



NEWSLETTER

society for invertebrate pathology

VOLUME 36, NUMBER 3
November, 2003



Society for Invertebrate Pathology
36th Annual Meeting
July 25-30, 2003, Burlington, Vermont

The 2003 Annual Meeting of the Society for Invertebrate Pathology in Burlington, Vermont marked the return of SIP to the USA. Located on the eastern shore of Lake Champlain and nestled between the Green Mountains to the east and the Adirondacks to the west, Burlington provided an ideal setting for a “Summer in New England”. The Radisson Hotel with its spectacular views of the lake, courteous staff and first-rate service afforded an excellent venue for the meetings. Following the shortened format introduced at Noordwijkerhout, in the Netherlands, the meetings began on Saturday evening with a mixer and ended on Wednesday evening with the banquet. Just over 300 delegates from more than 30 countries were in attendance, including 63 students and 31 companions.

Scientific Program. The program committee headed by Ann Hajek and Richard Humber put together an

excellent scientific program with a Plenary session (4 presentations), 17 symposia (72 presentations), 10 contributed paper sessions (115 papers) and two poster sessions (130 posters) which were available for viewing for the much of the time the meetings were in session. The Society’s divisional business meetings were held on Sunday and Monday evenings with Sunday’s meeting preceded by a “pizza party” in the Radisson’s Seasons on the Lake room, which featured an outdoor patio and a beautiful view of Lake Champlain.

Thanks to the efforts of Richard Humber, this year’s Program and Abstract Book took on a more user friendly format which allowed meeting participants to find information about the meetings much more easily. The artwork, depicting a scene of the Vermont countryside was graciously provided by the Society’s own Vincent D’Amico.

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Deadline for the next Newsletter is Feb. 1, 2004

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Dudley Pinnock (left) presents the 2003 Founders Lecturer Award to Robert Granados

The 2003 Founders Lecturer was Dr. Robert Granados of the Boyce Thompson Institute at Cornell University who spoke in honor of the late Dr. Lois Miller formerly at the University of Georgia in Athens, Georgia. His very moving lecture entitled "The Biology of Baculoviruses: A Tribute to Lois K. Miller" received a standing ovation from this year's meeting participants.

Social Events. This year's scientific program was complemented with several very interesting and entertaining social events. Saturday evening's opening mixer combined live musical entertainment with plenty of good food and conversation, providing delegates with the opportunity to catch up with old friends and make some new acquaintances.

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Published by
the Society for Invertebrate Pathology
(SIP Homepage: "<http://www.sipweb.org>")

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

Submissions to the following sections are solicited:

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

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

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

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

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

Deadline for the next Newsletter is February 1, 2004.

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



Former students of Lois Miller accept the Founder's Honoree Award on behalf of their mentor

On Tuesday afternoon, about 50 attendees participated in the annual 5K run/walk on a scenic course along a portion of the Burlington bike path beside the beautiful Lake Champlain shoreline. Later, more than 150 delegates toured one of Burlington's local breweries followed by a relaxing cruise on a rather uncharacteristically tranquil Lake Champlain aboard the Spirit of Ethan Allen III. The evening ended with a lakeside barbeque highlighted by the presentation of the awards to the 5K winners. Although rain dampened the event it did not dampen the spirits of the SIP'ers who were prepared, nay determined, to dance late into the night.

A fitting conclusion to this year's meeting was the tradition SIP banquet in which the Radisson Ballroom took on a Burlington nightclub atmosphere. The delegates were entertained by one of the top jazz and pop groups from the area. The highlight of the evening was, of course, the presentation of the student awards and the Founders Lecture award presented to Robert Granados for his work and for his lecture honoring Lois Miller. It was a special treat to see the large number of delegates from Lois Miller's lab gathered together for photographs; celebrating life and their science just as Lois would have wanted to see them.

Sponsors: The SIP 2003 organizing committee would like to thank Wendy Gelernter and members



**Organizing Committee
2003 SIP Annual Meeting**

of the Endowment and Financial Support Committee for their efforts in garnering support for this year's meeting from our corporate sponsors: AgraQuest, Bayer CropSciences, Bayer Bioscience N.V., Becker Microbials, BioLogic, Certis USA, DuPont, Elsevier, Monsanto, Pioneer, Syngenta, Taylor and Francis Ltd., and Valent BioSciences. To all our sponsors, your assistance is much appreciated!



Lake Champlain

2003 SIP STUDENT AWARDS

The Society made an unprecedented effort this year to reward students for their work and make possible their travel to the meeting. In addition to nine student oral and poster presentation awards, the Society and Divisions presented eight travel awards.

Martignoni Student Travel Award



**Huarong Li,
Winner of the 2003 Martignoni Award**

The Society's most prestigious student travel award is the Mauro E. Martignoni Student Travel Award. The Student Awards Committee received quite a number of excellent applications for the third annual Martignoni Award. The 2003 award went to Huarong Li of Kansas State University, USA, for his presentation *Resistance to Bacillus thuringiensis endotoxins in the European corn borer (Lepidoptera: Crambidae)*.

Huarong Li hails from China where he obtained his Bachelor and M.S. degrees from the Department of Plant Protection, Southwest Agricultural University in Chongqing. He then taught biological control courses and conducted research on plant beneficial microorganisms. He became interested in *Bt* technology and made the decision to interrupt his work in China to obtain a Ph.D. degree in the USA. Huarong is currently working on the underlying biochemical and molecular mechanisms of *Bt* resistance in a Dipel-resistance strain of the European corn borer. His work has produced evidence that reduced protoxin activation is an important mechanism conferring resistance of the corn borer. Congratulations and best wishes in your future endeavors!



**SIP President Harry Kaya presents the
2003 Martignoni Student Travel Award
to Huarong Li of Kansas State University, USA**

Bacteria Division Travel Award



**Dror Avisar
Tel Aviv University, Israel**

Dror Avisar received the 2003 Bacteria Division's student travel award for his presentation *Studying CryIC resistance mechanisms by using Sf9 cells (co-*

authored by B. Sneh, N. Chejanovsky and A. Zilberstein).

Dror is currently finishing his Ph.D. work at the Department of Plant Sciences, George S. Wise Faculty of Life Sciences, Tel Aviv University in Israel, under the supervision of Prof. A. Zilberstein. The subject of his doctoral dissertation is "Inter and intra protein interactions involved in the insecticidal activity of *Bacillus thuringiensis* δ -endotoxins Cry1C and Cry1E: the role of structural domains and receptor recognition."

His research goal is to gain a better understanding of Cry toxins' activity for a better characterization of insect resistance to Bt. Besides genes involved in Cry1C resistance, he hopes to identify the Sf9 Cry1C receptor and its homologue in the common multi-regional pest *Spodoptera littoralis*.

Fungi Division Travel Award



Ernst-Jan Scholte
Wageningen University, the Netherlands

Ernst-Jan Scholte earned an M.Sc. in biology at Wageningen University, the Netherlands in 1999 with a specialization in medical entomology. During the course of his Master's work he studied host-seeking behavior of the African malaria mosquito *Anopheles gambiae* s.s at Wageningen University, *M. anisopliae* against adult *An. gambiae* at ICIPE in Kenya, and conducted field work on the

distributions of eggs of different phosphoglucosmutase (PGM) genotypes of the yellow dung fly *Scathophaga stercoraria* at Zurich University, Switzerland. During his internship at ICIPE, Kenya, he studied oviposition of *An. gambiae*'. After graduation he spent a year at Bologna, Italy, working on sterile male technique for the tiger mosquito *Aedes albopictus*. He currently studies for his Ph.D. at Wageningen. His project is an extension of one of the thesis projects- the use of entomopathogenic fungi against adult malaria mosquitoes. An ICIPE strain of *M. anisopliae* emerged as the most virulent one tested and he has focused on this strain, doing dose response assays, a study on the longevity/pathogenicity of the fungus on the target species, followed by experiments on horizontal transmission and the effects of sublethal fungal dosages on bloodfeeding behavior and fecundity. He plans to carry out small scale field trials in Tanzania. Ernst-Jan's presentation at the SIP meeting was *Effect on bloodmeal size and egg production of the malaria mosquito Anopheles gambiae* s.s., when infected with *Metarhizium anisopliae*.

Microbial Control Division Travel Award



Adane Kassa
Georg-August- University, Germany

Adane Kassa, obtained his B.Sc. from Alemaya University of Agriculture in 1988. He was employed

by the Institute of Agricultural Research (IAR), now the Ethiopian Agricultural Research Organization (EARO), as a Junior Research Officer to work in entomology. He attended the Imperial College of Science, Technology and Medicine (IC) in UK and received his M.Sc. degree in Plant Pathology and Nematology in 1994 working in collaboration with Dr. Dave Moore of IIBC. In 1995 he established the microbial insect pest control division at the Plant Protection Research Centre (PPRC) in Ethiopia. He received his Ph.D. degree in Agriculture at the Georg-August University Goettingen, Germany in 2003. His dissertation work was on production, formulation and application of entomopathogenic fungi for locust, grasshopper and storage insect pest control. Dr. Kassa's presentation entitled *Mycoinsecticide for stored product pest control* won one of two travel awards given by the Microbial Division this year. He is looking forward to developing IPM compatible biological control methods for major insect pests of interest.

Microbial Control Division Travel Award



Reju D'Cunha

University of Greenwich, United Kingdom

Reju D'Cunha earned his B.Sc. in Biological Sciences from Mahatma Gandhi University, India, and obtained the Association of Commonwealth Universities/British Council Shared Scholarship to read for his M.S. degree in Crop Protection at the University of Bristol, UK, completed in 1988.

He then obtained a three-year fellowship from the Higher Education Funding Council for England (HEFCE) for Ph.D. studies at the Natural Resources Institute, University of Greenwich, UK. His research project investigates how the susceptibility of *Helicoverpa armigera* larvae to the nucleopolyhedrosis virus (*HearNPV*) differs between three different crops; cotton, chickpea and tomato, and to determine which components in these plants are responsible for any observed effects on the biocontrol agent. He will attempt to optimise the efficacy of the *HearNPV* in those crops where efficacy is currently low. His presentation at the SIP meeting was *Differential activity of Helicoverpa armigera nucleopolyhedrosis virus on cotton, chickpea, and tomato*.

Reju's career aim is to work with ecologically safe, sound, and environmentally conscientious projects.

Microsporidia Division Travel Award



Dörte Goertz

Free University of Berlin, Germany

Dörte Goertz began her studies in biology at the University of Osnabrück (Lower Saxony / Germany) and continued her studies at the Friedrich-Schiller-University of Jena (Thuringia / Germany where she earned a Diploma degree in Biology in 1998. Her thesis studies were on the refuge function of floodplain forests in the cultural landscape in the Middle Saale-valley using spider associations as a

model group of habitat valuation.

Since 1998 she has worked on various aspects of the interaction of microsporidia and their gypsy moth (*Lymantria dispar* L.) and nun moth (*Lymantria monacha* L.) hosts, especially on the transmission and the influences of different microsporidia on development of gypsy moth.

In 2000 Dörte became a Ph.D. student at the Free University of Berlin, Germany. She also conducts research at Fachhochschule Eberswalde with Andreas Linde. Dörte plans to finish her Ph.D. thesis at the end of this year. Her presentation at the 2003 SIP meeting was entitled *Modelling the transmission of an insect pathogen (Microsporidia) on its host, Lymantria dispar L. - a forest pest insect.*

entitled *Evasive behavior of white grub species against entomopathogenic nematodes*, where she summarized preliminary results of her work.

Corrie received her Bachelor's degree in biology at Grove City College in Pennsylvania and held an internship through the Student Conservation Association. Future plans might include the pursuit of a Ph.D. in invertebrate pathology or a job in entomology or nematology. Her ideal job would be working at a science center giving "insect zoos" or talks on nematology to community members.

Virus Division Travel Awards

Serafin Gutiérrez is a Ph.D. student in the lab of Miguel López-Ferber in Laboratoire de Pathologie Comparée at École Nationale Supérieur

Nematode Division Travel Award



Corie Yoder
Ohio State University, USA

Corrie Yoder is pursuing her M.S. degree in entomology under Parwinder Grewal at The Ohio State University, OARDC, Wooster, OH, USA. She is working on the biological control of grubs using entomopathogenic nematodes (EPNs). She is interested in discovering mechanisms of resistance of grubs to EPNs, including grub behaviors. She was granted the SIP Student Travel Award in 2003, Nematology Division, for her poster presentation



Serafin Gutiérrez
École Nationale Supérieur d'Agronomie, France

d'Agronomie, Montpellier, France. Having co-authored several published papers on research in the area of baculovirus entry into insect cells, Serafin was awarded a travel grant from the Virus Division to attend the SIP meetings in Burlington and present his current work on insect baculoviruses in a oral presentation entitled *Is PIF Quantity Regulated by the Virus?*

Clare Nixon (not pictured) is a Ph.D. student working in Insect Virology at Oxford Brookes University, School of Biological and Molecular Sciences, in Oxford, UK. She works with Linda King in association with R. Possee and R. Hails both at NERC Centre for Ecology and Hydrology at Oxford on persistent baculovirus infections in insects. Her oral presentation at the SIP meeting was entitled *Exploration of Natural Enemies and Pathogens to Activate a Persistent Baculovirus in Field and Laboratory Population of the Cabbage Moth Memestra brassicae.*

Poster and Oral Presentations

Students submitted 29 posters and 26 oral presentations at the 2003 SIP Meeting. Among the many excellent presentations, six were selected as award winners. Thanks to the Martignoni and Division Travel Award Judges, and also to the onsite judges including Raffi Aroian, James Becnel, Bryony Bonning, Sarjeet Gill, Gernot Hoch, Heikki Hokkanen, Richard Humber, Andreas Linde, Ruud de Maagd, James Maruniak, Luke Masson, David O'Reilly, Judith Pell, Helen Roy, James Slavicek, Patricia Stock, Robin Stuart, Fernando Vega, and Rudolf Wegensteiner, for their participation.

First Place Poster



Rebecca McNall
University of Georgia, USA

Rebecca McNall is a Ph.D. student at the University of Georgia, Dept of Biochemistry & Molecular

Biology, working with Mike Adang. She is using proteomic approaches to study the interactions between *Bt* toxins and midgut proteins in *Manduca sexta* as well as to compare midgut proteins from *Bt*-susceptible and -resistant *Plutella xylostella*. Her work has resulted in the identification of altered proteins in resistant animals and new candidates for *Bt* receptors as well as altered proteins in resistant animals.

Rebecca's poster was entitled *Analysis of midgut brush border proteins in Bt susceptible and resistant Plutella xylostella larvae using differential two-dimensional electrophoresis.*

Second Place Poster

Anna Estela began her Ph.D. work in July of 2001 at the Department of Genetics, Faculty of Biology, Burjassot, University of València, under the supervision of Profs. J. Ferré and B. Escriche. Her



Anna Estela
University of València, Spain

work is supported by a fellowship from the Spanish Ministry of Science and Technology included in the global project "Resistance management to *Bacillus thuringiensis* in cotton pests". Her research goals are to study the effects of many *Bacillus thuringiensis* toxins in different cotton pests and to determine the population structure of different Spanish *H. armigera* populations with molecular markers.

Anna's poster presentation at the SIP meeting was entitled: *Interaction of Bacillus thuringiensis toxins with Helicoverpa armigera midgut.*

Third Place Poster

Ellen Klinger recently completed her MS degree with Eleanor Groden, Department of Biological Sciences at University of Maine. Her poster *Horizontal transmission of Beauveria bassiana between cadavers and adults of Leptinotarsa decemlineata* described her work to elucidate the susceptibility of adult Colorado potato beetles to *Beauveria bassiana*. The goal of her work was to determine whether adult beetles could detect and avoid sporulated cadavers on the soil surface as well as to quantify the density of cadavers needed for successful lethal infection.



Ellen Klinger
University of Maine, USA

Oral Presentations

First Place Oral Presentation

Michael Botts, University of Florida, presented *In vitro development of Helicosporidium*. Michael is currently studying for a B.S. degree in molecular biology with a minor in mathematics. His academic goals are to attend graduate school and eventually



Michael Botts
University of Florida, USA

earn a Ph.D. focusing on a topic in molecular biology. Michael is currently working on sequencing some interesting genes from *Helicosporidia* and also a chemical analysis on its cell wall. Michael is a student in the Department of Entomology and Nematology, University of Florida, Gainesville, working with Drion Boucias.

Second Place Oral Presentation

Felicity Haines (not pictured)
Oxford Brookes University, United Kingdom

Felicity Haines attends the School of Biological and Molecular Sciences, Oxford Brookes University, Gypsy Lane Campus, Oxford. Her presentation was entitled *Formation of budded virus at the plasma membrane in baculovirus-infected cells involves the localization of gp64 within lipid rafts.*

Third Place Oral Presentation

Adane Kassa.
Georg-August-Universität, Germany

Adane Kassa, was also a Microbial Control Travel Award winner (see biographical sketch and photo above) His presentation was entitled *"Mycoinsecticide for stored product pest control.*

5K RACE, RUN & WALK



.....and they're off!

Michael Brownbridge reports that there were approximately 50 participants in the annual 5K race, which took place along the shore of Lake Champlain on a beautiful sunny afternoon (the rain held off for the tent dance). No mishaps, no lost SIP'ers; altogether a great race.

1. Walkers

Women: Mary Barbercheck & Anne Hajek (tied) 40min 17s
 Men: Ted Andreadis 21min 27s

2. Women Runners (number in parentheses indicates overall finishing position, irrespective of category)



First overall woman: Lorena Passaarelli

Under-35:

- 1. Roselyn Labbe (12) 25min 22s
- 2. Ozlem Kalkar (22) 29min 31s
- 3. Charlotte Nielsen (33) 44m 52s

35-45:

- 1. Lorena Passarelli (9) 23min 41s
- 2. Bryony Bonning(14) 26min 17s
- 3. Maureen O'Callaghan (23) 30min 50s

Over 45:

- 1. Lee Solter (17) 27min 31s
- 2. Karen Toohey (26) 31min 17s
- 3. Ginger Carner (28) 36min 49s

3. Men Runners



First overall man: Tim Andreadis

Under 35:

- 1. Tim Andreadis (1) 17min 54s
- 2. Gernot Hoch (4) 21min 50s
- 3. Joerg Schirmer (6) 22min 54s

35-45:

- 1. William Meikle (2) 19min 19s
- 2. Neil Crickmore (3) 20min 27s
- 3. Rollie Clem (13) 25min 52s

Over 45:

- 1. Gerald Carner (5) 22min 25s
- 2. Michael Brownbridge (7) 23min 22s
- 3. Peter Krell (10) 23min 51s

**MINUTES OF THE GENERAL BUSINESS
MEETING, JULY 30, 2003
BURLINGTON, VERMONT, USA**

The meeting was convened by the President of SIP, Dr. Harry Kaya, in the Green Mountain Ballroom, Radisson Hotel, Burlington at 10:40 a.m. Approximately 95 members attended.

1. Minutes

The Minutes for the 2002 General Business Meeting having been published in the November 2002 Newsletter, Jean-Louis Schwartz proposed acceptance of the Minutes; the motion was seconded by Loy Volkman. The motion was carried.

2. President's Report

a) Council had approved the allocation of \$1,000 to each Division for the support of symposium speakers. Priority of access to this funding should be given to non-member invited speakers. If not used, up to \$1,000 could be rolled forward to the following year. Council also approved the allocation of \$1,000 to each Division to support student travel, with any one award not to exceed the value of the Martignoni Award (currently \$500). There is no roll-over provision for the student award funding.

Allocations to symposium organizers from the President's discretionary fund were:

Sarjeet Gill/Alejandra Bravo	\$1,000
Ted Andreadis	\$ 200
Kelli Hoover	\$ 90
Helen Roy	\$ 675
Bob Anderson	\$ 200
Paresh Shah	(not used) \$ 450

The President's discretionary fund was superseded by the allocations to Divisions for symposium speakers and no longer exists.

b) The Society for Invertebrate Pathology/Journal of Invertebrate Pathology agreement was approved by Council. The main features of the agreement are:

- JIP becomes the official publication of the Society
- The Editor-in-Chief will be chosen by Elsevier from members of the Society if possible; if not, with the approval of the Society
- Members will have a privileged subscription rate with no minimum number of subscriptions
- SIP will promote JIP to its members and the relevant scientific disciplines

- SIP will not compete in other publishing activities; it will offer the 'first right of refusal' to Elsevier and will offer Elsevier display facilities at its meetings
- Three pages in each edition will be available for the Society to promote its activities
- No royalty or compensation will be payable to the Society

c) A Student Affairs Committee will be established to provide advice to Council and organize student activities, such as a student sponsored symposium, student social night, etc. The committee will consist of a representative of each Division. The Chair of each Division was asked to nominate one student. The possibility of a non-student member to act as mentor is under consideration.

d) Two new committees were established: the Logo and History committees are chaired by Ted Andreadis and Betty Davidson, respectively. The President extended his thanks to members of all of the Society's committees.

e) The Executive Secretary's contract expires in March 2004. The President, Vice-President and Treasurer will re-negotiate the contract with Peg Rotstein. Council will be kept informed.

f) Restriction of access to the SIP website, agreed at the 2002 meeting, has not yet been implemented because of complications arising from installation of a new server at NC State University and Peg Rotstein's move to Tennessee. When restriction is implemented, the public will still have access to the front page of the newsletter, jobs, annual meeting program (no abstracts), and Division pages.

g) Some email addresses on the website are no longer correct. Members were asked to check the accuracy of their entries and to advise Peg Rotstein of any amendments required.

h) About 6-7 people were unable to obtain visas to attend the Burlington meeting. The President and Chair of the Organizing Committee were able to help some others by writing letters of support.

i) The President advised of the deaths since the previous meeting of John Briggs (USA) and Andrzej Bednarek (Poland), members of SIP, and David Kelly (UK), a former member. The meeting observed a silence in their honor.

j) The President thanked John Burand and his Organizing Committee for running the 2003 meeting, and Ann Hajek and Richard Humber for organizing the program.

