcher.

Karolin's presentation at the SIP meeting was entitled "Novel CpGV isolates: Deciphering the molecular mechanism involved in overcoming CpGV resistance in codling moth".

Chris Lomer Travel Award

Le Thi Thanh Thao

The Chris Lomer Memorial Travel Award is provided to help support researchers from less developed countries to attend SIP Annual Meetings.

The winner for 2009 was Le Thi Thanh Thao who, after finishing her Bachelor's degree at the College of Agriculture, Cantho University, Vietnam, won a Japanese scholarship for a Master's degree program in the laboratory of Professor Yasuhisa Kunimi at the Faculty of Agriculture, Department of Applied Biological Science, Tokyo University of Agriculture and Technology (TUAT).

She worked on the characterization of a microsporidium isolated from diseased larvae of *Spodoptera litura* collected from soybean fields in Cantho, Vietnam. Thao also studied the interactions between SpItNPV and the microsporidium in *S. litura* larvae.

Thao just graduated from TUAT in September and is currently working as a researcher in a cooperative project with the Japan International Cooperation Agency, TUAT and Bach Ma National Park, Vietnam. The aim of the project is improving living conditions for farmers near the buffer zone of Bach Ma National Park in her beloved country.

As Lomer Awardee, Thao's presentation to the SIP was "Characterization of a microsporidia isolated from *Spodoptera litura* and its relationship with a nucleopolyhedrovirus in Vietnam".



Minutes of the SIP Business Meeting Park City, Utah, 20 August, 2009

The SIP business meeting was called to order by Mark Goettel at 10:15 a.m.

1. Welcome and agenda review/approval

A motion to approve the Agenda was made by Peter Krell, seconded by Wendy Gelernter and passed unanimously.

2. In Memoriam

The society observed a minute of silence in memory of their members Howard Whisler, Keith Steinkraus, Sergio Alves, Claire Vidal, Peter Faulkner, John Cunningham, who passed away during the last years.

3. Historian's report

Elisabeth Davidson gave a report (Where are they now?) on some retired SIP Members.

- H. Denis Burges - review of career, hobbies, positions in society, honors & awards. Sent message to membership (message read).
- Jaroslav Weiser - review of career, meeting work in Prague, family, positions in society, honors & awards. Sent message to membership (message read).
- Wayne Brooks - review of career, fishing trips, positions in society, honors & awards. Sent message to membership (message read).
- Joe Maddox - review of career, positions in society, honors & awards, hobbies and family and fishing trips. Told fishing trip story. Sent message to membership (message read).
- Carlo Ignoffo - founding member, treasurer of SIP. Sent message to membership (message reviewed).
- John Harshbarger - review of society offices, career, sends best wishes
- Y.A. (Joe) Tanada - review of career, society offices, honors & awards. Review of quote
- Robert Granados - review of society offices, career, hobbies and family. Sent message to membership (message read).
- Lu Martignoni (widow of M. Martignoni)-wanted to have her at meeting. Sends greetings.

4. Minutes of 2008 Business meeting

Johannes Jehle suggested that the reading of the minutes from the 2008 business meeting be dispensed since they were published in the newsletter for all to read. All approved.

Motion to approve not reading minutes moved by Lerry Lacey, seconded by Ann Hajek, unanimously approved.

5. President's Report

Review of year:

Introduction of and thanks to the new executive secretary Cecilia Schmitt

Thanks to committees' and Divisions' Chairs for the work done during last year.

Announcements:

* New Chair of Endowment and Support Committee: *Kelli Hoover*.

* Publications Committee assigned the duty of overseeing the website. New member appointed *Aaron Gassmann*.

* History Committee - working on certificates and pins looking up all memberships. Thanks to *Jim Harper*.

* Nominating committee looking for nominees (looking for executives)

Society remains vibrant, financially sound, membership numbers good.

Graph shown of financial fund balances. Success of cutting back on funding available to Divisions for support of travel to meetings to keep balanced budget

6. Treasurer's report (*Ann Hajek*)

Highlights of draft budget for the calendar year of 2009. Ann reviewed different items, Income: reviewed estimated income, Expenses: reviewed estimated expenses. Trying to keep budget balanced. Explained that income of auction is used for awards. Went over draft budget summary. Reviewed all funds and total cash amount available (fiscal year).

7. Auditors Report

Mark Goettel read written report of the auditors *Trevor Jackson* and *Michael Brownbridge*, who could not attend the meeting. Auditors were satisfied with report but flagged concern about reliance on meeting profits.

