BULLETIN

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Dans ce numéro:

December 2015

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Décembre 2015

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This issue of the CSPB/SCBV Bulletin reports on the major events of our society in 2015, including our Annual General Meeting, which was part of the Botany 2015 Conference in Edmonton July 25-29.

Our 2015 Eastern Regional Meeting was held November 20-21st at the University of Toronto, St. George Campus, and was co-chaired by Darrell Desveaux, Daphne Goring and Nicholas Provart. Details of that meeting will feature in the next Bulletin.

The 2016 AGM will be a joint meeting with the Canadian Association of Plant Biotechnology. It will be held June 19-21 at Queen's University in beautiful, historic Kingston Ontario. As the new CSPB Vice-President, I look forward to seeing you there.

Geoffrey Wasteneys, UBC Interim Communications Director and Vice-President

Word from the CSPB President

As this new academic year is already well underway it is a great pleasure to address you as the new President of the CSPB. I would like to seize the opportunity to thank the following CSPB members terminating their mandates for their involvement and tireless implication in the operation of the Society: Outgoing President Vincenzo de Luca had served from 2013-2015 after a mandate as Vice-President from 2011-2013. On the behalf of all members of the Society I would like to thank him for having led the Society over a period that saw intense interaction with other societies (joint meeting with ASPB in 2014 and joint meeting with Plant Canada and the Botanical Society of America in 2015). Outgoing Western Regional Director Greg Moorhead, Education Director Madoka Gray-Mitsumune and Outgoing Past President Bill Plaxton deserve appreciation for their service on the CSPB Executive. And finally, words are hardly enough to recognize all the work that Outgoing Treasurer Harold Weger has done for the Society over the past decade. He has been and is both the 'memory' and the omnipresent fixer of all problems and the CSPB wouldn't be what it is today without him.

The beginning of my own mandate as President coincided with the Society's annual meeting in partnership with Botany 2015, in Edmonton on July 25-29, 2015. As then Vice-President I had taken the lead of our Society's involvement in organization of this joint meeting that brought together not only the six Canadian Societies making up Plant Canada, but also eight American Societies including the Botanical Society of America that was responsible for much of the logistics. The BSA's engagement in this meeting on Canadian soil is much appreciated. Botany 2015 attracted 1547 participants including 548 from Canadian institutions. 163 participants identified as CSPB members. 40 exhibitors were present in the exhibit hall. The preparations and organization would not have been possible without the help of numerous colleagues. Janice Cooke represented the society locally in Edmonton and among many other things she and her team of students were responsible for organizing the very successful CSPB Social at the Yellowhead Brewery that allowed CSPB members to mingle away from the bigger crowds of the conference. A non-exhaustive list of CSPB members actively involved in the organization and logistics of the conference are: Carl Douglas (coordination of the Plant Canada Breakfast workshop), Harold Weger (communication and finances), Michael Stasiak (communication), Glen Uhrig



Vincenzo de Luca passes the presidency to Anja Geitmann at Botany 2015 in Edmonton.

(organization of career development event), Madoka Gray-Mitsumune (co-organization of education symposium), Geoff Wasteneys (organization of CSPB sponsored symposium). Many thanks also to the following groups of people: Organizers of scientific sessions - Carl Douglas, Harold Weger, Vincenzo De Luca, William Plaxton, Jeffrey Waller, Daphne Goring, Uwe Hacke, Darrell Desveaux. Judges of oral student presentations - Harleen Kaur, Line Lapointe, Michael Emes, Mark Belmonte, Barbara Hawkins, Susan Murch, Fushan Liu, Robin Cameron, George Owttrim, Joanna Urban. Judges of poster presentations - Zakia Boubakir, Peter Constabel, Jeff Waller, Uwe Hacke, Abdelali Hannoufa, Bourlaye Fofana, K. Peter Pauls, Jake Stout, Simone Castellarin. Thank you to all for your help.

Among the very visible CSPB sponsored events were the CD Nelson Lecture given by 2014 Awardee Darrell Desveaux, preceded by opening words by David Turpin, President of the University of Alberta. A Major Symposium on 'Plant Resilience to Climate Change' attracted a large audience, and the Workshop 'Lab Bench to Boardroom: Developing Plant Science Ideas' organized by the CSPB Student/Postdoc Rep Glen Uhrig demonstrated the creativity of our younger scientists. At the Plant Canada Breakfast Workshop coordinated by CSPB Science Policy Director Carl Douglas members from all six member Societies discussed the challenges facing plant science in Canada and the mandate of the umbrella organization. Both the CSPB and Plant Canada are members of the Global Plant Council (GPC). I invite you to inform yourself on the activities of the GPC (including the most recent annual report) and our involvement in that organization on our web site at http://www.cspp-scpv.ca/ under 'Global Plant Council'.