3. Treasurer's Report

Suzanne Thiem advised that the details of her report would appear in the next newsletter. She noted that the Society is in good shape, despite reduced interest rates. Assets increased as the result of successful meetings, the efforts of the Endowment and Financial Support Committee, and dues, while expenses had been reduced by the employment of the Executive Secretary in place of FASEB and the acceptance of the electronic form of the newsletter. The Society's funds will be put into short-term certificates of deposit, in the hope that higher interest rates will become available.

Brian Federici voiced concern that the balance was becoming too large and that the Society was in danger of infringing IRS rules for non-profit organizations. He suggested that funds should be spent to support invited speakers. President Kaya noted that Council had allocated an additional \$10,000 for the 2004 meeting and, because of the current low interest rates, must subsidize the Martignoni Award. In addition, Council is considering increasing the Martignoni award. Mark Goettel noted that the balance had not grown as quickly as appeared because about \$25,000 of the balance was due to Endowment and Division funds that were not part of earlier balances. Members were asked to submit to Council creative ways to use the balance to promote the Society.

Jean-Louis Schwartz asked how to elicit movement on using the balance, being concerned that there might be no action until the 2004 meeting. Bob Granados commented that the Society tends to one annual burst of activity that sometimes results in 2-3 years to produce action. He asked for a mechanism to obtain action through the year. President Kaya noted that interim meetings were difficult because the Constitution forbids officers using Society funds for travel. However, email and teleconferences are options, though the latter is complicated by the members of Council living in widely different time zones. He asked Divisional chairs to gather ideas and forward them to Council members.

4. Auditor's Report

Mickey McGuire reported that the Treasurer's

Report was an accurate account of the state of the Society's finances and moved acceptance of the Treasurer's report; seconded by Stefan Jaronski. Motion carried.

5. Logo Committee

The Logo Committee has submitted a written report that will be published in the November newsletter. Ted Andreadis (chair) showed the final selection of 23 to the meeting, noting that the Committee's selections were determined by the need to reproduce the logo in black and white and in several size formats. The Committee proposed a short-list of four to be put to the entire membership for an online vote. There was discussion about how many should be short-listed for voting. Ted Andreadis agreed to go back to the Logo Committee for some additional selections. Kelli Hoover suggested that members needed to see the short listed entries in reduced format as well as black and white.

The President thanked Ted and the Committee for their efforts, which he acknowledged was a monumental amount of work.

6. Nominating Committee

Bob Granados reported that the Nominating Committee was preparing a slate of candidates for election in 2004. The Committee had accepted applications from members and sought input from Council members. He expected to finalize the slate by October 1st. Biographical details of each candidate will be published in the newsletter in 2004.

7. Meeting Reports

Iguassu 2002. The 2002 meeting attracted 352 participants from 29 countries, with more than 30% from Latin America, and realized a profit that has been passed on to the Society. Flavio Moscardi noted that the Organizing Committee was proud to be given the opportunity to organize the meeting in Brazil as a contribution to the Society.

Burlington 2003. The current meeting involved 307 participants, of whom 26 were companions and 45 were walk-ins.

Helsinki 2004. Heikki Hokkanen described the planning, facilities, and tourism opportunities for the 2004 meeting in Helsinki (1-6 August), which will be a joint Nordic effort (Finland, Norway, Sweden, Denmark and Iceland).

Mark Goettel advised that the Meetings Committee had received proposals for the 2005 meeting from Traverse City (Michigan, USA), Victoria (BC, Canada), and Anchorage (Alaska, USA). Mark extended the thanks of the Committee to the three proponents. The Committee proposed the Anchorage bid to Council, which accepted the proposal.

Kelli Hoover, who will co-chair the Anchorage Organizing Committee with Dianne Cox-Foster, described the superlative facilities of the University of Alaska campus, which will be the venue for the 2005 meeting (7-11 August).

There was some discussion around the issue of whether a meeting in Anchorage would serve the membership. Kelli Hoover advised that fisheries and invertebrate biologists from U. Alaska and the USDA will be interested in the meeting and that Alaska was seen to be an attractive destination. Mark Goettel said that the committee had looked at facilities, costs and timing. Anchorage was very favorable in terms of having the university campus with good accommodation and low accommodation costs and was better in terms of timing. The other two proposals were for the end of August when there are conflicts with resumption of schools and universities. When asked if there was any provision in the by-laws for the Meetings Committee to consult members, Mark replied in the negative. Peter Krell asked the organizers to put together an information package at an early time to assist potential participants from abroad in obtaining visas.

Mark Goettel advised that Council had accepted a bid from Wuhan, China for the 2006 meeting and that the Meetings Committee is seeking proposals for a North American venue for 2007. The Meetings Committee will seek pre-proposals to limit the effort that goes into unsuccessful bids.

The Meetings Committee has prepared a questionnaire for members that will be issued in September.

The President thanked the Meetings Committee for its efforts on behalf of the Society.

8. Division Reports

Bacterial Division. Jean-Louis Schwartz, outgoing Chair, announced that Juan Ferré was the new Chair for the Bacterial Division. Other office holders are

Christina Nielsen-Le Roux (Chair-elect), Neil Crickmore (Sec./Treasurer), Colin Berry and Mario Soberon (Members-at-Large). The Division's student prize (\$500) was awarded to Dror Avisar (University of Tel Aviv, Israel). The Division has proposed four symposia for the 2004 meeting: two for the SIP meeting and two for the companion International *Bt* Conference. The Division voted to allocate \$500 for the publication of the Proceedings of the 2003 *Pacific Rim Conference on the Biotechnology of Bacillus thuringiensis and its Environmental Impact*. There will be no change to the Division fees; Jean-Louis noted that about 25% of members contributed the voluntary \$8 for student support and hoped that this proportion would increase. The Division's website is close to completion. In his final statements as Chair of the Division, Jean-Louis thanked the Society for its provision of \$1,000 p.a. for student travel awards and the formation of the Student Affairs Committee and suggested student representation on Council.

Microbial Control. Jeff Lord, new Chair of the Division, reported that the other office holders are: Michael Brownbridge (Chair-elect), Travis Glare (Sec./Treasurer), Kerstin Jung and Melanie Filotas (Members-at-Large). The Division organized two symposia, a workshop and a short course for the Burlington meeting, as well as contributing to two invited speakers. Two student awards were allocated. The Division voted to contribute up to \$1,000 to test a new *Btk* standard, which will be provided at no cost to the Society by Terry Couch; the project will be coordinated by Travis Glare. The Microbial Control Division also allocated \$500 for the publication of the Proceedings of the 2003 *Pacific Rim Conference on the Biotechnology of Bacillus thuringiensis and its Environmental Impact*. Jeff thanked Wendy Gelernter for her work on behalf of the Division.

Microsporidia. Rudolf Wegensteiner (Chair) advised that the Division had elected Douglas Streett as a Member-at-Large. The student travel award went to D. Goertz (Germany). The Division, which currently has 60 members, organized a symposium and a workshop for the Burlington meeting and plans at least one symposium for the Helsinki meeting. The Division discussed production of a new photographic CD, which will be coordinated by Lee Solter.

Virus. John Burand (Chair) announced the election

of Robert Possee as Member-at-Large. The Division, currently 118 members, issued two student travel awards. It will consider helping organize cross Divisional symposia again next year.

Fungi. Judith Pell (Chair) reported that the Division (currently 126 members) elected Stefan Jaronski as Member-at-Large. The Division organized three symposia (one cross Divisional) in 2003 and was proposing two for 2004. The winner of the Division's first student travel award, Ernst-Jan Scholte (The Netherlands), will also be the Division's representative on the Student Affairs Committee; the Division will allocate two student travel awards next year. Committees for the Divisional website and CD have been established. The Division will submit a proposal for the sequencing of the genomes of two entomopathogenic fungi.

Nematodes. Patricia Stock (Chair) announced that Guy Belair was elected Member-at-Large and that Heather Smith will represent the Division on the Student Affairs Committee. The Division awarded its first student award in 2003. Symposia for 2004 will be developed from meetings on entomopathogenic nematodes and their bacteria (EPNBs) being held in Ohio and Israel. The Division will be promoted at these meetings and at a COST 2004 meeting. The Division is considering production of a CD or video on techniques for EPBNs.

9. Other Business.

Comments were offered from the floor. A job consortium at meetings to give students ideas of places available in the work force was proposed. It was suggested that the Society is missing out on non-infectious diseases. Lee Solter requested photographs for the newsletter and that those of student award winners should be accompanied by a short biography.

A motion to adjourn was proposed by Ted Andreadis and seconded by Peter Krell. The meeting was adjourned at 12.20 pm

Respectfully submitted

Ray Akhurst
Secretary

2003 DIVISION MINUTES

Bacteria Division

The annual business meeting of the Bacteria Division was held at the Radisson Hotel, Burlington, Vermont, USA, on July 27th, 2003 from 19h30 to 21h00, during the 36th Annual Meeting of the Society of Invertebrate Pathology (SIP). As of June 15, the Bacteria Division had 101 members (2003 calendar year). Twenty-one members attended the business meeting. Jean-Louis Schwartz chaired the meeting and Christina Nielsen-LeRoux acted as the meeting secretary. Copies of the agenda, the 2002 business meeting report, the preliminary 2002-2003 report and a financial report for the May 2002-April 2003 fiscal year were distributed to the participants.

Approvals: The 2002 and 2002-2003 reports were unanimously approved.

2003 Bacteria Division student travel award. For the second year, our division organised a student travel award competition for the SIP meeting using the general criteria set forth by the Society for the Martignoni award. Announcements were posted on both the SIP and the Burlington conference web sites. Five applications were received and evaluated by the members of the Bacteria Division Student travel award committee: Raffi Aroian (UC San Diego, USA), Jeroen Van Rie (Bayer CropScience, Belgium) and Ray Akhurst (CSIRO, Australia). Dror Avisar, a Ph.D. student at Tel Aviv University won the US\$ 500 award, which was officially given to him during the award ceremony at the SIP banquet. As requested from SIP Council at its meeting on Saturday, July 26th, 2003, all future student awards shall be given in local currency.

Elections. In 2002-2003, the officers of the Bacteria Division were: Chair: Jean-Louis Schwartz (Université de Montréal, Biotechnology Research Institute and Biocontrol Network, Montreal, Canada); Chair-Elect: Juan Ferré (University of Valencia, Spain); Secretary/Treasurer: Christina Nielsen-LeRoux (Institut Pasteur and INRA, France); Members-at-large: Colin Berry (Cardif University, UK) and Didier Lereclus (Institut Pasteur and INRA, France).

For the 2003-2005 period, three new division officers were to be elected: the Chair-Elect, the Secretary/Treasurer and one Member-at-large. Request for nominations was e-mailed to all

members in the second week of June 2003. By July 14th, a nomination list was prepared. It was posted at the SIP conference site 24 hours before the business meeting took place.

Christina Nielsen-LeRoux was elected as Chair-Elect, Neil Crickmore (University of Sussex, UK) as Secretary/Treasurer and Mario Soberón (UNAM, Cuernavaca, Mexico) as Member-at-large. The newly elected officers will join Juan Ferré, Chair, and Colin Berry, Member-at-large to run the Division in 2003-2004.

Committees. The current composition of the Bacteria Division committees and the Division's representatives on SIP's committees will remain the same as last year:

Bacteria Division Student travel award committee: Raffi Aroian, Jeroen Van Rie and Ray Akhurst

Bacteria Division Symposia committee: Alejandra Bravo, Brian Federici (UC Riverside, USA) and Trevor Jackson (AgResearch, New Zealand). In 2003-2004, the committee was involved in the preparation of symposia for the SIP 2003 meeting, based on suggestions made at the 2002 business meeting. In particular, it was proposed to invite speakers with different scientific backgrounds. It was also suggested to change the name of the VIIth International Conference on *B. thuringiensis* to VIIth International Conference on Insecticidal Bacteria. This was discussed further at the present business meeting and finally it was decided to call the next conference, which will take place in Helsinki, Finland in 2004: VIIth International Conference on *B. thuringiensis* and other bacterial pathogens.

Bacteria Division Web site committee: Jean-Louis Schwartz, Colin Berry and Neil Crickmore, along with excellent input from several other members of the Division. The design of the site is well advanced and its look is quite attractive. The site, which is not yet public, was displayed at the meeting. Further ideas are most welcome. Please contact Jean-Louis Schwartz at: jean-louis.schwartz@umontreal.ca.

SIP Student award committee: The Division is represented by Margaret Wirth (UC Riverside, USA).

SIP Fund raising financial committee: Jeroen Van Rie will represent the Bacteria Division.

Symposia and workshops

2003 Events

At the 2002 annual business meeting in Foz do Iguaçu, Brazil, the Bacteria Division proposed that the 2003 SIP meeting to organise the three symposia listed below. The events, which featured an impressive series of excellent presentations were very well attended.

New approaches for studying toxicity, infection and pathogenesis: virulence aspects (Convenors: Loy E. Volkman and Sarjeet Gill).

Mode of action of bacterial toxins (Convenors: David Ellar and Alejandra Bravo)

Mode of action of three domain Cry toxins (Convenors: David Ellar and Alejandra Bravo).

Future events

It was discussed whether our division would agree with the Society's invitation to commercial exhibitors at future meetings. The general opinion was positive.

There was a general feeling that too many concurrent sessions are held at SIP meetings. It was suggested that more time should be allotted to plenary sessions covering topics of interest for all.

It was also noted that the members of the local scientific committees for future SIP meetings should be reminded to work in close collaboration with the individual Divisions for the smooth organisation of symposia and workshops.

For the 2004 SIP meeting, the Division plans to organise the following symposia:

Second generation transgenic crops (S. Gill, convenor)

Risk assessment and non-target effects of Cry toxins in sprays and transgenic plants (B. Federici and Juan Ferré, convenors)

Genomics of B. anthracis, B. cereus, B. sphaericus and of B. thuringiensis israelensis plasmid (R. Aroian, D. Ellar and M. Adang, convenors)

New advances in research and development of insecticidal proteins produced by B. thuringiensis (J. Baum and T. Jackson, convenor).

The following symposia which were proposed at the 2002 business meeting will be considered for future SIP meetings:

*Bacterial symbiosis**Bacterial ecology, distribution and interaction with the environment* (T. Jackson)*Insecticidal bacteria in human health: vaccine enhancers and tumor killers* (J. L. Schwartz)*Infection physiology of pathogen insect interactions* (A. Bravo)*Synergism between insecticidal active factors* (M. Wirth)*Interaction and exchanges between bacteria: chromosomes and plasmids* (D. Ellar, U. Cambridge, UK)*Mode of action of insecticidal toxins* (M. Soberón)*Various mechanisms of resistance to larvicidal bacterial toxins* (J. Ferré and C. Nielsen-LeRoux)*Insect pathogen co-evolution: adaptation and resistance* (C. Nielsen-LeRoux)*Health issues related to non-specific virulence factors of bacterial insecticides* (K. Van Frankenhuyzen)

Two workshops, also suggested in 2002, are planned for the future:

Product potency evaluation: need for standards (P. Vilarinhos and D. Burges)*F.A.O. and W.H.O.: project support and vision related to application in endemic countries* (J. L. Schwartz and P. Vilarinhos).

A priority list will be established by the Bacteria Division Symposium committee based on published work and recent advances in the areas of interest.

Society's support to invited speakers and divisional programs. The Society will continue to provide \$1,000/year to each Division to support symposium and workshop speakers who would not normally come to SIP meetings. The SIP Council, at its last meeting, decided that these funds could also be used to support divisional programs. Furthermore, it was decided that unused funds could be rolled over for a second year.

Membership and membership fees. Following the approval in principle of divisional fee increase by the SIP Council at its 2002 meeting in Foz do Iguaçu, it was decided in 2002 to increase the Bacteria Division membership fee to \$10 on a voluntary basis (\$2 regular membership and an additional \$8 fee to contribute to the Division's

student travel award fund. In 2003, about one third of the members paid the increased fee. The current membership for calendar year 2003 (as of June 15) is 101 members (including 28 who generously paid the additional fee to support the Division's Student Travel Award).

Finances (as of June 15, 2003). The following data were diligently made available to the Division's Chair by Peg Rotstein:

Financial report for fiscal year 2003 (May 1, 2002 – April 31, 2003)**Revenue**

Membership dues (118 members @ \$2)	\$ 426.00
Private speaker contribution	\$1,500.00
Society speaker contribution	\$1,000.00
Total revenue	\$2,926.00

Expense

Student travel award	\$ 500.00
Support to symposium speakers	\$2,500.00
Bank service charges	\$ 20.00
Meeting expenses	\$ 180.70
Total expense	\$ 3,200.70

Net revenue \$ (274.70)

Comparative statement of fund balance

<u>4/30/2002 Fund balance</u>	<u>4/30/2003 Fund balance</u>
\$1,266.00	\$991.30

As of June 15, 2003, the following funds have been committed for the next financial period: \$500 for the Division's Student Travel Award.

Varia

Financial support to the Bt Pacific Rim conference: Ray Akhurst requested, on behalf of the conference organisers, financial support to organise the 2003 meeting in Vietnam. It was decided to give \$500 US in order to promote our division and the SIP; it is expected that the organisers will treat us as official sponsors of the conference and advertise this accordingly.

Slide bank on CD: It was discussed whether our members would be interested in sharing PowerPoint/slide illustrations with other SIP divisions to produce an updated CD like the Microbial Control Slide Atlas which was put on CD some years ago. It was generally agreed that it was

an excellent idea, one which would bring in additional funds and promote our research.

The meeting was adjourned at 21h00.

Report prepared by Christina Nielsen-LeRoux and Jean-Louis Schwartz

Fungus Division

Minutes From the Business Meeting of the Fungus Division. August 28, 2003. XXXVI Annual Meeting of the SIP, Burlington, Vermont, USA

Chair: Judith Pell (present)
Chair Elect: Jørgen Eilenberg (present)
Secretary/Treasurer: Helen Roy (present)
Member at large: Richard Humber (present)
Member at large: Pedro Neves (absent)

Welcome

The chair, Judy Pell, welcomed everyone to the Fungus Division business meeting.

Approval of minutes from last meeting

Motion: Judy moved to approve the minutes.
Seconded: Richard Humber

Chair's report (Judy Pell)

Membership of the Fungus Division rose from last year by 12 %, so this means that the Division is gradually increasing financial reserves.

The Fungus Division supported three symposia this year, one cross-divisional:

- Conservation Biocontrol* (Paresh Shah)
- Challenges of controlling acari with fungi* (Tove Steenberg)
- Host-altered behaviour: host altered or pathogen mediated* (Helen Roy)

This year the Fungus Division awarded their first student travel award to Ernst-Jan Scholte from Wageningen University. Ernst was extended a warm welcome to the Society and invited to give a short resume of his studies. He will be presenting a paper on the use of *Metarhizium* for the control of African Malarial mosquitoes.

Treasurer's report

Helen Roy presented the following financial tables:

Financial Report for Fiscal Year 2002 (May 1, 2002 – April 31, 2003)

REVENUE	
Membership Dues (126@\$2)	\$ 252.00
Speaker Contrib. From SIP	\$1,000.00
Total Revenue	\$1,252.00
EXPENSE	
Meeting speakers	\$500.00
Total Expense	\$500.00
Net Revenue	\$ 752.00

4/30/2001	4/30/2002	4/30/03
Fund Balance	Fund Balance	Fund Balance
\$374.00	\$634.00	\$1386.00

Discussion: Judy Pell: there has been some confusion over the use of the \$1000 provided by the Society this year. It was thought that this could be used for any purpose and the Fungus Division agreed at last years meeting to use \$500 for a student travel award. However, it was made clear at the SIP business meeting this year that this money was for invited symposium speakers (non-members OR members) only and not students, unless they were an invited symposium speaker. Despite this, the Society had accepted the use of the money on this occasion. SIP will be providing a further \$1000 for symposium speakers next year - this money can be carried over for one year but would be returned to the Society after that time if it was not used. The Division will also carry over \$500 from this years money making a total \$1500 potentially available for symposium speakers (Society members or non-members) next year. The \$500 not spent last year will return to the council as money can only be carried over for one fiscal year.

