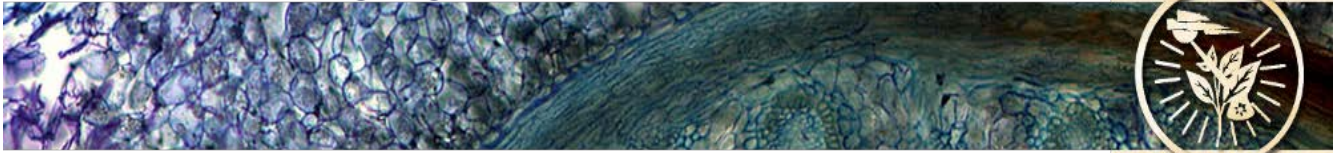

BULLETIN

BULLETIN

Société canadienne de biologie végétale.



Canadian Society of Plant Biologists

Dec 2013

Dec 2013

IN THIS ISSUE

Message from the President.....	2
Report on the 2012 CSPB/SCBV Eastern Regional Meeting.....	5
Report on the CSPP/SCPV 2013 Annual Conference.....	7
Report from the Education Director	10
Report from the Science Policy Director ..	12
Obituaries	13
Upcoming Meetings	14
CSPB Executive	15
CSPB Committee Members.....	15
Contributors	16

DANS CE NUMÉRO

Mot du Président	2
Compte-rendu du 2012 Congrès régional de l'Est de la SCBV	5
Compte-rendu du 2013 Congrès national de la SCBV.....	7
Nouvelles du directeur d'éducation	10
Nouvelles du directeur des politiques scientifiques	12
Les avis de décès	13
Congrès futurs.....	14
Membres de l'Exécutif	15
Membres des divers comités	15
Collaborateurs.....	16

This issue of the CSPB/SCBV Bulletin coincides with the 2013 Eastern Regional Meeting of the Canadian Society of Plant Biologists, which will take place from December 6 to December 7 at the University of Toronto Mississauga's Instructional Centre Complex in Mississauga. Information on the program, the schedule and the venue can be found at the conference webpage: (<https://secure.utm.utoronto.ca/cspb-scbv-2013erm/>)

Please visit the website as conference information will be updated frequently.

The next National Meeting of CSPB/SCBV will be a joint conference with The American Society of Plant Biologists, to be held in Portland Oregon July 12-16 2014. A travel bursary announcement for Plant Biology 2014 will be coming soon.

Details of this meeting are on provided on page 13 as well as at the conference webpage: (<https://aspb.site-ym.com/page/Oregon2014>)

Message from the President



CSPB/SCBV
President Vincenzo
De Luca
(Brock University)

The Canadian Society of Plant Biologists had its origins as a series of Annual Research Conferences on Plant Physiology from 1950-1958 that led to the founding of the previously named 'Canadian Society of Plant Physiologists' in 1958. It is an honor and privilege for me to represent this historic Society at such a critical time in our history. There have never been so many opportunities for Plant Biology to make critical contributions that will help to improve the human condition and that may at the same time create more sustainable conditions that will save our planet from the many threats of population growth and its consequences. The new and imposing fields of genomics combined with computing power and data organization are greatly increasing the pace of fundamental and applied plant biology discoveries. These new technologies are being adopted by plant biologists in order to expand knowledge in our field from a broad understanding of plant evolution and developmental biology to fundamental understanding of diversification of biochemical pathways that have led to the plethora of biologically active biomolecules that are responsible for human health and well being. These discoveries have enormous potential for solving in a sustainable manner many of the present and future needs of humanity.

A case in point may be illustrated by the astounding success achieved in the past year when Sanofi industrialized the production of the antimalarial agent 'artemisinin' in engineered yeast that had been transformed with the entire pathway derived from the source medicinal plant known as sweet wormwood (*Artemisia annua*). This success would not have been possible without very large grants to the Jay Keasling lab in California from organizations such as the Bill and Melinda Gates Foundation (\$40 million) and the OneWorld Health drug development program (> \$10million) that funded the mobilization of the technology to large scale production of this pharmaceutical. Remarkably, this success also involved a key Canadian contribution from the laboratory of Patrick Covello at the former Plant Biotechnology Institute of the National Research

Council of Canada in Saskatoon that discovered the two terminal dehydrogenases required to complete the pathway. The lessons from this success are clear: large-scale funding of targeted projects can lead to outstanding new technological advances, but not without the contributions of other smaller scale projects focused on particular components of target pathways. It is clear that industrial production of artemisinin in yeast provides a proof of concept that many more plant pharmaceutical pathways (bioflavonoids, morphinans, taxol, vinblastine etc) will soon be transferred to yeast or other microorganisms or in time to agriculturally important plants!

A question that may be asked is whether the Government is aware of the activities of Canadian Scientists and their impact. I recently had the privilege of meeting the Honorable Gary Goodyear, recently appointed Minister of State (Federal Economic Development Agency for Southern Ontario), when he visited Brock University on September 26, 2013 accompanied by St. Catharines MP Rick Dykstra. During a short presentation of our work on innovative approaches to produce plant pharmaceuticals, Minister Goodyear reflected on the importance of our work and then noted the success achieved with the production of artemisinin in yeast and especially the Canadian contribution that made it possible! The moral of this story is that, while we complain about the lack of time to do these types of activities, we need to make every effort to advertise our research, not only in scientific journals, but also to make their significance known to the public.