The judges for the Presidents' Awards for best student presentation had the daunting task to judge a total of approximately 60 CSPB students, about half in the poster category, half in the orals. The winners were announced at the Plant Canada Reception and the most senior CSPB President in attendance, Rob Guy, handed out the awards to Nicolas Sieben (University of Calgary, best poster) and Valentin Joly (University of Montreal, best oral presentation). Honorable mentions went to Ashley Hart (University of Alberta, poster), Ian J. Girard (University of Manitoba, oral presentation), Ian R.Willick (University of Saskatchewan, oral presentation). My congratulations to these talented students!

Equally successful was the Eastern Regional Meeting of the CSPB, which was held on the St. George campus of the University of Toronto (November 20-21, 2015). Approximately 160 participants made this one of the largest Eastern Meetings and the program of speakers and posters rivalled that of an annual general meeting in scope and quality. The following student presentations stood out. Jennifer Doucet from the Goring Lab at the University of Toronto won the top oral presentation award for her talk "Investigating the roles of stigma-expressed RLCKs in compatible pollen signaling". Honorable mentions were awarded to Philip Carella from the Cameron Lab at McMaster University (Comparative Proteomics of Arabidopsis Phloem During the Induction of Systemic Acquired Resistance) and to Matt Stata from the Sage (Rowan and Tammy) Labs at the University of Toronto (Genetic Control of Alternate Chloroplast Patterns in C4 Bundle Sheath and Mesophyll Cells). The top poster award went to Ubaid Midhat from the Sneddon Lab at Queen's University (Characterizing the roles of Arabidopsis calmodulin-like protein, CML39, in hormonal regulation of early seedling development and fruit formation) and an honorable mention was awarded to Nicolas Bensoussan from the Grbic Lab at the University of Western Ontario (New insights into the spider mite mouthparts, their mode of action and their effect on plant tissues associated with feeding).

As the President of the CSPB I will continue serving on the Board of Directors of Plant Canada. The Board comprises two members of each member society, typically the societies' Presidents and Vice-Presidents. At the Edmonton meeting, the membership on the Board changed significantly with several mandates ending at that time. Both the Plant Canada President (Shahrokh Khanizadeh) and Treasurer (Carol Peterson) stepped down and Deena Errampalli (President of the CPS), and Tariq Akhtar (University of Guelph) took over the respective offices. Following the regular four-year cycle the next Plant Canada meeting will take place in 2019. The location will be communicated to our members once it has been decided. An ongoing discussion is being held pertaining to the mandate of Plant Canada beyond the organization of the quadriennual meeting.

Long term conference planning also concerns the regular joint meetings with the American Society of Plant Biologists (ASPB). The next joint meeting (Plant Biology 2018) will be held in Montreal in the summer of 2018. CSPB meetings in both 2016 and 2017 will be regular, CSPB-only Annual Meetings, or joint meetings with small societies. The upcoming Annual Meeting at Queen's University in Kingston (June 19-21, 2016) will be held in conjunction with Canadian Association for Plant Biotechnology (CAPB). I am looking forward to seeing you at these meetings!

Finally, I would like to follow up on the discussion that has been initiated already a couple of years ago, and that found traction at the last annual meeting: the Society Logo. The discussion whether to maintain the current logo or look into a modified or new one was triggered by the need for new dies to cast a new batch of CSPB Gold Medals. A new die would be required for at least one side of the medal to accommodate for the new name of the Society ('Biologists' instead of 'Physiologists'). After much discussion both at the annual business meeting and the executive the following has been decided:

- The reverse side of the medal showing the current CSPB logo (without text) will be maintained for the time being for the purpose of the medal. Even if a new logo will be adopted for the Society for web site and letterhead, nothing prevents us from maintaining history for a while longer on the medal.
- The front side of the medal that lists the Society name will be redesigned to change the name. Whether the twinflower will be maintained or a different design added will be decided in the coming months.
- A competition has been launched to solicit ideas for a new or modified CSPB logo to be used on web site and letterhead. A logo committee has been formed, chaired by Robin Cameron. Members are Geoff Wasteneys (CSPB Vice-President and Interim Communications Director), Ingo Ensminger (CSPB Communications Director starting January 2016), Peter Pauls (CSPB Past-President), Caitlin Donnelly, Anja Geitmann (CSPB President). Once suitable suggestions have been received, the membership will be consulted for opinions. We hope for your input!

