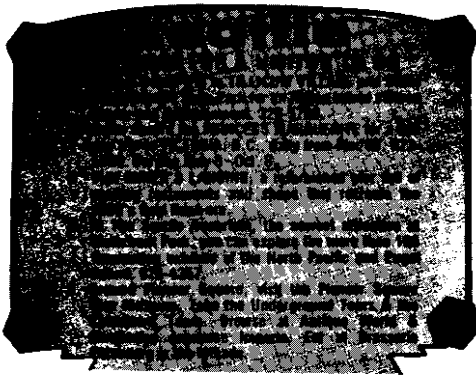


society for invertebrate pathology

Volume XII, Number 3
July 1980

XIIIth ANNUAL MEETING
SOCIETY FOR INVERTEBRATE PATHOLOGY
University of Washington, Seattle, Washington
July 27 - August 1, 1980



Seattle Sayings

Ever wonder where the name Seattle came from? Well, it seems that a group of settlers came to an area North of the Columbia River and settled at Alki Point, because they recognized a good thing when they saw it. It seems they were welcomed by a Chief Sealth of the Suquamish Tribe and the newcomers decided to name the town Seattle, which is as close as they could make it with the Indian name. Whatever, the area scenery is superb, not to mention the fact that Seattle has an established reputation for dining excellence and in particular seafood. Such yummys as Dungeness crab, Olympic and Pacific oysters, steelhead and salmon. I am looking forward to tasting a lot of the food; and I have already put myself on a strict diet so as to take care of the added pounds.

A. Domnas
SIP Editor



Election Results

Vox populi. The people have spoken! The results of our elections show that the following have been elected officers of the SIP for the next two years.

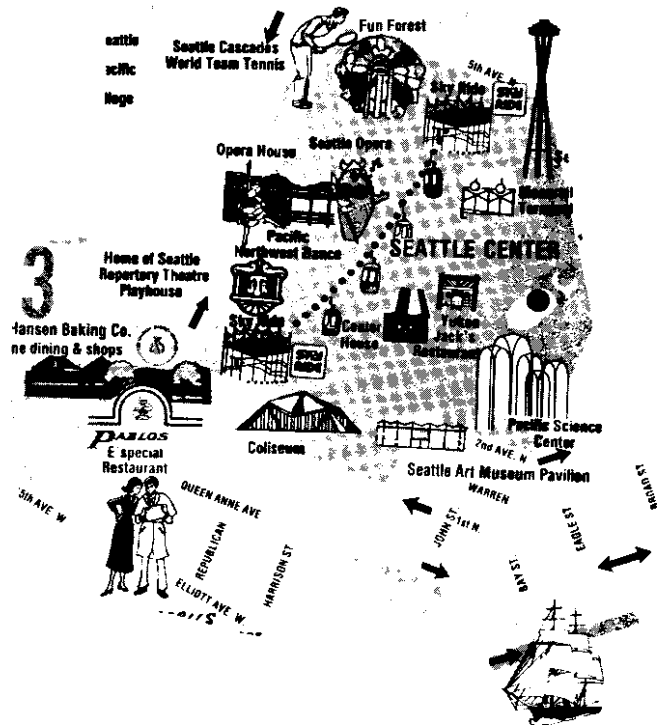
President:	P. Johnson
Vice-President:	W. Brooks
Secretary:	O. Morris
Treasurer:	J. Harper
Trustees:	T. Couch
	P. Luthy

Congratulations and good luck for their endeavors of the next two years. Mrs. M. Steinhaus was elected honorary member.

It was a good, and closely contested, election with almost 50% of the body politic exercising their rights.

Tellers

A. Domnas and R. Axtell



URGENT ADVISORY AND RELEASE FROM:
Seattle-King County Convention & Visitors Bureau,
Seattle, Washington

The City of Seattle and surrounding King County are alive and well and doing business as usual.

The City and County are more than 100 miles from Mt. St. Helens, Washington State's newest news feature. We have been virtually unaffected by ashfall or any other by-product of the mountain's eruptions. Nor is there likely to be any effect in the future, due to traditional wind patterns.