Over the past several years many of us have been complaining about the changing policies of funding agencies towards basic fundamental research. The argument has been made by many that funding in the areas of plant physiology, molecular biology and biochemistry needs to be increased significantly in order to develop world class research in plant biotechnology. The outcome of previous consultations by federal and provincial funding agencies has produced a number of impacts. In the 2013 discovery grants competition, the average NSERC discovery grant for established researchers was about \$36,000 (76% success rate) while it was almost \$27,000 (60% success rate) for early career researchers. Generally NSERC funds serve to provide baseline funding to plant biologists and both Provincial and Federal governments are expecting researchers to diversify their sources of funding by tapping into other granting sources, many of which require more applied forms of activity. Many funding schemes at the Provincial and Federal levels are promoting more interactions with local industries as a mechanism to match University skill sets to the

actual needs of the Marketplace. Perhaps it is time for members of our Society to consider these additional avenues of funding, even if many of them offer short term 6 month to 1 year funding opportunities. The successful collaborations may actually lead to longer term research and development collaborations and ultimately to enterprises requiring the skill sets of the students graduating from our laboratories! I still remember the days when NSERC funding involved a 2 or 3 year granting cycle, much shorter than the 5 year cycles of today! Perhaps the 5 year granting schemes have led to a certain amount of complacency on the part of our researchers? To summarize, it is important to seize the message that we may need to tailor our services to the needs of Society, since the alternative is to be satisfied with the base funding that we can get from the NSERC discovery grant system.

Perhaps it is time to start promoting some “Big” ideas and objectives again. I do recall when I was a graduate student that Plant Biologists were going to solve the problem of photorespiration, they were going to create nitrogen fixing cereals, disease resistance would be programmable, large scale crop cultivation would become feasible in colder parts of Canada and crops could be cultivated with lower amounts of water. It seems to me that with the new and emerging technologies of genomic and bioinformatics combined with the broader knowledge about fundamental pathways involved, these could be convincingly sold as major target areas for improving the production of crops. A targeted approach could serve both fundamental and applied science research goals. I would encourage members of our society to consult a document recently published by our American colleagues in the ASPB entitled: “Unleashing a Decade of Innovation in Plant Science.” (<http://plantsummit.files.wordpress.com/2013/07/plantsciencedecadalvision10-18-13.pdf>) where a planetary vision for Plant Biology for 2015-2025 has been promoted.

Changing the Name and Constitution of our Society: We are almost there!

The executive of CSPB and in particular Harold Weger has been heavily involved with changing the name of our Society to “The Canadian Society of Plant Biologists/La Société canadienne de biologie végétale”. While the name change has been relatively problem-free, our new constitution (draft can be consulted on the CSPB web site) must be approved by the Charities Directorate of the Canada Revenue Agency and by Corporations Canada since CSPB is a not-for-profit corporation and registered charity. I am happy to report that we are almost there with completing all of the requirements

and that we should soon have final government approval. I would like to recognize and thank Harold for all of the efforts and for the fine job he is doing to bring this task to an end for our Society.

Activities of CSPB

The activities of the CSPB have traditionally been focused to serve the needs of our members. Our regional and annual meetings in particular are excellent venues for Society activities where students, postdoctoral fellows and their supervisors can exchange research results, develop collaborations and promote professional development.

Last year the Eastern Regional Meeting of the CSPB was held at Wilfred Laurier University in conjunction with The Plant Development Workshop on November 30th and December 1st, 2012. I would like to acknowledge and thank Allison McDonald (Chair), Frédérique Guinel, Matthew Smith, Jennifer Baltzer and Kevin Stevens as well as numerous students and post-doctoral fellows and the University of Waterloo for organizing an excellent meeting with over 140 participants (in spite of a bad and very early winter storm!). I thank several sponsors of the meeting for their financial assistance. The plenary lectures were well connected with a focus on the origin of plastids, endosymbiosis and single cell C4 photosynthesis. The oral presentations and posters were very well organized and well-scheduled and congratulations go to the winners of the best oral presentations/posters.

The Annual Meeting of the CSPB was held at Université Laval in Québec City from June 25-28, 2013 amid some quite unusual weather that was being experienced throughout Canada as some of you may recall. The organization of the meeting was excellent and I am extremely grateful to the organizing committee [Line Lapointe (chair), Steeve Pepin, Annick Bertrand, Armand Séguin and Dominick Michaud] for their tireless efforts before, during and after the meeting to make it a wonderful experience and success. In addition, many students and other members of Université Laval were also extremely important for their involvement in the organization of this meeting and should be acknowledged as well as the numerous sponsors who helped with financing of the meeting. The success of the meeting was also assured by the participation of approximately 200 registrants who participated enthusiastically in the meeting and by the fact that the entire meeting was held on Campus with residences and modern conference center being very close and accessible. The plenary sessions were excellent and covered the areas of biomass and bioproducts, the effects of climate

change to their production and the evolution of plant-microbe interactions in relation to climate change. In addition, there were over 65 excellent oral presentations and as many posters presented that made it very difficult to choose the best oral and poster presentations. The meeting concluded with a thought provoking talk by Mike Deyholos who was the 2012 CD Nelson award winner, on the use of genomics for crop improvement by discussing his work on Flax as an example. Other important activities included a symposium organized by students on how to start a business (From Lab bench to Boardroom: Creating a Viable Business from Your Graduate Research) by using selected examples of research results presented in this year's annual meeting. From what I heard, this was a well appreciated and interesting exercise and thanks go to the student organizers together with our student representative, Michael Stokes, for their efforts in making this a successful activity. I hope this type of initiative will continue in future meetings.

I thank the NSERC representative for participating in an information session relating to changes to the NSERC Discovery and Research Tools and Instruments Grants. Also the Education Committee led by Anja Geitmann deserves many thanks for continuing efforts to put on an education symposium on the growing problems with plagiarism in Science that was also well appreciated. Finally, the conference banquet completed an excellent week of deliberations and was organized to take place at the Musée des beaux-arts du Québec next to the historic site of the Plains of Abraham. The food was great, the atmosphere was jovial and elegant and the company was warm and friendly.

Future meetings of the CSPB

The Eastern Regional Meeting of the CSPB will be held at the University of Toronto at Mississauga on December 6-7, 2012). Please take a look at the web site (<https://secure.utm.utoronto.ca/cspb-scbv-2013erm/>) for registration information, meeting theme and venue.

As many of you know, we are meeting jointly with the American Society of Plant Biologists next year in Portland Oregon, July 12-16, 2014. This has been a longstanding tradition that began with the 1st joint meeting that took place in Calgary in 1973 and our Societies have met together in our respective countries on alternating 4 year intervals. Please mark your calendars and I look forward to see you all in numerous numbers next summer. Please remember to apply for travel support to this conference since there will be a travel budget available for some of you who wish to attend, but you need to apply in order to be considered!