8. Membership committee Report

Helen Roy reported about membership being down especially student membership. Asked for members to contact people who might be interested in joining the Society.

9. Meetings reports

Lerry Lacey gave overview on future meetings

2010 will be in Trabazon, Turkey, hosted by *Zihni Demirbag*

2011 will be in Halifax, Canada, hosted by *Susan Bjornson*.

Currently deciding on 2012 meeting (undisclosed)

- Report on 2009 meeting (*Rosalind James*)

Reported about unknown income, attendance low compared to previous years. Listed attendance numbers. 270 attendees in total: 169 members, 49 non-members 51

students, six 1-day registrants. 108 posters, 174 oral presentations: total 282 presentations.

- Report on 2010 meeting (*Zihni Demirbag*)

Invited all to the Turkey meeting next year. Reviewed website for meeting. www.sip2010.org Discussed information available online: deadlines, location information, photos, conference center, things of interest, discussion of logo for the meeting, travel information, location of university, hotel/guest house review, program, 5K run, tours. Registration review of fees will be available online of via mail/phone, meals to be included. Suggestion to make non-student member registration higher to encourage membership. Showed video about Turkey. Location full of history. Reminders to apply for visas well in advance.

- Report on 2008 Warwick meeting (*Helen Roy*) .

Thanks given to *Dave Chandler* and co-organizers for great meeting. 430 attendees, 85 students, attendees came from 44 countries. 234 oral presentations, 149 poster presentations. Made a good profit.

- Report on 2010 Halifax meeting (*Susan Bjornson*).

Will be the 44th annual meeting. Presented overview of meeting. Venue St. Mary's University. Review of location, historic sites, registration estimated \$450 (CND), August 7-11, 2010, accommodations rates, BBQ site, Banquet site (pier 21), Excursion ideas (Peggy's cove), items of interest in Nova Scotia.

10. Division reports

- * Bacteria Division: changes, announcement of new members and a new student representative. Review of meetings. Symposium about European biological control and/or novel BT toxins and/or cross divisional symposium on response to BT toxins.
- * Fungus Division: announcement of new member at large and student representative. Discussion about student award winners. Discussion about next year's symposium but nothing definite.
- * Microsporidia Division: Election for member at large and student representative Possible symposium on Microsporidia and Protozoa in the Mediterranean area. Workshop suggestion: Microsporidia and genomes.
- * Nematode Division: suggestion on cross-divisional symposium (fungi) on new formulation techniques. Biotic and abiotic limitations to persistence (workshop).
- * Discussed student awards policy: preference to be given to new applicants.

One new member at large, looking for new student members. Sponsored mixer after meeting on Monday.

- * Microbial Control Division: 33 division members attended (election of new officers announced). Voted to return funds back to Society general fund because student travel award winner was unable to attend. Will do own travel award from own funding in 2010. Student should not

receive award in consecutive years. Division will make funds available to cover registration for one invited speaker. Increased membership fee to \$3.00. Membership form to include donation section for divisions. No suggested symposium. Suggested two workshop ideas, Status of microbial control in Middle East.

- * Virus Division: Election of one new member at large; student representative renewed, do have two student representatives. Membership dues to increase to \$15, student remains the same. Three symposiums decided on, one will be cross divisional. Had a pre-conference hands-on workshop on insect cell culture, 19 attendees, great success. Bioinformatics will be workshop in Trabzon. Sunday, first day of meeting followed by presentation. Student travel awards: encouraged to apply.
- * New Division formed: Decided name: Diseases of Beneficial Invertebrates. Election of all officers, officers announced. Voted on by-laws. Membership fees \$10.00 decided on, students free. Planning of two symposia and one workshop. OECD funding sought to help in Halifax proposed. Looking for members interested in fisheries, aquatic and aquatic insect, bees, butterflies, etc..

11. New Business

- * Newsletter: Need new newsletter editors, current editors are stepping down.
- * Three year membership to be offered starting this year.
- * Idea to look into standardized website for abstract submission to be located on SIP website. Looking for people interested in working on this site.
- * Student/non student registration. Suggest including a non-student registration fee to encourage more student membership
- * Questions: Three year membership, how would it be coordinated with the journal?
- * Announcement of IOBC conference on biological control to be held at Niagara Falls in May 2010.
- * Trend, people have submitted title but did not submit abstract. Item discussed and possibility of publishing abstracts in JIP.
- * Consider having a transitional membership registration fee for students. Will be put on mid-year council meeting agenda.
- * People taking pictures of slide/posters of presentations. Need to be proactive about not allowing reproduction/pictures of presentations. (Council did make the decision, but was announced that this not acceptable, will be more proactive in future) NO PHOTOS from oral presentations and posters allowed without author allowance.