Unfortunately, however, we have been lumped together with all those areas which have been affected (most of which are now free of ash). As a result, many inquiries and expressions of concern have been forthcoming from those who want to visit Seattle and King County. We are doing our best to inform those interested about the complete lack of effect on our beautiful area but obviously we cannot reach everyone.

Seattle and King County still are the jewels in the Northwest crown they always have been.

Hartly Kruger
Executive Vice President

Note:

Al Sparks informs me that only some 60 members have registered for the meeting. Hey now, let's get in there, the mountain won't affect us.

From the Newsletter
Editor emeritus

The Editorial Board Dinner meeting schedule July 28, is cancelled because Dr. Cheng will be unable to attend the meetings.



Meetings

X International Congress on Tropical Medicine and Malaria, Manila, Philippines, November 9-15, 1980. Those interested in obtaining registration forms, etc. are urged to write:

Secretariat
P.O. Box EA-460
Manila, Philippines

Deadline for submission of titles and abstracts is July 30, 1980.

The Role of Edward A. Steinhaus in the Origin of the Society for Invertebrate Pathology

I have been asked to chronicle the events leading up to the formation of the Society for Invertebrate Pathology. I agreed to do so because of the need for historical documentation of our Society's origin, much of which is not in written form in the SIP Archives. It is unfortunate that this was not done earlier because I have had to rely largely on memory of events that occurred more than 13 years ago, my notes and many records having been lost in a fire and the remaining records donated to the Archives.

It all began at a meeting of a west coast oyster mortality steering committee in Teburon, California during January 1967. During an evening social session, Carl Sindermann expressed the view that the oyster pathologists had reached a stage of sophistication sufficient to join with the insect pathologists and form a society of invertebrate pathology in which workers in all areas of invertebrate disease would have a common interest. He said this could only be done through the influence of Ed Steinhaus and, because of my frequent contacts with Steinhaus as a member of the Editorial Board of JIP, I was the logical person to approach him on the matter.

On my return to Seattle, I called Ed and asked him what he thought of the idea. He was highly enthusiastic, stating he had proposed the same thing in a talk at the 8th International Congress of Comparative Pathology in Beirut, Lebanon in September 1966. There had been no favorable response to that suggestion or other similar ones over a number of years, largely because, in his opinion, he had been talking primarily with insect pathologists. They were quite comfortable because of their numbers and did not need the umbrella of an organization that the smaller numbers of molluscan and other non-insect pathologists did.

At Ed's suggestion, I prepared a list of all the researchers I knew who were working with the diseases of invertebrates other than insects. We combined my list with his list of virtually every insect pathologist in the world. We then prepared a questionnaire asking if the recipient was in favor of a truly international society of invertebrate pathology and whom they would nominate as members of an organizing committee. The questionnaire was sent to the 560 invertebrate pathologists on our combined list.

After allowing sufficient time for recipients to return the questionnaires, I visited Ed at the Irvine Campus where we evaluated the results. At that time 248 questionnaires had been returned, with 229 favoring the formation of the society and many enthusiastically supporting it in written comments. We considered the response a mandate to initiate the organization and turned to the nominations for membership on the organizing committee. A total of 98 individuals were nominated, 15 of whom received more than 10 votes. We arbitrarily decided that a seven person organizing committee was appropriate and the committee was formed of the seven individuals receiving the most nominations. As I recall, Ed Steinhaus was, not surprisingly, nominated on every return. The other members elected to the organizing committee were Tom Angus, Art Heimpel, Mauro Martignomi, Carl Sindermann, Victor Sprague, and Al Sparks.

Before I left Irvine, Ed and I drafted an Editorial Report for the Journal of Invertebrate Pathology in which we reported on the results of the questionnaire and our intention to proceed with the organization of the society (Sparks, A.K. and Steinhaus, E.A. 1967. Editorial Report. A proposed Society for Invertebrate Pathology. Jour. Invertebr. Pathol. 9(No.2): i-iii).