Other future CSPB activities include our joint meeting as part of Plant Canada with the American Botanical Society in the summer of 2015 being held in Edmonton, AB and our National meeting that will be held in Kingston, ON in the summer of 2016.

Let's acknowledge our Officers of the Society and our Volunteers. At this point I would like to take a moment to thank Bill Plaxton who stepped down after a 2-year term as president of CSPB for his excellent tenure and guidance of our Society. He has fought long and hard for us with his efforts to draw attention to the importance of maintaining the research funding for Plant Biology in Canada. Bill has been gracious and extremely helpful whenever I asked him for guidance related to my role as an officer and vice president of the Society. It has been a great pleasure to interact with him and to serve our Society under his capable guidance. I would also like to take a moment to thank Soheil Mahmoud who has served as Communications Director and Bulletin Editor for CSPB for the past two years. I also thank Carl Douglas who steps down as Past President of CSPB and I welcome his continued involvement with our Society in a number of other capacities. Thanks go to Anja Geitmann for her efforts and who steps down as Education Director and I welcome and congratulate her for accepting the post of Vice President of CSPB. Special thanks go to Barry Micallef (Secretary) and to Harold Weger (Treasurer) who both fulfill many important functions that keep our Society organized and moving forward. The executive is also very thankful that Harold has agreed to stay on as Treasurer for another period of time. I would like to welcome Geoff Wasteneys as our new Communications Director and Bulletin Editor.

A special mention goes to all the volunteers whose work often goes unnoticed, but without whom our Society would not exist. These include our web master Michael Stasiak and the many people who participate in the many committees of our Society. Finally, I would personally like to express my gratitude to the many colleagues who participated enthusiastically in the evaluations of oral presentations and poster sessions over the course of the past years during the various Society conferences. Without your participation, this would not be possible and I am certain that our students greatly appreciate your friendly questions and critiques about their research during the CSPB conferences. Meanwhile I hope I have not forgotten anyone and I look forward to seeing you all at future meetings of our Society.

**Vincenzo De Luca,
President, CSPB-SCBV**

REPORT ON THE 2012 CSPB/SCPV EASTERN REGIONAL MEETING


**CSPB-SCPV Eastern
Regional Director, Ewa
Cholewa (Nipissing
University)**

The Canadian Society of Plant Biologists and Plant Development Workshop meeting was held on November 30th and December 1st, 2012 at Wilfrid Laurier University in Waterloo. The organizing committee was chaired by Dr. Allison McDonald, and also included Frédérique Guinel, Matthew Smith, Jennifer Baltzer, and Kevin Stevens. A group of wonderful student and post-doc volunteers welcomed 147 registered conference participants to the university's beautiful Science Building.



**Conference Organizer Dr. Allison McDonald with
CSPB president William Plaxton**

The theme of this meeting was Symbiotic Relationships. The meeting started on Friday evening with a public talk by Dr. Mary Rumpho from the University of Connecticut. Dr. Rumpho's research focuses on the unusual endosymbiotic association between algal (*Vaucheria litorea*) chloroplasts and a marine mollusc (*Elysia chlorotica*), resulting in photosynthetic sea slugs; the process by which the sea slugs acquire the algal plastids has been termed "kleptoplasty". Dr. Rumpho's plenary presentation was entitled: "Unraveling the mystery of photosynthetic sea slugs: Giving new meaning to *going green*". The talk was followed by the opening reception which also celebrated the 50th anniversary of the Biology Department at Wilfrid Laurier University.

In keeping with the symbiotic relationships theme, Dr. Debashish Bhattacharya opened the meeting early on Saturday, December 1st, 2012 with a



**Keynote Speakers Dr. Bedashish Bhattacharya and
Dr. Mary Rumpho**

plenary talk entitled: "Genomic methods elucidate the origin of plastids and endosymbiotic gene transfer in photosynthetic eukaryotes". In his research lab at Rutgers University in the Department of Ecology, Evolution, and Natural Resources, Dr. Bhattacharya studies single cell genomics, gene transfer and footprints of endosymbiosis to understand plastid evolution and the origin of the Plantae. In the following concurrent sessions speakers presented their research in the areas of environmental stress and plant-microbe interactions. The morning Plant Development Workshop session was focused on the development and regulation of organs and organelles.

Throughout the coffee and lunch breaks, conference participants discussed research advances in plant sciences presented in a display of 41 posters. Judges were busy evaluating 31 student posters competing for the Eastern Regional Director award for the best poster presentation. Judges selected Eric A. Clendening's poster entitled: "A unique N-terminal sequence in the CIRV replicase protein p36 is responsible for recruiting Vps23 during ESCTR-mediated re-modeling of the mitochondrial outer membrane" for the best poster award. Eric is conducting his studies in the laboratory of Dr. Robert T. Mullen in the Department of Molecular & Cellular Biology at University of Guelph. Praising the high quality of research and excellence of poster presentations, judges nominated Kristie Bruinsma's poster entitled: "P38 PEP peptides and associated receptors in Arabidopsis defence response to spider mite feeding" as a runner up with honourable mention. Kristie is working in the lab of Dr. Vojislava Grbic in the Department of Biology at University of Western Ontario.



Eric A. Clendening from University of Guelph (with Ewa Cholewa) receives Director's Best Poster Award

The afternoon session started with Dr. Simon Chuong's plenary talk "Going solo: the art of single-cell C4 photosynthesis in plants." Dr. Chuong is researching several plant species from the family Chenopodiaceae to understand the mechanisms that control the compartmentalization of organelles and biochemistry in fascinating single-cell C4 systems. The overall goal of Dr. Chuong's research is to provide opportunities for incorporating unique characteristics of C4 photosynthesis into C3 crops to improve carbon assimilation and plant productivity in the future.



