



## **Golden Jubilee Meeting**

**Next year, we will celebrate  
the 50<sup>th</sup> anniversary of the  
Society of Invertebrate Pathology**

**The SIP annual meeting will be held in  
San Diego, California, USA  
August 13-17, 2017**



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## From the President

Dear friends and colleagues, dear SIP members,

This is my first "From the President" and I feel deeply privileged and gratefully honoured to be endowed with your trust and confidence to serve the Society as its head for the next two years.

Our Society was founded in May 1967. Soon, we will look back on 50 years of an incredible journey of progress and successful developments in invertebrate pathology and many related fields, such as microbial control, invertebrate ecology, edible invertebrates, as well as insect and plant biotechnology. We will celebrate this landmark in the history of SIP with our Golden Jubilee Meeting in San Diego — La Jolla, CA, from August 13-17, next year.

*"During these difficult times of world tribulation, rising taxes, increased dues of ongoing societies, increased printing costs, and even increased postage rates, such an effort [of initiating a new scientific society] might ordinarily be considered foolhardy",* wrote the moving spirit and first president of our Society, Ed Steinhaus, in the first SIP newsletter. Though our Society dues are still very modest, printing costs and postage costs literally do not exist anymore, being replaced by electronic tools, taxes have certainly increased and the world's misery and political adversity seem to be getting greater and greater, especially in recent years. However, before indulging in fruitless lamenting, we need to think about the situation in those days 50 years ago; wars in Vietnam and other places in the world, the Suez Canal crisis, catastrophic hunger in Africa, and an insurmountable iron curtain between East and West. Times have been always difficult. However, many societal discussions and political developments of our days are highly disturbing, especially for scientists used to, and dependent on international collaboration and sharing of ideas and concepts. New borders, new fences and new walls are being arrogated and erected physically in many places of the world, but especially in many heads. Many countries and societies appear to be untypically vulnerable to populism, new national egoisms and outlawing. But isn't it the deepest demand of personhood and the oldest human want to challenge inherited borders in thinking and to explore the unknown of this world and beyond? Therefore our life is based on knowledge and facts, not on conspiracy theories, prejudice and ignorance. We shall not allow these achievements to be questioned and shred.

No, the founders of our Society were not foolhardy. They were wise, far sighted and forward-looking. They would look with pride and satisfaction on their initiative and how this Society has developed to being the natural scientific home of so many talented invertebrate pathologists worldwide for half a century. This home has steadily nourished the success of advancing scientific knowledge and its application; it has stimulated research, and promoted international cooperation, as it was stipulated in the constitution of this Society. But even more, this home has cultivated a unique spirit and atmosphere of friendship and cordiality, among its members from all over the world. We, as SIP members, feel like a family, not always having the same opinion, but taking care of each other by living trust and mutual support. This makes this Society so different from all other professional societies of which I am member. By the way, nobody has ever better pointed out the family character of SIP as our former president Betty Davidson in her Presidential Address in the November 1992 Newsletter (Vol. 24, No. 3). It is a real pleasure to read.

Our Golden Jubilee Meeting will await you. We will have several special activities to celebrate this unique anniversary. We will commemorate our founders, and we will cheer our future, traditionally by giving out travel awards to



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*The Coronado bridge (1969) linking San Diego (on the right) and Coronado. It opened in 1969, during the celebration of the 200<sup>th</sup> anniversary of the founding of San Diego.*



students, as well as the highly prestigious Martignoni Award. On the occasion of the Golden Jubilee Meeting, the Council has allotted increased funding to the Divisions, to bring in more students and invited guest speakers. We will grant for the first time an Early Career Award. The Student and Postdoctoral Affairs Committee has prepared a YouTube contest, not only for juniors, but also for senior scientists interested in picking up new forms of information exchange. There will be a T-shirt contest and many, many other special activities will be ongoing over the next few months and during the meeting in San Diego. For communicating purposes, SIP uses this traditional newsletter but also its homepage, Facebook and Twitter account (@SocInPathol). Please check the SIP website and Facebook page for the latest developments.

For nearly 50 years, SIP has been founded on a solid and wise constitution, which needed only very few amendments to accommodate some novel developments, such as electronic voting in Council elections. Numerous members have served the Society as President or in other functions of the Council, Divisions or Committees. Therefore, I am in the lucky position, finding the Society in a very good shape, when starting my presidency. Of course, this is not really a matter of luck but the result of a foresighted and fruitful work of the past leaders, especially of the outgoing president Peter Krell and his Council. I wish to thank Peter for his exemplary leadership and service to the Society and his guidance to me during the last two years. I am looking forward to another two years when he will serve the Council with wit and wisdom as Past President. I would further like to thank the outgoing Council members, first of all, Jørgen Eilenberg, our previous Past President, who led this Society with his Nordic sense of humor and untiring commitment. Our secretary Mary Barbercheck wrote down the notes and minutes often before we got up the next day. The outgoing Trustees Ed Lewis and Surendra Dara, your advice and help was a great contribution to the efficient and smooth work of the Council. Surendra continues to carry several heavy burdens on his shoulder, not only as our Society's portrait artist, but also as the Chair of the Membership Committee and Chair of the Annual Meeting Program Committee of our Golden Jubilee Meeting next year.

