## Bulletin



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



Brock University will host the 2019 Eastern Regional Meeting on November  $22^{nd}$  and  $23^{rd}$ , 2019 (Photo credit: Brock University)

## JUNE / JUIN 2019

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

### In This Issue / Dans ce numéro

Message from the President / Message du président	2
Message from the vice president / Message de la Vice-Présidente	4
Get Involved / S'impliquer	5
Upcoming Annual Meetings / Réunions Annuelles à Venir	5
Eastern Regional Meeting at Western University / Réunion régionale de l'Est à l'Western U	6
A Message from the Student & Postdoc Representative / Message du Représentant des Étudiants & Postdocs	8
Upcoming Eastern Regional Meeting / Réunion Régionale de l'Est à Venir	8
CSPB Welcomes New Faculty / Accueil des Nouveaux Professeurs Adjoints par SCBV	9
Postdoc Feature / <b>Postdoc Sélectionné</b>	10
In Memoriam: Dr. Gordon Gray / En Mémoire de Gordon Gray	11
CSPB Inside / A l'intérieur de la SCBV	12
Editorial / Éditorial	13

## Message from the President

## Geoffrey Wasteneys University of British Columbia

As my term as President of CSPB/SCBV draws to a close, I am revisiting my first message from the autumn Bulletin of 2017. In that message, I stated the obvious: plant scientists have the collective wisdom, skills and expertise to address the most pressing challenges facing our planet and humankind. Back then I was cautiously optimistic that the Canadian government would adopt the recommendations of the Naylor Report on Federal Funding for Fundamental Science. Indeed, the 2018 Budget increased science spending, with increments promised for the NSERC Discovery program that should see a more than doubling from \$44 million in 2018 to \$90 million by 2021. Whether these increments will have any positive impact on the research programs of plant biologists, however, remains to be seen. In reviewing the 2018 Discovery results, I see little evidence for substantial increases in grant levels. One shocking observation is that a very low proportion (close to 10%) of plant biologists receiving funding from the Biological Systems and Function Evaluation Group. It is even less in Genes, Cells and Molecules.

Why is plant biology not getting its fair share of research funding in country in which agriculture and forestry are among its most important economic drivers? One explanation is that governments and funding agencies prefer to allocate spending in large chunks rather than spreading resources more evenly across and within sectors, and some areas, most directly impacting the general public, always win out. While this strategy certainly provides positive publicity for politicians, and keeps the administrative process simple, it is inequitable, and arguably not cost-effective.

The Canada Excellence Research Chairs (CERC) program is a perfect example of the tendency for government agencies to



spend big and splashy. The CERC program aims to attract the world's top researchers by offering host institutions ten million dollars over 7-year periods. I seriously question the wisdom of a funding system that sinks into each CERC position the equivalent of 35 NSERC Discovery Grants (for established researchers, the average in 2018 was ~\$40K pa) or seven Tier 1 Canada Research Chairs. Are these brilliant new imports going to be 35 times more productive than the average Canadian NSERC-funded researcher; as productive as seven CRCs?

When you come to realize that you are paying more personal income tax than you are getting from government agencies to run your research program, it is easy to become jaded. It's also of huge concern that our PhD candidates are looking south of the border and overseas to find post-doctoral employment. Those who manage to return find it challenging to emulate the lavishly supported research programs they became accustomed to as postdocs.

Despite these real problems, it is critical to never lose sight of the important contributions we are making as scientists in Canada, and to work even harder and collaboratively to communicate this to our students, the general public and, especially, politicians. Appropriately, the theme for the Plant Canada 2019 meeting this July 7-10 in Guelph Ontario will be "Communicating Innovation in Plant Science".

Plant Canada 2019 brings together all seven Canadian plant science societies for the first time in four years, and CSPB is the host society. The scientific program organizing committee, which I have been chairing for the past two years, has put together a comprehensive program including four plenary sessions, each featuring three prominent scientists. The invited speaker list is available on the Plant Canada 2019 website. The four topics include Biotechnology, Agronomy, Plant Pathogens in Horticulture, and Root Evolution, Development and Function. Included in the line-up of speakers are Bill Plaxton, our 2018 Society Gold Medal winner, and Jaswinder Singh, the 2018 CD Nelson Awardee.