Motion to adjourn meeting by *Carrie Hauxwell* was seconded and approved at 12.00 a.m.

By Cecilia Schmitt and Johannes Jehle, 26 October, 2009

SIP Division Officers

Current and newly elected Officers for SIP Divisions are listed below. Please note Minutes of Division Business Meetings are available from Division pages on the SIP website.

Bacteria Division

Chair: Hyun-Woo Park
Vice-Chair: Juan Luis Jurat-Fuentes
Secretary/Treasurer: Baltasar Escriche
Member-at-Large: Dennis Bideshi
Member-at-Large: Jie Zhang
Student representative: Sabrina Hayes

Division of Beneficial Invertebrates

Chair: Grant Stentiford
Chair-Elect: Elke Genersch
Secretary/Treasurer: Kate Aronstein
Member at Large: Huang Shaokang
Member at Large: Regina Kleespies
Student Representatives: Eva Forsgren & Kelly Bateman

Fungi Division

Chair: Rosalind James
Chair-Elect: Helen Roy
Secretary/Treasurer: Helen Hesketh
Member-at-Large: Todd Ugine
Member-at-Large: Tariq Butt
Student Representative: Vitalis W. Wekesa

Microbial Control Division

Chair: Surendra Dara
Chair Elect: Stefan Jaronski
Secretary/Treasurer: Sue MacIntosh
Member-at-Large: Nina Jenkins
Member-at-Large: Steven Arthurs
Student Representative: Jerry Ericsson

Microsporidia Division

Chair: David Oi
Chair-Elect: Dörte Goertz
Secretary/Treasurer: Susan Bjornson
Trustee: Ji-Ping Liu
Trustee: Steven Valles
Student Representative: Nils Cordes

Nematode Division

Chair: Albrecht Koppenhöfer
Chair-Elect: Ed Lewis
Secretary/Treasurer: Christine Griffin
Member-at-Large: Barton Slatko
Member-at-Large: Claudia Dolinski

Virus Division

Chair: Bryony Bonning
Chair Elect: Monique Van Oers
Secretary / Treasurer : Kelli Hoover
Member-at-Large: Karyn Johnson
Member-at-Large: Nor Chejanovsky
Student Representatives: Ikbal Agah Ince & Jondavid de Jong



SIP Council (from left) Rose Hu, Christine Nielsen-Le Roux, Jörgen Eilenberg, Ann Hajek, Mark Goettel, Leellen Solter, Johannes Jehle, Wendy Gelernter and Jeff Lord

Industry News

Dow AgroSciences

Dow AgroSciences' *SmartStax* Technology Sets New Industry Standard for Corn Farmers

U.S. and Canadian farmers are one step closer to a new corn seed trait combination that is expected to provide the most comprehensive insect and weed control and allow farmers to significantly reduce their refuge. These benefits will be realized through *SmartStax*[™], which is the outcome of a cross licensing agreement and research and development collaboration signed in 2007 between Monsanto Company and Dow AgroSciences LLC.

SmartStax, the agriculture industry's most advanced, all-in-one corn trait platform, received registration from the U.S. Environmental Protection Agency (EPA) and regulatory authorization from the Canadian Food Inspection Agency (CFIA) and remains on track for a 2010 commercial launch.

SmartStax expresses six insect-control proteins (obtained from *Bacillus thuringiensis*) that will provide two modes of action for control of above ground Lepidoptera pests and two modes of action for control of below ground *Diabrotica* pests:

- **Above ground insect control** for protection against corn earworm, European corn borer, southwestern corn borer, sugar cane borer, fall armyworm, western bean cutworm and black cutworm with Dow AgroSciences' HERCULEX® I *Insect Protection* technology and Monsanto's VT PRO[™], a second generation, two-gene lepidopteran control product contained in Genuity[™] Triple PRO[™];
- **Below ground insect control** for protection against Western, Northern and Mexican corn rootworms by integrating Monsanto's YieldGard VT Rootworm/RR2 technology with Dow AgroSciences' HERCULEX® RW *Insect Protection* technology;
- **Broad spectrum weed and grass control** by bringing together Monsanto's Roundup Ready® 2 technology with Bayer CropScience's Liberty Link® herbicide tolerance.