I am looking forward to working with your new Council: Stefan Jaronski (Treasurer) and the Trustees Monique van Oers and Albrecht Koppenhofer who will stay on Council for another two years and will ensure continuity. I welcome a highly capable group of new Council members, who are Zhihong (Rose) Hu as Vice President, Juan Luis Jurat-Fuentes as Secretary and two new Trustees, Helen Hesketh and Sean Moore. Coming from four different continents, your council represents ideally the international nature of our Society.

I would also like to thank all members of the Society, who took and take action and execute their responsibilities in different Divisions and Committees. It is their dedication and involvement which moves the Society forward and makes it so attractive and important to invertebrate pathologists. And of course, I would like to thank our Executive Secretary, Cecilia Schmitt, who takes care of the daily work of the Society and runs both small and big things so smoothly and efficiently.

Last July, we had a magnificent meeting at the Vinci International Convention Centre in Tours, perfectly organized to the last detail by the local organizers Elisabeth Herniou, Christina Nielsen-Leroux, Michel Drezen and their team. More than 400 attendees and companions from 43 countries attended this event. Yet we sadly missed our friends and colleagues from Turkey, who did not receive travelling permission subsequent to the overthrow of the military coup, which happened just a few days before the meeting. We will not forget the reception at the historic town hall of Tours. We followed an exceptional scientific program with many special events, such as the Plenary Session on *Pathology of Insects Produced for Feed and Food*, as well as a one-day post-conference workshop on *Prevention and Control of Diseases and Contaminants in Insectaries* and an unforgettable public outreach event on insects as food at the Guinguette on Wednesday night, which demonstrated that insects can be a culinary delight. The Founders' lecture was given by Neil Crickmore in honour of David Ellar for his pioneering research on Bt toxin structure. I was especially pleased to see so many students presenting oral presentations and posters, and participating in student competitions and SIP affairs. Their enthusiasm and eagerness is a great contribution to the enduring youth of the Society. For the Tuesday excursion we were taken back several centuries when visiting the Château d'Amboise, a favored royal residence in the 15<sup>th</sup> and 16<sup>th</sup> centuries, and the Clos Lucé, where Leonardo da Vinci lived from 1516 until his death in 1519. The 5K race and the BBQ were hosted on another famous spot, the Domaine de Candé, a picturesque place that had also served as wedding place of the abdicated English King Edward VIII and Wallis Simpson. The banquet was held at the Grange de Meslay, a historic domain built in the early 1200s by the monks of Mar-moutier. Despite its long history, I am convinced that this barn had never harboured before such enthusiastic dancers who crowded the floor for hours, not wanting the musicians to leave. We will never forget this splendid meeting. *Merci beaucoup!*

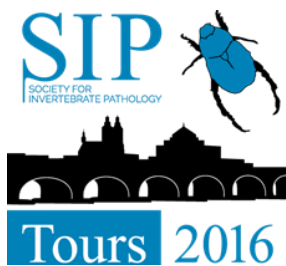
The membership has stabilized at about 450 members for several years now. This is a minimum number to keep the different activities and responsibilities of the Society going on. We shall try our best to bring membership up to 500 in its 50<sup>th</sup> year of existence. Council will work hard to reach this goal. This brings me to the last point of my first presidential address: it is time for you to renew your SIP membership and, for those of you who consider joining SIP, to do so. The membership fees are modest, only \$45.00 for regular members and \$20.00 for student members, a real bargain when you consider all the benefits you get. Please stay with us and help encouraging others to join. In case you are looking for a pleasant, useful and timely Season's present to give to your students and trainees, consider paying their membership fees and make them part of our wonderful Society.

Johannes A. Jehle





# Report on the 49<sup>th</sup> Annual Meeting of SIP in Tours, Loire Valley, France (July 24-28, 2016)



The International Congress on Invertebrate Pathology and Microbial Control and the 49<sup>th</sup> Annual Meeting of the Society for Invertebrate Pathology were held on the 24<sup>th</sup> to 28<sup>th</sup> of July 2016 at the Vinci International Conference Centre in Tours, France. Coming from 44 countries, 451 registered delegates, including 304 regular registrations, 106 students and 41 companions, participated in SIP 2016. We regret that unforeseen events led to a few last minute cancellations, in particular from our Turkish colleagues.