The next step was to set the date and location for the meeting of the organizing committee. We settled on May 9, 1967 at the College of Fisheries, University of Washington because three members of the organizing committee (Sindermann, Sprague and Sparks) would be participating in an oyster pathology workshop at that time and place. It also provided an opportunity for the insect pathologists on the organizing Committee to meet many of the leading American oyster pathologists.

At that meeting, the Society for Invertebrate Pathology was officially established by the Organizing Committee. The committee elected the first slate of officers: Edward A. Steinhaus, president; Albert K. Sparks, vice-president; and Arthur M. Heimpel, secretary-treasurer. The remaining members became the first governing council of the society.

The actions of the organizing committee were reported in an addendum to the Editorial Report by Sparks and Steinhaus in the Journal of Invertebrate Pathology. It was also noted in that report that, beginning January 1, 1968, the Journal of Invertebrate Pathology would be the official publishing organ of the Society.

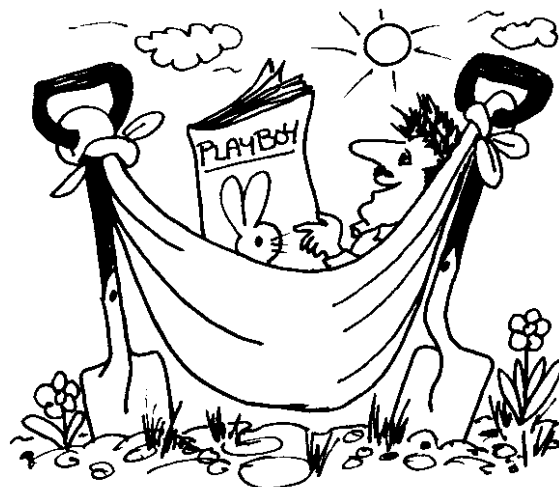
The first meeting of the new Society was as an adherent society of AIBS at Ohio State University, September 3-7, 1968, an appropriate but serendipitous location because Ohio State was Ed's alma mater for his graduate studies.

The first council meeting convened on the afternoon of September 2nd in the Conference Room of the Dean of the College of Biological Sciences and was reconvened in the evening at the house of John Briggs. In addition to the governing council, attendants included the chairman of the membership committee, Carlo Ignoffo, and program committee, John Briggs, appointed by Ed after the organizing committee's meeting in Seattle. There was an incredible amount of business to transact in this first Council Meeting of the Society and, perhaps setting the tone for future Council Meetings, the deliberations continued far into the night. Ed, however, with his characteristic enthusiasm and organizational ability, steered the Council through this difficult first meeting.

Members of SIP who have recently entered the field of invertebrate pathology and did not have the rare privilege of knowing Ed Steinhaus might well ask why he is almost deified by older members of the Society and perhaps question the importance of his role in the birth and early life of what is now a healthy adolescent, if not mature, organization. I find it easy to answer these questions: quite simply, without Ed Steinhaus there would not be a Society for Invertebrate Pathology. Only he had the stature and acquaintance of the world community of insect pathologists necessary to form the base of the organization. His leadership and organizational skills were essential in its origin and early growth. As Editor of the Journal of Invertebrate Pathology, he was able to arrange with Academic Press for JIP to be the official organ of the Society. Thus, the Society

began life with close official affiliation with an internationally known, prestigious journal, avoiding the financial problems that have frequently caused new and struggling societies to fail. Finally, in his all too short tenure as Past President, he provided wise counsel to both the Council and his successor as President.

Albert K. Sparks
Invertebrate Pathologist



THE NEWSLETTER EDITOR HAD TO RESIGN
BECAUSE HE WAS ASSIGNED OTHER MORE
PRESSING UNIVERSITY BUSINESS!

Regional Note--U.S.A.

The second joint US/USSR Conference on Microbial Insecticides, "Characterization, Production, and Utilization of Entomopathogenic Viruses," was held in Clearwater Beach, Florida, USA from January 7 to 10, 1980. The Conference was part of the continuing activity of Project V, Microbiological Control of Insect Pests, of the US/USSR Joint Working Group on the Production of Substances by Microbiological Means, under the US/USSR Agreement on Cooperation in Science and Technology.