Richard Meadow asked whether there were any further guidelines for allocating funds to invited speakers? It was agreed that allocations would be made after discussion amongst committee members (Judy Pell) and that priority would be given to non-members, as SIP advises (Steve Wraight). Denis Burges: recommended the use of e-mail communication between committee members for circulating details of award applicants.

Judy Pell: In addition a further \$1000 has been given

for student awards, although each individual award must not exceed the Martignoni award of \$500. Ann Hajek commented that \$500 was insufficient for a student to attend the meeting and so she proposed that the Council should be asked to consider increasing the value of the Martignoni award although she understood that the Martignoni award is limited by the terms of the endowment. She suggested that the Division could propose to donate to the Martignoni Award from the Fungal Division funds and this would enhance the award and allow all other student awards to be increased. This would require discussion at SIP Council level. Jørgen Eilenberg agreed that \$500 is not sufficient funding for a student and that successful applicants need an early indication of success to gain more funding as required. Judy Pell: after discussions on travel awards both at the Council Business Meeting and at the Fungus Division meeting the situation is now clearer. It is also possible to request additional funds from Council in the event of extreme need.

Motion: John Vandenberg proposed that the Division should fund two student travel awards.

Seconded: Ann Hajek.

Vote: Majority in favour

Action: Two student awards (\$500 each) to be funded next year.

Election of a new member at large

Richard Humber has completed his term as member at large. There were three nominees for a new member at large: Charlotte Nielsen, Dave Chandler, and Stefan Jaronski. Stefan Jaronski was elected as the new member at large.

John Vandenberg thanked all the nominees and encouraged them to stand again.

Student affairs committee

SIP Council agreed to convene a student affairs committee with one student representative from each division. The purpose of this committee is to provide a mechanism for feedback from students that would help the Society to determine how students can be better served. Todd Uguine has already agreed to represent the Microbial Control Division. Ernst-Jan Scholte volunteered to represent the Fungus Division but was concerned that he would only be a student for one more year. It was agreed that most students would be in a similar position and Ernst-Jan Scholte was thanked and

welcomed as the Fungus Division student representative.

Symposia for next year's meeting

Judy Pell invited proposals for symposia for next year's meeting.

Fernando Vega: presented an idea proposed by Meredith Blackwell and himself based on a book (*Insect-Fungal Associations: Ecology and Evolution*) that they have co-edited and that will be published next year. The book has 11 chapters and a number of the authors could be invited to speak. John Vandenberg suggested that the book could be added to the recommended reading for another short course.

John Vandenberg: proposed that the Society should recognise fungal diseases of non-insect invertebrates and to this end recommended that some of the \$1000 be used to entice scientists from the Baltic region to speak in a symposium on non-insect invertebrate pathogens (e.g. fungi of sponges, fungi of nematodes...). Richard Humber agreed that Scandinavia is home to research on crayfish disease and this could be included. Judy Pell suggested that the symposium could be cross-divisional by expanding it to cover more pathogens.

Richard Humber: with reference to the previous proposal, suggested that the division could have a "Worm-turning" symposium – nematodes attacked by fungi (these are mainly studied by Europeans).

John Vandenberg: Genomics of arthropod pathogenic fungi would make an excellent symposium and support the genome initiative of Ray St. Leger (see below).

Steve Wright commented that speakers new to the Society should not be placed into a symposium on their own or the symposium should not be too specific otherwise the speakers end up talking to themselves! Members need to attend these symposia.

Judy Pell: all the ideas are great – further proposals should be submitted to Judy as soon as possible so they can then be circulated to the committee, including the past chair, for a decision on which ones go forward this year.

Action: Submission of symposium ideas to the Chair.

Website

Discussion: There has been little progress since last years meeting. Judy Pell and Helen Roy circulated a short questionnaire by e-mail prior to the meeting. Members of the Fungus Division should complete this and return it to Helen Roy as soon as possible.

Steve Wraight: Have there been any discussions about information which should be for members only? John Vandenberg: The Council is considering the idea of having member only sites. Paresh Shah: Is there any standardisation of sites across SIP? John Vandenberg: No

Judy Pell: proposed to form a website committee to look into all these aspects and establish a fungus web page.

Committee: Helen Roy (no web expertise but willing to collate information), Paresh Shah, Stefan Jaronski (has web expertise)

Action: Members of the website committee will come up with a timetable of targets and keep the Chair informed of progress.

Dues and fundraising

Last year we had lengthy discussions on whether or not to raise dues. This year it was agreed to leave the dues at their existing level.

Discussion: Judy Pell: suggestion of producing a CD-ROM of images. Richard Meadow: Images should be categorised as host insects or systematically. Stefan Jaronski: Instructional material for people new to the area would be useful. John Vandenberg: This is contained within recent techniques books. Stefan Jaronski: A pictorial guide would be a useful addition. Mark Goettel: Requested images are sent digitised. Judy Pell: Resolution level should be standardised. Charlotte Nielsen: Images should be accompanied by sufficient information to make the images useful. Paresh Shah: A provisional outline already exists from a few years ago. Richard Meadow: Aim to have the CD-ROM available for next year's meeting. Paresh Shah: Aim to have an outline that members can review at next years meeting. Judy Pell: A few Division members should form a committee to develop these ideas.

Committee: Mark Goettel, Stefan Jaronski, Richard Humber, Jørgen Eilenberg

Action: Members of the CD-ROM committee will

come up with a timetable of targets and keep the Chair informed of progress.

Sequencing Fungal Genomes (Ray St Leger)

Ray St Leger has drafted a proposal to get the genomes of *Metarhizium anisopliae* and *Beauveria bassiana* sequenced within the 2002 Fungal Genome Initiative. He described this proposal; The 2002 Fungal Genome initiative is soliciting for new proposals of fungi to sequence. It would be useful to have two entomopathogenic fungi sequenced so genes can be compared. Two closely related species would also enable assessment of recent divergence. The genomes of Zygomycetes are larger than the Mitosporic fungi and so five mitosporic fungi could be sequenced for every Zygomycete. Cornell University should hold the information because of the huge bioinformatics capability there. The Whitehead Institute could do the sequencing and they are likely to be interested because of the comparative aspect of insect and plant pathogenic fungi. It was proposed that the Fungus Division submit the proposal developed by Ray and others within the Division. Supporting letters should be submitted with the proposal to increase its chances of being accepted. The cover letter should come from the Division Chair. The proposal with letters should be completed within two months.

Discussion: Don Roberts: Who would fund the project? Ray St Leger: Many agencies involved – we would take our proposals to these to get sufficient funds to get at least two genomes then progress from there. Paresh Shah: Which isolates? Ray St Leger: Some consider isolates important – genomes only vary by a few percent – so it doesn't really matter. We should choose well known strains such as GHA for *Beauveria bassiana*. John Vandenberg: Is it possible to use GHA in this way? Stefan Jaronski: It should be but Stefan will confirm this. Ray St Leger: A letter of support should be provided from Mycotech. Don Roberts: *Metarhizium* ARSEF 2575 (a lot is known about this isolate) and *Beauveria* GHA or ARSEF 252 are ideal - but we should perhaps use an isolate that doesn't have a commercial attachment.

Motion (Ray St Leger): The Fungus Division will support the genome initiative to sequence M. anisopliae and B. bassiana with an overall aim of undergoing a comprehensive study to sequence more genomes subsequently. Ray St Leger will lead the project with help from a committee of Division

members.

Seconded: John Vandenberg

Vote: Unanimous agreement.

Committee: Ray St Leger (Chair). Steve Reyner, Alice Churchill, John Vandenberg, Don Roberts, Stefan Jaronski, Richard Humber, Judy Pell (Division representative)

Action: Develop the proposal and supportive letters. All such letters should be addressed to the Division Chair, Judy Pell

Motion (Richard Humber): Adjourn meeting

Seconded: Richard Meadow.

Minutes respectfully submitted by Helen Roy
26th August 2003

Microbial Control
27 July 2003, Radisson Hotel
Burlington, Vermont USA

Chair Wendy Gelernter called the meeting to order at 8.06 pm. All officers were present. A motion to dispense with the reading of the 2002 minutes and accept them as written was made by Denis Burges, seconded by Terry Couch. The vote was unanimous in favour of the motion.

**Financial Report for Fiscal Year 2002 (May 1,
2001 – April 31, 2002)**

Income	
Slide Atlas CDs	\$ 815.00
Interest earned	\$ 176.42
Meeting speakers transfer	\$1,000.00
Membership Dues	\$ 414.00
Total Income	\$5,704.64
Expense	
Awards	\$1,000.00
Meeting speakers	\$ 860.00
Postage & delivery	\$ 283.00
Total Expense	\$2,143.00
Net Income	\$ 262.42

Investments: Comparative Statement of Fund Balance

4/30/2001	4/30/2002	4/30/2003
\$6,116.00	\$7,959.27	\$8,221.69

Secretary Maureen O'Callaghan read the financial report. The total balance of the MCD account at 4/30/2003 is \$8,221.69. The MCD funds were in a Certificate of Deposit account, which matured in April 2003, and the funds were cashed into the SIP bank account. Currently, returns on CDs are very low, so the MCD funds are being held in the SIP money market account until interest rates rise. There was general consensus that, should interest rates increase to over 3%, approximately \$5000 could be reinvested in CDs.

Membership: Current Membership for Calendar Year 2003 is 207, in comparison with 210 last year.

Student Travel Awards: The MCD received five high quality applications for the \$500 student travel awards. The recipients of the awards were Adane Kassa, Institute for Plant Pathology and Plant Protection, Goettingen, Germany, and Reju D'Cunha, University of Greenwich, UK.

MCD Symposia and Workshops: The MCD organised two symposia and one workshop at the Burlington conference. The first symposium "*Is big always better? Scale of production for microbial pesticides*" was convened by Wendy Gelernter and Lerry Lacey. The second symposium "*Microbial Control of Social Insects*" was convened and chaired by Maureen O'Callaghan. The MCD supported attendance of two invited speakers: Becky Rosengaus, Boston University, who contributed to the social insect symposium; and Sheena Cotter, CSIRO, who presented at a cross division symposium "*Host mediated behaviour: Host mediated or pathogen induced*". There was also a workshop organised by Jeff Lord on "*Microbial control products: What's in the pipeline?*". There were seven presentations from industry representatives. All symposia were well attended.

Elections and Officers for MCD: Elections were held for positions of Vice Chair Elect, Secretary Treasurer and one Member at Large. Michael Brownbridge, University of Vermont, USA, was elected Vice Chair; Travis Glare, AgResearch, New Zealand was elected as Secretary/Treasurer; and Melanie Filotas, Cornell University, USA, was elected Member at Large. Jeff Lord has succeeded Wendy Gelernter as Chair, and Travis Glare takes over secretarial duties from Maureen O'Callaghan. Member at large Kerstin Jung continues to serve for another year.

2004 Symposium and Workshop: Wendy Gelernter called for suggestions for symposia and workshops to be convened by MCD at the 2004 meeting, which will be held in Helsinki, Finland. Another workshop on new microbial control products was suggested, with short presentations by industry representatives, as has been done in previous years. Trevor Jackson proposed a joint symposium with the Virology Division on the Oryctes virus, which would commemorate the discovery of the virus 40 years ago. Suzanne Thiem from the Virology Division would be co-organiser and Alois Huger has indicated his willingness to participate in the Symposium. There was general consensus that the division should support this symposium.

Other suggestions included "Sustainable Agriculture and Microbial Control" and Michael Brownbridge suggested a symposium/workshop on tools/techniques useful in public education, working with growers etc. Further suggestions of topics and potential speakers for the symposia should be passed on to Michael Brownbridge (Michael.Brownbridge@uvm.edu), while suggestions for the workshop should be sent to Jeff Lord (lord@gmprc.ksu.edu).

Report on SIP Council Meeting: Wendy Gelernter reported briefly on some matters from the SIP Council meeting of relevance to the MCD. The \$1000 allocated to MCD from the Council to support speakers will be continued. In addition MCD will receive an additional \$1000 to be used for student travel awards. The Council decided to set up a Student Affairs Committee to better address the needs for students. The division selected Todd Uguine as its representative on this committee.

Fundraising: The need for further fund raising to support student awards and speakers was discussed and suggestions called for. Vince D'Amico volunteered his time to process slides for a new collection on CD, should the decision be taken to pursue this as a fund-raising option. Volunteers Vince D'Amico, Trevor Jackson, Richard Humber, Juergen Langewald and Rosalind James will explore this option and have plans in place by the end of the year. There is a need for this group to communicate our plans to other divisions.

Directory of Microbial Control: There have been many requests for an updated version of the

Directory. It was suggested that companies be approached to put links to their websites in the directory. It was decided that this topic would be revisited next year.

Short course: Michael Brownbridge and Mark Goettel organized another short course in insect pathology, which was run in conjunction with the Burlington SIP meeting. This course was open to all meeting attendees, with the cost of the required text(s) as the only charge.

Funding request: A request for funding was made by the organising committee of the "5th Pacific Rim Conference on the Biotechnology of *Bt* and its environmental impact". This meeting is to be held in Hanoi, Vietnam, in November 2003. A vote was taken and the decision was made to provide \$500, towards the conference Proceedings.

***Bt* standard:** Denis Burges presented a proposal that the MCD support the establishment of a new standard for *Btk*, as supplies of the current standard are almost exhausted. Terry Couch, Becker Microbials, has offered to supply 25 kg of HD1-like strain. There is an offer from Joel Siegel to act as curator of the standard, subject to permission from USDA. Ralf-Udo Ehlers said that a European COST initiative is also considering the need for a *Btk* standard and may be able to participate. Travis Glare is to coordinate the project and will attempt to find researchers and laboratories willing to perform bioassays to establish the new standard. A group of interested researchers was formed, including Ralf-Udo Ehlers, Terry Couch, Antoine Bonhomme, Larry Gringorten and Denis Burges. Other members who would like to be involved can contact Travis at travis.glare@agresearch.co.nz. A commercial company can be used to conduct bioassays if other laboratories cannot be found. Wendy Gelernter proposed that Travis and the committee be given authority to spend up to \$1000 to support the production and standardisation of the *Bt* powder. Seconded by Vince D'Amico. The motion was passed.

The meeting was adjourned at 10 pm.
Maureen O'Callaghan, Secretary-Treasurer
Secretary-Treasurer

Microsporidia Division



The business meeting was called to order by Division Chair Rudolf Wegensteiner at 8:30PM 28 July 2003 with 22 people present.

Old Business. The minutes of the 2002 Division Business Meeting, published in the November 2002 SIP Newsletter 35(3), were unanimously accepted. The Division has 56 members with an account balance of US\$2,217 on 30 April 2002.

New Business. The 2002 Workshop presentations, "Techniques in Microsporidia Research," are posted on the SIP website at http://www.sipweb.org/Microsporidia/Microsporidia_Techniques.pdf

A similar educational initiative, spearheaded by the Society, is for each Division to create CDs containing informational and teaching materials using a standard format such as PowerPoint. There was interest among Division members for production of a CD on microsporidia; Lee Solter volunteered to coordinate production.

Student Travel Award. One \$500 Student Travel Award was presented in 2003 to Dörte Goertz of Germany following review by the selection committee comprised of Lee Solter, Jimmy Becnel, Ted Andreadis. James Harper also reminded the Division of the ESA Norm Dubois Scholarship Fund of \$1500/year donated by Valent Corp. Due to the lack of competition and limited interest in student awards the Division agreed that Newsletter promotion of the Division award and the Scholarship Fund might increase interest among students.

Symposia. The 2003 Division Symposium, organized and convened by Ted Andreadis, was entitled "Evolutionary strategies and adaptations for survival among microsporidian parasites in aquatic

ecosystems" and presented by Alison Dunn, Sandra Lass, Steven Kohler, and Ted Andreadis. The Society provided financial support for two of the speakers at \$500 each. Discussion regarding Society's contribution of \$1000 for Division Symposium speakers emphasized the importance of the two-year carryover limit. The Society funds provided the Division for invited speakers; funds unused within two years are returned to the Society general fund. The recent loss of \$2000 of unused Division Speaker Funds was discussed in the context of planning the 2004 Division Symposium. The following topics were suggested: 1) a cross-divisional Symposium with the Fungus Division to compare morphological and molecular relationships between fungi and microsporidia; 2) quality control of beneficial insects; 3) history of microsporidia research. No decision was made and Division members are continuing to solicit ideas.

Workshop. The Division 2003 Workshop, organized and convened by the Vice-chair Gernot Hoch after the business meeting, included an oral presentation by Charles Vossbrinck entitled "Molecular phylogeny and the classification of Microsporida" followed by lively discussion.

Election of Officers. Doug Street was nominated and elected as the Division's new Member-at-large.

The business meeting was adjourned at 9:10PM.

Leah Bauer, Secretary

Nematode Division

2003 Minutes of Business Meeting

July 28, 2003, 6:45-7:10 p.m.

The Meeting was called to order by Patricia Stock, the Division's Chair. Fifteen people attended the meeting.

Executives: Chair: S. Patricia Stock, Chair elect: Parwinder Grewal, Secretary/Treasurer: Mary Barbercheck, Members-at-large: Robin Stuart and Heikki Hokkanen.

Student travel award: During FY02, P. Stock developed the guidelines for the student travel award contest. The guidelines were submitted for consideration to the Division's officers and members and were posted on the Society's website during the announcement of the past meeting.

For the first time, the Nematode Division granted a student travel award (\$250) to Corrie Yoder for her poster presentation entitled “*Evasive behavior of white grub species against entomopathogenic nematodes*”. Corrie is pursuing a Master’s degree in entomology under Dr. P. S. Grewal at The Ohio State University.

3. Symposia for 2003: The Division sponsored two symposia during the past meeting: 1) Genomics of Entomopathogenic Nematode-Bacteria Complexes, and 2) You are what you eat: multitrophism in invertebrate pathology systems (Cross Division Symposium). The Division was able to provide partial financial support to two of the invited speakers.

Nematode Division Membership Global Distribution Survey: P. Stock provided a summary of the geographic distribution of the Division’s members and highlighted the need to increase geographic representation of members from Central and South America and Africa. Strategies will be searched to increased membership from underrepresented countries.

Student Affairs Committee: Upon request of the executive Board, the Division proposed Heather Smith, graduate student at the Dept. of Entomology and Nematology, University of Florida, Gainesville, FL, to become the Nematode Division representative for the Student Affairs Committee for 2003-2004.

Division’s Website: P. Stock encouraged the use of the Division’s website as a source for communication, and dissemination of information related to EPN-EPB research. The website is available for job postings, and course/workshop announcements, as well as for the establishment of links to Division members’ personal websites. Members interested in posting information through the Nematode Division Website should e-mail Patricia Stock (spstock@ag.arizona.edu)

Election of new officers: The officers assembled the slate of candidates for the renewal of one Member-at large office. Members of the Division present during the meeting elected Guy Belair (Agriculture and Agri-Food, Canada) as the new Member-at-large representative for 2003-2005. Congratulations Guy!

2004 Student Travel Award: To promote student participation to our next meeting in Helsinki, Finland, the Division will consider increasing

number of awards to two.

2004 Symposia/workshops: It was agreed that topics for the Helsinki meeting will be suggested and discussed by e-mail upon request of the Division’s Chair. Also, and taking into account the diverse and numerous participation of colleagues in the upcoming Third International Conference of Entomopathogenic Nematodes in Wooster Ohio, next September, 2003, symposia/workshops topics will be discussed during this meeting.

The meeting was closed at 7.10 PM.

Respectfully submitted,

S. Patricia Stock, Chair

Virus Division

Minutes of the Virus Division Business Meeting XXXVI Annual Meeting of SIP, Burlington, Vermont - Sunday, July 26, 2003



Opening: The Virus Division Business Meeting was attended by 35 people. The meeting was chaired by the Virus Division Chair John Burand.

One nomination (Bob Possee, UK) was received by the Chair for the position of Member-At-Large.

Chair’s Report:

Summary of Virus Division activity at the Burlington meeting

Founder Honoree and Founder Lecturer are from the Virus Division. The Plenary Session and a joint symposium are sponsored in conjunction with the Bacteria Division.

2 Division symposia

2 cross-division symposia

35 contributed papers of which are 7 student papers

29 posters 4 of which are student posters

Summary of Virus Division activity in the past year

Symposium speakers: The Society gives each division \$1000/ yr for Symposium speakers that are not members of the Society. If not used that year it can carry over one year.