The SIP meeting began on Sunday afternoon with a special half-day workshop organized by the Bacteria Division entitled '*The Future of Bt nomenclature*' and with 121 registrants. On Monday morning, Neil Crickmore presented the Founders' Lecture in honour of David Ellar. This was followed by a plenary

symposium on the topic of 'Insects for Food and Feed'. Four concurrent sessions followed until Thursday afternoon. The SIP divisions and SIP 2016 program chairs put together an exciting scientific program. A total of 237 oral presentations were distributed in one plenary symposium, 10 symposia, four workshops and 25 contributed paper sessions. As reflected by their important contributions to the field of invertebrate pathology, women gave 33% of the invited presentations. On Wednesday morning, 146 posters were presented right to the end of a cocktail lunch. Junior researchers partook in several dedicated events, including a workshop on funding opportunities in the EU and the USA. As in SIP 2015, the abstract book was made available on line to all participants in pdf format to reduce printing costs. Pre-ordered printed copies were made available to 80 participants. In addition, 40 participants registered to the early morning Qi-Gong classes.

The social program took the SIP participants back to different periods of the

rich history of the Loire Valley. The traditional evening mixer was held at the 'Hotel de Ville' of Tours, introduced by a welcome speech from a city representative. On Tuesday afternoon, 248 people participated in the excursion to Amboise, where they visited the Castle and the 'Clos Lucé', the last home of Leonardo da Vinci. In the evening, 440 people attended the barbecue, renamed Garden Party, as befitted the Domaine de Candé. While some visited the castle, discovered outdoor games or just relaxed and enjoyed the view, 55 valiant participants undertook the 5K run around the castle's wooded grounds. On Wednesday evening many mingled around, with a drink and a few crickets at the 'Guinguette', where an outreach event on the theme of 'Insect Food' was organized. On Thursday evening the closing banquet was held in the fortified medieval barn of Meslay, with 'Lebel Orchestre' providing the entertainment.

*The SIP 2016 Organizing Committee*

## SIP 2016 ORGANIZING COMMITTEE

### **CHAIR**

Elisabeth Herniou, IRBI CNRS, Tours

### **PROGRAM CHAIRS**

Christina Nielsen-Leroux, INRA,  
Jouy-en-Josas

Jean-Michel Drezen, IRBI CNRS, Tours

### **REGISTRATION COORDINATION**

Annie Bézier, IRBI CNRS, Tours

### **JUNIOR RESEARCHER PROGRAM**

Diane Bigot, IRBI CNRS, Tours  
Matthieu Leobold, IRBI CNRS, Tours

### **5K RACE and QI GONG**

Philippe Gayral, IRBI CNRS, Tours

### **SOCIAL PROGRAM**

Jérémy Gauthier, IRBI CNRS, Tours  
Yannis Moreau, IRBI CNRS, Tours

### **OUTREACH PROGRAM**

Thibaut Josse, IRBI CNRS, Tours

### **LOCAL SPONSORSHIP COMMITTEE**

Elisabeth Herniou, IRBI CNRS, Tours  
Miguel Lopez Ferber, Ecole des Mines  
d'Alès, Alès  
Christina Nielsen-Leroux, INRA,  
Jouy-en-Josas

### **PROGRAM BOOK**

Dominique Lidoreau, formerly of IRBI  
CNRS, Tours

### **COMMUNICATION**

Faustine Louis, formerly of IRBI CNRS,  
Tours

### **WEBSITES COORDINATION**

Elisabeth Huguet, IRBI CNRS, Tours

### **VOLONTEERS**

Germain Chevignon, U Georgia,  
Athens, USA  
Aurore Dubuffet, U Clermont-Ferrand,  
Clermont-Ferrand  
Nadine Fresquet, IRBI CNRS, Tours  
Carlos Lopez Vaamonde, INRA,  
Orléans  
Julien Thézé, U Oxford, Oxford, UK  
Zoé Tourrain, INRA, Jouy-en-Josas



## Next SIP Meeting: San Diego, California, USA August 13-17, 2017

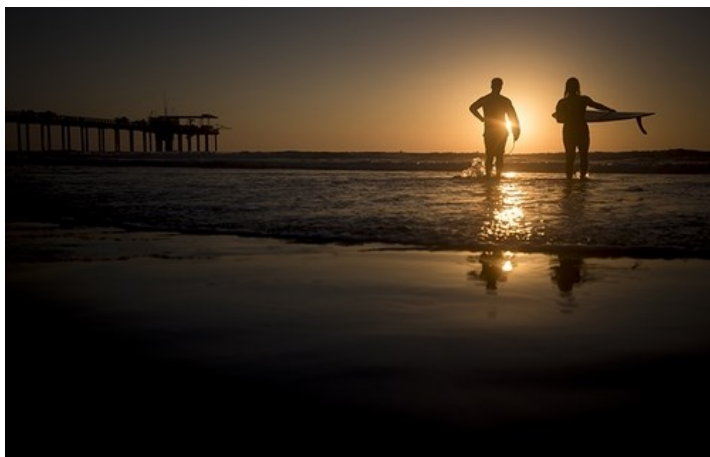


Arrangements are being made for the **Golden Jubilee SIP Conference** from the 13<sup>th</sup> to the 17<sup>th</sup> of August 2017 at the University of California San Diego campus in La Jolla.

Additional information will be available soon. Please send symposium ideas to your Division Chairs.