Hwi Joong Yoon from University of Western Ontario (with Ewa Cholewa) receives the Director's Best Poster Award

Concurrent afternoon speaker sessions were grouped into the following themes: herbivory and pollination; subcellular organization; enzymology; molecular biology and genetics. Two afternoon Plant Development Workshop sessions focused on stress and defence responses as well as on flower development and self-incompatibility. Overall 51 speakers presented their research. Amongst all presenters, there were 34 students competing for

the award for the best oral presentation. A total of nine judges worked hard to evaluate student presentations and decided that Hwi Joong Yoon from University of Western Ontario was the winner of the Eastern Regional Director's award for the best oral student presentation. Hwi's work, "*SUNERGOS1*, a *Lotus japonicus* gene required for proper accommodation of rhizobial infection", is being carried out under the direction of Dr. Krzysztof Szczyglowski from Agriculture/Agri-Food Canada.

The judges also named Charlotte de Araujo as a runner up and distinguished her with an honorable mention. Charlotte presented her work entitled: "Evidence for multiple carboxysomal bicarbonate dehydration complexes based on the form and function of carbonic anhydrase". Charlotte is conducting her studies in the laboratory of Dr. George Espie in the Department of Cell and Systems Biology at University of Toronto, Mississauga.

The 2012 Eastern Regional Meeting of Canadian Society of Plant Biologists was a great success thanks to the great efforts of Dr. Allison McDonald, her organizing committee, and a fantastic group of student and post-doc volunteers. Wilfrid Laurier University proved once again to be a great host to CSPB ERM participants.

**Ewa Cholewa,
CSPB/SCBV Eastern Regional Director**



Recipients and runners up of the Eastern Regional Director's 2012 Best Presentation Awards

From Left: Kristie Bruinsma, Hwi Joong Yoon, Eric A. Clendening and Charlotte de Araujo

Report from the 2013 Annual Conference

The 2013 CSPB-SCBV Annual Conference was hosted at Université Laval in Québec City, June 25-28. This very well-organized conference was put together by Line Lapointe (Université Laval; chair of the organizing committee), Steeve Pepin (Université Laval), Annick Bertrand (Agriculture et agroalimentaire Canada), Armand Séguin (Ressources naturelles Canada), Dominique Michaud (Université Laval), and a host of other volunteers. The complete conference proceedings are available at the Society website (<http://www.cspb-scbv.ca/documents-proceedings.shtml>).

The conference started off with a morning plenary session about Biomass and Bioproducts, with a focus on using plant-based biomass for bioenergy/biofuels. Sustainable biofuels were discussed by Don Smith (McGill University), plant cell wall effects on biomass conversion was covered by Dario Bonetta (Univ. of Ontario Institute of Technology), and Shawn Mansfield (Univ. of British Columbia) covered genomic strategies for poplar improvement for bioenergy.

After a series of concurrent sessions, the CSPB Student Symposium ran over the lunch break. It

was titled “From Lab bench to Boardroom: Creating a Viable Business from Your Graduate Research”. The symposium was coordinated by Michael Stokes (Univ. of Toronto), the Society’s Graduate Student/PDF Representative on the CSPB Executive, along with Guillaume Thérault Rancourt (Université Laval). Presenters included representatives from bio-industry, universities and a patent agent.

The second day began with another plenary session: Responses to Climate Change. Pierre Bernier (Laurentian Forestry Centre) described climate impacts on the boreal forest, and Danielle Wáy (Univ. of Western Ontario) examined the constraints of vegetation responses to increasing temperature and CO₂. Lastly, Lisa Ainsworth (Univ. of Illinois) described the interactions between atmospheric [CO₂] and crop productivity.

More concurrent sessions followed the plenary session. Lunch was accompanied by a presentation from Marie-Claude Caron (Team Leader, Engineering and Life Sciences Division, NSERC), who described changes in the various NSERC programs.

The Education Symposium, organized by Anja Geitmann (Université de Montréal) and Madoka Grey-Mitsumune (Concordia University) led off the afternoon. The theme was a discussion about plagiarism, both intentional plagiarism and unintentional, and suggestions about how to reduce the incidence of both. The second day’s presentations were followed by the banquet and awards ceremony, held a short bus ride away at the Musée national des beaux-arts in Parc des Champs-de-Bataille.

The third and final day of the conference also began with a plenary session: Evolution of Plant-Microbe Interactions. Speakers were: Kamal Kourab (Université de Sherbrooke) who described the role of small RNAs in plant immunity; David Guttman (Univ. of Toronto) who described the evolutionary arms race between bacteria and plant immune systems; and Steven Kembel (Université de Québec à Montréal) who discussed evolutionary associations between plants and leaf microbes.

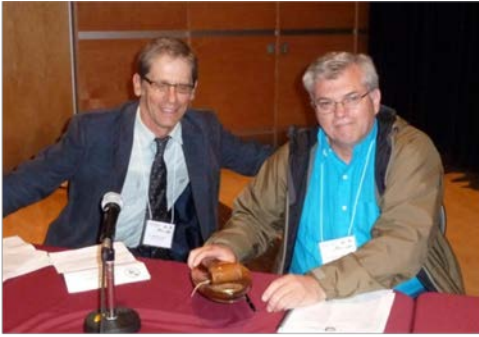
The conference closed with the C.D. Nelson Address, given by the 2012 C.D. Nelson Award winner Michael Deyholos (Univ. of Alberta). Michael’s talk was entitled “What a difference a gene makes: gene discovery and crop

improvement”. The conference was followed by optional field trips to visit the research facilities of the Complexe de serres haute performance or to the Jardin botanique Roger-Van den Hende, both located at Université Laval.



Organizing Committee for the 2013 Annual Conference

(L to R): Dominique Michaud, Line Lapointe, Armand Séguin, Annick Bertrand, and Steeve Pepin.



At the end of the Annual Business Meeting, now Past-President Bill Plaxton (left) officially handed over the CSPB gavel to incoming President Vincenzo De Luca (right).