Two years of pre-registration field trials conducted by Dow AgroSciences show that *SmartStax* provides a greater level of insect protection than corn traits currently on the market.

In corn rootworm trials during 2007 and 2008, *SmartStax* more consistently protected plant roots from western corn rootworm than first generation insect traits. Results of trials conducted by Dow AgroSciences against the most prevalent above ground pests show that *SmartStax* prevents crop damage more effectively than either HERCULEX® *Insect Protection* or YieldGard VT PRO alone.

The advancement in insect management ("pyramiding" different genes for control of the same target insect) will deliver to farmers the broadest spectrum of insect control ever available while reducing the size of their non-*Bt* corn refuge from 20% to 5% in the corn belt and from 50% to 20% in cotton growing areas. Growers can expect complete insect protection among transgenic *Bt* corn hybrids in the market, with the associated benefits of higher yields due to an overall reduction in stress.

The proteins expressed by the eight transgenes in *SmartStax* make up a very low percentage of all of the proteins expressed by a corn plant, so the energy required to express multiple modes of action will not have a negative impact on yield and other attributes.

SmartStax will be sold by Dow AgroSciences through its seed brands, which include Mycogen Seeds, Dairyland, Renze, Brodbeck, Pfister, and Triumph.



**A DOW AGROSCIENCES
INNOVATION***

Dow AgroSciences will also use *SmartStax* as the platform to launch future trait technologies including Herbicide Tolerant Trait technology and other agronomic enhancements. The technology is a new family of traits to impart tolerance to 2,4-D and other classes of herbicides. This will provide growers with improved and enhanced weed control versus current herbicide programs. Introduction of this technology to the market is anticipated for 2012.

Contact the Newsletter if you wish to submit articles or features on production, formulation, field testing, regulatory approval or marketing of microbial control agents.

Paresh Shah

Obituary

Howard Whisler (1931-2007)



Howard Whisler died on September 16, 2007. Howard was a renowned expert on *Coelomomyces* and entomopathogenic fungi and spent the majority of his career at the University of Washington, Seattle.

Howard was born in Oakland, California on February 4th, 1931. He met his future wife, Patricia Paine, as a seventh grader in Berkeley. Howard began his undergraduate studies at Oregon State University in 1949, but after two years he returned to California and entered the University of California. In 1952 he and Patty married. For a period of more than 50 years, Patty and Howard traveled around the world chasing blackflies, mosquitoes, nematodes and other invertebrate hosts of entomopathogens, especially aquatic fungi.

Howard's undergraduate major at Berkeley was in Plant Pathology and a fascination with fungi led him to take Ralph Emerson's course on "Phycomycetes". Howard isolated the aquatic fungus *Monoblepharis* from twigs collected in Yosemite National Park, disproving Emerson's view that this genus could not be found in relatively arid states such as California.

Howard was stationed in Aviano, Italy, during the Korean War as a US Air Force supply officer and was joined there by Patty and their two young children, Jack and Jane. On his return from the Air Force, Howard continued his studies and his PhD thesis was on entomogenous fungi and chytridiomycetes. One of these organisms, now known as the mesomycetozoean, *Amoebidium parasiticum*, became the subject of several papers in subsequent years.

After receiving the Ph.D. in 1960, Howard and family were off to Europe again for a year of postdoctoral study with Dr. Jehanne-Françoise Manier and Dr. Odette Tuzet at the University of Montpellier in the south of France. In 1961, he became an Assistant Professor of Botany at McGill University, Montreal and in 1963 Howard moved to the Department of Botany, University of Washington in Seattle where he remained until his retirement as a full Professor in 1999.

One of Howard's duties at the University of Washington was to develop a marine mycology course and fungal research program at the Friday Harbor Marine Laboratory. He was joined by Melvin Fuller and David Porter to teach the very first marine mycology course at The Friday Harbor Laboratory.

During graduate studies with Emerson, Whistler and Fuller had heard much about an important fungal pathogen of

mosquitoes and the potential that it might have for controlling the mosquitoes that were responsible for the spread of malaria. In 1972, Howard published his first studies of *Coelomomyces* spp. with Joe Shemanchuk of The Lethbridge Research Center in Alberta, Canada and Linda Travland (Whisler et al. 1972).