*Surendra Dara, Chair, Organizing Committee, SIP 2017*

*e-mail: [skdara@ucanr.edu](mailto:skdara@ucanr.edu)*



# SIP 2016 Award Winners

## Mauro Martignoni Award

### Julie V. Hopper

**Title: Pathogenicity, prevalence and intensity of a microsporidian infection by *Nosema fumiferanae postvittana* subsp. n. in the light brown apple moth, *Epiphyas postvittana*, in California**

Dr. Julie V. Hopper recently graduated from the PhD program at the University of California, Berkeley and is currently a postdoctoral fellow at the University of California, Davis. Her research interests include biological control, parasitology, pathology, entomology, aquatic ecology and global change biology. She aspires to use biological control in aquatic and terrestrial systems to manage disease and invasive species. Her PhD research focused on multitrophic interactions among the exotic light brown apple moth, *Epiphyas postvittana*, its host plants, resident parasitoid wasps and a novel microsporidian pathogen, *Nosema fumiferanae postvittana* subsp. n., in California.

Julie's current postdoctoral research investigates the mechanisms for effective biological control of the invasive water hyacinth, *Eichhornia crassipes*, in the Sacramento-San Joaquin River Delta, California. Although the classical biological control agent, *Neochetina bruchi*, results in damage to water hyacinth, current control outcomes in the Delta have not reached the desirable levels observed in other regions of the globe where classical biological control has been implemented. Julie is investigating several potential factors that could be limiting the success of this biological control agent in the Delta, including the effects of low temperatures during the winter, population bottlenecks and/or low genetic variation, and an unidentified microsporidian species (soon to be identified).

Julie is a proud member of the Society of Invertebrate Pathology and will be the Secretary/Treasurer for the Microsporidian Division and the Chair of the Student and Postdoctoral Affairs Committee for the 2017 and 2018 SIP meetings.



## Chris J. Lomer Award

### C.M. Senthil Kumar

**Title: Characterization and virulence of *Beauveria bassiana* associated with auger beetle (*Sinoxylon anale*) infesting *Pimenta dioica***



Dr. Kumar works at the Umad Indian Institute of Spices Research (ICAR), Kerala, India.

**Title: Residual efficacy of *Beauveria bassiana* (Balsamo) Vuillemin, diatomaceous earth, Imidacloprid against three Coleopteran and one psocid species of stored grains**

Dr. (rer. nat.) Waqas Wakil is an Assistant Professor at the Department of Entomology, University of Agriculture, Faisalabad (UAF), Pakistan. He has obtained his PhD from UAF and then another PhD (Doktor der Naturwissenschaften - Dr. rer. nat.) from Trier University, Trier (Germany), focusing on management of stored grain insect pests utilizing insect pathogenic fungi. He has 15 years experience in IPM of significantly important insect pests and authored/co-authored 70 research articles and book chapters. He has presented original papers at various international conferences as invited speaker. He edited two books on sustainable management of insect pests published by Springer and Academic Press - Elsevier (in press). He has worked in many world-renowned research laboratories as Visiting Scientist/Professor. His scientific interests are biological control, insect pathology and sustainable integrated pest management of insect pests. He is lead scientist of several extra-mural grants from different funding agencies. He has mentored number of PhD and MPhil students. In addition, he is a member of several professional societies, editorial boards of many scientific journals, a Fellow of the Royal Entomological Society (UK), a TWAS-UNESCO Associate. He completed his postdoctoral training as a Fulbright Scholar (USA).



### Waqas Wakil



# SIP 2016 Oral Presentations

## 1<sup>st</sup> Place — Oral Presentation Award Wided Souissi

**Title: Interactions between HepG2 and Parasporin-3**

My name is Wided Souissi. I am a second-year DPhil student in the School of Life Sciences at University of Sussex. I have always had an interest in molecular biology and genetics and this interest was deepened during my master's course (Developmental Cell Biology) at University of Sussex, which encouraged me to undertake a PhD in biochemistry. My PhD research interest is to investigate the interaction between a *Bacillus thuringiensis* crystal protein known as parasporin-3 and the human hepatic cancer cell line HepG2. Therefore, I have induced resistance in the HepG2 cell line through repeated exposure to increasing doses of the toxin. Morphological, physiological and genetic characteristics of the resistant cell line have been compared with susceptible cells. On the other hand, these toxins are only active after being proteolytically cleaved. I have shown that the relative toxicity towards human cancer cell lines (HepG2 and HL-60) depends on the protease used to activate the toxin. To understand this activation mechanism, various mutations were made at the N-terminal or C-terminal region of the protein and the toxicity against both susceptible cell lines (HepG2 and HL60) cell lines was evaluated.