Society “Gold” Medal

The CSPB Gold Medal is awarded for outstanding published contributions, or for distinguished service to plant biology, primarily in Canada. This year’s recipient is Dr. Beverley Green from the University of British Columbia, who is being recognized for her research contributions to chloroplast biochemistry and evolution of the photosynthetic apparatus. Dr. Green will be invited to give a plenary talk about her research at the 2014 joint CSPB-ASPB conference in Portland, Oregon.



Carl Douglas (right) accepted the Society Medal from new CSPB President Vincenzo De Luca of behalf of Beverley Green, who was unable to attend the conference.

C.D. Nelson Award

The C.D. Nelson Award is given for outstanding research contributions to plant biology. Special consideration will be given to originality and independence of thought. Nominees shall have been in an independent, full-time research position for no more than 10 years. This year’s winner of the C.D. Nelson Award is Dr. Uwe Hacke of the University of Alberta. Uwe was recognized for his

work in integrating functional anatomy, molecular biology, whole plant physiology, and ecophysiology to understand how plants optimize water use under different and ever-changing environmental conditions.



Uwe Hacke (right) accepting the C.D. Nelson Award from CSPB President Vincenzo De Luca.

Presidents’ Awards

The Presidents’ Awards are named after all of the Presidents (past and present) of the CSPB-SCBV, and are given out for the best poster presentation and best oral presentation at the Society’s annual conference. By tradition, the most senior former President attending the conference presents the awards, the winners of which are determined by a large panel of judges.



Thérèse Wallon (left) being congratulated by former CSPB President Robert Guy for winning the Presidents’ Award for best poster presentation.

In 2013, the winner of the Presidents’ Award for best poster presentation was Thérèse Wallon (Université de Sherbrooke), for her paper “Characterization of CCR-NB-LRR proteins, a unique and conserved protein family of the plant

immune system". The paper was authored by Thérèse Wallon, Sarah Collier and Peter Moffett.

An Honourable Mention for the posted award was Bronwen Forward (McGill University), for her paper "MUM ENHANCER 4 is involved in mucilage production in the mucilage secretory cells of *Arabidopsis thaliana*". The paper was authored by Bronwen Forward, Andrej Arsovski and Tamara L Western.

The winner of the Presidents' Award for best oral presentation was Wendy Lyzenga (Dalhousie University), for her paper "Keep On Going (KEG), a RING-type E3 ligase, mediates the proteasomal degradation of CBL-interacting protein kinase 26 (CIPK26). The paper was authored by Wendy Lyzenga, Hongxia Liu, Andrew Schofield, Alexandria Muise-Hennessey and Sophia Stone.



Robert Guy congratulates Wendy Lyzenga (left) on winning the Presidents' Award for best oral presentation.

Two Honourable Mentions were awarded for the oral presentations: 1) Travis Howe (University of Western Ontario), for "*In planta* examination of the subcellular localization of AROGENATE DEHYDRATASES (the paper was authored by Travis R. Howe, Crystal D Bross and Susanne E Kohalmi), and 2) Jordan Demone (McGill University) for his paper entitled "Characterizing the role of the transcriptional adaptor ADA2, an integrating node in the cold response mechanism of *Brachypodium distachyon* (authored by Jordan Demone and Jean-Benoit Charron).

Congratulations to the winners and the runners up.

Ragai Ibrahim Award

The purpose of the award is to recognize excellence in publication by graduate students, and is announced at the CSPB Annual Conference. The Ibrahim Award for best student publication in 2012 was awarded to Yue (Alex) Wu (Brock University) for his publication: Y. Wu, D. Zhang, J. Y. Chu, P. Boyle, Y. Wang, I. D. Brindle, V. De Luca, C.

Després (2012) The Arabidopsis NPR1 Protein Is a Receptor for the Plant Defense Hormone Salicylic Acid. *Cell Reports* 1:639-647. The work was performed while Alex was an MSc student with Charles Després.



Ragai Ibrahim (left) presenting the Ibrahim Award to Alex Wu.

An honourable mention for the 2012 Ibrahim Award went to Shiu (Terry) Chung Lung (University of Waterloo) for his publication: S. C. Lung & Simon D.X. Chuong (2012) A Transit Peptide-Like Sorting Signal at the C Terminus Directs the *Bienertia sinuspersici* Preprotein Receptor Toc159 to the Chloroplast Outer Membrane. *Plant Cell* 24:1560-1578. This work was performed during Terry's PhD program in the laboratory of Simon Cheng.

Reported by **Harold Weger**,
CSPB/SCBV Treasurer



Some of the many volunteers that helped to make the conference a great success

REPORT FROM THE CSPB/SCBV EDUCATION DIRECTOR


Dr. Madoka Gray-Mitsume

Education workshop at the annual meeting in Quebec city ‘*Plagiarism: Let’s shed some light on the dark subject*’

This year’s education workshop focused on plagiarism. It’s a subject many of us dread. We initiated the plagiarism conversation by conducting a pre-workshop survey. The survey provided a safe environment where participants could share their opinions and experiences openly. Not surprisingly, most (83 %) of respondents experienced plagiarism cases sometime in the past. But the frequency of plagiarism cases depended on the class size, assignment types, student diversity, etc. Most educators believe plagiarism education is pivotal to deterring plagiarism. However, educating students from diverse backgrounds can be a great challenge. Several respondents pointed out that, in some countries, students are encouraged to copy directly from the source materials. Thus, identifying and correcting the misperception is the first step towards plagiarism prevention. The workshop showcased hands-on plagiarism education approaches, such as a video tutorial combined with online quizzes and small assignments to identify inappropriate citation habits.

Another focus of the workshop was the use of plagiarism detection software. Dr. Ingo Ensminger at U of Toronto described how he and his TAs use the plagiarism detection software Turnitin for his lab course with a 350 student enrollment. He explained that the software detection is fair and does not rely on the subjective observation of his TAs. Unfortunately, Turnitin requires an institutional subscription and is not widely available. In addition, the Turnitin system is somewhat controversial, as the company holds the copyright to the students’ works after submission. As an alternative to Turnitin, the workshop described how the free software WCopyfind can be used to



Ingo Ensminger (University of Toronto-Mississauga) described the use of Turnitin at his institution.

detect plagiarism without worrying about copyright issues.