This fungus became a major focus for Whisler's research (Whisler et al. 1974, 1975). His discovery of an alternate host for *Coelomomyces* and, as a result, the sexual stages of the life cycle, were groundbreaking. Howard received a standing ovation when he reported these findings which he made with Steve Zebold and Joe Shemanchuk at the SIP meeting in Tempe, Arizona, in June 1974.

Although Howard did not succeed in growing *Coelomomyces* spp. in axenic culture, he never stopped trying, and the January 2009 issue of the Journal of Invertebrate Pathology contains an article by Howard on this topic (Whisler et al., 2009).

While he continued his work on fungi associated with invertebrates, he was not able to forget the challenges first posed by *Monoblepharis* when he was an undergraduate. He and Ralph Emerson had been able to grow pure cultures of the fungus but never achieved more than mycelial development. Howard persisted until he succeeded in getting isolates of *Monoblepharis* to produce the sexual stage in the laboratory. The work resulted in a film, "Sexuality of *Monoblepharis*" and several papers (Marek, 1984; Whisler & Marek, 1987).

A detailed biographical sketch that emphasizes Howard's research achievements and includes a complete bibliography was published by Joe Ammirati of the University of Washington (Ammirati, 2008).

Article produced with information from Melvin S. Fuller for the Mycological Society of America

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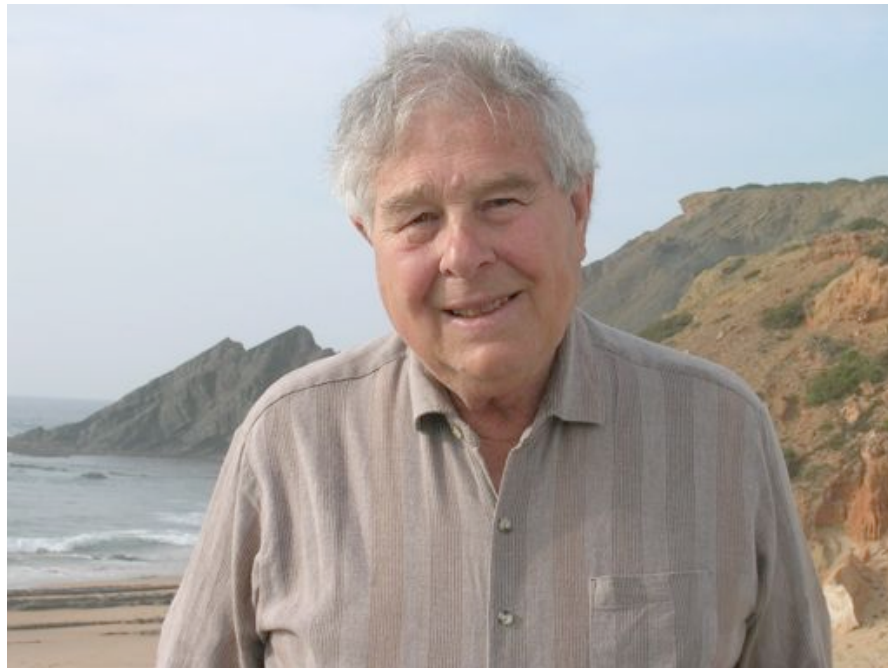
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Obituary

Peter Faulkner



Peter Faulkner, a well known member of the SIP for most of his career and Professor Emeritus at Queen's University, Kingston, Ontario, passed away peacefully with family at his side, on Monday, July 13, 2009, in his 81st year.

Apart from being an educator, Peter was the quintessential scientist. Just Vlak wrote "He was not only a very friendly person, but also a passionate scientist and an icon in the field of invertebrate virology. He made major contributions to the baculovirus research field in recognizing at an early stage the importance of genetics by developing plaque assays and generation baculovirus mutants, and by applying molecular techniques to study transcription regulation. He also made major discoveries, such as the function of GP64, P10 and P74, to name a few, and all that at an early stage."

His love of insect virology started when he was a scientist at the Insect Pathology Research Institute in Sault Ste. Marie, Ontario (now the Great Lakes Forestry Centre) following in the footsteps of the great insect virologist Gernot Bergold. Later he was appointed Professor of Virology at Queen's University. Peter mentored many graduate students who went on to develop their own careers in insect virology and in other related fields.