## 2<sup>nd</sup> Place — Oral Presentation Award Johanna Mayerhofer

**Title: Non-target effects of *Metarhizium brunneum* on microbial communities assessed in pot and field trials to control *Agriotes* spp.**



Johanna Mayerhofer is currently enrolled in a PhD program in the Department of Environmental System Studies at the ETH Zürich in Switzerland and conducts her research in the Molecular Ecology group at Agroscope (Swiss agricultural research center), also in Zürich. She is studying if and how the applied entomopathogen *Metarhizium* spp. affects soil microbial communities. Her work was funded by the EU-project INBIOSOIL. In the context of INBIOSOIL, she collaborates with two PhD students from Italy and Switzerland to conduct pot and field experiments. Besides applying classic microbiological techniques and molecular identification tools of *Metarhizium* strains and species, which she had already learned during her master's degree in Microbiology, she took on a challenge with a Next Generation Sequencing project including advanced bioinformatics and statistics. Before her PhD, she became interested in biological control during her Master's thesis at the Institute of Microbiology at the University of Innsbruck in her home country Austria. There, she monitored a *Beauveria* strain, which was released in the previous 20 years in fields in Austria and Italy, using molecular tools. She obtained her bachelor's degree from the University of Vermont in Burlington, USA, where she earned a scholarship by competing in the Nordic ski team, improved her English skills and made her first experiences in the laboratory with her own small research project trying to purify and characterize an enzyme called phytase from a *Pseudomonas* species. Besides research in microbial control, she likes teaching cross-country skiing to adults, as well as coaching in a kid's program, and she is a member of a running club where she guides a visually impaired person. Johanna currently resides in Zürich where she is working on the last phase of her PhD.



## 3<sup>rd</sup> Place — Oral Presentation Award

### Thomas Whelan

**Title:** Genome evolution and pre-mRNA splicing in microsporidia and early-diverging fungi



Thomas Whelan is from Toronto, Ontario. He completed his undergraduate degree at Dalhousie University in Halifax, Nova Scotia. There, he worked in the lab of Dr. Alastair Simpson and studied predator-prey interactions in hypersaline environments between *Dunaliella salina*, an algae of economic importance, and the early-diverging apicomplexan predator, *Colpodella*. He went on to work at Mount Sinai Hospital in Toronto in Dr. Steven Gallinger's lab, which studies familial pancreatic and colorectal cancers using next generation sequencing techniques to catalog potential cancer-causing candidate genes. Thomas is currently working towards his PhD at the University of British Columbia in the laboratory of Dr. Naomi Fast, where he studies genome reduction, how it affects splicing and the spliceosomal proteins. He has recently started to culture *Rozella allomycis*, a close relative of the microsporidia, to determine when key spliceosomal components were lost in early-diverging fungi.

## Honourable Mentions — Oral Presentation Award

**Leo Graves**

(Oxford Brookes University, UK)

**Title:** 3-Dimensional ultrastructural modelling of *Autographa californica* multicapsid nucleopolyhedrovirus infection in insect cells to determine the role of P10 during baculovirus infection

**Racha Majed**

(MICALIS-INRA, France)

**Title:** Two polysaccharides are involved in the formation of specific biofilm structures in *B. thuringiensis*

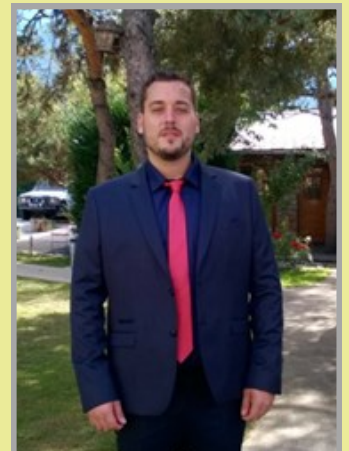
## SIP 2016 Posters

## 1<sup>st</sup> Place — Poster Award

### Laurent Consentino

**Title:** Mechanisms involved in the acquisition of host iron ferritin by the opportunistic insect pathogen *Bacillus cereus*

I am 32 years old and I was born in a Parisian suburb. I am currently a PhD student at the *Institut national de la recherche agronomique* within the *Génétique microbienne et environnement* team. Since I was a little boy, I have always been close to nature and my grandfather made me aware of the importance of the live world surrounding me, including the one that we do not see ... I studied physiotherapy but had to quit, so I entered the world of work for a few years. Meeting my partner was a turning point in my life and I wished to resume my studies in biology, a domain which fascinates me since my childhood. I first received a bachelor of biology at the *Université Pierre et Marie Curie* in Paris. I afterward continued in a master's programme, first in general molecular and cellular biology, then receiving my degree in Microbiology, Environment and Health at the *Université Pierre et Marie Curie* and at the *Muséum national d'Histoire naturelle* of Paris. The ecological and microbial questions are of particular importance to me and I wish to pursue a research career in this domain, especially in the field of host-pathogen interactions. Last but not least, I will be a dad at the end of the year; my partner is fulfilling my wishes and making me so happy. I am proud and honoured to obtain this award the same year my future son will be born.