The objectives of the Clearwater Beach Conference were to: (1) review past work and determine the current status of the use of entomopathogenic viruses for controlling insect pests in both the US and USSR, especially as it relates to production, selection specificity, standardization, safety, and epizootiology of entomopathogenic viruses; (2) define specific research objectives for collaborative research; (3) identify interested scientists to participate in collaborative research; and (4) develop a formal working document to assist in implementing research objectives.

The fifteen papers presented, eight by USA scientists and seven by Soviet scientists, covered both basic and applied research on the feasibility of developing viruses for control of insect pests. Research in both countries has concentrated on viruses associated with lepidopterans (*Apamea*, *Autographa*, *Heliothis*, *Lymantria*, *Mamestra*, *Orgyia*) and a hymenopteran (*Diprion*). As a consequence of this conference, scientists of the USA and USSR will exchange insect cell lines, published bioassay techniques, industrial preparations of insect viruses, a standard specification list for industrial viral preparations, and a current directory of US and USSR scientists working on entomopathogenic viruses.

The published proceedings, edited by Carlo M. Ignoffo, Mauro E. Martignoni, and James L. Vaughn, are available from the National Technical Service, Springfield, Virginia 22161.

Regional Note--Australia

Received a copy of the Australasian Invertebrate Pathology Working Group from Dudley Pinnock. It is a very nice publication which keeps close contact with the Australasian group and their particular regional interests. Those who may wish to procure a copy should write Dudley Pinnock at the Waite Agricultural Research Institute, University of Adelaide, Glen Osmond, Australia.

US/USSR Enzyme and Fungi Conference Proceedings Available

The Proceedings of the First Project V Conference on the Production, Selection, and Standardization of Entomopathogenic Fungi, held in Jurmala (Riga), Latvia, Soviet Union, 20-26 May 1978 and of the Fourth Project IV Microbial Enzyme Reactions Conference, held in New Orleans, 29 October - 3 November 1978 are now available from the National Technical Information Service (NTIS) of the U.S. Department of Commerce, Springfield, Virginia 22161, USA.

Both conferences were held in conjunction with the activities of the US/USSR Joint Working Group on Scientific and Technical Cooperation on the Production of Substances by Microbiological Means, under the US/USSR Science and Technology Agreement. The conferences were sponsored by the National Science Foundation through a contract to ASM.

Part of the joint work on Project V, Microbiological Control of Insect Pests, the first US/USSR Entomopathogenic Fungi Conference, reviewed the status of the use of entomopathogenic fungi for controlling insect pests in both the United States and the Soviet Union and explored possibilities for collaborative research. Presentations covered basic and applied research on the feasibility of developing fungi for control of insect pests. Research in the United States and the Soviet Union has concentrated on species of Aschersonia, Beauveria, Entomophthora, Hirsutella, Metarhizium, and Nomurea.

The fourth Project IV Enzyme Conference reviewed progress in the area of microbial enzyme reactions by American and Soviet participating scientists. Papers covered new enzyme sources (isolation techniques and purification methods); enzyme and co-factor immobilization; industrial, medical, and analytical uses of enzymes; and new concepts, such as bio-fuel cells.

The Fungi Proceedings include seven U.S. papers and eleven USSR papers and can be purchased from NTIS in hard-cover copy for \$16 and in microfiche for \$3.50. The accession ordering number is PB80-106552.

The Enzyme Proceedings consist of 11 Soviet papers and 20 American papers and cost \$25 for the hard-cover copy and \$3.50 for microfiche. The accession number is PB80-132913.

Regional Note--U.S.A.

A "Workshop on Insect Pest Management with Microbial Agents: Recent Achievements, Deficiencies, and Innovations" was held May 12-15, 1980 in Ithaca, New York under the sponsorship of the recently organized Insect Pathology Resource Center (IPRC) and the Rockefeller Foundation. There were approximately 180 registered participants representing 25 nations. Attendance at some sessions exceeded 200 due to unregistered visitors from the Cornell University community.