He was an active member of SIP, served as a Trustee and as the Chair of the Organizing Committee that brought the Annual Meeting to Queen's University. Peter had an unflagging sense of social justice and served his community in Kingston in so many ways.

The scientist and the man will be missed by many world-wide.

News and Announcements

Retirement of Juerg Hüber

The Institute of Biological Control of the Julius Kuehn Institute (Darmstadt, Germany), recently celebrated the retirement of its Director Dr. Juerg Hüber with a two day scientific colloquium held from 13 to 14 October 2009. Juerg was a researcher for 36 years at the Institute and was Director for the past 19 years. His successor will be another member of SIP, Prof. Dr. Johannes Jehle, who is presently at the Agricultural Service Station (DLR) Palatinate in Neustadt and will take up the post in January 2010.

During his scientific career Juerg was dedicated to the development and application of baculoviruses for control of pest insects in agriculture, horticulture and forestry. Under his direction the *Cydia pomonella* granulovirus (CpGV) was registered in Germany and became an unprecedented success story of commercial use. More recently, he focused on field resistance of codling moth against CpGV, a topic he had already explored during his PhD thesis at the Swiss Federal Institute of Technology, Zürich, in the late 1960s.

Juerg has served in numerous scientific organisation and on many committees, including SIP where was Vice President (1996-1998) and President (1998-2000). Juerg was also a founding member of the IOBC/WPRS Working Group on Insect Pathogens and Insect Parasitic Nematodes in 1985 and served for the IOBC in different functions as Working Group Convenor (1989-1991), Treasurer (1989-1997), Vice President (1997-2005) and Council Member (2005-2009). In 2009 he was made Honorary Member of the German/Austrian branch of the International Biocontrol Manufacturers' Association (IBMA). For his research on the development of microbial control agents Juerg was awarded the highly prestigious Karl-Escherich Medal of the German Society of General and Applied Entomology (2005).

Juerg will enjoy his retirement with his wife Monika, but during his farewell party, it became very clear that his dedication to biological control and invaluable advice will be urgently needed by the biocontrol community in the future.



New Fellows of the Entomological Society of America



Dr. Brian A. Federici is a distinguished Professor of Entomology at the University of California, Riverside. He received his undergraduate training at Rutgers University and his M.S. and Ph.D. degrees in medical entomology from the University of Florida, Gainesville. Professor Federici's research focuses on the basic and applied biology of pathogens of insects, with the overall aim of developing these and their products as biological, environmentally-safe insecticides.

He has published over 200 peer-reviewed papers and review articles. He is the editor-in-chief of the Journal of Invertebrate Pathology and a member of the editorial board of Applied and Environmental Microbiology. He has served as president of the Society for Invertebrate Pathology. He has served on a variety of panels during his career, including scientific advisory panels for the U.S. Environmental Protection Agency and the World Health Organization's Expert Committee on Vector Biology and Control. He is an elected fellow of the America Association for the Advancement of Science.



Dr. Malcolm J. Fraser Jr. earned his B.S. degree at Wheeling College and his M.S. and PhD in entomology with emphasis in invertebrate pathology at the Ohio State University in the laboratory of W. Fred Hink. Following postdoctoral work at Penn State and Texas A&M University, he joined the University of Notre Dame and rose to his present position as Professor. Dr. Fraser's research has followed his interest in insect virology and invertebrate transgenesis from early work with baculoviruses to his latest work with dengue fever virus.

Among his contributions are the development of an agarose-based plaque assay for baculoviruses that permitted the characterization of a unique group of baculovirus mutants associated with acquisition of host transposons. One of these transposons, named piggyBac, has been developed over the years into a functional gene vector for protist (*Plasmodium falciparum*), invertebrate, and vertebrate transgenesis. While at Notre Dame, he established the currently accepted model for baculovirus assembly, elaborated the genetics of transposon mutagenesis of baculoviruses, and developed the piggyBac transposon vector system. More recently he has pursued novel ribozyme approaches to suppression of dengue fever virus in transgenic mosquitoes as part of a Bill and Melinda Gates Foundation Grand Challenges in Global Health award.

Fuller details are given on the Entomological Society of America's website at:
www.entsoc.org/resources/press_releases/2009-fellows.htm.

Member on the Move

Travis Glare

Travis is moving from the Institute AgResearch to take up a Research Professorship in Applied Entomology at Lincoln University, in Lincoln, New Zealand.