## 2<sup>nd</sup> Place — Poster Award

### Mine Aksular

**Title: Improving baculovirus surface display system**



Mine Aksular is a final-year PhD student from Cyprus, working on investigating the antigenic structure of African horse sickness virus VP2 protein using baculovirus expression and surface display systems. Mine's project is a collaboration between Oxford Brookes University, Oxford Expression Technologies Ltd (OET) and the BBSRC Pirbright Institute. Mine has carried out all her higher education in the United Kingdom. Prior to her PhD, Mine had an undergraduate degree in Biomedical Sciences from Oxford Brookes University, which was followed by an MSc in Infection and Immunity from University College London. Mine's interest in baculovirus research started with her undergraduate research project under the supervision of Prof. Linda King. Her interest in virology was extended with her master's research project in which she studied the replication cycle of human cytomegaloviruses and herpes viruses. While undertaking these small research projects during her academic learning, she realized that she wanted to pursue a career in virology research. This then led on to her current PhD project. Following submission of her thesis, Mine will join OET as a postdoc working on an innovative UK-funded project to develop novel baculovirus gene therapy and vaccine vectors.

## 3<sup>rd</sup> Place — Poster Award (ex aequo)

### Diane Bigot

**Title: Overview of bee viruses in wild hymenoptera**

Diane Bigot is a PhD student working at the University of Tours (France) at the Institute of Research for Insect Biology (IRBI) in the team of Dr Jean-Michel Drezen and Dr Elisabeth Herniou. She holds a BSc in Biology from the University of Orléans (France) and a master's degree in Bioinformatics (Honours) from the University of Rennes (France). During her master's internships at IRBI, she developed an efficient bioinformatic pipeline for virus discovery from large metagenomic sequence data. She continued in this field for her PhD, co-supervised by Dr Herniou and Dr Philippe Gayral, with the goal to describe viral biodiversity and better understand virus evolution in non-model animals, including wild bees. Her combination of skills in biology and bioinformatics allows bridging the gaps between field work and data mining using Next Generation Sequencing technologies.



## 3<sup>rd</sup> Place — Poster Award (ex aequo)

### Martin Kunc



**Title: FIM Track: a novel method for tracking of *Drosophila* larval behavior in response to entomopathogenic nematodes**

Martin Kunc comes from the Czech Republic. He is currently a first year PhD student. He received his bachelor and master's degrees in Animal Physiology and Immunology at the Faculty of Science, Masaryk University, Brno. Martin's interest in pathology of invertebrates started when he was working on his bachelor thesis, where he focused on silver nanoparticles and their influence on invertebrate immunity. He also worked on this topic during his master's studies. His work on silver nanoparticles application was done under the supervision of MVDr. Mgr. Monika Dušková, PhD. His PhD project, under the supervision of RNDr. Pavel Hyršl, PhD, deals with the influence of food additives on the insect immune system. This project has recently started as a collaboration between Masaryk University and Maynooth University — National University of Ireland, with Martin as a member of the research team. Early Feb. 2016, Martin started an

Erasmus stay at Stockholm University in Sweden where he worked on *Drosophila melanogaster* behaviour and successfully implemented FIM Track as a novel research tool in insect pathology. He hopes to successfully finish his PhD in the future and to continue research in the field of invertebrate immunity.

## Honourable Mentions — Poster Award

### Keiko Tsuruta

(Tokyo University of Agriculture and Technology, Fuchu, Japan)

Title: Morphological properties of the occlusion body of *Adoxophyes orana* granulovirus

## SIP 2016 Student Travel Award Winners

### **Bacteria Division**

Satomi Adegawa, Tokyo University of Agriculture and Technology, Fuchu, Japan

Joaquin Gomis-Cebolla, Universitat de València, Valencia, Spain

### **Diseases of Beneficial Invertebrates Division**

Melanie Buote, University of Prince Edward Island, Charlottetown, Canada

Louise-Marie Roux, University of Prince Edward Island, Charlottetown, Canada

### **Fungi Division**

Yordanys Ramos Gonzales, Universidad Central "Marta Abreu" de Las Villas, Villa Clara, Cuba

Sonnica Albertyn, Rhodes University, Grahamstown, South Africa

### **Microbial Control Division**

Jamie Bojko, University of Leeds, Leeds, United Kingdom

Johanna Mayerhofer, Molecular Ecology, Institute of Sustainability Sciences, Agroscope, Zurich, Switzerland

Annette Sauer, Julius Kühn-Institut, Darmstadt, Germany

### **Microsporidia Division**

Thomas Whelan, University of British Columbia, Vancouver, Canada

### **Nematodes Division**

Deidré Odendaal, Stellenbosch University, Stellenbosch, South Africa

Monique Rivera, Rutgers University, New Brunswick, USA

### **Viruses Division**

Kaat Cappelle, Ghent University, Ghent, Belgium

Yue Han, Wageningen University, Wageningen, The Netherlands

Yu Shang, Wuhan Institute of Virology, Wuhan, China



## Remembrances

### Dr. Allan A. Yousten

Nov. 9, 1936 - Aug. 24, 2016  
Blacksburg, Virginia, USA

Dr. Allan A. Yousten passed away August 24, 2016 at the age of 79. Allan received his BS degree from the University of Wisconsin and PhD in 1963 in microbiology from Cornell University. He served in the US Army from 1963-1965 and as a research microbiologist at the International Minerals and Chemical Corporation in Illinois from 1965-1969.