Five major topics were treated by approximately 50 invited speakers and panelists: I. Progress in Microbial Control (1975-1980); World Activities; II. Progress in Microbial Control (1975-1980); Pathogens; III. Progress in Microbial Control (1975-1980): Developing Integrated Pest Management Programs; IV. Current Technological and Conceptual Impediments to Widescale Use of Microbial Control Agents; V. Innovative Approaches and Solutions to the Problems Impeding Widescale Use of Microbial Control Agents. The published proceedings of the Workshop will consist of abstracts submitted by the 28 speakers and recommendations on future directions on these topics prepared by the speakers, their panelists, and interested Workshop participants. Publication is expected in September 1980.

IPRC is comprised of the insect pathology specialists of the Boyce Thompson Institute Biological Control Program, the USDA Insect Pathology Research Unit at Boyce Thompson Institute, and the Cornell University Department of Entomology. Total staff currently is approximately 30, with 14 at the Ph.D. level. The functions of the Center include training, maintaining a repository of pathogens, consultation, and conducting applied research or basic research which bridges basic and applied studies, with emphasis on microbial control of pests.

Donald W. Roberts
IPRC Coordinator

SIPEople

Tom Cheng is moving from the Institute for Pathobiology to assume the directorship of the Marine Biomedical Research Program at the Medical University of South Carolina. Tom wants to be closer to the warmer waters--congrats and good luck for his new job. In the meantime, those who wish to send articles to the Journal of Invertebrate Pathology please note:

Dr. Thomas C. Cheng
Marine Biomedical Research Program
The Medical University of South Carolina
P.O. Box 12559 (Fort Johnson)
Charleston, South Carolina 29412

Authors are asked to refrain from sending in manuscripts to either the present or new address until July 1.

As is the pattern with several medical schools situated in coastal states, including the University of Florida College of Medicine, Duke University School of Medicine, and the University of Texas Medical College at Galveston, the Medical University of South Carolina has come to realize that a great deal can be learned about basic medical problems by studying marine organisms. Dr. Cheng was selected for the position because of his published studies on the basic mechanisms involved in cellular immunity in molluscs, especially marine bivalves. Thus, Invertebrate Pathology has formally gained another inroad into the world of Biomedicine.

As a part of the negotiations, this new program in South Carolina will also include all parasitological research within the Medical University. This includes studies on malaria, schistosomiasis, and zoonotic diseases transmissible to humans by marine animals.

Joining the initial faculty being assembled by Dr. Cheng are three other members of SIP: Dr. John T. Sullivan, Dr. David A. Schoenberg, and Dr. Keith H. Howland. Dr. Sullivan will be continuing his studies on the genetics of resistance of the snail *Biomphalaria glabrata* to *Schistosoma mansoni* under WHO sponsorship. Dr. Schoenberg will continue to study cell-surface recognition phenomena and transplantation immunity in marine invertebrates. Dr. Howland will further pursue his studies on the isolation and characterization of chemotactic factors of bacteria associated with marine bivalves. Besides his administrative duties, Dr. Cheng will continue to study the biochemistry and biophysics of phagocytosis under NSF sponsorship. Renewed efforts by the above named and other staff members on parasitism in marine organisms and marine toxicology have also been planned.

The new department will be housed in new facilities at Fort Johnson in scenic Charleston Harbor as well as on the nearby main campus of the Medical University.

Dr. Cheng extends his invitation to all to visit the new group in historic Charleston, South Carolina, and suggests that this colorful city might serve as the site for a future SIP meeting.

Dr. Hamon of WHO has been visiting several laboratories in this country, notably H. Chapman at Lake Charles and Joe Maddox at Urbana. Dr. Hamon informs me that Dr. Dubitskii does not replace Dr. Arata's position but is presumed to fill a new position.

From the Newsletter Editor

This issue marks my last effort as Editor of the Newsletter and to a certain extent my decision to leave this post is tinged with regret. When I first took on the responsibility, I followed a set format, but as I grew into the task I began to experiment (as is my nature) and I tried to imbue the Newsletter with some personality. Admittedly it reflects mine, somewhat flamboyant at times, with a rather low sense of humor as my classes have repeatedly told me, yet I enjoyed it to a large extent. However, inasmuch as I have an increasing responsibility to a variety of new tasks here in the hallowed halls of ivy, I've found it difficult to maintain a regular schedule for the Newsletter and meet my other obligations. Again, I feel that after four years at the job, it is time for me to step down and allow a new person with his or her personality to mold a new character for the Newsletter.