From November 2009, Travis' contact details will be:

Prof. Travis Glare
The Bio-Protection Research Centre
PO Box 84, Lincoln University
Lincoln 7647
Christchurch
New Zealand

<http://bioprotection.org.nz>

travis.glare@lincoln.ac.nz

Free Text Editing

Free text editing is available to SIP researchers and students for whom English is a second language.

Stefan Jaronski and Genevieve Gwynne (Stefan's spouse, a technical editor since the early 1980s) have teamed up to offer SIP members and associates two extra sets of editorial eyes to help authors for whom English is a second language to improve the comprehensibility of scientific papers.

This service is being offered to help authors avoid the frustration of receiving rejections because phraseology is unacceptable, while helping reviewers avoid the frustration of receiving stylistically incomprehensible material to review.

There is no guarantee that papers edited in this manner will be accepted for publication—but it is guaranteed that they will be more readable. Confidentiality about the contents will be maintained.

The use of this service is straightforward. The author e-mails the paper as an attachment to ges_ltd@hotmail.com or gwynne@midrivers.com.

Manuscripts should be in Word 2003 or earlier (.doc) or Open Office 3 (.odt) format. Gwynne and Jaronski will read the manuscript and return it, incorporating suggestions for style, sense and content where necessary, using "Track Changes" and embedded "Comments".

The service is free, but Jaronski and Gwynne would urge individuals receiving this editorial help to make a financial donation to SIP's Lomer Memorial Fund.

Please visit <http://www.sipweb.org/donations.cfm> to make your donation.

Stefan Jaronski & Genevieve Gwynne

ISPI Pest Directory 2009 CD

In September 2009, the **International Society for Pest Information** (ISPI) published a new issue of its Pest Directory database on CD-ROM. ISPI is a non-profit organization which promotes information exchange in the field of pest management. The database contains scientific literature and other information on pests, diseases, weeds and beneficials, as well as contact addresses of scientists. It can be installed on any Microsoft Windows operating system (starting with Windows 98).

The unique feature of the database is that all data are inter-linked and pre-sorted. For example pests are linked to the crops they attack, the regions and countries where they occur in, the beneficials and diseases which affect them and the scientists who have researched them.

This eliminates the need to struggle with different search terms and sort through many unrelated and duplicated search results. For example, a pest can be selected from a data tree or by typing the first few letters, then a disease with this pest as a host can be specified from the data tree of beneficials, and finally, a list of publications relevant to this combination can be displayed.

The literature comes with abstracts and (in 60% of the cases) with internet links to the full texts. There are many other possibilities of filtering out and combining the data on pests, crops, beneficials, regions/countries, and scientists.

More details on the database can be found at <http://www.pestinfo.org/cds.htm> where the CD can be ordered (57 Euros).



The 10th International Colloquium on Invertebrate Pathology and Microbial Control and the 43rd Annual Meeting of the Society for Invertebrate Pathology



Dear SIP Members, Scientists and Other Contributors,
It is a great pleasure to invite you and your company to attend 43th Annual Meeting of the Society for Invertebrate Pathology which will be held on **July 11-15, 2010**, at Karadeniz Technical University, Trabzon, Turkey.

With its magnificent vistas situated amidst the greenery and abundance of historical and spectacular sites, Trabzon, on the Northern coast of Turkey, promises to ensure an exciting scientific and cultural event.

We are planning a wonderful scientific program to explore the most current international findings on invertebrate pathology, including biological control of insect pests, understanding disease in beneficial invertebrates, medical and biotechnological significance of entomopathogens, and fundamental scientific research in host-pathogen interactions.

Please visit the following websites for more information:

- www.sip2010.org
- www.ktu.edu.tr
- www.microlabktu.com

We look forward to welcoming you at Trabzon-Turkey in July 2010.

Sincerely,
Prof. Dr. Zihni Demirbag, Chair of the Organizing Committee.

Virus Division pre-SIP meeting workshop

8000 Genomes At Your Fingertips: Comparative Genomics using CoGe

Virus Workshop: Sunday, July 11, 2010, Trabzon University
Registration deadline: May 21, 2010

Currently, there are genomes available for over 7500 organisms, with new ones being sequenced at an exponential rate. New DNA sequencing technologies make obtaining genome sequences easier and faster, and modern researchers must understand genome biology in order to take advantage of this wealth of data.