This year we spent \$800 for two speakers.

Student Travel awards: Two years ago we voted to increase division dues in order to sponsor more student travel awards. This year three awards were offered; however, one student could not attend the meeting. This year's winners are: Clair Nixon and Serafin Gutiérrez. Three nominations went forward to the *Martignoni Student Travel Award* competition.

Membership: The increase in dues went into effect this year. We have 116 dues paying members, up from 107 in July 2002, with a high of 138 as of 7/23/01; 25 members paying \$3 (20 of these are members paying on the old payment structure, 5 are students under the new structure), 91 members paying \$10 (regular membership under new structure)

Financial Report for Fiscal Year 2003 (May 1, 2002 – April 30, 2003)

Revenue	
Membership Dues	\$ 985.00
SIP Speaker Funds	\$1,000.00
Total Revenue	\$1,985.00
Expenses	
Meeting Speakers	\$1,000.00
Student Travel Award	\$ 200.00
Total Expenses	\$1,200.00
Net Income	\$ 785.00
Fund Balance 4-30-2002	\$1,321.00
Fund Balance 4-30-2003	\$2,106.00

The Financial information was provided by the SIP Treasurer, Suzanne Thiem, and the Executive Director, Peg Rotstein.

The reports of the Chair and Secretary/Treasurer were approved.

Items for Discussion

Symposium/Workshop Titles:

Suggested Symposium & Workshop Titles for 2003/Symposium & Workshops held in 2003:

1. Tritrophic Interactions/*You Are What You Eat: Multitropism in Invertebrate Pathology Systems*
2. Baculovirus Genomics and Evolution/*Baculovirus Genomics*
3. Virus-Host Interactions/*Pathogen-Midgut Interactions*
4. Resistance Mechanisms to Virus Infection/*Insect Resistance Mechanisms to Viruses: Beyond the Midgut*

Suggested Symposium & Workshop Titles Carried forward from 2002

1. Viruses of Aquatic Invertebrates
2. Cell Culture: Serial Passage Effects and Virus Production
3. Virus Ecology
4. Field Performance of Insect Viruses
5. Invertebrate Virus Proteomics
6. Invertebrate Virus Genomics
7. Emerging Diseases of Invertebrates
8. Insect Genomics [Future]
9. Genomic Analysis Methodology – Workshop

The following list of potential Symposia titles was established by suggestions from the floor. Several subjects were consolidated, others were changed from virus symposia to cross-divisional and new virus and cross-divisional subjects were proposed. The topics were organized into ecological and molecular categories, and an equal balance of Symposia topics from these categories would be included in the 2004 SIP meeting. The order of topics reflects the outcome of voting for preference for inclusion in the 2004 program. The items listed as number 1 received the most votes; topics 2 received the 2nd highest number of votes etc. within each category.

Ecological Focus

1. Case Studies of Biocontrol Agents, include Oryctes (cross-divisional)
2. Virus Ecology
3. Viruses of Aquatic Invertebrates

Molecular Focus

1. Role of Native Immune System/Molecular Host Response (cross-divisional)
2. Entomopathogen Proteomics/Genomics (cross-divisional)

3. Entomopox vs. Vertebrate Pox Viruses, Comparative Pathology, genomics, etc.
4. Insect Genomics and Proteomics (cross-divisional)
5. Cell Culture: Serial Passage Effects and Virus Production

If the first rated topics in each category listed as potential cross-divisional are selected as such for the 2004 meeting the item listed below will be the topic for the Virus Division symposia (total of 2). A total of four cross-divisional Symposia were held in the 2003 meeting.

The topic below was selected for the 2004 Workshop to be held after the Virus Division Meeting:

1. Genomic Analysis Methodology – Workshop

Election of Officers

One nomination (Bob Possee) was received by the Chair for the position of Member-at-Large. Bob was unanimously elected.

New Business

Trevor Jackson (conveyed by John Burand):

It is now 40 years since the Oryctes virus was discovered by Alois Huger in Malaysia which makes it a good time to mark the anniversary with a symposium at the meeting. Regina Kleespies and I have discussed the idea with Alois who is prepared to participate in the meeting. I think it would be a good opportunity to review work with Oryctes over the years and draw in some of the SE Asian workers to the society.

Nominations for Officers:

The following positions will voted on at the 2004 meeting:

- Member at Large
- Secretary/Treasurer
- Vice-Chair/Chair Elect

All Virus Division members are encouraged to send nominations for these positions to John Burand.

Adjournment

Peter Krell moved to adjourn the meeting, the motion was seconded by Just Vlak, and the meeting was adjourned by the Chair.

*Submitted by Jim Slavicek
Virus Division Secretary/Treasurer
August 28, 2003.*

ANNUAL REPORTS

President's Address and Report 2003



SIP President Harry Kaya

The first year of my presidency of the Society has been most rewarding. I have made a number of appointments and re-appointments to various standing committees and these individuals have worked diligently on behalf of the Society (see the SIP web page <http://www.sipweb.org/newsletterx.cfm> for the composition of the committees). In addition to the standing committees, I have appointed Elizabeth Davidson as chair of the History Committee. The charge of this committee is to bring together the rich history of the Society (formation of SIP, former officers, fellows, Founder's Lecturer and Honoree, student award winners, meeting sites, etc.) from the various sources and have it available on the website. I have appointed Ted Andreadis as chair of the Logo Committee, which had over 100 logos submitted for consideration. This committee, composed of representatives from each of the Divisions along with Margaret "Peg" Rotstein, Executive Secretary, had some interesting and challenging times to reduce the number of logos to eight for the membership to consider. Voting for the logo by the membership via the website is to be completed by December 1, 2003.

The Council agreed to continue to provide \$1000 to each of the six Divisions for general program symposium for the Helsinki meeting in 2004. This

is the Council's continuing effort to assist symposia speakers within the Divisions to defray their meeting cost. In addition to the Division support for the Burlington meeting, the Council also agreed to provide \$1000 to support a symposium organized by Bob Anderson on pathology of non-insect invertebrates. In conjunction with the divisional symposia for the Burlington meeting, the Council approved a one time discretionary fund of \$3000 for the President to support non-member speakers who are involved in cross-divisional symposia. Accordingly, I dispersed a total of \$2665 to support symposia speakers for the Burlington meeting.

Council has also voted to support student travel to the Helsinki meeting. Each Division will receive \$1000 to support student travel. All the travel funds must be used by the Divisions for that meeting, and the travel award by the Division should not exceed the amount of the Mauro E. Martignoni Student Travel Award.

The Society has supported the first, second, and third place winners of the Best Student Oral Presentation and the Best Poster Presentation for many years. Since 2001, the Martignoni Student Travel Award has been provided to an outstanding student. These students are recognized at the banquet and are awarded a monetary sum. After the Foz Do Iguassu meeting, student winners were sent a letter from the President and a certificate, designed by Steve Wraight's wife, Sandy, for their achievements. The students appreciate the monetary award, and the certificate and letter will provide a written documentation of their accomplishments. We have continued this effort and hope that it will become a tradition in the future. This is not the first effort by the Society as a whole because the Bacteria Division, as far as I am aware, was first to provide a certificate to their student travel award winner.

With respect to the Mauro E. Martignoni Student Travel Award, Mrs. Marie Louise (LU) Martignoni and her sons have contributed another \$2000 (\$1000 for 2002 and \$1000 for 2003) to this fund. I quote two sentences from LU in her letter to me. "Since you have been so gracious about our family's input into the MEM Student Travel Award..., we thought of instead of waiting for Mauro's B-day in October, we would send our contribution for this year, prior to the Annual Meeting. "SIP meant a lot to Mauro." On behalf of SIP, I thank the Martignoni family for their continued, generous support of the MEM

Student Travel Award.

Between 1968 and 1987, the Society was linked with the Journal of Invertebrate Pathology (JIP) and this statement "Published under the Auspices of the Society for Invertebrate Pathology" appeared on its cover. Since the journal's inception in 1959 to 2001 (first as the Journal of Insect Pathology and then from 1965 onward as the Journal of Invertebrate Pathology), Academic Press has been the publisher of JIP. In 2002, Elsevier took over publication of JIP. At the Foz do Iguassu meeting in Brazil in August, 2002, Dr. Andrew Richford of Elsevier was most receptive to re-establishing a link with SIP and JIP. In March 2003, Andy Richfield, Brian Federici (Editor-in-Chief of JIP), and I met in San Diego, California at the US headquarters of Elsevier and agreed that re-establishing a relationship between the Society and JIP was mutually beneficial. In June, 2003, I received a formal agreement from Elsevier which covers a number of issues. The main provisions of the agreement are as follows:

1. SIP will be associated with JIP and that JIP is the official publication of the Society.
2. The notice "Published under the Auspices of the Society for Invertebrate Pathology" will be printed on the cover of JIP, and "Founding Editor: Edward A. Steinhaus" will be maintained.
3. The Publisher (Elsevier) shall select as Editor-in-Chief of JIP an individual who is a full member of the Society, unless no such individual is suitable and available, in which case the Publisher shall select a non-member in consultation with the Society.
4. A privileged Individual Member Subscription rate shall be established by the Publisher. For 2004, the print subscription rate for Individual member Subscriptions to JIP will be \$90.00 US worldwide. Thereafter, the print subscription rate shall be determined annually by the Publisher who will notify the Society of the new Individual member Subscription rates before the end of the preceding year. There will be no minimum number of subscriptions by members to get this reduced rate for JIP.
5. The Society will promote the JIP to its members and the relevant scientific discipline.
6. The Society agrees that it will not directly or indirectly be involved in any other publishing activities that compete with or otherwise negatively affect the commercial opportunities of the Publisher with respect to JIP or Sponsor,

publish nor affiliate itself with any other scientific journal or other regularly distributed scientific publication or information service in the same or related field. (This clause does not affect publication of occasional papers such as that of the commercial companies by the Microbial Control Division or the reduced subscription rate for Biocontrol Science and Technology.)

7. The Society agrees to provide Publisher, free of charge, with display facilities for JIP and related products at meetings, conferences, or exhibitions which may be organized by the Society.
8. The Society may use three text pages within each issue of JIP to promote its own activities. This material shall also appear on the JIP web page. The copy of the material to be published shall be provided to the Publisher and shall be subject to acceptance by the Editor-in-Chief of JIP.
9. No royalty or other compensation shall be payable to the Society under this Agreement.

Council has agreed to the provisions of the agreement. I have signed the agreement and it, in turn, has been signed by Dr. Jasna Markovac, Senior Vice President and Chief Operating Officer, Science and Technology Division of Elsevier. The agreement will be effective on January 1, 2004 and will be renewed automatically for one-year periods. The agreement can be terminated by a written notice of cancellation sent by either party by registered mail to the other party at least 6 months prior to the expiration of the relevant term.

The linkage between SIP and JIP is due to efforts of many individuals. David Onstad's Publication Committee made significant contributions toward this goal. A major player was Bob Anderson who served as a catalyst at the Iguassu meeting. Elsevier, and in particular, Andy Richford, has been most helpful, and Brian Federici has always been a positive influence. Thank you all for assisting in this effort.

We are saddened by the deaths of three individuals who were affiliated with SIP during the past year. Dr. John Briggs passed away in November, 2002, Dr. Andreij Bedarnek passed away in July 2003, and Dr. David Kelly died on July 18, 2003. Dr Briggs was a founding member of SIP, served as President from 1972-1974, and was active in the Society even

after retirement. Dr. Bedarnek was a member of the Nematode Division and attended some of our meetings. Dr. David Kelly was a former member who worked on insect viruses.

Finally, on behalf of the Society, I thank the organizers for putting together the Burlington Meeting. For those who have previously been involved with organizing a meeting, you know the Herculean effort that is required. John Burand and his Local Arrangement Committee members have done a tremendous job of organizing the meeting. Rich Humber and Ann Hajek, co-chairs of the Program Committee, have spent many hours putting the program together. And I thank the Division Chairs and the organizers of symposia for their efforts in selecting topics and speakers. Wendy Gelernter's Endowment and Financial Support Committee did an excellent job of obtaining corporate support for this meeting.

Harry K. Kaya
President

Treasurer's Report

The Society's financial statements for the fiscal year ending April 30, 2003 are shown in Exhibits A (assets sheet), B (revenue and expenses), C (board designated funds), and D (accompanying notes). At the end of the fiscal year the majority of our assets were held in a money market account. Three CDs matured during this period but were not immediately reinvested in CDs as interest rates were at record lows, 1.3% and 1.8%, for one and two year maturing instruments respectively (Exhibit D, note 3). Total interest earned for the fiscal year was \$ 5,609 down approximately \$1,300 from last fiscal year.

Society revenues for the fiscal year were \$63,723 and expenses totaled \$51,153 (Exhibit B). Net revenue was \$12,027, down by approximately \$4,700. The reduction in revenues can be attributed in part to reductions in income from membership dues, which totaled \$16,584, down from \$18,715 for last year, and income from interest, which declined from \$6,913 to \$5,609. However contributions showed a healthy increase of over \$4000 compared to last year and net profit from the Iguassu Falls Meeting is estimated at over \$18,000. In general, expenses continued their downward trend from previous years, dropping approximately \$4,000 from

last year, including a decline in Newsletter expenses of a little over \$1000 compared to last year. Expenses included \$6,000 meeting program support for Divisions (\$1000 each) and \$3,860 in meeting support distributed at the discretion of the President.

The activities of Board Designated Funds (Divisions, Endowment, and Martignoni Funds) are shown in Exhibit C.

Overall, the fiscal health of the Society is excellent (Exhibit A). Our total assets are \$228,167, up from \$191,958 last year. However the Society is facing some fiscal challenges. Profits from the Annual Meetings continue to be a major source of revenue. However, memberships and the resulting revenue from this source are on a downward trend. As reported last year, revenue from dues alone is sufficient to cover only about one third of the Society's operating expenses. Due to the slowdown in the economy, returns on Society investments are also declining. Rates on CDs are at record lows and interest returns on the money market account are minimal. In recent years, our annual revenues have

been sufficient to cover operations and generate a small profit. This is due largely to a combination of operational savings and generous profits from the Annual Meeting. As long as these trends continue our fiscal state will remain healthy. However, a substantial portion of annual revenue, approximately 10%, is from interest on our investments. The Society has built a sizable nest-egg, but because these funds are in a low interest earning money market account, we will face a serious shortfall in interest income next year. Interest rates on CDs remain extremely low, 1.16 and 1.65% on one and two-year instruments, respectively. To remain profitable and to better fulfill the missions of the Society, such as greater support for student participation, we need to make our assets grow. In my view, the Society would be best served by initiating a less conservative investment strategy for at least a portion of our assets.

Respectfully submitted,

Suzanne M. Thiem
Treasurer

Exhibit A: Fund Balances: 4/30/02 and 4/30-03

	4/30/02 Fund Balance	4/30/03 Fund Balance
General and Administrative	\$ 165,684.74	\$ 169,643.36
Virology	\$ 1,321.00	\$ 2,109.00
Bacteria	\$ 1,266.00	\$ 991.30
Microsporidia	\$ 1,953.00	\$ 2,217.00
Microbial Control	\$ 7,959.27	\$ 8,221.69
Fungi	\$ 634.00	\$ 1,384.00
Nematode	\$ 1,134.00	\$ 2,337.00
Endowment	\$ 8,924.93	\$ 9,231.70
Martignoni	\$ 9,643.00	\$ 12,182.02
Chris Lomer Memorial	\$ 1,466.00	\$ 3,682.70
TOTAL	\$ 199,985.94	\$ 211,999.77

SOCIETY FOR INVERTEBRATE PATHOLOGY **COMPARATIVE STATEMENT OF FINANCIAL POSITION** **FOR PERIODS ENDED MAY 1, THROUGH APRIL 30, 2003 AND 2002**

ASSETS	2002	2003
Cash Merrill Lynch - EMA	\$ 70,253.00	\$ 141,999.77
Accrued Interest Receivable	\$ 1,507.00	\$ 972.00
Funds Receivable	\$ 4,000.00	\$ 18,294.57
Funds Payable	\$ (12,184.42)	\$ (3,476.38)
Certificates of Deposit	\$ 128,382.00	\$ 70,377.00
TOTAL ASSETS	\$ 191,957.58	\$ 228,166.96

EXHIBIT B: INVERTEBRATE PATHOLOGY COMPARATIVE STATEMENT OF ACTIVITY FOR PERIODS ENDED MAY 1 THROUGH APRIL 30, 2003

<u>REVENUE</u>	2003 Activity		Total 2003	Total 2002
	General Fund	Board Designated Funds (Sched. 1)		
Slide Atlas Sales	\$ 120.00	\$ 815.00	\$ 935.00	\$ 1,974.22
Proceedings Sales	\$ 12.00	\$ -	\$ 12.00	\$ 12.00
Membership Dues	\$ 14,025.00	\$ 2,559.00	\$ 16,584.00	\$ 18,715.00
Annual Meeting Income (2002)	\$ 14,096.00		\$ 14,096.00	
Annual Meeting Income (2003)	\$ 500.00	\$ -	\$ 500.00	\$ 16,927.00
Meeting Speakers	\$ -	\$ 6,000.00	\$ 6,000.00	\$ 11,261.00
Contributions	\$ 1,569.00	\$ 6,478.70	\$ 8,047.70	\$ 3,981.00
Interest	\$ 4,739.28	\$ 870.21	\$ 5,609.49	\$ 6,913.26
Publication Handling Fees	\$ 159.00	\$ -	\$ 159.00	\$ 192.00
JIP Subscriptions collected	11,237.38	\$ -	\$ 11,237.38	\$ 12,184.42
Short Course Profit	\$ -	\$ -	\$ -	\$ 44.41
Miscellaneous		\$ -	\$ -	\$ -
TOTAL REVENUE	\$ 46,457.66	\$ 16,722.91	\$ 63,180.57	\$ 72,218.31
<u>EXPENSE</u>				
Postage and Delivery	\$ 191.87	\$ 283.00	\$ 474.87	\$ 270.56
Newsletter - Printing, Mailing (incl. meeting abstracts), and Supplies	\$ 5,155.83	\$ -	\$ 5,155.83	\$ 6,171.37
Supplies and Duplicating	\$ 2,023.49	\$ -	\$ 2,023.49	\$ 326.75
JIP Subscriptions paid out	\$ 7,761.00	\$ -	\$ 7,761.00	\$ 13,134.00
Office Equipment	\$ -	\$ -	\$ -	\$ 322.65
Accounting Services	\$ 2,131.25	\$ -	\$ 2,131.25	\$ 500.00
Internet Services	\$ 135.00	\$ -	\$ 135.00	\$ -
Secretariat (Peg's Salary)	\$ 8,712.00	\$ -	\$ 8,712.00	\$ 9,372.00
Telephone	\$ 436.79	\$ -	\$ 436.79	\$ 796.54
Mail Box Rental	\$ 174.00	\$ -	\$ 174.00	\$ 174.00
Awards*	\$ 2,528.29	\$ 4,100.00	\$ 6,628.29	\$ 7,763.71
Credit Card Charges	\$ 1,083.52	\$ -	\$ 1,083.52	\$ 1,096.89
Bank Account Fees	\$ 196.00	\$ 20.00	\$ 216.00	\$ 173.83
Speakers at Meeting	\$ 6,000.00	\$ 3,860.00	\$ 9,860.00	\$ 14,992.00
Martignoni Fund Donation	\$ -	\$ -	\$ -	\$ 200.00
Slide Atlas Expense	\$ -	\$ -	\$ -	\$ 146.95
Seed Money for Vermont Meeting	\$ 6,000.00	\$ -	\$ 6,000.00	\$ -
Meeting Expenses	\$ -	\$ 180.70	\$ 180.70	\$ -
Federal and State Taxes	\$ 180.00	\$ -	\$ 180.00	\$ -
TOTAL EXPENSE	\$ 42,709.04	\$ 8,443.70	\$ 51,152.74	\$ 55,445.25
Net Revenue Before Fund Transfers	\$ 3,748.62	\$ 8,279.21	\$ 12,027.83	\$ 16,773.06
Endowment Fund Transfer	\$ 210.00	\$ (210.00)	\$ -	\$ -

Net Revenue After Fund Transfers	\$ 3,958.62	\$ 8,069.21	\$ 12,027.83	\$ 21,394.39
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EXHIBIT C**Society for Invertebrate Pathology****Board Designated Fund Revenue & Expense for Period May 1, 2002-April 30, 2003, Schedule 1**