Many of us are unaware of the duties that are undertaken by our officers and how much of their time goes into the Society. As a consequence of my work with the Newsletter, I became aware of just how much is done by these people for the Society. The task of the Treasurer is not enviable because of the continual membership update, and how many of us know just how much work is put into the task of Program Chairman. My task as Newsletter editor put me into close contact with all the various sections of our Society, and I feel that this was an experience that was worth it.

I express my deepest thanks to the officers of the Society from President Weiser to John Henry (when he was in the country), to Joe Maddox for his unfailing response to my requests for \$, to Aaron Rosenfield, and to Phyllis Johnson who helped make some of our decisions. Thank you all.

My last thanks go to our pretty, most competent, and charming typist, Karen Hildebrandt, who had to literally translate my horrible writing and who never complained about the work I perpetually heaped on her. Thanks go to my cartoonist, Debbie Minor, who had to interpret my ideas.

Best wishes go to the new Newsletter Editor whoever that may be and I will do my utmost to assist in the transition period.

Aris Domnas



NEW MEMBERS

Regular members

- Mike Adang
Dept. of Bacteriology/Biochemistry
University of Idaho
Moscow, ID 83843
Research interest: Nucleic acids of Baculoviruses
- Serge Belloncik
Centre de recherches en Virologie
Institut Armand Frappier
531 Boul. des prairie
Laval, Quebec, Canada
Research interest: Insect virology, biological control, replication of virus in insect cell lines
- Meir Broza
96 Alpine Drive
Amherst, Massachusetts 01002
Research interest: Applying B.t. to control cotton pests in Israel and Middle-East; fungi-imperfecti
- Jacqueline Coremans-Pelseneer
Laboratoire Parasitologie ULB
115, bd Waterloo
B-1000 Brussels, BELGIUM
Research interest: Entomophthora/aphids

Ir. G. H. de Raaff
Gist-Brocades N.V.
Wateringseweg 1 Postbus 1
2600 ma Delft
NETHERLANDS

Research interest: Fungal genetics

A. T. Gillespie
Entomology Department
Glasshouse Crops Research Institute
Worthing Road
Littlehampton, Sussex
ENGLAND

Research interest: Entomogenous fungi are being studied to determine if any are suitable for use to control the glasshouse leafhopper Zygina pallidifrons and the thrips, Thrips tabaci

D. B. Godse
Station de Recherches de Pathologie Comparée
30380 Saint-Christol - Les - Alés
FRANCE

Research interest: Insect pathology in general and Baculo virus characterization in particular

Yasuhisa Kunimi
Laboratory of Biological Control
Research Division
Tokyo Sericultural Consulting Center
107 Hikita, Akikawa
Tokyo 197, JAPAN

Research interest: Epizootiology and biological control

Prof. Dr. Herbert W. Ludwig
Zoologisches Institut
Im Neuenheimer Feld 230
6900 Heidelberg
FEDERAL REPUBLIC OF GERMANY

Research interest: Ecology, mosquito control, parasitology

Thomas McInnis, Jr.
Botany Department
Clemson University
Clemson, South Carolina 29631

Research interest: Fungi parasitic on mosquito larvae

Hisashi Nemoto
Saitama Horticultural Experiment Station
Rokumanbu, Kuki-shi
Saitama 346, JAPAN

Research interest: Fungal diseases of insects and mites

Dr. Pamela J. M. Normansell
Department of Entomology
Glasshouse Crops Research Institute
Littlehampton, West Sussex BN16 3PU
ENGLAND

Research interest: Genetics of Bacillus thuringiensis

Kay M. Peters
4522 W. Sanna
Glendale, Arizona 85302

Research interest: Crop protection, plant resistance, feeding stimulants, insect bio-regulants

A. S. Rao
Biology and Agriculture Division
Bhabha Atomic Research Centre
Bombay 400 085
INDIA

Research interest: General invertebrate pathology, insect itssue culture

Riva Rubinstein
Boyce Thompson Institute for Plant Research
Cornell University
Tower Road
Ithaca, New York 14853