Looking forward to seeing you in Kingston next summer.

Anja Geitmann CSPB President



2015 Awards

The Canadian Society of Plant Biologists La Société canadienne de biologie végétale

The Society (Gold) Medal

The Canadian Society of Plant Physiologists' Medal (the "Gold Medal") was established in 1967 and is awarded for outstanding published contributions, or for distinguished service to plant physiology, primarily in Canada. The recipient of the Medal shall be invited to address the Society at the annual meeting following the one at which the award is made.



Barry J. Shelp University of Guelph

Barry Shelp has forged a distinctive career path in fundamental, applied and translational plant science. As evidenced by more than 130 peer-reviewed publications and four book chapters that have been cited nearly 5000 times, Dr. Shelp has made notable research advances in our understanding of how plants cope at cellular, biochemical and molecular levels with a wide array of biotic and abiotic environmental stresses. Much of this research has direct application in agriculture and horticulture.

The C.D. Nelson Awardin Plant Biology

The C.D. Nelson Award is a monetary prize established in 1977 to recognize outstanding early career research contributions to plant physiology in Canada. Special consideration is given to originality and independence of thought. Nominees shall have been in an independent, full-time research position for no more than 10 years.



Janice Cooke University of Alberta

Since her appointment in July 2005, Dr. Cooke has become a leader in her investigation of forest tree genomics and the mountain pine beetle infestation. Her diverse research interests span all aspects of the pine beetle infestation, the molecular biology of dormancy, nitrogen utilization and water movement in trees. These projects have broad ranging scientific and socio-economic impacts of not only domestic but also global significance. The importance and diversity of these projects is reflected in extensive individual and group funding from a variety of organizations including NSERC, Alberta Innovates,

CFI and Genome Canada. Specifically, Dr. Cooke was the co-lead on two TRIA Mountain Pine Beetle Epidemic Large Scale Genomics Research Projects and is currently the director of the NSERC Strategic Network, TRIA-Net: Turning Risk Into Action for the Mountain Pine Beetle Epidemic. Leadership of these programs highlights her ability to spearhead large collaborative research groups that generate significant research outcomes. She has published 55 papers or reviews including 32 since 2010 in top-tier journals such as New Phytologist, PLoS One, Molecular Biology and Evolution and Ecology. Dr. Cooke is also a devoted mentor at all levels, having supervised 2 research assistants, 10 post-doctoral fellows, 3 PhD, 3 MSc students and 30 undergraduate

research project students. Janice is also an award-winning teacher, having received a McCalla Professorship for Teaching and Research and a Faculty of Science Teaching Honor Roll - Student's Choice awards. Overall, the combination of research productivity and originality, the broad-based funding, the contributions to Canadawide research projects and HQP clearly identify Dr. Cooke as a prominent, international leader in her field. The CSPB/SCPB is delighted to honour Dr. Janice Cooke as the very deserving recipient of the 2015 C.D. Nelson Award.

The Ragai Ibrahim Award for Best Student Paper

The Ragai Ibrahim Award is a monetary prize for a peer-reviewed paper by a student member of the CSPB-SCBV. Nominated papers are evaluated on their impact or potential impact on plant science. The nominee will be the first or primary author of the work, and the paper must be based on work that the nominee performed as a student.



Ryan Christopher Eng University of British Columbia

The Ragai Ibrahim award committee unanimously nominated Ryan Christopher Eng as the 2014 winner of the Ragai Ibrahim award for the best published student paper. Currently, Ryan is a PhD student of Dr. Geoffrey Wasteneys at the University of British Columbia. Ryan's research published in the Plant Cell journal uncovered novel findings for the *Arabidopsis thaliana* ARMADILLO-REPEAT KINESIN 1 (ARK 1) as a microtubule destabilizing factor. Ryan utilized a number of advanced techniques, including chemical and genetic approaches as well as live-cell imaging through fluorescent protein

constructs to document the proposed function of ARK1 in modulating microtubule catastrophe (the rapid destabilization of microtubules), an important phenomenon involved in polarized tip growth such as root hair development. Ryan's work represents a breakthrough in the field of plant cell biology as acknowledged in the "in brief" article by The Plant Cell science editor Jennifer Lockhart. Furthermore, this work was also featured on the cover of the August 2014 issue.