We also conducted a student survey on the same issue. Students’ perception of the plagiarism detection rate is alarming. Only 12 % of respondents believe plagiarism cases are detected effectively. This perception among students can further promote a culture of cheating. I presented a case study at Concordia University, where the number of plagiarism cases decreased dramatically if students were warned about plagiarism detection software prior to submission of their work.

Like educators, students also believe plagiarism education is pivotal to plagiarism prevention. However, some student responses contrast with educators’ responses. Dr. Emily Indriolo, postdoctoral fellow at U of Toronto, summarized these differences. Only 33 % educators think detection software is important for deterring plagiarism. This response is consistent with the low rate of software use (27 %). In contrast, 59 % of students believe in the importance of detection software. Another interesting finding concerns the role of sanction. 88 % of students believe a stricter sanction is a good plagiarism deterrent, whereas only 33 % of educators agree with the idea.

Although the survey sample sizes were small, the survey results offer a rare opportunity to compare our experiences from different institutes across Canada. Many of us felt strongly that this was an important issue in higher education. The workshop slides and full survey results can be downloaded from the CSPB education web site <http://www.cspb-scbv.ca/education/edu-events.shtml>.



Dr. Emily Indriolo explaining about the student survey result

Annual Meeting 2014

Great news! Next year's annual meeting will be a joint meeting with ASPB. This means that there will be a larger coverage of education at the meeting. Those who are passionate about education can present and/or participate at several education-related sessions, including workshop, mini-symposium and poster sessions. This will be a fantastic opportunity for dedicated educators to exchange ideas. Several CSPB members gave presentations at the last joint meeting in 2010. I hope we can get equally strong participation at next year's meeting.

Madoka Gray-Mitsumune,
CSPB-SCBV Education Director

International Fascination of Plants Day

Did you know that May 18th is the International Fascination of Plants Day (FoPD)? It is a global event to appreciate and learn more about plants. The CSPB Education Committee invites you to participate in FoPD by organizing outreach activities around in the middle of May. FoPD activities can be as simple as organizing group walks in woods/garden, or more elaborate, such as organizing workshops. For example, this year, CSPB committee member Dr. Santokh Singh at The University of British Columbia organized an interactive presentation and demonstration titled 'Plants and Sustainability'. You can find more information and other FoPD activity suggestions here:

<http://www.plantday12.eu/home.htm>.



Dr. Santokh Singh (third from right) with workshop participants at UBC campus on International Fascination of Plants Day 2013



Anja Geitmann (left, from the Université de Montréal), outgoing chair of the CSPB Education Committee, introducing Madoka Gray-Mitsumune (Concordia University) at the Education Symposium. Dr. Gray-Mitsumune is the new chair of the Education Committee.

CSPB Participates in 2013 Annual Meeting of the Global Plant Council

The 2013 Global Plant Council (GPC) Annual Meeting was graciously hosted by the Howard Hughes Medical Institute on October 20–22 2013 at its headquarters near Washington DC, USA. 25 delegates representing 20 GPC member societies and organizations from 16 different countries gathered together to discuss progress during the last year as well as future strategies and initiatives. The CSPB/SVBP is a founding member of the GPC, and **Carl Douglas, CSPB Science Policy Director**, attended the meeting representing our society. Also in attendance from Canada was **Shahrokh Khanizadeh, President of Plant Canada**, which is also a member organization.

Since its last meeting in October 2012 (Jeju, Korea), the GPC has made significant strides in meeting its aspiration to provide a voice for plant biology on the international stage and to offer solutions to global problems by bringing plant biology societies from across the globe together.

In 2012 and 2013, significant funds for initial GPC operations were obtained from member society contributions (including the CSPB), and by fundraising by Global Plant Council acting President Wilhelm Gruissem. With the help of these resources, in March 2013, the Global Plant Council Executive Board appointed Dr. Ruth Bastow as GPC Executive Director. Ruth obtained her PhD with Andrew Millar in the UK (now at the University of Edinburgh) in 2000. After postdoctoral research with Julie Gray at the University of Sheffield and Caroline Dean at the John Innes Centre in Norwich, she became the Coordinator of the UK Network for Arabidopsis Researchers (GARNet) in 2004. Since 2011 she is also Scientific Advisor to the UK Plant Sciences Federation. Ruth joins the GPC with over 18 years of experience in plant science, and is overseeing GPC activities, including its updated website (<http://globalplantcouncil.org>), fundraising initiatives, and interaction with member societies.

Through its 25 member organizations and societies the GPC currently represents over 40,000 plant and crop science researchers spread over five continents. This wide geographical distribution and wealth of experience allows the GPC to fulfill a unique role internationally. At the 2013 meeting, the GPC representatives decided that the organization would focus its current activities in the following areas.

1. Providing a voice for plant and crop science at the global level that is not possible at the national/regional level. For example, the GPC has the ambition to be consulted by the UN,

G8, G20 and FAO on global plant and crop research.

2. Bringing plant and crop scientists together at the global level to pool expertise and knowledge in order to define and engage in coordinated strategies that impact the most critical global issues. This will be achieved via GPC Initiatives for Global Challenges.
3. Forming a critical mass for plant and crop science at the global level to undertake activities and to generate greater leverage than one organization could achieve on its own. For example, the GPC plans to undertake an economic assessment of the global value of plant and crop science.

At the meeting, it was also decided that in the coming years, the GPC's central aim should be to define coordinated research programs to provide food and feedstocks for 10 billion people in a sustainable manner. To achieve this, the GPC has decided on four main priority areas for action:

Agricultural Productivity and Sustainability

To begin with this will be achieved via the **Digital Seed Bank** GPC Initiative, which focuses on capturing and exploiting the wealth of crop biodiversity to find new genes, alleles and genetic networks. These will make our crop plants more resilient to climate change and pathogens while increasing nutrient use efficiency and yield.