Allan joined the faculty at Virginia Tech in 1971 as Professor of Microbiology and in 1980 he received a Fulbright Fellowship for research at the Pasteur Institute in Paris. He also was Visiting Professor at Arizona State University in 1987 and at Heriot-Watt University in Edinburgh, UK in 1994. He retired from Virginia Tech in 2001.

Allan's research interests included the physiology, ecology, and systematics of spore forming bacteria causing diseases in insects and the use of these bacteria for the biological control of insects. He published many papers on *Bacillus* and was especially important in the development of *Bacillus sphaericus* as a microbial control agent for mosquitoes. His research was supported by the World Health Organization and USA agencies. He was a member of the Society for Invertebrate Pathology for over 40 years.

Allan was preceded in death by his wife Anna Katherine and his son Kenneth Andrew. He is survived by his daughter Joanne and granddaughter Jamie. He enjoyed his backyard wildlife and garden, and travel to visit distant cousins in Belgium and Switzerland.



*Obituary prepared by Elizabeth Davidson, Chair, SIP History Committee*

## News and Announcements

### The SIP Golden Jubilee Early Career Award

The Council of the SIP has created an **Early Career Scientist award** to recognize outstanding contributions from invertebrate pathologists who are in the early stage of their scientific or academic career. For the Golden Jubilee Meeting in San Diego, USA, in August 2017, the SIP council has allocated US \$1250 for this award. The winner will be expected to give a 20 minute oral presentation, followed by a 5 minute discussion during the Annual Meeting. For this award, members in good standing are asked to nominate an early career scientist. The deadline for nominations is January 15, 2017.

Visit the SIP website at <http://www.sipweb.org/about/awardearlyc.html> to learn about the nomination procedure.

*Monique van Oers; Chair of the Student Awards and Contest Committee*

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### Members donate to the Society of Invertebrate Pathology

**Neil Crickmore** has donated a substantial amount of his Founders' Lecturer reimbursement and honorarium to the Lomer and Martignoni Funds.

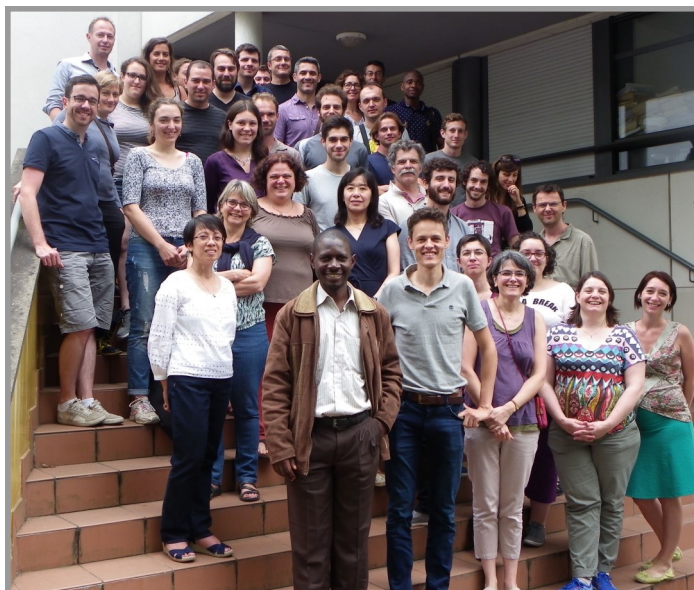
**Betty Davidson** has given the Bacteria Division a significant donation in memory of an old time member of the SIP, Al Yousten, who passed away recently.

The Society is very grateful for these generous donations.

## 2016 SIP Summer Workshop on Insect Pathology

### "Prevention and Control of Diseases and Contaminants in Insectaries"

The 2016 Insect Pathology workshop, focused on "Prevention and Control of Diseases and Contaminants in Insectaries", was held at the Institute of Research on Insect Biology at the University of Tours on July 29, after the annual SIP meeting in Tours, France. Twenty-eight eager participants, from academic institutions and industry, attended the workshop, representing nine countries (Belgium, Cuba, France, Kenya, Netherlands, Norway, Poland, Switzerland and the USA). The workshop was organized by Louela Castrillo, Elisabeth Herniou, Elisabeth Huguet, Christina Nielsen-LeRoux and Annette Bruun Jensen. Lectures, given by Louela Castrillo, Annette Bruun Jensen and Madoka Nakai, covered all major pathogen groups and included a section on colony establishment and maintenance. A laboratory session provided the participants hands-on experience with disease diagnosis and pathogen identification. Healthy and infected insects were prepared by organizers and Yanniss Moreau, Karine Musset, Zoé Tourrain, Miguel Lopez-Ferber and Aurore Dubuffet.



### Members of S1052: The Working Group on Improving Microbial Control of Arthropod Pests at the ICE/ISA conference in Orlando

The S1052 National Working Group on Improving Microbial Control of Arthropod Pests organizes its annual meeting in conjunction with the Entomological Society of America annual meetings. The group met on Sept. 24 at the International Congress of Entomology and ESA joint meeting in Orlando and discussed the progress of regional projects on microbial control of various arthropod pests throughout the United States.