Eng RC, Wasteneys G. 2014. The Microtubule Plus-End Trafficking Protein ARMADIILLO-REPEAT KINESIN1 Promotes Microtubule Catastrophe in Arabidopsis. Plant Cell 26:3372-3386

Honourable mention: Teagen Quilichini (Univ. of British Columbia) Quilichini TD, Samuels AL, Douglas CJ. 2014. ABCG26-Mediated Polyketide Trafficking and Hydroxycinnamoyl Spermidines Contribute to Pollen Wall Exine Formation in Arabidopsis. Plant Cell 26:4483-4498

Ann Oaks Doctoral Scholarship

The Ann Oaks Doctoral Scholarship is named in honour of the late Dr. B. Ann Oaks, a long-time member of the CSPB-SCBV. The Oaks Scholarship is valued at \$21,000 per year (equivalent to NSERC's PGS-D), and like the PGS-D, is renewable for up to a total of three years of support.



Christopher Wong University of Toronto - Mississauga

Christopher is a PhD student with Ingo Ensminger, and is working on the physiological phenology of conifers at a long-term carbon monitoring site at Turkey Point, ON. Among other things, his work will integrate leaf-scale photosynthesis to ecosystem-level primary productivity.

The Presidents' Awards

The Presidents' Awards are monetary prizes given to student members for the best oral and poster presentations of scientific papers at each Annual Meeting of the Society. Papers are judged on the basis of their scientific content and quality of presentation. By tradition, the winners are announced by the most senior Past President in attendance at the meeting.



Best Student Talk Winner

Valentin Joly Université de Montréal (Matton Lab)

"Plants' secret words of love: rapid evolution of pollen-pistil recognition proteins drives reproductive isolation of wild potatoes"



Best Student Talk Honorable Mention

Ian R. Willick University of Saskatchewan (Tanino Lab)

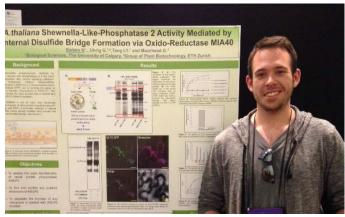
"Where did the water go? Mapping ice migration and regions of damage in winter cereal crowns during freezing stress"



Best Student Talk Honorable Mention

Ian Girard University of Manitoba (Belmonte Lab)

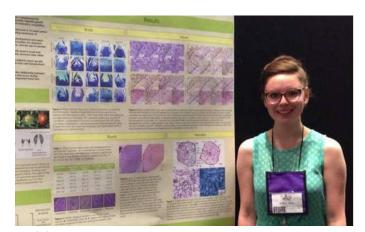
"Using Big Data to probe the plant defense response: RNA sequencing of the canola – Sclerotinia pathosystem"



Nicolas Sieben University of Calgary

Best Student Poster Winner

"A.thaliana Shewnella-Like-Phosphatase 2 Activity Mediated by Internal Disulfide Bridge Formation via Oxido-Reductase MIA40"



Ashley Hart University of Alberta

Best Student Poster Honorable Mention

"Cellular level changes that occur during white spruce growth cessation and dormancy acquisition"



Some photo impressions fromt the conference...



























Masatoshi Yamaguchi











Mark Belmonte & Simon Chuong













Good conversation



'Calgary guys'



Smiling faces

Greg O'Neill & Harold Weger





Sherryl Bisgrove & her student Tommy Kim

CSPB RNA-Seq Workshop and Western Regional Meeting at the University of Victoria

April 28 - May 1, 2015

NextGen Sequencing, and in particular RNA-Seq, is revolutionizing plant biology and plant physiology in non-model plants. In light of this, Jim Mattsson from Simon Fraser University volunteered his time and expertise to put on a three-day hands-on training workshop called "Make and Analyze Your Own RNA-Seq Libraries" for CSPB graduate students and trainees. The course was hosted at the University of Victoria by the UVic Centre for Forest Biology, with support from the UVic NSERC CREATE Program in Forests and Climate Change.



The expense of commercial library construction is often the limiting factor in RNA-Seq experiments, so that making the libraries yourself is very much worthwhile. Together with Juan Aldana, a PhD student in Forest Biology at UVic, Jim spent three days taking the group through the details of how to construct and test RNA-Seq libraries using commercially available kits. Everyone was successful in constructing libraries of RNA-Seq quality, using RNA from their favourite plants, and the trainees left confident they could now do this in their

home labs. The workshop clearly addressed a need - it filled up quickly to a total of 20 trainees, coming from throughout B.C., Alberta and Saskatchewan. Besides the direct

training, this was a great opportunity for the graduate students to get to know each other, and we hope that this network of students will facilitate more training and information exchange. Perhaps the course could serve as a model for future training workshops, put on regionally, for techniques of general

interest.