	Virology	Bacteria	Micro- sporidia	Microbial Control	Fungi	Nematode	Endow- ment	Martignoni Fund	Chris Lomer Fund	Total
REVENUE										
Membership										
Dues	\$ 998.00	\$ 428.00	\$ 264.00	\$ 416.00	\$ 250.00	\$ 203.00				\$2,559.00
Contributions		\$1,500.00					\$ 193.00	\$2,569.00	\$2,216.70	\$6,478.70
Speaker										
Contrib. from										
SIP fund	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00				\$6,000.00
Short Course										
at Annual										
Meeting										\$ -
Slide Atlas										
CDs				\$ 815.00						\$ 815.00
Interest										
Income				\$ 176.42			\$ 323.77	\$ 370.02		\$ 870.21
Total Revenue	\$1,998.00	\$2,928.00	\$1,264.00	\$2,407.42	\$1,250.00	\$1,203.00	\$ 516.77	\$2,939.02	\$2,216.70	\$16,722.91

EXPENSE

Travel Awards	\$ 200.00	\$2,000.00	\$ 500.00	\$1,000.00				\$ 400.00		\$ 4,100.00
Short Course										
Manuals										\$ -
Slide Atlas CD										
Costs										\$ -
Meeting										
Expenses		\$ 180.70								\$ 180.70
Meeting										
Speakers	\$1,000.00	\$1,000.00	\$ 500.00	\$ 860.00	\$ 500.00					\$3,860.00
Postage				\$ 283.00						\$ 283.00
Bank Service										
Charges		\$ 20.00								\$ 20.00
Total Expense	\$1,200.00	\$3,200.70	\$1,000.00	\$2,143.00	\$ 500.00	\$ -	\$ -	\$ 400.00	\$ -	\$8,443.70

**Net Revenue
Before Fund**

Transfers	\$ 798.00	\$ (272.70)	\$ 264.00	\$ 264.42	\$ 750.00	1,203.00	\$ 516.77	\$2,539.02	\$ 2,216.70	\$8,279.21
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Fund

Transfers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	(210.00)	\$ -	\$ -	\$ (210.00)
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**Net Revenue
After Fund**

Transfers	\$ 798.00	\$ (272.70)	\$ 264.00	\$ 264.42	\$ 750.00	1,203.00	\$ 306.77	\$2,539.02	\$2,216.70	\$8,069.21
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EXHIBIT D

Note 1: Membership Dues (previous; current)	2002	2003
Full Member (516@\$30; 437@\$30)	\$ 15,480.00	\$ 13,110.00
Student Member (106@\$15; 61@\$15)	\$ 1,590.00	\$ 915.00
Microsporidia (53@\$2; 12@\$2, 48@\$5)	\$ 106.00	\$ 264.00
Virology (133@\$3, 1@\$2; 26@\$3, 92@\$10)	\$ 401.00	\$ 998.00
Bacteria (\$118@\$2; 74@\$2, 28@\$10)	\$ 236.00	\$ 428.00
Microbial Control (250@\$2; 208@\$2)	\$ 500.00	\$ 416.00
Fungi (130@\$2; 125@\$2)	\$ 260.00	\$ 250.00
Nematode (71@\$2; 9@\$2, 37@\$5)	\$ 142.00	\$ 203.00
TOTAL	\$ 18,715.00	\$ 16,584.00

Note 2: Interest and Investments

Investments owned by SIP

	CD PROVIDIAN N.B. TILTO	TOTAL
Society Operations:		
Cost	\$ 70,000.00	\$ 70,000.00
Maturity Date	7/11/03	
Interest Rate	4.65%	
TOTAL VALUE	\$ 70,000.00	\$ 70,000.00

Note 3: CD detail

2002 CD Name	2002	Interest	Purpose	Date Liquidated
CD PROVIDIAN N.B. TILTO*	\$ 70,000.00	\$ 3,255.00	Society Operations	-
CD COLE TAYLOR BANK**	\$ 44,000.00	\$ 1,188.00	Society Operations/ Microbial Control	4/10/03
CD IBJ WHITEHALL BK & T**	\$ 8,000.00	\$ 312.00	Martignoni Fund	7/11/02
CD FIRST FEDERAL SVGS**	\$ 7,000.00	\$ 273.00	Endowment Fund	7/11/02
	\$129,000.00	\$ 5,028.00		

*year one interest on a 2 year CD acquired 07/02/01

**CD's cashed into SIP bank account and not reinvested into new CDs

Audit of the Treasurer's Report for Fiscal Year 2002-2003

The Treasurer's report appears to be accurate and in order. The Society is in relatively good shape financially and the total assets continue to climb (\$191,958 last year to \$228,167 this year). The increase in assets continues to be derived from strong profits from the annual meetings and, as long as this continues, the Society will be secure financially. However, general membership dues declined from \$17,070 in 2002 to \$14,025 in 2003, an 18% decrease and, due to decreased interest rates, interest decreased 15% from \$5,609 in 2002 to \$4,739 in 2003. On the positive side, Newsletter costs, thanks to Lee Solter, continue to decline (\$6,171 in 2002 to \$5,155 in 2003) and some meeting costs were reduced. Overall, the Society had a net revenue of \$12,027 in FY 2003 compared with \$16,773 in FY 2002 and \$21,394 in FY 2001. However, the 2003 net revenue does not reflect accounts payable and accounts receivable (Treasurer's Exhibit A) that reflects a profit from Brazil of over \$18,000 and JIP subscriptions of \$3476 that were not billed in FY 2003. These funds should be reflected in the FY 2004 report.

A push should be continued to attract new members, both student and full, for the health of the Society as well as for the health of the profession. Members seem to be retiring faster than they are being replaced.

We strongly encourage the Council and Treasurer to consider conservative alternatives to money market and CD placement of Society reserves. Interest rates are at historic lows and are not projected to increase any time soon.

In summary, as long as the annual meetings continue to provide ample profits to be returned to the Society General Fund, the Society for Invertebrate Pathology should remain fiscally strong.

Audit Committee

Michael R. McGuire and Mary Barbercheck



2003 SIP Council

First row (from left): Ray Akhurst, Just Vlak, Harry Kaya, Jim Harper, Suzanne Thiem; Second row: Judy Pell, Rudolf Wegensteiner, Basil Arif, Wendy Gerlernter, Jean-Louis Schwartz, Alejandra Bravo, Trevor Jackson and John Vandenberg

Secretary's Report

Doreen Winstanley, as outgoing Secretary, compiled the Minutes for the 2002 SIP Council Meeting and the General Business Meeting.

The only actions for the Secretary in this year have been compiling annual reports from the office holders, Committees and Division, distributing them to the members of Council and organising the Council Meeting and General Business Meeting.

Ray Akhurst, Secretary

Executive Secretary Report

In the past year, I have continued my regular duties as executive secretary including printing and mailing newsletters, corresponding with members, maintaining the membership database and maintaining SIP's bank accounts with the

supervision of our treasurer, Suzanne Thiem. In addition to these duties, I also maintain the website for the Society.

Last summer I spent several days training at our accountant's office to use our new accounting software (QuickBooks). This software has helped greatly in keeping track of the increasing complexity of SIP accounts, including 6 divisions, annual meetings and 3 investment funds. Due to this complexity, I propose the Society consider moving some of the major funds, including Endowment and Martignoni fund into sub accounts. I also propose the Microbial Control Division reinvest in a separate CD rather than join with the SIP fund in a CD investment as had been done in the past. Both actions will make accounting much easier for the Society.

Late last year, the Society acquired a VISA account that allows us to issue credit cards to the Executive Secretary or meeting organizers if necessary. The VISA card has been extremely useful and efficient for minor purchases and bill paying. Use of the credit card has eliminated the need for a petty cash account.

Last year I proposed that we limit certain areas of the SIP website to members only. The council approved this idea and I have been working to program the website to efficiently handle members' logins. The original plan was to implement the new security features in March of 2003 but time limitations and new server technology at our internet service provider has delayed the implementation. I hope to have this finished by the end of the summer.

As a personal note, my husband and I have had several new and exciting developments in our lives. We recently moved to Knoxville, Tennessee where my husband took a job as assistant professor as a veterinary pathologist at University of Tennessee. I will continue my full time job working remotely from Knoxville for NC State University and the Center for Integrated Pest Management as an Internet application specialist. We are expecting the arrival of twin boys this October. Since I plan to continue my role as executive secretary with SIP after the birth, I have "trained" my husband and mother to help me maintain the contact with the membership and send out newsletters.

This is the final year of my 6-year executive secretary contract starting in 1998 with SIP. The contract will end March 31, 2004. I hope to continue my position with SIP in the future and look forward to renegotiating my contract for continued service.

I continue to encourage members to communicate with me via e-mail at sip@sipweb.org. I am open to all suggestions and complaints and look forward to serving SIP for another year.

*Respectfully submitted,
Margaret "Peg" Rotstein
Executive Secretary, SIP*

2002 SIP Newsletter Report

Three issues of the Newsletter comprising a total of 90 pages were produced in 2002-2003 year. In addition to Newsletter text, 1 supplement comprising 8 pages was printed. The supplement consisted of the registration forms for the Vermont meetings. Meeting announcements, SIP meeting registration, position announcements and other information of a timely nature was also posted on the SIP Website.

Text was prepared in Urbana, Illinois and printed in Raleigh, North Carolina. Newsletters were mailed to U.S. members using the U.S. Postal Service and to other countries using Deutsche Post Global Mail.

The Newsletter is available on the Society's website as downloadable Adobe PDF files. Approximately 66% of members chose only to receive online copies of the Newsletter.

Dr. Vince D'Amico, USDA Forest Service and Dr. Gernot Hoch, Universität für Bodenkultur, Vienna, Austria have graciously agreed to serve as assistant editors, providing assistance with editing and formatting of text and photographs.

We are grateful to all members who contributed material to the Newsletter this year, particularly photographs, and encourage all members to send news of interest to the Society. Special thanks to

	November 2002	Feb. 2003	June 2003
	Vol 35(3) 44 pp.	Vol 36(1) 20 pp	Vol 36(2) 24 pp.
Printing	\$ 770.09	869.94	251.74
Printing taxes	53.91	60.90	0.00 ^b
US Mailing	141.18	352.00	55.00
Int'l Mailing	434.00	232.50	147.25
Subtotal	1,399.18	1,515.34	453.99

Newsletter Financial Report, July, 2003

Total cost of Newsletter (3 issues): \$3,368.51

Cost per member based on 511 members: \$6.59

Peg Rotstein for final layout, printing, collating and mailing.

Respectfully submitted,

Leellen Solter, Editor

Vince D'Amico, Assistant Editor

Gernot Hoch, Assistant Editor

COMMITTEE REPORTS

Meetings Committee Report

The 35th Annual Meetings were held in Iguassu Falls, Brazil, August 18-23, 2002. More than 350 persons attended and 163 contributions were presented as posters, 112 as submitted oral presentations and 103 invited presentations within symposia. The Committee is very grateful to Drs Flavio Moscardi and Bonifacio Magalhaes and their teams for the organization of an excellent meeting both scientifically and socially. All participants enjoyed the Brazilian hospitality, the good weather and the wonderful falls.

The Committee communicated frequently with the Organizing Committee of the 36th Annual Meeting, Burlington, VT and is expecting a very successful meeting at another interesting venue. This brings us to yet another format, with the meetings commencing on a Saturday evening and ending on a Wednesday evening. Further details can be found in Dr. Burand's report to Council

In early January, 2003, the Committee

recommended to Council that the 2004 meetings be held in Helsinki under the chairmanship of Dr. Heikki Hokkanen. Council accepted this proposal and the Helsinki meetings are scheduled for 1 - 6 August. Further details can be found in Dr. Hokkanen's report to Council.

The Committee received 3 proposals to host the 38th Annual Meetings in 2005. The proposed sites were Traverse City, Michigan, Victoria, BC, Canada and Anchorage, Alaska. The Committee had a very difficult time in deciding the venue, as all 3 were excellent proposals. The Committee is recommending to Council the Anchorage venue (see Appendix 1). Anchorage won out based on concerns over dates, venue and housing costs. All of these concerns were relatively minor in nature, but they were enough to tip the balance towards Anchorage. The Committee was unanimous in its view that the other proposed venues would be excellent and invite the organizing committees of these proposals to resubmit their proposals to host the 2007 meetings.

At Iguassu, Council approved the recommendation by the Committee that Professor Ziniu Yu and his colleagues host the 2006 Meetings at Wuhan, China. Council approved China as the meeting venue, but requested that Professor Yu consider an alternate site and report back in due course, as some members of Council felt that the Wuhan weather may not be most suitable during August

The Committee has the intention to maintain an international spread of future meetings, alternating venues between Northern America and other parts of the world. The Committee is awaiting offers for the 2007 Annual Meeting and beyond. The approved and tentative sites for SIP Meetings through 2004 are as follows:

- 2004² Helsinki, Finland (approved)
- 2005 Anchorage, Alaska (recommended)
- 2006^{1,2} China (approved)
- 2007 North America, open

¹ International Colloquium

² International Conference on *Bacillus thuringiensis*

After having had a set format of annual meetings for many years, the Society has experimented a

little with different formats in the last few years. The Committee felt that it was time to find out from our members how they feel about these changes. Should the format of our meetings change to meet the present and future demands of the membership? Consequently the Committee has prepared a questionnaire which will be made available on-line shortly after the end of the Burlington meetings (Appendix 2).

Members of the Committee are Brian Federici , Mark Goettel (Chair), Lerry Lacey and Flavio Moscardi.

Respectfully submitted.
Mark Goettel, Chair

2003 Membership Committee Report

Composition of SIP Membership: There are 511 current members worldwide (see table below) representing approximately 50 countries (as of June 20, 2003). We have maintained our base support but with little growth (505 members in 2002). Approximately 50% of the members are from North America (US, Canada and Mexico). Membership numbers remain low for Eastern Europe, Central and South America and the Middle East/Africa regions (see attached graph). There are currently 6 Divisions within the SIP and these remain very popular with the membership (see table below) with many members belonging to several divisions. The largest division is Microbial Control followed by Fungi, Virus, Bacteria, Microsporidia and Nematode.

GENERAL MEMBERSHIP 2003

<u>Category</u>	<u>Number</u>
Emeritus	28
Endowed Member	7
Full Member	416
Honorary	11
<u>Student Member</u>	<u>49</u>
Total	511

Activities during 2002/2003:

Membership renewal information was sent out with the November Newsletter. A reminder form was sent with the February Newsletter and an e-mail reminder was sent in February.

Most members who have cancelled their memberships, reported that they either no longer work in the area of invertebrate pathology, or have retired.

Suggested activities for 2003/2004:

Continue to promote the online renewal and joining option. This has been very successful with 271 members or 53% selecting the online option in 2003 (42% renewed or joined online 2002).

Submit articles or information about the society (purpose, benefits and activities) to suitable outlets and promote SIP web site by advertising on related sites and mailing lists.

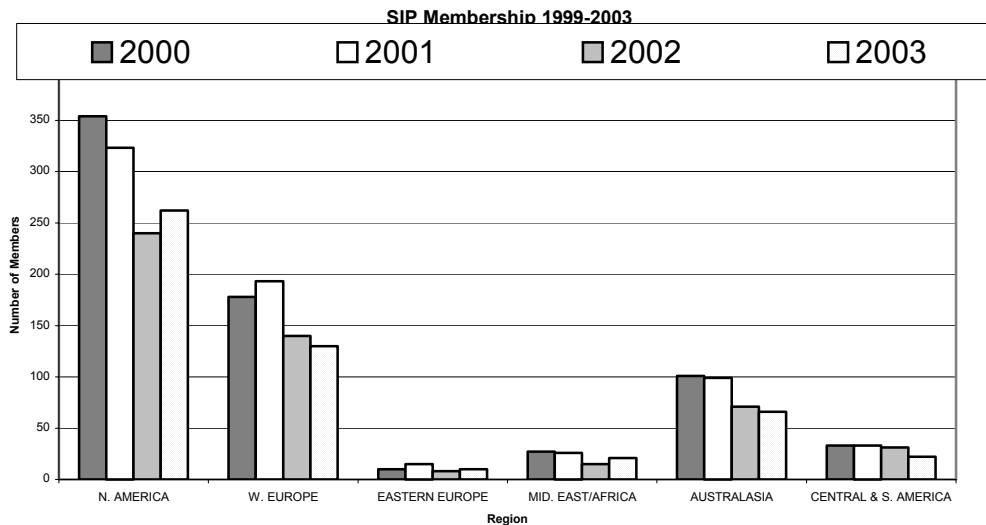
Expand and refine the membership portion of the SIP web site.

The Membership Committee: The Membership Committee for 2002/2003 consists of Yasuhisa Kunimi, Robert Anderson, Paresh Shah, Kerstin Jung and James Becnel.

James Becnel, Chair

DIVISION MEMBERSHIP 2003

<u>Division</u>	<u>Number of Members</u>
Microsporidia	56
Microbial Control	200
Bacteria	88
Virus	102
Fungus	112
Nematode	46



SIP Endowment and Financial Support Committee 2003 Report

I. General: The committee has added one new member, Jeroen vanRie (Bayer Bioscience). Other members include Mike Dimock (Certi), Pat O’Leary (Cotton, Inc.), Juerg Huber (BBA) and Treasurer Suzanne Thiem who serves in an advisory capacity.

Status of corporate fund-raising, endowment and memorial funds: 2001 – 2003:

	2001	2002	2003
Corporate donations	13,000	8,650	9,650
Endowment	8,432	8,925	9,232
Martignoni	8,048	9,643	12,182
Lomer Memorial	----	1,466	3,683

II. Corporate donations: \$9650 has been pledged by the companies below for support of the 2003 meetings. As of 8/14/03, \$8650 has been received so far.

- With the agrichemical consolidating and shrinking, attempts were made to broaden our fund-raising efforts to other types of organizations. We were successful in attracting two publishers to our list of donors this year; both publishers will take advantage of our offer to exhibit and distribute sales literature at tables that will be set up at registration. In the future, we need to expand the list of donors further.

- Coordination of fund-raising efforts among the Meeting Organizer, SIP Divisions and the Endowment and Financial Support Committee continued to improve. This was the second year in which the Committee has attempted to serve as a focal point for coordination of these efforts, and it is worthwhile to again review the successes/failures of this new approach at the Council meeting.

III. Memorial Fund: As currently constructed, only the interest generated by the Lomer Memorial Fund can be used to support awards. At current rates of interest, the Fund requires a balance of at least \$5,000 before even a small award (\$200) can be considered. A fund-raising drive, with a goal of surpassing this amount, has been scheduled for late 2003. A deadline of summer, 2005 should be considered for re-evaluation of the fund’s status. If the principal has not reached the level where significant interest income can be generated, it is recommended that the fund begin to disperse travel awards using the principal.

IV. Endowment and Martignoni Funds: A combination of healthy principal amounts, interest and voluntary contributions by SIP members keep these funds in healthy operating shape. However, because the Martignoni Fund generated only \$370 in interest during 2002/03, it was necessary for SIP to supplement this amount to make up the \$500 student travel award.

We need to continue to make it as easy as possible for members to donate funds (via the yearly dues renewal form and SIP website), but otherwise, no changes to current procedures are recommended.

Both funds have been earning minimal interest in money market accounts since 7/02. It is recommended that all but \$500 of each fund be invested in 6 month CDs to take advantage of higher interest.

V. Recommendations for 2003/2004

- SIP should consider integrating a modest trade show (for vendors donating a minimum amounts, such as \$750) into the annual meeting format. This would involve setting aside an area (preferably near the registration table or poster area) where vendors could display products or literature. The income could help to supplement the decreasing revenues obtained from agricultural sponsors.
- To make accounting easier, a sub-account or separate account for the Memorial Fund should be considered. An annual charge of us up to \$50 would be worth the expense if tracking of interest, contributions and fund status could be made easier in this way.
- Memorial Fund monies should be placed in a 6 month CD to take advantage of higher interest rates.
- Endowment and Martignoni Fund monies should be reinvested in CDs or other short term funds to take advantage of higher interest rates. Approximately \$500 of each fund should remain in the money market fund to allow flexibility in awarding funds in 2004.
- If the principal of the Memorial Fund has not reached the level where significant interest income can be generated by summer, 2005, consider a re-evaluation of the fund's strategy, including the possibility of dispersing travel awards using the principal.

Respectfully submitted,

Wendy Gelernter

SIP Awards and Student Contest Committee Reports

Endowed Memberships

The endowment fund of the Society for Invertebrate Pathology is used to pay the annual membership dues of scientists and students working in the fields of insect pathology or microbial biocontrol who lack sufficient resources to be self-supporting members

of SIP. Endowed members usually come from countries with struggling economies and work at research institutions with limited financial support; however, endowed memberships are also granted to scientists from more developed nations in special cases where financial constraints preclude membership or currency exchange issues are a factor. Usually the interest on the endowment is sufficient to pay the dues for up to 12 persons per year. Endowment support is not granted for a specified number of years; however, support has generally been provided for up to 5 years.

Identification of eligible individuals has been a persistent problem with this program, and the current official list of endowed members includes only 7 individuals. All of these members have been endowed for at least 4 years. Maintaining contact with the endowed members remains another difficult challenge, and we are now requesting that endowed members provide email addresses.