Barry Micallef, as chair of the Local Arrangements Committee, has taken on a huge task of coordinating a complex set of events, and accommodating the needs of all participating societies. He and Robert Mullen have also worked together as co-chairs of the all-important fund-raising committee to secure sponsorship that helps keep the registration fees more affordable. Our Vice-President Daphne Goring has worked in coordinating communications between the LAC and Scientific Program Committees, and will be responsible for managing the Presidents Awards for student presentations. More details are provided in her report. I would like to take this opportunity to thank Barry, Robert, Daphne, and all other members of the organizing committee for their efforts.

Plant Canada 2019 officially gets underway on Sunday evening (July 7) with a keynote address by media personality and evolutionary biologist Dan Riskin. This will be followed by an awards ceremony, and an all-society mixer. Prior to that several excellent tours have been scheduled, along with workshops and business meetings. On Monday through Wednesday, in addition to the main symposia, there will be two full afternoons of concurrent seminar sessions, evening poster sessions, mixers, a banquet, numerous workshops, sponsor exhibits, and, of course, business meetings. Last year in Montreal we had a record number of attendees at the CSPB-SCBV business meeting, so I look forward to similar

attendance at the 2019 business meeting, which will be held at 11:15 a.m. on Wednesday July 10.

Reflecting on the past two years, my term as President coincided with two of our biggest conferences: co-hosting Plant Biology 2018 in Montreal, and hosting Plant Canada 2019 in Guelph. We also made much progress on other fronts, including the implementation of new Equity, Diversity and Inclusion policies, which my predecessor Anja Geitmann initiated, and our next President Daphne Goring so capably coordinated. I am also very satisfied to be able to see the launch of two new Society Awards, the Carl Douglas Prize for post-doctoral fellows, and the Mary Spencer Award for midcareer researchers. Throughout my term I have been buoyed and inspired by the dedication and talent of the executive and committee members. This dedication and willingness to work together is what drives this organization, and I am optimistic that our society will continue to promote plant biology in research and teaching, and to provide professional development and opportunities to Canadian plant biologists well into the future.

#### **Geoffrey Wasteneys**



## Message from the Vice-President

Daphne Goring University of Toronto

It has been a busy several months with the organization of the upcoming Plant Canada 2019 meeting, Communicating Innovation in Plant Science, which will take place July 7-11, 2019 at the University of Guelph. This meeting is a wonderful opportunity for our society to join other Canadian plant societies and meet under the umbrella of Plant Canada. These societies are the Canadian Association for Plant Biotechnology (CAPB), the Canadian Botanical Association (CBA), the Canadian Phytopathological Society (CPS), the Canadian Society of Agronomy (CSA), the Canadian Society for Horticultural Science (CSHS), and the Canadian Weed Science Society (CWSS).

Please visit www.cspb-scbv.ca/PlantCanada2019 for full meeting information, registration and abstract submission. You can also read more about the meeting program in President Geoffrey Wasteneys' message. As usual for CSPB annual meetings, we will be holding competitions for CSPB student oral and poster presentations. I will be organizing these competitions and looking for many volunteer judges to help out! If you are interested in volunteering, you can email me at d.goring@utoronto.ca (please add PC2019 judge volunteer in the subject line).

For CSPB members, the CSPB/SCBV Annual Business Meeting will be held during the lunch break on the Tuesday so please look out for notices to attend this meeting. Social events will include a Plant Canada Reception and Mixer on the Sunday evening, a CSPB Members Mixer on the

Monday evening (7-9 pm), and an all-Society Banquet on the Wednesday evening. Students can also attend a second mixer on the Monday evening, an all-Society Student Mixer (8:30-10:30 pm)! Finally, there are a number of tours that you can sign up for including a walking tour of the U of G Arboretum. All great opportunities to meet your colleagues and socialize.

Many people have been hard at work to organize this meeting, and I would like to highlight a few individuals. Barry Micallef has been very busy with detailed planning as the Chair of the local arrangement committee. Our president, Geoffrey Wasteneys, has been leading the efforts, as Chair of the scientific program organizing committee, to line up an exciting list of international plenary speakers. Finally, Barry Micallef and Robert Mullen have been working together as co-Chairs of the fund-raising committee to garner sponsors for the meeting. I have been engaged with the different societies to organize a schedule of events that will take place during Plant Canada 2019, and to act as a liaison between the Plant Canada Board and the local arrangement committee as matters arise.

I look forward to seeing many of you in Guelph at Plant Canada 2019.

Daphne Goring
CSPB/SCBV Vice-President



## Get involved in the CSPB/SCBV

## Seeking candidates for director positions and several committees

The Canadian Society of Plant Biologists is seeking candidates to serve on its Executive Committee as Vice-President and Communications Director.

In addition, the society is looking for motivated individuals to serve on several committees. Most of these committees recognize excellence in plant biology through awards such as The Society Medal and the C.D. Nelson Award.

The Canadian Society of Plant Biologists invites those interested in serving as member on one of its committees to please contact Jean-Benoit Charron, Senior Director (jean-benoit.charron@mcgill.ca)

## Upcoming Annual Meetings

#### 2020

CSPB/SCBV Annual General Meeting, Saskatoon. Local Organizing committee: Raju Soolanayakanahally, Ken Wilson, and colleagues at AAFC, NRC and the University of Saskatchewan.

#### 2021

CSPB/SCBV Annual General Meeting, Dalhousie University, Halifax, Nova Scotia. Local Organizing committee: Sophia Stone and colleagues.

#### 2022

Plant Biology 2022 (Joint ASPB-CSPB/SCBV), Portland Oregon.

## CSPB/SCPV Eastern Regional Meeting 2018 at Western University

### Robert Mullen, Eastern Regional Director

The Eastern Regional Meeting was held on Saturday, November 24th (2018) at Western University. 115 registrants enjoyed a full day of lively discussions and outstanding oral and poster presentations and thanks to all of the hard work by the organizing committee, including Danielle Way (Chair), Mark Bernards, Norman Hüner and Susanne Kohalmi, as well as several helpful and friendly student volunteers, the meeting was a glowing success.

The meeting began with a short series of welcoming remarks, followed by a plenary lecture from Arunika Gunawardena (Dalhousie University) entitled "Lace plant: An emerging model system to study developmental program cell death'. Afterwards, three concurrent sessions covering 18 oral presentations were held in the areas of 'Abiotic Stress', 'Biochemistry', and 'Development, Enzymes and Molecular Biology'.

The poster session took place after lunch with 34 participants presenting their work and then another three concurrent sessions of 14 oral presentations were held in the areas of 'Climate Change and Environmental Physiology', 'Biotic stress and Education' and 'Reproduction'. Thereafter, Keiko Yoshioka (University of Toronto)

delivered the second plenary lecture entitled 'Cyclic nucleotide-gated channels and Ca2+ signaling – Roles in immunity, cell death and beyond – Insights from genetic screens and structural analysis'.

Competition for the Director's Awards was particularly strong, with 23 students competing for the best oral presentation award and another 27 students competing for the best poster presentation award. All of the talks and posters were high calibre and a special thank you goes to each of the 21 judges that took the time to carefully evaluate oral and poster presentations and make

Photos by Susanne Kohalmi



Winners of the Directors awards (from left to right): Best oral presentation, **Angela Fufeng** (with presenter Robert Mullen, Eastern Regional Director); Honorable mention for best oral presentation, **Mark Minow** (with R. Mullen); Best poster presentation, **Boris Mayer** and Greg MacNeil (with R. Mullen).

what was, undoubtedly, some very tough selection decisions. Many thanks to the two lead judges, Ian Tetlow (University of Guelph) and Elizabeth Weretilnyk (McMaster University), for guiding the judging discussions.

The Director's Award for the best oral presentation went to Angela Fufeng (McMaster University): 'Biofilm formation by *Pseudomonas syringae* pv. tomato is correlated with bacterial success and is reduced in Arabidopsis plants undergoing PAMP-triggered immunity'. Honorable mention went to Mark Minow (University of Guelph): 'Stability and change in *Zea mays* small RNA transcriptomes provide exciting insights into the formation of new epigenetic states'.

The Director's Award for the best poster presentation was awarded to two students, Gregory MacNeill (University of Guelph): 'The role of post-translational modification in the regulation of Arabidopsis start branching enzyme 2.2'



The Plant Canada Oral Presentation Award went to Michael Kanaris (University of Toronto): 'Evolutionary insights into the role of shikimate kinase-like 1 in chloroplast development'.







and Boris Mayer (McGill University): 'Developing under a changing environment: cold acclimation and vernalization in *Brachypodium distachyon*'. Honourable mention went to Lilia Virta (University of Guelph) 'Isoflavonoid levels in soybean (*Glycine max*) cultivars and associated anti-herbivore activity'.

Thank you again to the organizing committee and volunteers, as well as the session chairs, for ensuring that everything ran smoothly. I look forward to seeing everyone again at the next Eastern Regional Meeting, which is being held November 22<sup>nd</sup> and 23<sup>rd</sup> (2019) at Brock University and organized by Vincenzo De Luca (Chair), Mehran Dastmalchi, Charles Despres and David Liscombe. As always, the Eastern Regional Meeting will be a wonderful opportunity to catch up on the latest breakthroughs in plant science, see old friends and make new ones, all in the beautiful venue of the Niagara region in the fall.

Robert Mullen
Eastern Regional Director



## Message from student and postdoctoral representative

Ryan Eng - Max Planck Institute for Molecular Plant Physiology

Now that spring is over, it's time to get ready for the Plant Canada 2019 meeting in Guelph, Ontario. As the student/ post-doc rep, I am excited to announce two free workshops that will run during the Plant Canada meeting:

Careers outside of Academia Monday July 8; 11:15 AM -11:45 AM (Location: TBA)

The goal of this workshop is to highlight career paths outside of academic research, including in industry and government. The workshop will be led by Dr. Teagen Quilichini who has valuable experience in academic (as a PhD/post-doc at UBC), industry (as a post-doc with Annandia Labs), and government (as a research associate with the NRC) research settings.

Beyond grad school: a guide for PDF and PI positions Tuesday July 9; 11:45 AM -12:45 PM (Location: TBA)

The workshop is aimed at helping junior scientists apply for careers following graduate school and to craft their applications with employer's point-of-view in mind. The speakers will also share tips and experiences that they have gained during their time as postdoctoral fellows and later as principal investigators. The workshop will be led by Dr. Jacqueline Monaghan (Queen's U) and Dr. Heather McFarlane (U of Toronto), both early-career faculty members.

I hope you can find the time to attend these workshops. Our speakers are amazing scientists with diverse and valuable research experience in and outside academia. I look forward to seeing you all in Guelph!

## Upcoming Eastern Regional Meeting at Brock University

Be sure to mark your calendars for the upcoming Eastern Regional Meeting at Brock University, in St. Catharines, Ontario. The meeting will commence with a reception on the evening of Friday, November 22<sup>nd</sup> and continue with talks and poster sessions on Saturday, November 23<sup>rd</sup>, 2019. Registration and conference information will be available on the CSPB website. The meeting will be a wonderful opportunity for students and young researchers to present their findings with plenty of room for oral and poster presentations. Catch up with old friends and make new ones in the beautiful Niagara wine country and Brock University campus. Hope to see you there!

The organizing committee (Vincenzo De Luca, Charles Despres, David Liscombe and Mehran Dastmalchi)

## **CSPB Welcomes New Faculty**

### Mehran Dastmalchi, Brock University



#### **Danve Castroverde**

Department of Biology, Wilfrid Laurier University

Christian Danve M. Castroverde was hired as Assistant Professor in the Department of Biology at Wilfrid Laurier University in Waterloo. He will begin his appointment on July 1, 2019. Dr. Castroverde is currently investigating how environmental factors, such as elevated temperature, influence plant immune responses at the molecular level. He aims to generate an integrative model of the mechanisms underlying plant-pathogen interactions in a changing environment, in order to better understand and improve plant resilience. Currently, Danve is an NSERC Postdoctoral Fellow at the Department of Energy Plant Research Laboratory and Plant Resilience Institute, Michigan State University. He is working in the laboratory of Dr. Sheng Yang He, a Howard Hughes Medical Institute Investigator at MSU. Danve obtained his B.Sc. at the University of the Philippines Diliman. He completed M.Sc. and Ph.D. degrees at the University of Guelph, under the supervision of Jane Robb and Ross Nazar. He is also an MSU Postdoctoral Teaching Scholar and a member of The Plant Cell editorial board.



### Heather E. McFarlane

Department of Cell and Systems Biology, University of Toronto

Heather opens her lab at U of T in July, 2019. Her group aims to uncover the mechanisms of plant cell wall signaling and remodeling using a combination of cell biology, live cell imaging, electron microscopy, genetics, molecular biology, biochemistry, and computational biology. Previously, Heather earned her PhD from UBC, then she held an EMBO postdoctoral fellowship at the Max Planck Institute for Molecular Plant Physiology, followed by an Australian Research Council DECRA fellowship at the University of Melbourne. Potential students and postdocs: check out the lab website (https://mcfarlane.csb.utoronto.ca) and contact Heather (h.mcfarlane@utoronto.ca) if you are interested in joining the group!



Yang Qu

Departments of Chemistry and Chemical Engineering, University of New Brunswick

Yang was cross-appointed as an Assistant Professor and the Cannabis Health Research Chair at Department of Chemistry and Department of Chemical Engineering at University of New Brunswick in January 2019. He received his PhD in biochemistry from the University of Calgary in 2013 and continued his research career on natural product biosynthesis at Brock University as a postdoctoral fellow. Yang's professional interests include understanding the biosynthesis of plant-derived specialized metabolites, the molecular basis of the related biosynthetic regulation, and engineering the production of high-value plant metabolites using synthetic biology approaches. His research program at UNB will focus on cannabis genetics and cannabinoid biosynthesis to support the rapidly developing Canadian cannabis industry.

## **New Postdocs**



#### Anna Kisiala

Department of Biology, Trent University

Anna Kisiala is a postdoctoral fellow working with Dr. Neil Emery, at Trent University. She received her PhD (2008) in agronomy from the University of Technology and Life Sciences in Bydgoszcz, Poland, investigating the effectiveness of androgenesis in cultivated and wild species of pepper, Capsicum. Her work led to the registration of the first Polish pepper cultivar, Lunova. obtained through anther culture. After coming to Canada in 2010, Anna worked as a postdoctoral fellow with Dr. Ewa Cholewa at Nipissing University. She used confocal microscopy to study the patterns of aluminum sequestration in metal hyper-resistant arctic-boreal cotton-sedge, Eriophorum vaginatum. Anna met her current supervisor, Dr. Emery, at the Plant Canada 2011 meeting, in Halifax. At Trent University, she uses mass spectrometry to investigate cytokinin metabolism in plants and other organisms, including microbes, insects and mammals. Her research on plant growth-promoting bacteria has been supported by government and industry, including farmer's organizations, attracting interest as an alternative 'green' biofertilizer. Anna helps to manage the Journal of Multidisciplinary Research at Trent (JMRT), a Trent graduate student-run scientific journal. She also enjoys serving as a judge in the regional science fair held yearly in Peterborough.



## In Memoriam Dr. Gordon Gray

Ken Wilson, University of Saskatoon

On Feb 17th, 2019 our great friend and colleague Gord Gray passed away due to complications from surgery and psoriatic arthritis. Gord had a long association with the CSPB, starting when he was an undergraduate research student with Dr. Marilyn Griffith in the Department of Biology at the University of Waterloo.

Working with Marilyn, Gord developed a keen interest in how plants respond to cold stress. To explore this further, he moved to Western University and the lab of Dr. Norman Hüner. Gord completed his MSc and PhD under Norm's supervision, publishing seminal papers on the response of wheat and rye plants to excitation pressure and the interactions of temperature and light. Gord pursued an NSERCfunded postdoctoral fellowship at the Department of Energy's Plant Research Lab at Michigan State University, but he maintained a close connection to the plant community in Canada and the CSPB.

In July 2000, Gord moved back to Canada, taking up a faculty position in the Department of Biochemistry at the University of Saskatchewan. Gord transferred to the Department of Plant Sciences in the College of Agriculture to better reflect his research interests and was promoted to the rank of Professor in 2012. A renowned and innovative teacher, Gord developed an online

Plant Biochemistry course, before the arrival of the age of MOOCs (massive open online courses). This course was heavily subscribed by both agriculture and biochemistry students.

In Saskatoon, Gord continued to work on the interaction of light and temperature on plant physiology. He never limited himself to a single model organism and was interested in finding the right plant for the question. This approach led to his long-standing collaborations with Drs. Barb Moffatt and Elizabeth Weretilnyk and their work on the extremophile Eutrema salsugineum. In later years, Gord continued to publish his work and that of his students through some significant health challenges related to his arthritis. His continued effort, innovative approaches, and strong record of accomplishment led to an impressive body of published work and research funding, including sustained support from the NSERC Discovery Grant Program.

Of course, Professor and Plant
Biologist are adjectives that only touch
on Gord's work life. He was also a
husband, friend, student, and mentor.
Gord will be sorely missed but fondly
remembered by many friends in the
CSPB and the plant biology community
around the world. Gord's quirky sense
of humour, love of life, tenacity, and
perseverance made him a great person
to be around, and someone who will
never be forgotten.

To honour Gord's memory and work, donations may be made to the "Dr. Gordon Gray Memorial Award", online at donate.usask.ca, indicating Dr. Gordon Gray award in the comments section.

## **CSPB** Inside

### CSPB / SCBV Executive Committee Membership 2018/2019



TOP President: Geoff Wasteneys, Vice-President: Daphne Goring, Secretary: Sherryl Bisgrove, Treasurer: Sheila Macfie, Communications Director/Bulletin Editor: Ingo Ensminger, Western Regional Director: David Bird BOTTOM Eastern Regional Director: Robert Mullen, Senior Director: Jean-Benoit Charron, Science Policy Director: Owen Roland, Education Director: Steven Chatfield, Student/PDF Representative: Ryan Eng, Past President: Anja Geitmann

#### Committee Members

## Ann Oaks Scholarship Committee

Harold Weger (Regina) Chair Elizabeth Weretilnyk (McMaster) Co-Chair Doug Campbell (Mt Allison) George Espie (UT Mississauga) Sharon Regan (Queen's) Sheila Macfie (Western) Treasurer

#### **Communications Committee**

Ingo Ensminger (Toronto) Chair Kenneth Wilson (Saskatchewan) Susanne Kohalmi (Western) Mehran Dastmalchi (Brock) Sherryl Bisgrove (Simon Fraser) Secretary Michael Stasiak (Guelph) webmaster

## **David J. Gifford Tree Biology Award Committee**

Joerg Bohlmann (British Columbia) Chair Olivia Wilkins (McGill) Uwe Hacke (Alberta)

#### **Nominating Committee**

Jean-Benoit Charron (McGill) Chair

Steeve Pepin (Laval)
Marcus Samuel (Calgary)

#### **Gleb Krotkov Award Committee**

Jaswinder Singh (McGill) Chair Nicholas Provart (Toronto) Belay T. Ayele (Manitoba)

#### **Education Committee**

Steven Chatfield (Toronto) Chair Jake Stout (Manitoba) Tamara L Western (McGill) Joseph Colasanti (Guelph)

### Ragai Ibrahim Award Committee

Jean Danyluk (UQAM) Chair Jacquie Bede (McGill) Cara Haney (UBC) Ryan Eng (Max Planck)

## Society (Gold) Medal Award Committee

Peter Moffett (Univ. Sherbrooke) 2019 Chair

Doug Muench (Calgary) 2017-2020 Sophia Stone (Dalhousie) 2018-2021

#### C.D. Nelson Award Committee

George Haughn (UBC) Chair Moira Galway (St Francis Xavier) Darrell Desveaux (Toronto)

## Society (Gold) Medal Award Committee

Peter Moffett (Univ. Sherbrooke) Chair Doug Muench (Calgary) Sophia Stone (Dalhousie)

#### **Carl Douglas Prize committee**

David Bird (Mount Royal) Chair Dae-Kyun Ro (Calgary) Eliana Gonzales-Vigil (Toronto Scarborough)

#### **Mary Spencer Award committee**

Robert Mullen (Guelph) Chair Line Lapointe (Laval) Shelley Lumba (Toronto)

## **Contributors**

The Bulletin is the official newsletter of the Canadian Society of Plant Biologists/Société Canadienne de Biologie Végétale (CSPB/SCBV).

#### Contributors

Geoffrey Wasteneys, Daphne Goring, Robert Mullen, Ryan Eng, Mehran Dastmalchi, Susanne Kohalmi, Ken Wilson, Jean-Benoit Charron

#### Photo Credits

Susanne Kohalmi

### Layout and Production

Dan Lebl, Mehran Dastmalchi

# Bulletin 28 will appear in October 2019

Editorial deadline for Bulletin 28 is September 30, 2019

Please submit your contributions, comments, photos, suggestions for featured papers, new faculty bios and announcements before the editorial deadline to:

communication@cspb-scbv.ca

## **Sponsors**

CSPB/SCBV is sponsored by the following Corporate Members:









Check out the Plant
Global Events Calendar
brought to you by
Agrisera Antibiodies.
The calendar is not
just a page with links.
It provides an overview
of worldwide plant
meetings, conferences and
workshops. There are over
85 meetings listed already:

https://plantae.org/events-calendar/