Jim Mattsson explains the finer points of RNA-Seq library construction during a three-day training workshop at UVic. Juan is on the far right.

The RNA-Seq workshop was organized as a satellite event for the one-day CSPB Western Regional Meeting on May 1st, joint with the biennual UVic Forest Biology Symposium. The meeting featured Janice Cooke from the Department of Biological Sciences, University of Alberta, as our first keynote speaker with a talk was entitled "Living on the edge: Responses of an evolutionarily co-evolved and a naïve pine in the face of mountain pine beetle range expansion". Michael Stoehr, a tree breeder with the B.C. Ministry of Forests, Lands, and Natural Resource Operations in Victoria B.C. gave the second keynote with the intriguing title: "The exciting life of a breeder". We also had ten contributed talks and 16 posters on a diversity of topics relating to plant and tree biology. Altogether the meeting attracted more than 70 participants from B.C. and beyond, and many graduate students and post-docs had the chance to present their work. The stimulating day of plant and forest biology wrapped up, as per tradition and in the original meaning of the word 'symposium', with refreshments in the lounge at UVic's University Club.

C. Peter Constabel
Department of Biology & Centre for Forest Biology
University of Victoria

The Global Plant Council (GPC)

The Canadian Society of Plant Biologists is a founding member, and a key supporter, of the Global Plant Council (GPC) (globalplantcouncil.org)



What is the GPC?

The Global Plant Council is a coalition of national, regional and international societies representing plant, crop and agricultural and environmental sciences across the globe.

Currently, there are 27 member societies from all continents (globalplantcouncil.org/about-us/members) The mission of the Global Plant Council (GPC) is to

- Facilitate the development of plant science for global challenges.
- Foster international collaborations and enable the effective use of knowledge and resources.
- Provide an independent and inclusive forum to bring together all those involved in plant and crop re search, education and training.

GPC Governance

Society representatives:

Each member society provides one representative to the GPC (usually 3-year terms), who discuss and vote on GPC business at the annual meeting. The current CSPB representative to the GPC is Carl Douglas, CSPB Science Policy Director.

President:

The President of the GPC is William (Bill) Davies, Professor of Plant Biology at Lancaster University, UK.

<u>Executive Board</u>: Members of the Executive Board of the GPC are elected to three-year terms by individual societies, usually through their GPC representatives, and meet regularly using electronic media. The elected incoming members of the Executive Board (in October, 2015) are:

- Barry Pogson Australian Society of Plant Sciences Chair
- Ariel Orellana Chilean National Network of Plant Biology Vice Chair
- Vicky Buchanan-Wollaston Society of Experimental Biology Treasurer
- Carl Douglas The Canadian Society of Plant Biologists/La Societé canadienne de biologie végétale - Executive Board Member
- Yusuke Saijo Japanese Society of Plant Physiology Executive Board Member

Staff: The GPC employs two staff members:

- Ruth Bastow Executive Director
- Lisa Martin Outreach and Communications Manager

Example GPC Activities

Website – actively curated with news, initiatives, resources relevant to the global plant biology community, as well as information about the GPC and its initiatives

Monthly E-Bulletin – available electronically and by email subscription

Plant Resilience Workshop – the GPC and the Society for Experimental Biology (SEB) held a Stress Resilience Symposium on 23–25 October 2015 in Foz do Iguacu (Iguazu Falls), Brazil in conjunction with IPMB 2015, the International Plant Molecular Biology Congress.

Annual Meeting – the Annual Meeting of the GPC was held 29–30th October 2015, at Foz do Iguacu (Iguazu Falls), Brazil

Initiatives – the GPC is currently developing three Initiatives, with the hopes of raising awareness of how plant biology can contribute to solutions global problems, and help support funding for plant biology research globally:

- Diversity Seek & Digital Seed Bank
- Biofortification
- Stress Resilience

See globalplantcouncil.org/initiatives for more information.

Further information

Please consult the GPC website (<u>globalplantcouncil.org</u>) for more information about the GPC and its activities, or contact CSPB Science Policy Director and GPC representative Carl Douglas (<u>carl.douglas@ubc.ca</u>) for more information about the CSPB and the GPC, and how you can become involved.



Treasurers' News Sheila Macfie

The punctuation in the title of this article is not a mistake. While I stepped into the role of Treasurer last July, Harold Weger will remain as a joint-Treasurer until the legal transition is complete. I truly appreciate having ready access to his extensive expertise and experience – thank you, Harold.