[CoGe, a web-based comparative genomics system](#), permits researchers anywhere in the world to easily analyze and compare genomes. CoGe maintains a repository of all genomes publicly available, and its suite of interconnected analytical and visualization tools allows researchers to rapidly understand genome structure and evolution from the level of a gene to the genome.

This workshop lead by CoGe's creator, Dr. Eric Lyons of the Department of Plant and Microbial Biology at UC Berkeley, provides an introductory description of the structure, evolution, and dynamics of genomes that will be followed by a hands-on *in silico* training session using CoGe to characterize the structure and evolution of genomes. Workshop participants are encouraged to propose their invertebrate pathogens of interest for exploratory *de novo* research.

Specific topics will include:

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

CoGe is publicly available at:
<http://synten.cnr.berkeley.edu/CoGe>

44TH Annual Meeting

Place: Halifax, Nova Scotia, Canada
Tentative Date: August 7-11, 2011
Chairs: Dr. Susan Bjornson & Dr. Christine Norohna
Contact: Susan Bjornson
E: susan.bjornson@smu.ca

45TH Annual Meeting

Place: Buenos Aires, Argentina
Tentative Date: August 5-10, 2012
Chairs: Dr. Claudia López Lastra & Alicia Sciocco-Cap
Contacts: Alicia Sciocco-Cap & Graciela Quintana
E: gquintana@cnia.inta.gov.ar; asciocco@cnia.inta.gov.ar
W: www.inta.gov.ar/imyza

Photos from the Park City Meeting



Members of Microsporidia Division



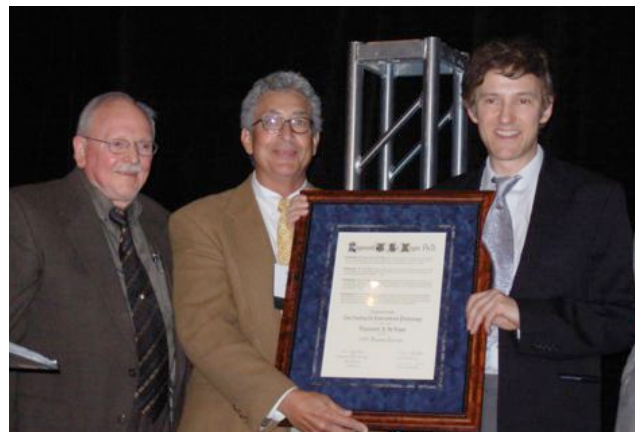
Microsporidia Division Workshop participants (from left) Dörte Goertz, Andreas Linde and Aurore Dubuffet



Microsporidia Division Symposium speakers (from left) Yulia Sokolova, Wei-Fone Huang, Susan Bjornson, Nils Cordes and Raquel Martín-Hernández



(from left) Rosalind James, James Fuxa, Ann Hajek and Harry Kaya



Founder's Lecture presentation (from left) Don Roberts, Honoree, Jimmy Becnel and Ray St. Leger (Founder's Lecturer)



Members of Virus Division



Virus Division awardees from Hokkaido return happy to their table!



Virus Division Symposium speakers (from left) Karyn Johnson, Rosie Dorrington and Anette Schneeman



A Parliament of SIP Presidents (from left) Mark Goettel, Betty Davidson, Don Roberts, James Harper, Just Vlak, Brian Federici, (front) Harry Kaya and Wendy Gelernter



(from left) Sunday Ekesi, Mark Goettel and Nguya Maniana



Ming-Guang Feng



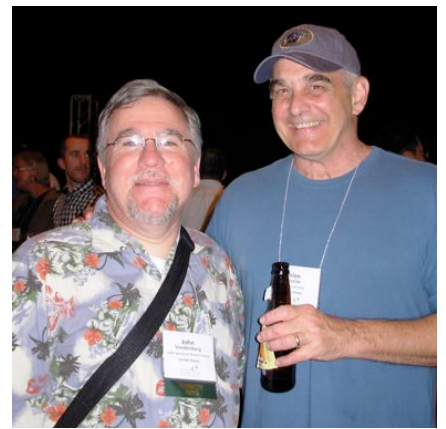
John Burand



Rosalind James



Bruce Tabashnik (left) and Juan Ferre



John Vandenberg and Drion Boucias



Just Vlask and Zihni Demirbag



Jarrod Leland



Ray St. Leger and Nemat Keyhani



Johannes Jehle and Agata Jakubowska



Don and Mae Roberts



Wendy Gelernter and James Fuxa