Recent calls for nominations for endowed memberships have produced many more responses than we have seen in the past, and 12 new members will be selected for 2004.

Mauro Martignoni Student Travel Award

The second annual Mauro Martignoni Student Travel Award was presented to Li Tan of China. Li received his B.S. in microbiology from Shandong University in Jinan, China and M.S. in entomology from the Shanghai Institute of Entomology, Academia Sinica of Shanghai, China. Li competed for the Martignoni Award as a PhD student with Professor Parwinder Grewal in the Department of Entomology of The Ohio State University in Wooster, Ohio. His dissertation research focused on elucidation of virulence mechanisms of the rhabditid nematode *Phasmarhabditis hermaphrodita* and its associated bacterium *Moraxella osloensis* to the grey garden slug. In these studies, Li discovered that the bacterium is the main pathogenic component of the nematode/bacterium complex and that this pathogen is vectored into the mantle cavity of the slug by the nematode. Mr. Tan was honored at the annual banquet with a certificate and cash award of \$500.

Student Presentation Awards

Students contributed many outstanding presentations at the VIIIth International Colloquium on Invertebrate Pathology and Microbial Control, 18–23 August, 2002, Foz do Iguaçu, Brazil. The award

winner were selected from among 34 poster and 20 paper presentations. The first, second, and third place winners received certificates and cash awards of \$350, \$250 and \$150, respectively

Respectfully submitted on behalf of the Awards and Student Contest Committee

Bryony Bonning
Andreas Linde
Nguya Maniania
Stephen Wraight, Chair

Founders' Lecture Committee Report

The members of the Founders' Lecture Committee are Professor Max Bergoin [France], Dr. David Ellar [United Kingdom], Dr. John Vandenberg [United States of America] and Professor Dudley Pinnock [Australia] (Chair).

The Committee was convened during the Society's 2002 meeting, where an overview of past Founders' Honorees and Lecturers was presented by the Chair. The Committee then deliberated on candidates for future Founders' Lecturers and Honorees.

The Committee's unanimous recommendation was that, in recognition of their outstanding service to invertebrate pathology, Dr. Robert Granados be invited to be the Society's 2003 Founders' Lecturer and the late Dr. Lois Miller to be the Honoree.

On his return to Adelaide, the Chairman, on behalf of the Committee, sent a formal letter of invitation to Dr. Granados. It is a pleasure to report that the invitation was accepted. On receipt of Dr. Granados' acceptance, the Chairman telephoned Dr. Granados to advise on the general format of the Lecture. Brief biographies of Dr. Granados and Dr. Miller were requested to be sent to Dr. Lee Solter in early 2003 for publication in the Society's Newsletter.

It is anticipated that Dr. Granados will deliver the Society's 2003 Founders' Lecture in honour of Dr. Miller during the Opening Plenary Session of the Burlington meeting, and that the 2003 Founders' Lecturer and Honoree certificates will be awarded on the evening of the banquet.

The Committee wishes to express its sincere thanks to Dr. Jim Harper for arranging the production of the

certificates on behalf of the Society.

As is the usual practice, the Founders' Lecture Committee will convene during the Society's Burlington meeting to consider and recommend the Founders' Lecturer and Honoree for the 2004 meeting and beyond.

Submitted on behalf of the Founders' Lecture Committee,

Professor Dudley Pinnock, Chair

Publications Committee Report

The Committee evaluated and prepared proposals for reestablishing a formal relationship between the Society and the Journal of Invertebrate Pathology owned and published by Elsevier. A final draft proposal was submitted to the Council for consideration and submission to Elsevier in early 2003.

David Onstad, Chair

MEMBER NEWS

Our executive secretary, Peg Rotstein, and husband Dave are the proud parents of twin boys, Eric and Nathan, born October 7, 2003. Congratulations to the Rotstein family!!

OBITUARIES

Dr. Raimon Beard

Dr. Raimon (Ray) Beard, one of the original members of this Society, and for almost 40 years an entomologist with The Connecticut Agricultural Experiment Station, died at age 91 at Heron Point, Chestertown, Maryland.

Dr. Beard was born in Longmont, Colorado on April 7, 1912. After graduating from high school in Longmont, he attended Antioch College, earned his



Dr. Raimon (Ray) Beard
1912- 2003

BA (Phi Beta Kappa) from Wesleyan University, and received his Ph.D. from Yale University in 1939.

Dr. Beard began his career at The Connecticut Agricultural Experiment Station as a part-time Junior Laboratory Technician in 1934 while he was a graduate student at Yale University. He joined the Experiment Station full-time in 1939. He published more than 93 scientific papers, mostly single authored, on a wide range of entomological research topics – ecology, biological control, host plant resistance, chemical control, insecticide resistance, physiology, and pathology. Ray was notable in that although usually concerned with basic research, he freely undertook problems with applied entomology when called upon.

An early and continuing interest in biological control produced papers on tachinid parasites of the common squash bug, *Anasa tristis*, and milky spore disease of the Japanese beetle. He published his classic study on milky disease of Japanese beetle larvae in 1945 as a 78 page Connecticut Agricultural Experiment Station Bulletin #491. His laboratory and field experiments with this disease were legion and included such important issues as mode of infection, course of disease, pathogenicity, susceptibility, spore potency, transmission, vertical distribution of spores in soil, and effect of this pathogen on field populations of the beetle. Later

publications by Dr. Beard reported two milky diseases and a previously unnamed coccidian parasite of Australian Scarabaeidae. Jaroslav Weiser and Beard described this parasite in Volume 1 of the Journal of Insect Pathology. With his colleague Dennis Dunbar, he reported increased resistance of Japanese and oriental beetle larvae to *Bacillus popilliae* in 1975.

In the early 1950's he shifted his research to insect physiology and the effects of hymenopterous venom of parasites on their insect hosts. Ray was one of the pioneers concerned with resistance to pesticides and this developed in later years into population studies of closed systems. In the mid 1960's, Ray published three papers in the Journal of Invertebrate Pathology on mycotoxins of *Aspergillus* and their effects on the pathogenesis in insects. Anticipating problems with persistent pesticides for control of termites, he was a pioneer in experimenting with bait blocks and pre-baiting for termite control.

His work with insect venoms was recognized by requests for contributory chapters in texts and the Annual Review of Entomology. In 1946 he was seconded for a year to the National Research Council in Washington. In 1954-55 he did research in Australia under a Fulbright Senior Research Grant, and in 1966 had an assignment with the International Atomic Energy Agency in Thailand. He served on the WHO Expert Advisory Panel on Insecticides from 1962-1972.

Dr. Beard was a member of the Governing Board of the Entomological Society of America. He was one of the founders of the Connecticut Entomological Society, serving as President and Editor of its memoirs. He was a member of numerous scientific societies, but his wide ranging interests also made him active in local and statewide botanical and historical societies and land trusts. Beekeeper, house builder, printer, musical instrument maker, Ray was predeceased by his wife, Frances Clark Beard, of 54 years and is survived by two daughters, Mary B. Deming of Fullerton, California and Carol B. Ireland of Hockessin, Delaware, and four granddaughters.

John F. Anderson and Stephen W. Hitchcock
Department of Entomology
The Connecticut Agricultural Experiment
Station, New Haven, Connecticut



**Professor. Andrzej Bednarek
1948-2003**

After a long struggle with an incurable disease, Prof. Andrzej Bednarek passed away in Warsaw on 22 June, 2003. He was a scientific member of the Department of Zoology, Chair of Biology of Animal Environment, Faculty of Animal Sciences, Warsaw Agricultural University. Prof. Bednarek was born on 28 April, 1948 in Poznan. In the years 1967-72 he studied Biology at Adam Mickiewicz University in Poznan where he received his MBS. During his studies he was a very active member of the Student Scientific Movement and in the League for Nature Preservation.

Under scientific guidance of Prof. Dr. Henryk Sandner, in 1982 he defended his doctorate thesis entitled: "Effect of internal environment of *Neoaplectana carpocapsae* Weiser (Rhabditida) on the formation of the nematode-host arrangement". In 1991, on the basis of his thesis "Ecological conditioning of biological activity of entomophilic nematodes in the soil environment of agrocenoses" he was conferred a title of a habilitated doctor. He had scientific training in the USA (Rutgers University, New Jersey), Holland (Institute of Plant Protection, Wageningen) and in the former USSR (All-Union Institute of Biological Methods in Kiszyniów).

In his research he dealt with problems of biology and ecology of insecticidal nematodes and research aiming at practical application of biological and

integrated methods in agricultural and horticultural practice. Lately, he worked on putting into practice the Bio-Plus technology attempting to eliminate insecticides in the protection of vegetables cultivated under cover and substituting them with biological methods. For his scientific and research work Prof. Bednarek received prizes from the Secretary of State in the Ministry of Higher Education and Science in 1987 and in 2002. He was rewarded with a honorary distinction "For the merit of Warsaw Agricultural University". He was the author of 47 original scientific papers, 43 popular scientific articles, 9 books and textbooks.

Prof. Bednarek was a member of many scientific societies and organizations, such as the Polish Entomological Society, Polish Ecological Society, Polish Parasitological Society, International Organization of Biological Control, and the Society for Invertebrate Pathology. He was in contact with various scientific centres in Poland and abroad - Institute of Ecology of the Polish Academy of Sciences at Dziekanów, Institute of Agricultural Environment Protection of the Agricultural University in Krakow, Department of Animal Ecology in Szczecin, Department of Applied Ecology at the Tennessee University (USA), Institute of Plant Protection in Wageningen (Holland), Institute of Czech Academy of Sciences in Ceske Budjowice and Ecology Department of the Ostrava University (the Czech Republic), Institute of Zoology, Belorussian Academy of Sciences in Minsk (Belorussia) and Institute of Parasitology, Academy of Sciences in Moscow (Russia).

Prof. Andrzej Bednarek performed didactic work in three Faculties of the Warsaw Agricultural University. He was a scientific adviser for MBS and PhD students. He worked out programmes of studies for such subjects as Ecology, Agricultural Ecology and Polish Fauna. He actively participated in the field of biological methods of plant protection and ecological agriculture.

Prof. Andrzej Bednarek was a patient teacher, openminded, initiative, hard working, cheerful, sincere, with a great sense of humour, always willing to help others. He will be sadly missed by his friends, students and colleagues. He is survived by his wife and an only son, Peter.

*Prof Aleksandra Hartwig
Warsaw Agricultural University*



Dr. Adrian Gillespie
1956-2003

It is with great sorrow that we report the early death of Dr Adrian Gillespie at the age of 46. He was well known both for his work in the 1980s on insect pathogenic fungi at the Glasshouse Crops Research Institute (GCRI), Littlehampton, UK - now Horticulture Research International - and later until he died for his biocontrol projects at Chr. Hansen's BIO-Systems, Denmark

Born and raised in Teignmouth, on the idyllic south coast of Devon, England, Adrian attended Teignmouth Grammar School, 1968 – 1975. He then graduated in Keith Charnley's group in Applied Biology at the University of Bath, 1979.

With a grant for 1979 – 1982, Adrian became a PhD student at the GCRI under the supervision of Denis Burges and Richard Hall, linked with John Manners' group at Southampton University. His PhD investigated the potential of fungi to control the glasshouse leafhopper, *Hauptidia maroccana*, and the onion thrips, *Thrips tabaci*. These studies were extended to include the rice brown planthopper, *Nilaparvata lugens*. As a result of his PhD studies he developed a great interest in the microbial control of pests, using fungi, that became the basis of a highly productive career.

From 1983 – 1984 Adrian moved to industry to work as a researcher for Dunlop in Birmingham,

UK, being project executive for the development of *Bacillus thuringiensis* subsp. *israelensis* for mosquito control – a valuable extension of his experience. It included bioassays, field trials, product registration and formulation, as well as the development of controlled release formulations of chemical pesticides and pheromones.

He rejoined GCRI in January 1985 on a European Union funded post that enabled him to resume work on his favoured topic, entomopathogenic fungi. He soon took up a permanent job on the core staff and enthusiastically joined our group policy of applying for as many grants as possible. This enabled him to lead research on the use of *Verticillium lecanii* to control aphids on glasshouse chrysanthemums and whiteflies on both cucumbers and tomatoes, the potential of fungi to control the black vine weevil, *Otiorynchus sulcatus*, EU funded research on the use of fungi to control jassids and delphacids on rice in S. E. Asia (with Nigel Hywel Jones), and a WHO research project on control agents of mosquitoes. During this time he also co-supervised three PhD students: on fungal control of vine weevil (student Ed Moorhouse, supervised with Keith Charnley at Bath), strain development in *V. lecanii* (student David Chandler, with Jim Heale at Kings College London) and interactions between entomopathogenic fungi and rice pests (student Jaime Jimenez, from Colombia). Adrian also worked with Jaime (by then a PhD) on an investigation of the potential of fungi to control the coffee berry borer, *Hypothenemus hampei*, funded by the Colombian Coffee Growers Association.

The philosophy at the GCRI was to look for pest problems in environments amenable to the use of fungi, to run practical trials and to back these up with fundamental studies to investigate difficult aspects. Adrian showed great ingenuity in devising new methods and approaches, always a strong point in later years. Denis spent many happy hours discussing all aspects of his work, including integrated systems in which a variety of biological agents played a role, together with methods in outdoor situations and the broader contexts of invertebrate pathology. He became skilled as an entomologist while breeding his insects and investigating their biology.

Equipped with a pleasant personality, a wry sense of humour and a lively, helpful disposition, Adrian was a valued member of Denis' team, devoted to his

work. His social life developed with that of the rest of the group and much fun was had by all. By 1984 he had met his wife Josephine (she typed his thesis) and they started their family.

Adrian was convinced that some pests could be controlled by fungi in their own right. In July 1989, he announced that he intended to put his money where his mouth was: he would leave the security and stability of a government research job for the relatively uncertain world of industry. He joined Chr. Hansen and moved with his family to Denmark.

Chr. Hansen is one of Denmark's largest biotech companies with enzymes for cheese production as one of the major products. Since the mid-eighties the company expanded its interests into biological control and established a branch to develop them. Adrian was a core person in this development during his first years in Denmark. Glasshouse facilities for production of predators and parasitoids were established in Karlebo and a range of beneficial agents for glasshouse growers became commercially available for the first time in Denmark.

The fungus *Verticillium lecanii* was also commercialised by the company as the product series "Microgermin". A notable improvement was the application by dipping the small plants into a fungus suspension, a prophylaxis which had several advantages over the commonly used spraying with a conidial suspension. Adrian established a co-operation with Jørgen Eilenberg's research group at the Royal Veterinary and Agricultural University at Bulosvej. Adrian and Jørgen jointly supervised Susanne Vestergaard for her PhD thesis on biological control of thrips (*Frankliniella occidentalis*) with fungi (mainly *Metarhizium anisopliae*). Chr. Hansen paid half of all costs for this work, which considered both basic and applied aspects. Adrian always fully appreciated that different requirements can arise between university research and industry. He worked to ensure that all participants were satisfied so that international scientific publications as well as product development were accomplished efficiently.

However, the commercialisation of biological control agents was (and still is) not an easy business and in 1994 Chr. Hansen decided to cancel the production and sales of predators, parasitoids and *V. lecanii*. Nevertheless, Adrian continued for some years the co-operation on *Metarhizium* with the

university team, but the main objectives for his work shifted gradually towards another system for microbiological control, the control of gastrointestinal nematodes in cattle and other husbandry animals with the pathogenic fungi *Arthrobotrys oligospora* and later *Duddingtonia flagrans*. Somehow the concept for this work fitted more exactly with the target system of the mother company, viz, domestic animals and dairy production. The co-operation included another group at the university, featuring zoologists, veterinary parasitologists and microbiologists (Peter Nansen, Jens Wolstrup, Jørn Grønvold, Michael Larsen and Svend Aage Henriksen). This co-operation was also very fruitful and resulted in a range of scientific publications on mode of action, production and field testing of the fungi. The work included travel opportunities for Adrian, which he always enjoyed due to his ability to establish new contacts and friendships all over the world.

Adrian and his family became truly integrated into the Danish life style. He learned the language to such extent that, in between times, he started to forget the correct English expressions. His family in England was surprised when he once asked for the "grass cutting machine" (a direct translation of the Danish word) instead of the "lawn mower". He understood and told jokes in Danish and was known for his ability to create a good and cordial atmosphere in his laboratory, yet always working hard and professionally to achieve the goals.

Adrian was a family man, enjoying all aspects of life: playing games, maintaining a bird aviary, cooking good food for family and friends etc. Some years ago, however, the marriage broke up and Adrian took over the main responsibility for bringing up his three children Nicola, Anna and Michael.

Despite the obvious difficulties of being a single parent, Adrian managed to balance family and career commitments, and the work on *Duddingtonia* continued. The field testing was constantly expanded to new areas abroad, for example as far away as New Zealand. At the time of writing, the prospects for a commercial development seem promising, but - as with much biocontrol - several obstacles are still to be overcome.

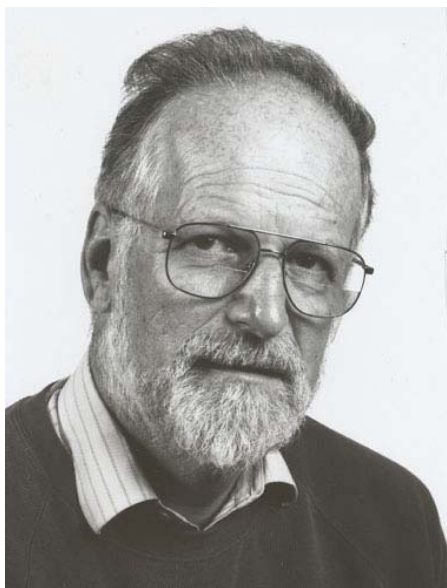
His ties to insect biocontrol were maintained in many ways and Adrian was, for example, a popular

external examiner for MSc and BSc theses. Each year he was also the external examiner in a university course on biocontrol of both insect pests and plant diseases. For such work, a fair person with a broad perspective and deep insight was needed: Adrian had all these qualities. There was always a good atmosphere when he was used as external examiner.

By the sudden death of Adrian from a heart attack microbial control has lost an innovative person, dedicated to develop organisms to serve agriculture and husbandry. We have lost a mentor for up and coming scientists, a highly esteemed scientific colleague, a good friend and a dedicated father. Although Adrian has gone, he lives on in his three children Nicola (19), Anna (16) and Michael (12).

We wish to thank all those who helped to prepare this obituary.

Denis Burges
Jørgen Eilenberg



Dr. David Kelly
1944-2003

David Kelly, a long-standing member of the Society, was found dead in woodlands near his home in the Oxfordshire countryside on Friday 18 July 2003. David's distinguished contributions to insect pathology between 1968 and 1988 have scarcely been referred to in the national and international

furor that has surrounded his suicide, and its association with the recent war in Iraq. I hope to help remedy that omission.

David (who was frequently known as Dai to his friends) was born and brought up in the Rhondda Valley, Wales. During his school days, he ran cross-country for Wales at junior level, and acquired a life-long love for Rugby Union Football. He started his higher education at the University of Leeds, where he was awarded a BSc in Microbiology, and met Jan, his wife-to-be. Both David and Jan moved on to Birmingham where David took a one-year MSc course in Virology, and Jan completed her teaching qualifications.

I first met David in October 1968, when we started our DPhil's on the same day, in the Unit of Insect Pathology, Oxford, under Tom Tinsley's supervision. We soon developed a family friendship that has continued for 35 years. David's DPhil research concentrated on the insect iridescent viruses (IIV). Although Kenneth Smith and Nick Xeros had been the first to identify and characterise the morphological properties of IIVs, David's research added a considerably improved understanding of these viruses and their taxonomic relationships, through his studies on their biochemical properties and replication. Having successfully obtained his DPhil, David moved to the University of Warwick for two years where he worked as a post-doc on influenza virus. However, insect viruses clearly remained a fascination for him and, when the opportunity arose to rejoin the Oxford group in 1974, David keenly returned.

The early 1970s was a wonderful time for research on insect viruses in the UK; the Oxford group was flourishing under Tom Tinsley's leadership and had received substantial recognition from the Natural Environment Research Council (NERC), leading to the group becoming the NERC Unit of Invertebrate Pathology (later still to become the NERC Institute of Virology and Environmental Microbiology). In addition, the group had hosted the 1973 SIP Conference and had established its international credibility in the field of insect pathology. Finally, research income in those days did not come encumbered with the need for innumerable project proposals, milestones and reports, and research management was able to provide a freedom of approach along the lines of "here's an interesting virus, go away and do something useful with it".