George H. Duff Travel Bursaries

The CSPB-SCBV allocated approximately \$15,000 in George H. Duff Travel Bursaries to students and post-docs who presented their research findings at Botany 2015 (Edmonton). This travel bursary program was established to make the annual CSPB-SCBV meeting affordable for students and post-docs, with the monetary value of an

individual award being proportional to the distance travelled. It is money very well spent as the student and post-doc presentations are reliably among the best at the meeting. Funding for the bursaries comes from Society coffers and donations from Society members. For Botany 2015, Plant Canada (The Federation of Canadian Plant Science Societies; http://www.plantcanada.ca/) generously contributed \$1,000 towards the Travel Bursaries.

Membership

We currently have about 380 members, of which 50% are full members and 45% are students and post-docs. Many disciplines within plant biology are represented – we are intentionally inclusive and we welcome new members from across the spectrum of plant biology. The CSPB-SCBV is the largest of the six member Societies of Plant Canada, and yet we have room to grow. New members do not require a sponsor to join our Society, the fees are very reasonable and the application process is simple (on-line: http://www.cspb-scbv.ca/membership_paypal.shtml or by mail: http://www.cspb-scbv.ca/documents/MembershipForm. pdf). Membership renewal is equally easy and the forms can be accessed through the websites listed above. Des versions françaises des formulaires d'adhésion sont aussi disponibles (http://www.cspb-scbv.ca/membership-f.shtml). The automated system for membership renewal and activation is provided to us via a contract with Vital Volunteers Inc. (http://www.vital-volunteers.com/).

Society Finances

The Society has generally broken even or gained small profits over the past few years. Annual meetings are more expensive to run than are Regional meetings, and some make more profit than others (mostly due to sponsorships), but we remain in excellent financial shape. This allowed us to steadily increase funding to the Duff Travel Bursaries (from \$3000 in 2002 to \$15,000 in 2015). In addition to funds dedicated to the George H. Duff Travel Bursaries, we hold money in the Ann Oaks Doctoral Scholarship Fund (http://www.cspb-scbv. ca/awards_oaks.shtml), which was established by the late Dr. Ann Oaks and which is topped up by donations from Society members. Donations to the Oaks and Duff funds can be made at the time of membership application or renewal, or separately, using the membership form.

Congratulations!

Dr. Joerg Bohlmann Inducted Into The Fellows Of The Royal Society Of Canada

Congratulations to Dr. Joerg Bohlmann for being inducted into the Fellows of the Royal Society of Canada (RSC) in the Life Science Division! This is the highest honour a scholar can achieve in the arts, humanities and sciences in Canada.

Dr. Bohlmann is a world leader in the fields of plant and forestry genomics and in plant natural products biology. He is distinguished for his research on the genomics of defense and resistance mechanisms of conifers against insect pests and insect-associated fungal pathogens, as well as on plant terpenoid biochemistry. New systems for high value



bioproducts, as well as groundbreaking approaches for conifer improvement, are emerging from this work. He was officially inducted into the academies of the RSC at a ceremony in Victoria in November.



2016 CSPB/SCBV Annual General Meeting

A joint meeting with the Canadian Association for Plant Biotechnology

June 19-21, 2016 Queen's University in Kingston, Ontario



Mark your calendar for 2016! The CSPB/SCBV Annual General Meeting for 2016 will be held from June 19-21 at Queen's University in Kingston, Ontario.

This will be a joint meeting with the Canadian Association for Plant Biotechnology (CAPB). Queen's campus is within walking distance to historic downtown Kingston, situated on the scenic shores of eastern Lake Ontario at the mouth of the St. Lawrence River and its nearby Thousand Islands. We are putting together an exciting program, so be sure to check back regularly for updates to our list of invited speakers, themes, and relevant information on registration, travel, and accommodation.

Confirmed plenary speakers:

Dr. Roger Beachy, Founding Director, World Food Center, University of California at Davis
Dr. Clint Chapple, Department of Biochemistry, Purdue University
Dr. Janice Cooke, Department of Biological Sciences, University of Alberta, (CD Nelson Winner, CSPB)
Dr. Thomas Greene, Research Director, Agronomic Traits, Trait & Technology Development, DuPont USA
Dr. Jiangxin Wan, Director of Research, Performance Plants Inc.

Dr. Jin Suk Lee, Department of Biology, Concordia University
Dr. Jacqueline Monaghan, Department of Biology, Queen's University
Dr. Maurice Moloney, Executive Director and CEO, Global Institute for Food Security,
University of Saskatchewan

Dr. Barry Shelp, Department of Plant Agriculture, University of Guelph, (Gold Medal Winner, CSPB)
Dr. Jian Kang Zhu, Director, Shanghai Center for Plant Stress Biology, Shanghai, China.
Departments of Horticulture and Landscape Architecture and Biochemistry, Purdue University

We look forward to seeing you in June, 2016! http://cspp-scpv.ca/meetings/2016AGM/

Message from the Incoming Education Director **Emily Indriolo**

Department of Biology, New Mexico State University

Hello everyone!