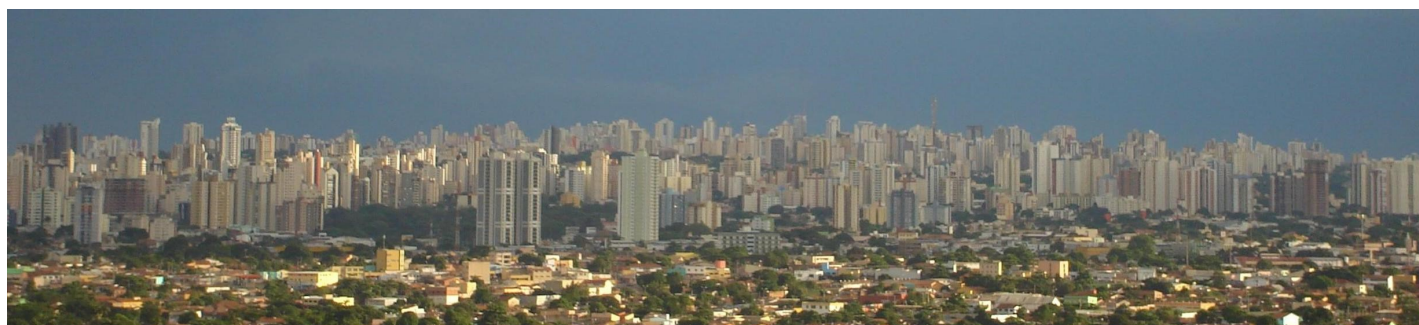
*Surendra Dara, Chair, S1052 national working group*



### Coming up: a conference on fungal stress

Drauzio Eduardo Naretto Rangel, a member of the SIP, is organizing the second International Symposium on Fungal Stress (ISFUS) at Universidade Federal de Goiás – Instituto de Patologia Tropical e Saúde Pública – Goiânia, Goiás, Brazil, May 8-12, 2017

For more information, visit <https://isfus.wordpress.com/>





## Founders' Lecture 2016



**Neil Crickmore**, University of Sussex, UK,  
presenting the Founders' Lecture:  
**“David Ellar: taking Bt beyond the realms of  
insect pathology”**  
in recognition of **Professor David J. Ellar**,  
University of Cambridge, UK.



Unfortunately, Dr. Ellar was unable to attend the SIP meeting in Tours. On Sept. 8, Neil visited Dr. Ellar and gave him his certificate as **Honoree of the Society of Invertebrate Pathology 2016 Founders' Lecture**.



David Ellar: taking Bt beyond the realms of insect pathology







**A cheerful, caring and efficient  
team of organisers**





**Qi Gong**



**La Guinguette: wine, beer and... insects**



**Silent auction**



**Other great moments**



**Handing over the baton**



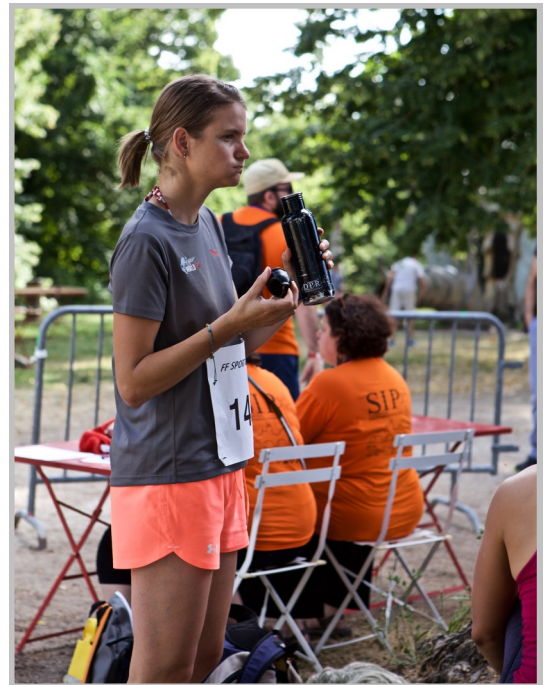
**Or is it the tuque?**



**Reporting on Divisions' current and future activities**

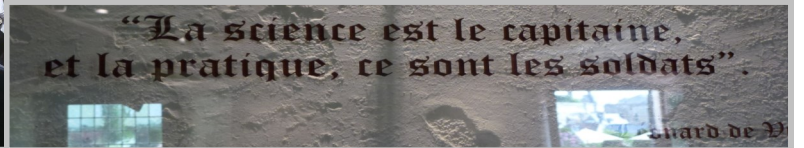


## SIP 2016 5K Race





## SIP 2016 Excursion and Barbecue





## SIP 2016 Banquet





**From SIP 2016  
in Tours,  
France**



**to SIP 2017  
in San Diego, USA...**



**Golden Jubilee celebration:  
the cherry on the cake!**  
*(Dessert served at  
the banquet at  
La Grange de Meslay)*