David took full advantage of these freedoms in a most positive way. In the period between 1974 and 1984, he was amongst the first scientists to study biochemical aspects of baculovirus replication in cell culture, leading to an important series of publications in the late 1970s and 1980s on baculovirus infection sequence, protein synthesis, viral DNA infectivity and the induction of baculovirus infections in persistently-infected cells. His last refereed publication on baculoviruses (jointly with Bob Possee), in 1988, was on the genome mapping and relationships of *Mamestra brassicae* and *Panolis flammea* NPV genomes. He also collaborated extensively with other scientists in the Unit, including Hugh Evans and Philip Entwistle, who were interested in having biochemical markers for virus identification as part of their epizootiological studies. David also continued to publish on insect iridescent viruses and developed an interest in the characterisation and taxonomy of insect parvoviruses, in collaboration with Norman Moore.

In 1984, David decided that it was time to move on, and he applied for and was appointed to the post of Head of Microbiology within the Ministry of Defence's establishment at Porton Down, in 1984. His first publication in this new role was a popular article in *New Scientist*, on anthrax spores, coinciding with his new responsibilities for overseeing the decontamination of Gruinard Island, Scotland, which had been the site of experiments on anthrax in the Second World War. He also published several papers on the molecular biology of other bacterial toxins, and the high-level containment facilities available to his team enabled him to lead research on the characterisation and diagnosis of simian Herpes B virus (almost always fatal in humans).

By the late 1980s, David was emerging as the UK national expert on viruses and microorganisms that had potential application as biological weapons. In 1989, he was co-opted to assist in the MI6 debriefing of a soviet defector, Vladamir Pasechnik, and entered that part of his career that has become the subject of widespread public debate. The debriefing of Pasechnik revealed the existence of a major Soviet biological weapons programme. In 1991, David was co-leader of a UK/USA delegation to investigate biological weapons establishments in the Soviet Union. David was instrumental in

revealing an ongoing programme of work on smallpox virus that was being carried out in contravention of international agreements.

After the eviction of the Iraqis from Kuwait, David became a senior adviser on biological weapons to the UN biological weapons inspection team (UNSCOM) between 1994 and 1998, and was instrumental in the discovery and supervision of the dismantling of several biological weapons establishments in Iraq, during a total of 36 visits to that country. Colleagues who worked with him during that period have described him as the complete professional, the leading international expert in his field, scientifically indomitable and with such an eye for detail that nothing got past him. The national importance placed on his skills was recognised by the UK Government in 1995 with the award of the CMG (Commander of St Michael and St George, or "Call Me God" as it is known colloquially).

Following Saddam Hussein's refusal to allow weapons inspection visits to Iraq in 1998, David remained an employee of the UK Ministry of Defense and was seconded to the Foreign Office as an expert adviser on biological weapons. He also traveled widely in North America and Europe, lecturing and running training seminars on biological weapons. When anthrax was detected in some letters posted in the US, shortly after the events of nine-eleven, David renewed acquaintance with some of his SIP contacts, including Denis Burges, to discuss issues surrounding the formulation of *Bacillus* spp. After the 2003 Iraq war, he made one post-war visit to Iraq and was keenly awaiting the go-ahead to return again, shortly before his death.

I doubt if the life of any former member of the SIP has been scrutinised in such public detail, following their death, and I do not intend to add further to the political agenda on this topic. However, in one of the innumerable websites established after David's death, Keith Harrap, another former colleague of both David and I at Oxford, summed up the feelings of many of us:

"...I feel a mounting sense of anger at the way he (David) seems to have been treated. Professional scientific advisors of integrity should not be treated as pawns in political games in this overt way".

Whatever the outcome of the Hutton Inquiry into the reasons contributing to David's death, David's friends and colleagues in the Society will remember him as a distinguished microbiologist and insect pathologist. He was a regular contributor throughout his career to Society meetings and publications as well as to International Virology Congresses and to Virus Group activities in the Society for General Microbiology. I will remember David as a loyal friend, someone who could be a private person and yet convivial in company, with a gentle sense of humour. He was passionate about his job, Welsh Rugby, and playing cribbage for the Hind's Head in Kingston Bagpuize. He gained great enjoyment from his house and garden, and always grew better cauliflowers than I could. Most of all, he enjoyed the company, love and friendship of his wife, Jan, and his beloved daughters, Sian, Ellen and Rachel.

Chris Payne

When David Kelly contacted me in the aftermath of the attack of nine-eleven, we were acquaintances rather than friends. We had some excellent chats about the possibility of *Bacillus thuringiensis* being used as a model for the production of *Bacillus anthracis*. Later I sought his opinions/help about queries in similar vein from other directions. He was always helpful and undertook to forward information and comments to appropriate destinations. I acquired a great respect for his knowledge and astuteness. I now have the honour of regarding him as a friend.

Denis Burges

ANNOUNCEMENTS

The SIP Endowment Fund: A Noble Cause

We see it listed on our membership renewal forms every year, but few people are aware of history and significance of the SIP Endowment Fund. In 1985, an anonymous donor gave the SIP \$3,500 to be used to cover the dues of members with "soft currency" (currency that is unstable, and/or with low value due to poor exchange rates) problems. Since that time, the Fund has been used to support up to 12 scientists per year. Endowed members usually come from

countries with struggling economies and work at research institutions with limited financial support. However, endowed memberships are also granted to scientists from more developed nations in special cases where financial constraints preclude membership or currency exchange issues are a factor. Endowment support is not granted for a specified number of years; however, support has generally been provided for up to 3 years, with the possibility of an extension if a continuing need is confirmed.

You can help to support the mission of the Endowment Fund in two ways. First, if you know of scientists who might benefit from the Fund, please forward their names to Stephen Wraight, Chair of the Awards and Student Contest Committee (spw4@cornell.edu). Secondly, you are encouraged to make a tax-deductible donation to the Endowment Fund. You can do this when you renew your membership (look under the "Journals and Contributions" section towards the bottom of the form). The fund currently has approximately \$9,000 invested in interest-bearing Certificate of Deposit accounts. Since the Fund operates by using only the interest from this account, today's lower interest rates threaten to curtail the number of scientists that can be supported, so your contributions are very important.

The SIP hosts two other funds, both of which honor deceased, but fondly remembered SIP members. The Mauro E. Martignoni Student Travel Fund provides financial awards to support the attendance of outstanding students at the SIP annual meetings. The Chris J. Lomer fund provides financial awards to support the travel of scientists from developing countries to the SIP meetings. Contributions to these funds are tax-deductible as well, and can be made on your membership renewal form.

SIP LOGO CONTEST – STILL TIME TO VOTE!!!

The Society for Invertebrate Pathology established a contest to select its first official logo in January 2003. Guidelines for preparation and submission of logos were printed in the February newsletter and posted on the Society's web page. A prize of \$500.00 for the winning logo was authorized by President Harry Kaya and approved by the SIP Council. A Logo Committee consisting of members

from each Division was formed and charged with selecting a slate of finalists for final vote by the entire membership.

A total of 103 logos were submitted to the Committee for review. From this group, the Committee has selected 8 finalists. Voting will be done electronically at the SIP web site. Each member should have received a unique password to logon. Please contact us at: sip@sipweb.org if you have not received your password. You may only vote once. Your email address and IP address will be logged to prevent fraudulent voting. Please vote for your favorite by ranking each logo from 1 (best) to 8 (worst). Each logo is displayed in color and in black and white. The winning logo will be that which receives the lowest overall ranking. The winning logo will become the exclusive property of the Society for Invertebrate Pathology for use in all activities. Voting is restricted to all active members of the Society of Invertebrate Pathology and each member may vote only once.

The voting deadline is December 1, 2004.

To view the finalists go to pages 57-58 this issue, or http://www.sipweb.org/logo_ballot.cfm

To vote go to http://www.sipweb.org/logo_contest/

Please feel free to contact us at: sip@sipweb.org if you have any questions

Theodore G. Andreadis
Logo Committee Chair

Danish Centre for Biological Control was established by governmental funding 2003. It aims to support the development and use of biological control in Denmark and internationally based on principles of ecological sustainability. Focus is on:

- 1) Biological research and development of products for release
- 2) Biological research to enhance natural regulation
- 3) Risk assessment
- 4) Teaching and other dissemination

The centre consists of core research groups in Denmark, who have a broad, established network

co-operation with other national and international research groups, companies, and authorities. The involved institutions are: Danish Institute of Agricultural Sciences, The Danish Pest Infestation Laboratory, The National Environmental Research Institute, The National Institute of Occupational Health, The Royal Veterinary and Agricultural University.

For more information see **www.centre-biological-control.dk**

Jørgen Eilenberg (chairman of steering committee 2003-2005)

Zoology Section
The Royal Veterinary and Agricultural University
Thorvaldsensvej 40
DK 1871 Frb C
JEI@KVL.DK



MEMBERS ON THE MOVE

SIP's Executive Secretary, Margaret (Peg) Rotstein has moved to Knoxville, Tennessee and the official address for SIP will follow. As noted in the address box on page 2, the new address is:

8904 Straw Flower Dr.
Knoxville, TN 37922
USA

Jean-Louis Schwartz reports a new address and contact information:

[The previous e-mail address: jean-louis.schwartz@bri.nrc.ca is no longer valid.]
Dr. Jean-Louis Schwartz
Professor, Department of Physiology, Faculty of Medicine
Network Leader, The Biocontrol Network
Université de Montréal
Building Paul G. Desmarais, Room 3156

2960, Chemin de la Tour, H3T 1J4
 P.O. Box 6128, Succ. Centre-Ville, H3C 3J7
 Montreal, Quebec, Canada
 tel: (514) 343-6364 (office) or (514) 343-7950
 (Network)
 fax: (514) 343-6631
 e-mail: jean-louis.schwartz@umontreal.ca
 biocontrol-network@umontreal.ca

Moving??

Please prepare a paragraph including information about past and present postings, new address, telephone, fax and email address and send to your Newsletter Editor for inclusion in the Move Section in the next issue of the Newsletter. The editor's address can be found on page 2.

Please also inform the SIP Office of your new address. The address of the Office is also found on page 2.

POSITIONS AVAILABLE

Research Associate, Michigan State University, E. Lansing, MI. A research associate is needed immediately to plan and conduct research on control of adult emerald ash borer, *Agilus planipennis* (Coleoptera: Buprestidae), using *Bacillus thuringiensis* with emphasis on planning and implementing 2004 field trials and efficacy studies. A Ph.D. is required with experience in laboratory and field research; ability to work cooperatively; good communication and writing skills. Send letter of application, CV, transcripts, abstract of dissertation, two representative publications if available, and names, addresses, and phone numbers of four references to:
 Dr. Leah S. Bauer
 USDA Forest Service
 1407 S. Harrison Rd.
 East Lansing Michigan 48823.
 For more information see:
http://www.ncrs.fs.fed.us/4501/eab/current/microbial_insecticide/ or contact Dr. Leah Bauer at lsbauer@msu.edu or call 517-355-7740x103 or write to above address.

Postdoctoral Research Scientist. The Connecticut Agricultural Experiment Station, New Haven, Connecticut, U.S.A. A position is available for a postdoctoral scientist to work on novel strategies for the control of the tick *Ixodes scapularis*, including delivery of commercial fungal pathogens in spray applications and host-targeted delivery systems, improved delivery of existing acaricides, in conjunction with a community-based Lyme disease prevention project. Research will involve both laboratory testing and development of these novel strategies and field trials (~75% of time) and assisting in some operations of the community prevention project (~25% of time). This position is funded by grants from the Centers for Disease Control and Prevention. Duration is approximately two years. An opportunity for reapplication or continuation of funds may be possible. Salary: \$34,195 per annum plus full medical and dental benefits and paid vacation.

Requirements for the position: A Ph.D. in entomology, invertebrate pathology, zoology, or in some related field. A candidate should have knowledge of concepts of biological or vector control and practical experience with entomophagous fungi is preferred. A candidate must have the ability to conduct laboratory and field-testing of proposed agents and surveillance of ticks and reservoir hosts. Good writing skills, communications skills and the ability to interact with local public health officials and the general public are important.

The Experiment Station's main facilities are located in New Haven, Connecticut, A new tick research laboratory is available to conduct the research at the Station's Lockwood Farm.

Contact information for applicants: Application Procedures: Send cover letter summarizing qualifications, curriculum vitae, both graduate and undergraduate transcripts, examples of writing, and the names, addresses, telephone numbers, and email addresses of 3 references to:
 Kirby C. Stafford III, Ph.D., Chief Scientist
 Department of Forestry and Horticulture
 Connecticut Agricultural Experiment Station
 123 Huntington Street ñ Box 1106
 New Haven, CT 06504-1106
 Inquires are welcome at (203) 974-8485 or at email: Kirby.Stafford@po.state.ct.us
<http://www.caes.state.ct.us>

Notice of Non-Discrimination: The Connecticut Agricultural Experiment Station is an Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply.



**Agricultural
Research
Service**

www.ars.usda.gov

Molecular Biologist, GS-11
Salary Range of \$47,110 to \$61,248

The U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), Mosquito and Fly Research Unit, Gainesville, Florida is seeking a temporary full-time Molecular Biologist Research Associate, GS-11. Specific research objectives include investigation of viral protein interactions with mosquito peritrophic matrix and midgut epithelial cells, and the identification of infection pathways with the goal of developing a biologically based pesticide for *Culex* mosquitoes. For details and application directions, see <http://www.afm.ars.usda.gov/divisions/hrd/hrdhomepage/vacancy/pstdclst.htm>. To have a printed copy mailed, call Dr. James Becnel at 352-374-5961. Ph.D. is required. Citizenship restrictions apply. USDA/ARS is an equal opportunity employer and provider.

Postdoctoral Research Positions. Department of Entomology, Plant Sciences Building, University of Maryland, MD 20742

Position Description: Two post-doctoral positions available immediately for computer-literate candidates, preferably with expertise in molecular biology, particularly PCR techniques, and microbial physiology/ecology. Activities will include performing microarray based analyses of infection processes of the fungal pathogen *Metarhizium anisopliae* and exploring the biocontrol implications of rhizospheric events among diverse insect pathogens. Training in microarray techniques will be provided. Salaries will be commensurate with training and experience. Duration approximately three years.

Contact information for applicants: Please send curriculum vitae, summary of research interests and the names and contact information of three references to:

Dr. Raymond St. Leger
Department of Entomology

Plant Sciences Building
University of Maryland
College Park
MD 20742
E-Mail: rl106@umail.umd.edu
Closing date when successful applicants are found
Comments: UMD is an equal opportunities employer

POSITIONS WANTED

Molecular Virologist / Entomologist Seeks Suitable Vacancy. Position location: Anywhere
My name is Dave Woodward and I am a PhD candidate due for completion in September who now seeks employment in the field of biocontrol or sustainable agriculture. My PhD is a collaboration between Horticulture Research International and Natural Resources Institute, and I am registered at University of Greenwich.

The working title of my PhD thesis is *Characterisation and Exploitation of New Isolates of PtxyGV*. In it a pool of virus isolates from Kenya and several latent isolates are described. During the course of the work differences in the genotype of isolates have been identified using restriction mapping and sequencing. "Hot-spots" of variation have been identified. Detailed bioassays have been carried out to determine phenotypic differences between isolates, and to compare infectivity in different populations of the host (*P. xylostella*). Sensitive PCR, RFLP-PCR and RT-PCR techniques for the detection and differentiation of virus isolates in vivo. These tools have been used to study virus ecology, host-virus and isolate-isolate interactions. For a full CV contact me at David.Woodward@HRI.ac.uk

Postdoc /research assistant or any other.

I am 30, B.Sc in Plant Science, M.Sc in Plant Pathology and PhD in microbial control (entomology). My PhD studies are on *Beauveria* and *Metarhizium* against stalk borers. I am interested to pursue my research in microbial control of insect pests. I have good research experience in microbial techniques, insect pathology, entomopathogenic fungi and entomopathogenic bacteria. Currently I have produced over ten papers in international

journals. My CV can be obtained upon request.

Tadele Tefera

E-mail: tadeletefera@yahoo.com

Postdoctoral position in the field of microbial control of insect pests in agricultural systems. I am finishing my PhD (University of Gent, Belgium) by the end of this year (2003), working on microbial control of white grubs using both entomopathogenic nematodes and Hyphomycetes fungi. I am seeking a position as post doctoral fellow in microbial control of insect pests or related field.

Most of my Ph.D. work is designed to enhance the microbial control and IPM of turfgrass and horticultural pests. My current research interest is with the use of both entomopathogenic nematodes and Hyphomycetes fungi for control of insect pests in agriculture system. Recent research has dealt with the field efficacy of nematodes and fungi to control white grubs in turf. With increasing interest in microbial control of pests, I have also explored the combined use of *Heterorhabditis megidis* and *Metarhizium anisopliae* for control of white grubs, demonstrating the effectiveness of these microbial agents when they applied together. Other research interests include the use of toxins of *M. anisopliae* and *Phororhabdus luminescens* for control of insect pests.

I have worked as a Research Associate in the Crop Protection Division for three years at International Crop Research Institute for the Semi-Arid Tropics (ICRISAT) Patancheru, Hyderabad, India. Since 1998, published more than 10 papers in international journals.

M. A. Ansari

E-mail: maa_nema68@hotmail.com

Doctoral or research fellow positions in Molecular Biology \ Insect virology

Let me introduce myself as Mithun Chakraborty, M.Sc. (Agriculture) with specialisation in Microbiology from University of Agricultural Sciences, Bangalore, India. My M.Sc. Thesis title is *Microbial control of armyworm (Mythimna separata) in maize using insect viruses*. Under this project I have worked on nuclear polyhedrosis virus of *Mythimna separata* (MsNPV) with the following major objective:

Under the project I had taken up survey for insect viruses and isolated a number of insect virus like nuclear polyhedrosis virus from Mulberry leaf roller *Diaphnia pulverulanatalis* a serious pest in mulberry area in south India and NPV from *Mythimna separata* a major cereals pest in south-east Asian countries.

The research involves molecular biology, electron microscopy apart from bioassay and histopathology work. I conducted my research work in Project Directorate of Biological Control, Indian Veterinary Research Institute, University of Agricultural Sciences and Indian Institute of Science.

My passion is in molecular virology research on insect viruses. I have published a few research papers in reputed scientific journals and presented scientific paper in National Symposium.

In this connection I am looking for an opening in the field of Insect Molecular Biology and Biological Control Research at Ph.D level where I can apply my knowledge and skills to the utmost. I will be very thankful if you can accommodate me in any of your virus based biocontrol project.

Mithun Chakraborty

E-mail: mithun_chakraborty@yahoo.com

Research position in biological control of insect pests.

I am a recent Ph.D from Tamil Nadu Agricultural University, Coimbatore, India specializing in Agricultural Entomology. For my M.Sc. research I worked on economic production of nuclear polyhedrovirus of *Spodoptera litura* (Fabricius) and produced good results.

For my Ph.D. work, I studied the diversity of spiders in coffee ecosystem, effects of newer insecticide, thiamethoxam on coffee sucking pest and the fungus *Lecanicillium (=Verticillium) lecanii* infecting coffee green bug, *Coccus viridis*.

My research with fungus include, collection of different isolates, characterization based on virulence by bioassays, chitinase assay (SDS-PAGE) and molecular characterization using RAPD-PCR. Also compatibility with new insecticides in lab as well as in field conditions was studied.

I have good knowledge with computers. My computer literacy is up to the mark of assembling a computer individually and have on hand experience

with most of the statistical softwares and biodiversity programmes. I have good working knowledge in both windows and Linux platforms, Office XP, Adobe Photoshop 7, web designing and web hosting.

For further details you can visit my site.

C. M. Senthil Kumar

E-mail address: cmskm@yahoo.com

www.coolgoose.com/sites/cmskm

Post-doctoral Research Fellowship / Associate or other in the US, Canada or Europe.

I am looking for an opportunity for a PDF or research associateship sometime later this year (2003). I have done my Ph.D. on Insect immunity on the topic "Studies on the role of some signal transduction moieties and cell-cell interactions associated with the cellular defense response of silkworm *Bombyx mori* L to bacterial infections" from India. Currently I have a PDF assignment at the Department of Comparative Animal Physiology and General Zoology at Masaryk University, Brno, Czech Republic where I work on reactive oxygen and reactive nitrogen intermediates in signaling during insect immune response. The contract is likely to be concluded in October 2003. I have been working on aspects related to insect pathology, patho-physiology and insect endocrinology for the past 11 years. I have experience in the use of immunological, biochemical and molecular biological methods for various research purposes (PCR, Northern, Southern and Western blotting using Millipore Transblot apparatus, HPLC (LKB)). Experienced in the use of computers and statistical applications for analysis of data. Have experience using Sigma stat, Sigma plot, curve expert. Capable of using statistical tools such as ANOVA, DMRT, Students t-test for analysis of biological data. Expert in using Grab-it gel capturing software and Gel base of UVP (Ultra Violet Products, U.K.) for analysis of protein, DNA gels and their interpretation. In addition, I have experience in light and electron microscopy techniques.