I would like to take this opportunity to introduce myself to the CSPB membership as the incoming education director. I am an assistant professor at New Mexico State University, but I became involved with CSPB during my postdoc at U of T and have been a member of CSPB since 2009.

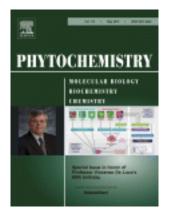


I took on the role of the education director in part because I am a junior faculty member and teaching is a new aspect to my career. I have taught my first few classes at NMSU and I am looking for ways to teach effectively with limited time and still improve for future classes.

Thus, one of my goals as the CSPB education director is to update our teaching resources on the CSPB website. I would like to create a resource for materials for undergraduate and graduate plant and molecular biologists to be shared amongst our community. For example, I taught Plant Structure & Function last semester and I will upload all of the laboratory exercises from my class to the website so that others may use them and modify them for their own purposes. I intend to do this for lecture slides as well as other materials from my teaching. The concept of this resource is to allow for the transfer of teaching materials between faculty and will aid in the development of materials especially for others. This also allows individuals to modify and adapt resources for others to use in the future. I am also looking for input into active learning and flipped classroom activities - so if anyone has done these in the context of plant biology, please get in contact with me.

For this to work, I will need others to contribute to this effort but as a community we can improve our teaching resources for the plant biologists from coast to coast to coast.

I will send out an email to the CSPB membership in mid-November with more details of this initiative.



In the news...

Aspecial issue of Phytochemistry has just been published honouring CSPB past president Vincenzo De Luca and his contributions to the field, on the occasion of his 60th birthday



CANADIAN BOTANICAL ASSOCIATION /ASSOCIATION BOTANIQUE DU CANADA

2016 Call for Award Nominations and Applications

Each year the Canadian Botanical Association gives awards to botanists studying in Canada, and Canadian botanists studying abroad. Many of the awards are available to non Association members. Applications and nominations are now open for the following:

STUDENT AWARDS

FOR PUBLISHED PAPERS

These awards are given to students for a paper they have published in the last year:

Porsild-Consaul Award for best paper in plant systematics or phytogeography. Value: \$1000 Stan Rowe Award for best paper in plant ecology.

Taylor Steeves Award for the best paper in plant development, or structure.

Luella Weresub Award for the best paper in mycology or lichenology.

Application deadline: February 1, 2016.

FOR BEST PRESENTATIONS AT THE ANNUAL CBA/ABC MEETING

Lionel Cinq-Mars Award is given for best oral presentation. lain and Sylvia Taylor Award is given for the best poster. Application deadline: March 1, 2016.

FOR TRAVEL TO ATTEND THE ANNUAL CBA/ABC MEETING

These awards provide travel funds for graduate (Macoun Award) or undergraduate (Winterhalder Award) students presenting talks or posters at the annual CBA/ABC meeting.

Application deadline: March 1, 2016. Value: \$200-\$600

FOR RESEARCH RELATED TRAVEL TO CANADA'S NORTH

Laurie Consaul Northern Research Scholarship Application deadline: March 1, 2016.

Value: \$1000

CBA/ABC MAJOR AWARDS

Nomination deadline: February 1, 2016.

The Mary Elliott Service Award is given to an individual for meritorious service to CBA.

The Magister Award is given for excellence in plant science teaching.

The Lawson Medal is the most prestigious award of the CBA. It recognizes excellence in the contribution of an individual to Canadian botany.

For more information see http://www.cba-abc.ca

Value: \$500

Value: \$500

Value: \$1000

Value: \$500

Student and Post-Doctoral Fellow Representative Update

This past July, CSPB student member Amanda Gregoris (University of Alberta) and I organized a version 2.0 of "Lab Bench to Boardroom". Originally inspired by CSPB student members Guillaume Theroux (Laval University) and Michael Stokes (University of Toronto), Amanda and I looked to build on their previous success at Botany 2015 in Edmonton, Alberta, Canada. To do this, we opted to create a 'Dragon's Den' style workshop, where presenters would 'pitch' their ideas to a panel of entrepreneurial science experts. The panel then worked with each presenter to further develop their idea into a business in front of a live audience. Due to the interactive nature of this workshop, we are immensely grateful to our presenters Dr. Susan Kaminskyj (University of Saskatchewan), Dr. Perrin Beaty (University of Alberta) and Laura Super (University of British Columbia) for giving excellent pitches. Each presenter highlighted unique and innovative science ideas that were at various stages of transformation into a business. As a result, each pitch stimulated exciting discussions amongst both the audience and expert panel members!