Research interest: Insect virology - special reference CPV

Kenneth Söderhäll
Institute of Physiological Botany
University of Uppsala
Box 540
751 21 Uppsala, SWEDEN

K. Roger Tsang
540 Hodson Hall
Department of Entomology, F. & W.
University of Minnesota
St. Paul, Minnesota 55108

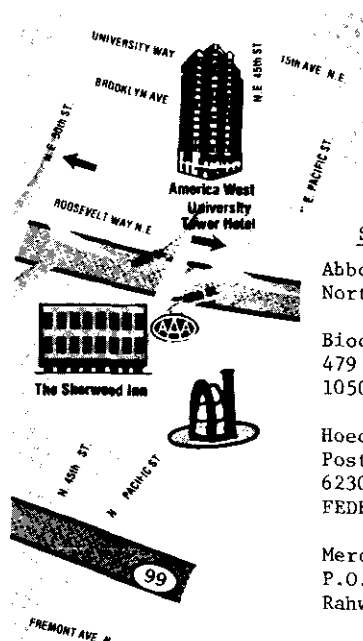
Research interest: Invertebrate (insect) itssue culture electron microscopy, insect pathology, transovarial transmission, Symbiotes, Microsporida

Loy Volkman
Department of Entomology
333 Hilgard Hall
University of California
Berkeley, California 94720

Research interest: Baculovirus; specificity/ characterization

Ceris F. Williams
Entomology Department, 1PV
Glasshouse Crops Research Institute
Worthing Road
Littlehampton, W. Sussex
ENGLAND

Research interest: Insect viruses, granulosis viruses of Cydia pomonella, Pieris brassicae, and P. rapae



Sustaining members

- Abbott Laboratories
North Chicago, Illinois 60064
- Biochem Products Corporation
479 Avenue Louise, Bte. 47
1050 Bruxelles, BELGIUM
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6230 Frankfurt (M) 80
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- Sandoz Inc.
P.O. Box 1489
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- Shell Research Limited
Biosciences Laboratory
Siltingbourne Research Centre
Siltingbourne, Kent ME9 8AG
UNITED KINGDOM

Student members

Gary W. Blissard
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Division of Biological Control
University of California, Riverside
Riverside, California 92521
Research interest: Baculoviruses

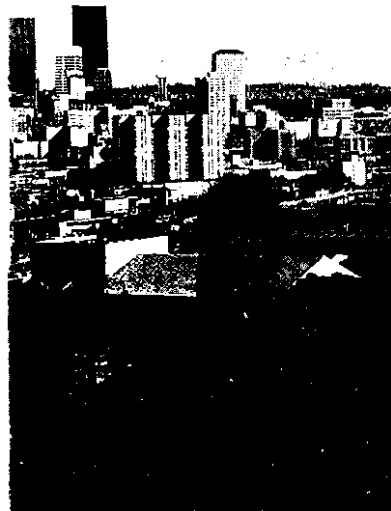
Esteban L. Cuebas-Incle
Department of Entomology
J. H. Comstock Hall
Cornell University
Ithaca, New York 14853
Research interest: Entomophthora spaerosperma
and E. rhizospora primary Conidia

Wendy Gelernter
Department of Entomology
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Riverside, California 92521
Research interest: Nuclear polyhedrosis viruses
of Noctuidae

P. Kanagaratnam
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Glasshouse Crops Research Institute
Littlehampton
West Sussex BN16 3PU
ENGLAND
Research interest: Bacillus thuringiensis and
Verticillium lecanii for control of wax moth,
glasshouse insect pests and blackcurrant mites

Ali H. Mardan
Department of Entomology
University of Minnesota
1980 Folwell Avenue
St. Paul, Minnesota 55108
Research interest: Microbial control of some
stored product insects

Andrew William West
Glasshouse Crops Research Institute
Worthing Road
Littlehampton, West Sussex
ENGLAND
Research interest: Survival of Bacillus
thuringiensis in the environment after dispersal
for pest control



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