I am interested to work on areas related to insect immunity, insect pathology, patho-physiology or on comparative invertebrate immunity. I am a hardworking goal oriented team player with an ability to publish research findings in peer reviewed journals. I am also capable of writing grant proposals for extra-mural funding. I have published

a total of 25 research papers in reputed international and national journals, and presented 15 papers at International and national research seminars.

Detailed list of publications and other qualifications are available in my CV which is at the website mentioned.

Dr. Natraj Krishnan

E-mail: n_krishnan67@hotmail.com

Webpage: myprofile.cos.com/n_krish

Postdoctoral fellow/scientist. I am a Ph.D. candidate in the Department of Entomology, Kansas State University, working on Bt resistance and its underlying biochemical and molecular mechanisms in the European corn borer. I have experience in: insect midgut proteinase characterization, involving activity assay, activity blot, and zymogram analysis; protein purification with ion exchange and gel filtration chromatography at common- or high-pressure conditions (i.e. HPLC); binding assays of Bt toxin to insect midgut brush border membrane vesicle (BBMV) with ligand blot, surface plasmon resonance (Biacore), and radiolabeled toxin binding approaches; gene cloning, involving primer design, RNA and DNA purification, RT- and RACE-PCR, DNA subcloning, DNA and protein sequence analysis, Southern, Northern, and Western blot, and gene expression.

I worked in Plant Pathology and Microbiology for more than 10 years when I was in China, published over 25 papers, have considerable knowledge and skills in the two subjects. I will graduate soon, and now seeking a postdoctoral position in either the area of Bt resistance, or mode of Bt action, or insect pathology.

Huarong Li

E-mail: hli@oznet.ksu.edu

Post Doctoral Position, US or Canada. I am a postdoctoral researcher working in the field of insect pathology at Prof. Douglas W. Whitman's lab, Illinois State University, Normal, IL. My study in his lab involved the systematics of gregarines and microsporidians associated with the eastern lubber grasshopper *Romalea microptera*, including the impact of gregarines on the host development and reproductive potential. In addition, tests are now being conducted to evaluate different antibiotic compounds for chemotherapeutic control of *Nosema* and gregarines infecting the lubber grasshopper.

Professor Douglas gave me a very good basis to expertise my hard work and talent. We have recently discovered two new gregarines and *Nosema* sp. infecting the lubbers. As a part of my doctoral study, I monitored the resistance level in different populations of the cotton leaf worm *Spodoptera litura*. I have also assessed the carboxylesterase activity in different populations of *S. litura*, which appear to be correlated with insecticide resistance. I also discovered a new microsporidian pathogen infecting *S. litura*. Thus, my doctoral and post doctoral experiences have made me an independent as well as a highly talented excellent researcher in the biology field.

At present, I am looking for next postdoctoral position since my tenure ends in October. My field of interest is insect pathology and resistance development in insects. My strength is in my capacity to organize and execute both laboratory and field experiments related insect pest management. In addition I have experience in biochemical analysis, biosystematics of gregarines and microsporidians (protozoans), statistical analysis and computational techniques. Above all I have the capacity to take independent research work and am equally at ease to work in a group.

Johny Shajahan

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MEETINGS NEWS

Third International Symposium: Entomopathogenic Nematodes and Symbiotic Bacteria

The Third International Symposium of Entomopathogenic Nematodes and Symbiotic Bacteria was held at the Ohio Agricultural Research and Development Center, Ohio State University in Wooster from September 4 to 7, 2003. There were 104 attendees representing scientists from 16 countries. Countries represented included, Brazil, Canada, China, France, Germany, Hungary, India, Ireland, Israel, Japan, Korea, Mexico, Thailand, Uganda, United Kingdom, and USA.

This symposium brought together bacteriologists, nematologists, and entomologists to present and discuss a number of topics that were in 9 different sessions. The sessions were (1) biodiversity, (2)

symbiosis, (3) pathogenicity and genomics, (4) nematode physiology, genetics, and molecular biology, (5) behavioral ecology, (6) population dynamics and modeling, (7) implementation around the world, (8) application technology, and (9) successes and failures. After each session, a discussion leader served to facilitate the dialogue with the speakers and audience. The discussion leader also has the major responsibility of writing the manuscript from the session, which will be published in a special issue of Biological Control.

In addition to the speaker sessions, 42 posters were presented, and two independent teams of anonymous judges scored the student posters based on originality of the research, difficulty of the project, and presentation and defense of the results of the data in the poster by the students. Three cash prizes were awarded to the following students with two second place awards (a tie) to Janet Lawrence, Ohio State University (major professors, Casey Hoy and Parwinder Grewal), Heather Smith, University of Florida, Gainesville (major professor, Byron Adams) and first place award to Eric Martens, University of Wisconsin (major professor, Heidi Goodrich-Blair).



Student poster winners: Heather Smith, University of Florida, Gainesville, Janet Lawrence, Ohio State University and Eric Martens, University of Wisconsin.

Each evening, there was ample time for social interaction. The first night was the opening mixer with food from different countries as a theme and wine brought by many participants, the second night was the banquet, and the third night was the picnic. The food was excellently catered by TJ's restaurant. The highlights of the banquet were (1) the food, (2) the showing of outtakes from the video entitled "Insect-parasitic nematodes: a tool for pest management" narrated by Michael Klein, and (3) the live background and dance music.

The general discussion on the last day of the meeting

generated much interest on a future meeting. Ralf Ehlers from Germany has agreed to host the Fourth International Symposium of Entomopathogenic Nematodes and Symbiotic Bacteria in Europe in conjunction with a COST meeting.

Parwinder Grewal – Chair, Local Arrangements and Organizing Committee

Organizing Committee: Steve Forst, Susan Bornstein-Forst, Heidi Goodrich-Blair, Harry Kaya

Mexican Course on Nematodes as Biocontrol Agents



Patricia Stock teaches field and laboratory techniques for the course “Nematodes as Biological Control Agents” in La Paz, Mexico.

Agronomists, biologists, and graduate students from Mexico participated in this course, which took place from September 25-28, at the Plant Sciences and Biotechnology Laboratory, Dept. Agronomy, Universidad de Baja California, La Paz, Mexico. The course was lectured in Spanish by Patricia Stock, University of Arizona and José Luis Díaz De León Álvarez, was the local organizer. Lectures, laboratories and a field trip provided participants with a thorough grounding in all aspects of practical Insect Nematology.



Nematode course participants

FUTURE MEETINGS AND WORKSHOPS

November 27, 2003. At the National Institute of Occupational Health in Copenhagen the Danish Centre of Biological Control will hold a workshop concerning potential occupational risks of production and handling of microorganisms for the biological control of pests in agriculture.

Place and time

The workshop will be held on AMI, Lersø Parkalle 105, 2100 Copenhagen on November 27th 2003 from 9^{am} to 4:45^{pm}.

Present a poster

Participants are welcome to present posters to support discussions or to present their work. If you want to present a poster please send an abstract (on 600-1500 characters) to amm@ami.dk. For further information

www.center-biologisk-bekaempelse.dk or contact Anne Mette Madsen, e-mail amm@ami.dk.

Cost of participation

200 dkr - lunch is included. For registration please send a mail to tko@kvl.dk with your name, affiliation, address and telephone number. Deadline for registration the 20th of November.

May 22-26, 2004, In Vitro Biology World Congress, San Francisco, California, USA Joint International Congress, 11th International Invertebrate Cell And Tissue Culture Conference Invertebrate Symposium on May 22

Convenors: Dr. Robert R. Granados, Boyce Thompson Institute, Cornell University, Ithaca, NY, Professor Karl Maramorsch, Rutgers University, New Brunswick, NJ, and Dr. Amy Wang, GlaxoSmithKline, Research Triangle Park, NC.

“Molecular Engineering and Biology of Invertebrate Cell Cultures: A Tribute to Dr. T.D.C. Grace and Professor Shangyin Gao”

In this symposium we are paying tribute to Dr. T. D. C. Grace and Prof. Shangyin Gao (Z-Y.Gaw) to recognize their specific tangible achievements in the field of invertebrate cell culture. The exceptional and unique achievements of these two pioneers have resulted in the rapid development and important applications of insect cell culture during the past four decades. Modern invertebrate cell culture got started independently by the two scientists. Prof. Shangyin Gao in Wuhan, China in 1958 and Tom Grace in Canberra, Australia in 1962. The two have never met and they were unaware of each other's work, but they shared outstanding talents as creative inventors. They have made invaluable contributions to furthering the progress of the field and provided guidelines for us to follow in the footsteps of these in vitro biotechnology pioneers.

The breakthrough achieved by Grace and Gao has influenced virtually all subsequent research dealing with insect cell culture. Therefore we are paying tribute to these pioneers, recognizing that without their contributions no achievement in modern molecular invertebrate cell culture would have been possible.

Several biotechnological advances have driven the remarkable growth and application of insect cell culture research during the past two decades. The emergence of the baculovirus-insect cell culture system resulted from intensive and elegant studies on the molecular biology of baculoviruses and the development of novel insect virus-cell culture systems. The use of in vitro expression systems have not only become important tools for basic research around the world, but represent a widely used technology for the commercialization of products for use in agriculture and human health. The speakers will represent some of the leading authorities in areas relating to cell culture systems and they represent the diversity of research from around the world.

Speakers:

Karl Maramorosch-Rutgers University, New Brunswick, NJ. USA

“ Introduction and Seminal Research Contributions by T.D.C. Grace and S. Gao

Robert R. Granados-Boyce Thompson Institute-Cornell, Ithaca, NY. USA, *“ Invertebrate Cell*

Culture Biology and Novel Cell Lines”

Zhihong (Rose) Hu-Wuhan Institute of Virology, Wuhan. China, *“Invertebrate Cell Culture Applications in China”*.

Spiros N. Agathos-University of Louvain, Belgium, *“Scale-up and Optimizing the In Vitro Growth of Insect Cells for Production of Recombinant Proteins and Viral Pesticides”*

Rollie Clem-Kansas State University, Manhattan, KS. USA, *“Apoptosis Regulation in Cultured Insect Cells”*

Gary Blissard-Boyce Thompson Institute-Cornell, Ithaca, NY. USA

“ Role of the Major Envelope Protein (GP64) of Baculoviruses in Viral Entry and Exit from cultured Cells ”

Don Jarvis-Univ. of Wyoming, Laramie, WY. USA

“Metabolic Engineering and Improvements in Glycosylation Pathways in Insect Cells”

Max Bergoin-Molecular Virology Unit, UMR, University of Montpellier II, Montpellier, France *“Stable Transformation of Insect Cells With Densovirus Vectors and Expression of Foreign Proteins”*.

Just Vlask-Wageningen Univ, Wageningen. The Netherlands, *“Molecular Biology and Genomics of Shrimp Viruses and Their In Vitro Culture”*

Steve Harwood- Invitrogen Corp., Carlsbad, CA USA, *“Invertebrate Cell Cultures for Commercial Pharmaceutical Drug Discovery”*

Patrick Condreay-Glaxo Wellcome Res. Inst., RTP, ,NC. USA, *“Baculovirus Technology for Mammalian Cell Gene Delivery”*

Jun Mitsuhashi-Tokyo Univ. Agriculture, Tokyo, Japan, *“Summary and Conclusions”*

Contacts:

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June 2-6, 2004, The 56th Annual Meeting of the Society of Protozoologists will be held at Bryant College, Smithfield Rhode Island. Details for the meeting, including registration, travel, and housing will be posted on the SOP website (<http://www.uga.edu/~protozoa/>) and distributed by e-mail over the coming months. We do NOT plan to mail hardcopy material by postal service, so check the Society website for updates.

Our goal is to develop an outstanding program of symposia, special lectures, presentations, and activities, while keeping meeting costs affordable. Low-cost housing will be available on the Bryant Campus and reasonably priced motels are situated nearby. The campus is about 20 minutes north of Providence, RI and about one hour south of Boston, MA. Providence airport is served by many airlines, including Southwest, and is a short (~30 min) drive from the Bryant Campus. We anticipate the meeting will give broad coverage of protists (phototrophs and heterotrophs alike) and plan to feature special platform sessions to address selected topics in protistology. If you have ideas for topics or wish to organize one of these sessions, please contact the program chair, Wayne Coats. If you would like to help with meeting arrangements, please contact the local organizer, Gaytha Langlois.

Contact Information:

D. Wayne Coats, SOP 2004 Program Chair
Smithsonian Environmental Research Center
P.O. Box 28
Edgewater, MD 21037
Ph: 443-482-2271
Fax: 443-482-2380
coats@serc.si.edu
<http://www.serc.si.edu>

June 9-13, 2004. IOBC Meeting on 'Management of plant diseases and arthropod pests by BCAs and their integration in agricultural systems' will be held in S. Michele all'Adige, Trentino, Italy. You are invited to participate. Please see the website for details and deadlines.

<http://www.agri.gov.il/Depts/IOBCPP/Jgroup/IOBCWPRSintegration1st.html>

July 10, 2004. ICTV Satellite Symposium on Virus Evolution in conjunction with the American Society for Virology Annual Meeting, McGill University, Montreal, Canada.

Registration and Program materials available at <http://virology.wisc.edu/VirusEvol>

Or contact:

A.C. Plamenberg: acpalmen@wisc.edu

L.A. Ball: andyb@uab.edu

R.W. Hendrix: rhx@pitt.edu

July 12-15, 2004. Workshop on Microsporidia from Invertebrate and Vertebrate Hosts, České Budejovice, Czech Republic: NATO Advanced Research Workshop. Prelim. Regis. Nov. 31, 2003
Regis. Forms: jumicro@yahoo.com

Future SIP Meetings

SIP 2004
August 1-6
Helsinki, Finland



Joint Nordic Meeting

SIP 2005
Anchorage, Alaska

SIP 2006
Wuhan, China

SIP 2007
Open, probably North America

Proposals for hosting future meetings are welcomed. Please contact Mark Goettel, Chair of the Meetings Committee. e-mail: goettel@agr.gc.ca

MICROBIAL CONTROL NEWS

PUBLICATIONS

Refuge Roulette: Growers Defy Requirements

A significant percentage of U.S. corn and soybean growers are taking careful aim in preparation for shooting themselves in the foot.

Growers who opt to plant crops genetically modified (GM) with *Bacillus thuringiensis* (*Bt*) are required by federal guidelines to plant 20 percent of their fields with non-GM crops, establishing refuges to help delay development of pest insect resistance to *Bt*, as well as to protect the environment.

However, federal survey responses reported in 2002 revealed that more than 19 percent of farms growing *Bt*-corn in 10 midwestern U.S. states skirted federal requirements and either cut back the accepted refuge size, or didn't bother to plant them at all. These growers violated the requirement, were deemed to be noncompliant, or in plain words, cheated. That action that could have future consequences.

A noted entomologist long involved with developing rational management approaches to pest insects attacking midwestern corn and other crops exclaimed, "I was dismayed," by the federal noncompliance findings. "No wonder the general public is skeptical about our stewardship of products developed from biotechnology," he wrote in a recent newsletter.

Citing the latest data and the widespread violations of the refuge requirement, the Center for Science in the Public Interest (CSPI) urged the responsible federal agency to implement several actions:

- *obtain the most accurate data possible on refuge compliance;
- *require regular on-farm visits to assess compliance;
- *require growers to provide a certificate of compliance and map identifying *Bt* and non-*Bt* fields;
- *investigate with growers reasons for noncompliance and take action based on that information;
- * require registrants (the firms selling *Bt* crop seed) to devise strategies to reduce noncompliance, or face federal restriction of *Bt* crop seed sales.

IPMNetNews 119; November 2003

PEST DIRECTORY UPDATE The International Society for Pest Information (ISPI) has issued a new, 2003 version of its PEST DIRECTORY CD (Pest Information Catalogue). As a comprehensive information source, the Directory includes a huge database of individuals worldwide, as well as the facility for users to enter their own data (addresses and notes attached to the individual records of individuals, organizations, pests, crops, or beneficials). ISPI is a not-for-profit organization dedicated to the exchange of pest-related information. Web: <http://www.pestinfo.org>. ISPI, B. Zelazny, Eulerweg 3, D-64347 Griesheim, GERMANY.

IPMNetNews, May 2003

IPMNetNews Celebrates 10 Years of Publication

(SIP's Jim Harper is Advisory Committee Chair)

With a decade of uninterrupted monthly publication in hand, IPMnet NEWS and its sponsors, the Consortium for International Crop Protection (CICP), hopefully will be forgiven a rare spate of chest thumping.

In 1993, CICP Board members met to brainstorm the dual challenge of finding an avenue to continue the Consortium's long and productive efforts to foster global IPM development and adoption, but now without a traditional means of support. Creation of an electronic newsletter to communicate recent developments in IPM to an international audience seemed like a plausible and highly worthwhile option that capitalized on the emergence and accessibility of the Internet coupled with the fact that no other entity had stepped forward to provide what was deemed a potentially important service.

The endeavor was a gamble; what initially stumbled out of the gate as "Global IPM Information Service" (the not so memorable "GIPMIS") quickly morphed into IPMnet and inclusion of the monthly IPMnet NEWS, an embryonic website, and a slate of creative ideas for broadly disseminating IPM information. A search and salubrious circumstances connected CICP with a semi-retired agricultural

technical editor with international newsletter experience, time on his hands, a suitably smudged keyboard, and a keen interest in tackling the challenge.

From inception IPMnet NEWS has spread, fungus-like, from an inauspicious initial distribution of just under 300 e-mail addresses 10 years ago to well over 3,000 e-mail subscribers today, plus uncounted web viewers and others who see pass-along files or articles from the NEWS picked up by other electronic outlets. While the wheels came off and sidelined numerous other IPM information vehicles for any number of reasons, IPMnet NEWS has trudged forward with intent to stay the course.

The NEWS owes its continuation to a very supportive CICP Board of Directors led by J.D. Harper, the nurturing of R.E. Ford as CICP's executive director, and especially to the interest and tangible support from M.S. Fitzner, national program leader for IPM at the U.S. Dept. of Agriculture's Cooperative State Research, Education, & Extension Service. The encouragement and provision of a home and infrastructure for the NEWS by the director of Oregon State University's Integrated Plant Protection Center--M. Kogan for many years (and a prime architect of IPMnet), and most recently P.C. Jepson--has been incalculably valuable and the essential lifeblood of the effort.

Lastly, a very heartfelt salute and "thanks" is extended to all NEWS e-mail subscribers and website viewers. After all, there's commonality of interest in seeking more rational pest management approaches, but your continued readership of the NEWS is genuinely appreciated, valued, and critical to the global future of IPM.

IPMNetNews 119; November 2003

(To subscribe to IPMNetNews, send an email, including email address and the word "subscribe" to: IPMnet@science.oregonstate.edu-Ed.)

EDITORS' NOTES

Another excellent SIP meeting has come and gone...but SIP members continue to work behind the scenes to prepare for the upcoming meeting in Helsinki, to carry out Society aims and goals, to

produce collaborative research and education projects, and to keep the wheels of the Society turning (they are turning quite well!)

A sincere thanks to all members who have provided reports, photographs (Wendy Gerlenter, Dörte Goertz, Mark Goettel, Peter Krell, Don Roberts, Paresh Shah), and other information to share with fellow SIP members in the Newsletter. This issue has grown to a rather extraordinary length but with a majority of members choosing electronic copies, we are less restricted by mailing costs. Keep the news coming...the Newsletter is a good way to keep your SIP colleagues updated.

Heikki Hokannen is our next meeting organizer--let's all be ready to lend a hand where needed....



.....and, John Burand, you deserve a rest. Great job!!!



Have a wonderful holiday season and we'll see you in 2004.

Lee Solter, Vince D'Amico, Gernot Hoch



SIP President-elect, Just Vlák, President Harry Kaya and Past President Jim Harper at the council meeting in Burlington

Vote before December 1!

To vote go to http://www.sipweb.org/logo_contest/







(A) Mark and Karen amidships. (B) David O'Reilly, Nor Chejanovski Enjoying the ocean air - in the stern. (C) Jorge Ibarra and Marlinda Souza - in conference. (D) Sean Moore - in his cups. (E) Doreen Winstanley. (F) Gernot Hoch and Eva Mersich. (G) Flavio Moscardi. (H) James Baum: "Is that Champie?"



(A) John Vandenberg and Alice Churchill. (B) Jean-Louis Schwartz and Brian Federici: "I'm not going to get mad, no matter what he says". (C) D'Amico and McGuire: separated at birth? (D) The race begins. (E) Runners Neal, Andreadis, and Meikle. (F) Organizer of SIP Burlington 2003, John Burand. (G) Stephan's indecent proposal meets with a thumbs-up. (H) Jimmy Becnel and Lee Solter. (I) Antoine Bonhomme. (J) A manly Mike Brownbridge. (K) Some of the folks behind the scenes.