Our panel of experts included: Dr. Andrey Golubov (PlantBiosis), David Lloyd (FREDsense technologies), Jay White (Aquality Environmental Consulting) and Dr. David Bressler (University of Alberta). Thanks to each of them for donating their time and expertise to make this workshop a success. As well, we would like to thank our sponsors Illumina and Genome Alberta, who generously contributed to help make the workshop possible. Most importantly, we offer many thanks to Dr. Janice Cooke (University of Alberta). Without her contributions and excellent mentorship, this workshop would not have been possible.

Overall, workshop turnout approximated 30-40 people. We hope to build on this turnout during the next student and post-doctoral workshop event, which is currently being organized to take place at the CSPB annual meeting in beautiful Kingston, Ontario, Canada (June 19-21, 2015). As we are currently in the very early stages of developing a workshop for the 2015 CSPB meeting taking place Kingston, I encourage any motivated CSPB members who have an interesting idea for a student and/or post-doctoral workshop to please email me at cspbrep@gmail.com. New ideas are always welcome! For motivated CSPB student and post-doctoral fellow members, this could be a great opportunity to get more involved in the society.

I look forward to seeing you all in Kingston!

Warm Regards, R. Glen Uhrig (PhD, MSc)

Thank you to the CSPB/SCBV Corporate Members:





















Fred David Sack

Fred Sack, who spent the last 9 years of his career in the Department of Botany at the University of British Columbia, died on June 30th 2015, after a short illness. Fred's life touched many in the plant biology field and he will be remembered for his exploration of stomatal development as well as his work on gravitational sensing and response mechanisms.

Born and raised in New York City, Fred majored in sociology at Antioch College. After graduation in 1969, he worked for several years as a research analyst in the Health Services field, including a position as Assistant Management Analyst for the City of New York Prison Health Service. During this period, he became passionate about plants after discovering the Brooklyn Botanical Gardens, leading to his PhD from Cornell University in 1982 on the development and ultrastructure of the stomata of Funaria hygrometrica. After post-doctoral work at the Boyce Thomson Institute at Cornell, in 1984 Fred was appointed as an Assistant Professor in Botany at Ohio State University. There he established strong research programs in two areas. He continued to work with moss to understand gravitational mechanisms in plants, which led to a long association with NASA and involvement in various space biology programs including the Space Station Biological Research Project between 1992 and 1995. He also expanded his stomatal development research program. Progressing to Associate Professor in 1990 and Full Professor in 1997, Fred eventually became Chair of the Plant Cell and Molecular Biology Department from 2004 until his move to UBC Vancouver in 2006.

Fred brilliant research legacy includes his pioneering achievements in adopting the model system Arabidopsis thaliana to explore the genetics of stomatal development. It was at one of the early Arabidopsis meetings in Madison Wisconsin that I had the opportunity to first meet him. Several years later, while on a seminar visit to OSU, I asked if he would consider applying for the headship of Botany at UBC. Fred's response was positive and in 2006, he and his wife Dian Clare made their move to Vancouver. Fred was Head of Botany until 2011, overseeing numerous faculty hires and departures, while orchestrating structural changes in an increasingly challenging funding climate. Looking back, it is remarkable how Fred maintained his positive outlook through every crisis, and celebrated every success.

Fred's untimely death, which rudely came on the eve of retirement, brings great sadness. Yet Fred's scientific legacy lives on, and all of us who knew him, are touched by his sense of wonder, his warmth and humanity.

Geoffrey Wasteneys Vancouver

CSPB/SCBV EXECUTIVE AND COMMITTEE MEMBERS FOR 2015-2016



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Gleb Krotkov Award Committee | Comité du Prix Gleb Krotkov

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Nominating Committee | Comité des candidatures

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Society (Gold) Medal Award Committee | Comité de la médaille de la biologie végétale

Guy Samson (UQTR) 2016 Chair Line Lapointe (Laval) 2017 Greg Vanlerberghe (U. of Toronto) 2018

Newsletter Contributors:

Special thanks to Kasia Celler, UBC Botany, for Production Assistance. Your comments and suggestions for future publications of the CSPB/SCBV News Bulletin are welcome. Please forward all your written material to communication@cspp-scpv.ca.

Flash back to... CSPB ERM Guelph, 2014



