Food and Human Health

The initial focus in this area will be the **Biofortification** GPC Initiative, which aims to generate plant-based solutions for dealing with malnutrition.

Adaptation to Climate Change

Activities in this area will be centered on the **Stress Resilience** GPC Initiative. This will concentrate on understanding how plants grow, develop and interact with their environments in order to develop crops that can generate a stable yield under fluctuating and unpredictable environmental conditions.

Data, Knowledge and Resources

To make informed decisions regarding the most appropriate solutions and approaches to current global problems, it is essential that all stakeholders have access to the most up-to-date evidence and relevant information. The sharing of data, knowledge and resources will therefore be a common foundation of all GPC initiatives.

The GPC will be working with all its members and other partners during the next 12 months when it will be actively pursuing its Digital Seed Bank initiative. In collaboration with colleagues from the US-based Seed Seq project and the Global Crop

Diversity Trust, these activities include a workshop to be held in January 2014 in San Diego, USA. At this workshop we will discuss the potential of untapped variation from plant and crop biodiversity that exists in seed banks across the world to help us feed the growing population in a sustainable manner.

Council members will also be working together to progress its initiative in biofortification via a GPC Forum in China during the summer of 2014.

The GPC is now a financially independent, registered charity in Switzerland, with a constitution and by-laws. At the 2013 meeting, delegates voted to standardize expected society annual dues to the GPC, based on the sizes and resources of member societies, in which there is a great range. As a society of less than 500 members without significant revenue income aside from membership dues, the CSPB falls into the membership category in which annual dues are set at \$500 per year.

[For more information about Global Plant Council and its initiatives, please visit the GPC website at http://globalplantcouncil.org](http://globalplantcouncil.org)

If you would like further information on the Global Plant Council please contact Executive Director

Ruth Bastow: ruth@globalplantcouncil.org, or CSPB Science Policy Director Carl Douglas: carl.douglas@ubc.ca

Carl Douglas,
Science Policy Director



Mac-oophile GPC members at work at the 2013 GPC annual meeting, HHMI, Washington DC. Far left, Dr. Ruth Bastow, GPC Executive Director; far right, GPC Acting President Wilhelm Gruissem. (Photo by Carl Douglas).

Obituaries



R. Austin Fletcher
July 1, 1932-May 10, 2013

The CSPB is saddened by the passing of Professor **R. Austin Fletcher, in Langley, BC.** Austin Fletcher was Professor Emeritus in the Department of Environmental Biology at the University of Guelph.

He had completed a BSc (Hons) at the University of Delhi, followed by an MSc at the University of British Columbia and a PhD at the University of Alberta, graduating in 1964. He spent time as a post-doctoral fellow at Oxford University, and then joined the University of Guelph in 1965.

During his career, Prof. Fletcher published more than 90 journal articles, mainly in the area of plant growth and development, especially in the context of plant protection from environmental stresses. His work focussed extensively on plant hormones, especially gibberellins, but also included work on fungal diseases and plant tissue culture.

We are sad to report that Professor Martin Canny passed away in Canberra, Australia on October 29th after a short illness. Martin was well known for his stimulating and provocative hypotheses on water movement in plants. He was President of the Canadian Society of Plant Physiologists in 1992-1993, was founding professor of Botany at Monash University, Australia, and Honorary Research Professor at Carleton University in Ottawa and The Australian National University. A full obituary will appear in the next issue of the Bulletin.

Next year's annual meeting of our society will be organized as a joint meeting with the American Society of Plant Biologists. **Plant Biology 2014** will be held from July 12 to 16 in Portland, Oregon. This city is one of the "greenest" cities in the US with its effort to be sustainable and support green initiatives such as urban bicycling, public transport, use of renewable energy, and the promotion of local food production and consumption. The meeting will take place at the modern Oregon Convention Center that is connected to the downtown core and the airport by a light rail system. A social highlight of the meeting will be the final conference party held at the World Forestry Center, a magnificent venue for those who like to party as well as those who prefer a quiet chat.

The CSPB Executive is involved in the planning of both the scientific program and the logistics of this joint meeting. We encourage timely submission of your abstracts to ensure ample Canadian

representation in the scientific program (abstracts for consideration for oral presentation must be submitted by February 21, 2014). To increase chances to be chosen for a Mini-Symposium presentation, consider coordinating abstract submission with similarly themed colleagues (Canadian or US) and send a note to the program committee proposing a title for the Mini-Symposium (the form for these proposals can be found on the ASPB web site at http://my.aspb.org/?Meetings_MiniForm). While this does not guarantee final selection, it certainly puts your proposed symposium on the radar. The official procedure for Mini-Symposium selection can be viewed on the ASPB web site (http://my.aspb.org/page/Mini_Selection).

I am looking forward to seeing you in Portland in summer 2014!

Anja Geitmann, Vice President



CSPB/SCBV Joint Conference with the American Society of Plant Biologists
 Plant Biology 2014
 July 12-16, 2014
 Portland, Oregon, USA
<https://aspb.site-ym.com/page/Oregon2014>

Plant Responses to Abiotic Stress Mike Thomashow, Don Ort, Steve Howell, Mary Lou Guerinot

CSPB President's Symposium - Synthetic Biology of Specialized Metabolism Sarah O'Connor, Barbara Halkier, Vincent Martin, and Dae Kyun Ro

21st Century Challenges Part A: Feeding 9 Billion Tim Benton, Mark Tester, Pamela Ronald, Philip Pardey, and Derek Yach

21st Century Challenge Part B: Nourishing 9 Billion Anna Amtmann and David Jenkins

Plant Signaling Jen Sheen, Thomas Laux, Hiroo Fukuda, and Ykä Helariutta

ASPB President's Symposium – Firsts in Plant Science David Baulcombe, Julie Law, Magnus Nordborg, and Pamela Ronald

Abstract Submission opens **November 1**

Minisymposia Consideration deadline **February 21**

Final Abstract Deadline **June 1 (tentative)**

CSPB/SCBV EXECUTIVE AND COMMITTEE MEMBERS FOR 2013-2014
President:

Vincenzo Deluca (Brock)

Vice-President:

Anja Geitmann (Univ Montreal)

Secretary:

Barry Micallef (Guelph)

Treasurer:

Harold Weger (Regina)

Communications Director/Bulletin Editor:

Geoffrey Wasteneys (UBC)

Western Regional Director:

Greg Moorhead (U Calgary)

Eastern Regional Director:

Ewa Cholewa (Nipissing U)

Senior Director:

Jean-Benoit Charron (McGill)

Science Policy Director:

Carl Douglas (UBC)

Education Director:

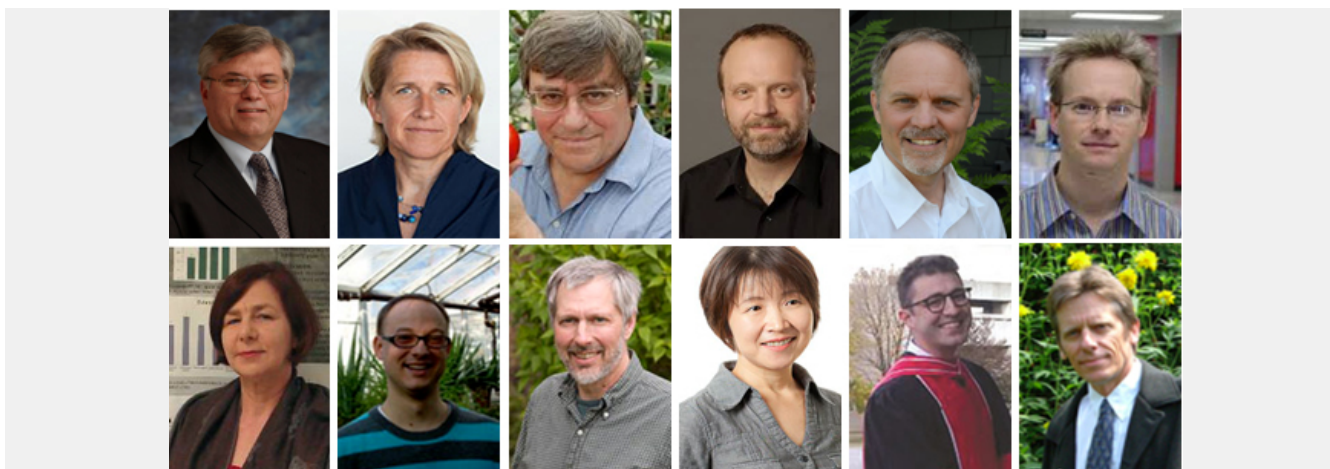
Madoka Gray-Mitsumune (Concordia)

Student/PDF Representative:

Michael Stokes (U of T)

Past President:

Bill Plaxton (Queen's)


COMPOSITION DES COMITÉS / COMMITTEE MEMBERSHIP
Ann Oaks Scholarship Committee | Comité des Bourses d'Études Ann Oaks

Harold Weger (Regina) Chair

Elizabeth Weretilnyk (McMaster) Co-Chair

Doug Campbell (Mt Allison)

Frederique Guinel (Laurier)

Sheila Macfie (Western Ontario)

George Espie (UT Mississauga) Advisor

Auditors | Vérificateurs

Ken Wilson (Saskatchewan)

Peta Bonham-Smith (Saskatchewan)

C.D. Nelson Award Committee | Comité du Prix C.D. Nelson

Wayne Snedden (Queen's) Chair

George Owtrim (Alberta)

Nathalie Beaudoin (Sherbrooke)

Communications Committee | Comité des Communications

Geoff Wasteneys (UBC) Chair

Gordon Gray (Saskatchewan)

Barry Micallef (Guelph)

Michael Stasiak (Guelph) webmaster

David J. Gifford Tree Biology Award Committee | Comité du Prix David J. Gifford en biologie des arbres

Peter Constabel (University of Victoria) Chair

Ingo Ensminger (Western)

Karen Tanino (Saskatchewan)

Education Committee | Comité en éducation

Madoka Gray-Mitsumune (Concordia) Chair

Santokh Singh (British Columbia)

George Haughn (British Columbia)

*Gleb Krotkov Award Committee | Comité du Prix
Gleb Krotkov*

Peter Pauls (Guelph) Chair

Doug Muench (Calgary)

Barry Shelp (Guelph)

Meeting Site Committee | Comité des congrès

Anja Geitmann (Montréal) Chair

Sylvie Renault (Manitoba)

Sherryl Bisgrove (Simon Fraser)

Nominating Committee | Comité des candidatures

Jean-Benoit Charron (McGill) Chair

Steeve Pepin (Laval)

Robert Guy (British Columbia)

*Ragai Ibrahim Award Committee | Comité du Prix
Ragai Ibrahim*

Allison McDonald (Wilfrid Laurier) Chair

Michael Stokes (Toronto)

Simon Chuong (Waterloo)

Soheil Mahmoud (UBC Okanagan)

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

Line Lapointe (Laval) Chair

Janice Cooke (Alberta)

Guy Samson (Trois-Rivières)

CONTRIBUTORS

Vincenzo Deluca CSPB/SCBV President

Ewa Cholewa CSPB/SCBV Eastern Regional Director

Anja Geitmann CSPB/SCBV Vice President

Harold Weger CSPP/SCPV Treasurer

Carl Douglas CSPP/SCPV Science Policy Director

Barry Micallef CSPP/SCPV Secretary

Geoffrey Wasteneys CSPB/SCBV Communications Director and Bulletin Editor

Photo Credits Anja Geitmann, Suzanne Kohalmi, Santokh Singh, Harold Weger

We welcome your comments and suggestions for future publications of the CSPB/SCBV News Bulletin. Please forward all your written material to Geoffrey Wasteneys (communication@cspp-scpv.ca).

Next issue of the Bulletin will be Spring 2014.

Thank you to the CSPB/SCBV Corporate Members:

