

Graduate Student Committee

Report to the CASCA Board — Fall 2018

1- GSC Membership

The 2018-2019 Graduate Student Committee (GSC) consists of fifteen members representing eleven universities. The current members of the graduate student committee and their university affiliations are shown in Table 1.

Table 1. The 2018-2019 GSC members and their associated host universities.

Executive		
Maan Hani	Chair	University of Victoria
Douglas Rennehan	Vice-Chair	University of Victoria
Representatives on other committees		
Margaret Ikape	EIC rep.	University of Toronto
Members		
Claire Guimond		McGill University
Kevin Lacille		McMaster University
Dhruv Bisaria		Queen's University
Adam Gonzalez		Saint Mary's University
Antoine Darveau-Bernier		Université de Montréal
Anne Boucher		Université de Montréal
Kenny Van		University of Alberta
Anna Ordog		University of Calgary
Mainak Singha		University of Manitoba
Anita Bahmanyar		University of Toronto
Ruth Digby		University of Victoria
Megan Tannock		University of Western Ontario

Note: The Education and Public Outreach officer remains vacant. The GSC is considering eliminating this position and possibly substituting it with a representative on the Education and Public Outreach (EPO) Committee, or a working group focusing on EPO within the GSC.

2- The Graduate Student Workshop & the Annual General Meeting

The 2018 Graduate Student Workshop (GSW) was a great success. The GSW featured two technical sessions and the newly-introduced industry networking session.

The technical sessions included a workshop on the GEMINI Fast Turnaround program which was led by Matthew Taylor & André-Nicolas Chené (Gemini Observatory), and a centralized data analysis and machine learning demonstration/information session led by Sébastien Fabbro (Canadian Astronomy Data Centre, NRC Herzberg).

The technical sessions were followed by an engaging afternoon with industry leaders. The industrial representatives partook in PechaKucha style presentations followed by a networking mixer. The industrial partners participating in the 2018 networking mixer year were: ABB, Dynamic Structures, Honewell, INO, MDA, and 3vGeomatics.

Following a successful GSW in 2018, and based on feedback collected by the 2018-2019 GSC members and the workshop organizers, the GSC has started brainstorming ideas for an engaging and informative workshop at the 2019 Annual General Meeting (AGM). The GSC is in the process of setting up a local contact in Montreal to help organize the workshop locally. Following the appointment of a local GSC workshop organizer in Montreal, the GSC will start a joint collaboration with the AGM's LOC early in the 2019.

3- GSC Internal Governance & Strategic Plan

The internal GSC governance has suffered severely from poor documentation. The absence of proper governance and procedural documents has hindered progress and added a source of frustration for new GSC members. Properly documented procedures, and terms of reference are essential for the continuity of the GSC, and for the transparency of the GSC to the members at large. Additionally, knowing the fast turnaround in student leaders that the GSC witnesses, the current GSC executive deems it necessary to establish a transition capsule which, in addition to the governance documents, includes a short-range strategic plan and adequate

documentation of continuing project. Many projects that the GSC is interested in require timescales longer than the term of the GSC's executive; therefore including a strategic plan in the transition capsule is essential to developing better representation and advocacy for graduate students. Establishing such a transition capsule will ensure continuity and sustainable progress which are key when serving a large, diverse, and quickly developing student body.

The GSC executive members have undertaken the development of a governance document, procedures and terms of reference. The aforementioned documents cover a variety of topics ranging from elections, award distribution/judging, terms of reference for the various positions on the GSC, an outline to better graduate student representation... The completed documents will be voted on during the GSW at the 2019 AGM.

4- GSC Diversity

In his annual report, the previous GSC chair outlined the importance and need for diversity on the GSC. The GSC acknowledges the importance of better/diverse representation at all levels of governance, and the challenges involved in achieving such representation. Albeit diverse (by many metrics), the current GSC membership may not represent the diversity within the graduate student body (e.g. women, visible minorities, Indigenous Peoples, persons with disabilities, persons of diverse sexual orientation, gender identity or expression LGBTQ2S+). The new governance documents outline a new representation model for universities which would facilitate increasing the GSC's diversity. The new model increases the representation from universities with larger student bodies which will help the GSC reach a broader group of students and develop better representation. Increasing the number of representatives on the GSC is not sufficient to ensure equitable representation of minority groups; in fact this approach may suffer from a variety of biases: e.g. the population demographics, the individuals' likelihood to volunteer, biased social selection. To alleviate some of the aforementioned biases, the GSC will consult the Equity and Inclusivity Committee to formulate better representation models which ensure equitable representation of under-represented groups.

5- GSC Services

The GSC services have been mostly limited to organizing the GSW, providing awards for the best oral and poster presentations at the AGM, and stochastic graduate student advocacy and representation. The GSC recognizes the ubiquitous challenges that many graduate students suffer from (e.g. mental health, impostor syndrome, career uncertainties, supervisory relationships, professional training).

The GSC is organizing a program by which its representatives will compile a list of local resources which are available for graduate students at their universities. The resource list will be shared by the GSC representatives with their fellow graduate students at their home departments.

6- GSC Communication

Website: The previous GSC chair stressed the importance of updating the outdated GSC website. The GSC executive removed all outdated information from the GSC website in August 2019. With the recent migration of the CASCA website, the GSC will return to developing the GSC's webpage to align with the graduate student needs.

Social Media Presence: With the growing influence of social media, the GSC deems it necessary to be present on common social media platforms to effectively communicating with graduate student members. The GSC's social media would strengthen the graduate student community across the various institutes and geographical regions, provide the GSC with a distinct and known identity associated with a positive influence on graduate students (i.e. representation, advocacy), and better connect graduate students with the broader community. The GSC's presence on social media platforms is pending CASCA's social media policy.

GRADhighlights: The GSC is launching a new program this year. The goal is to present one interesting research highlight per month in a brief format which is accessible to the broad community and undergraduate students in the physical sciences who are interested in active research. The program will be known as "GRADhighlights" and it will:

- feature the wonderful work graduate students are doing,
- provide accessible information to the public,

- enhance our scientific communication skills, and
- grow an appreciation to scientific work around the country.

GRADhighlights will feature recent/ongoing research by graduate students on the CASCA website, social media platforms (i.e., twitter, instagram — pending CASCA’s social media policy), and possibly *Cassiopeia* (CASCA’s newsletter). The GSC envisions the highlights to consist of a visual (e.g., animation/video, image, plot) which sums up the pivotal point(s) of your research.

Community Building & Career Development: The GSC recognizes the importance of building a stronger community amongst graduate students and alumni in both academic and non-academic careers. The GSC is establishing a LinkedIn group to connect current graduates with alumni and their employers. This will be the first step in launching a networking series which is hosted locally at host universities around the country bringing graduate students together with alumni and future alumni.

6- GSC Advocacy and Representation

The GSC’s advocacy and representation over the past two decades has been broadly unstructured, owing primarily to our poor understanding of the graduate student body which is represented by the GSC. Proper representation and advocacy for any community requires an adequate understanding of the community’s challenges, needs, experiences, and successes. Our understanding of CASCA’s graduate student community has been broadly anecdotal.

With only a few exceptions, the Canadian astronomy graduate student body has not been surveyed in a systematic and comprehensive fashion. The Equity and Inclusivity Committee’s (EIC) survey in the winter of 2018 was the first dataset on equity/inclusivity from CASCA members (including graduate students). Additionally, several years ago the GSC lead a brief study (*not* a survey) of the financial status of astronomy graduate programs which is now severely outdated and was prone to completeness issues. Therefore, a comprehensive survey is much-needed for us to understand our members' needs and better serve them. Studies focusing on graduate students (usually within single universities and across programs) show ubiquitous challenges (i.e. declining mental health, supervisory relationships, funding, discrimination, unethical treatment). Whilst the results of such studies can be extrapolated and applied to Canadian Astronomy graduate students, such extrapolation is unwise and unfair. The GSC

would like to know what the graduate student members need so we can properly represent and advocate for them. A good understanding of the challenges our community faces is essential for progress.

The GSC is planning a survey to understand the financial status, well-being, academic experience/climate, and the supervisory relationships and their influence on CASCA's graduate students. The GSC is currently collaborating with the EIC to understand the impact of discrimination and the academic climate on graduate students.

The results of our survey will help inform the GSC's future plans (outlined in the transition capsule; see Section 3).

Maan H. Hani
Chair, GSC

25 November, 2018