

Report from the Equity and Inclusivity Committee of CASCA to the Long Range Plan 2020 Panel

May 2019

Executive Summary

This report summarizes the activities and initiatives of the Equity and Inclusivity Committee of CASCA from its inception in 2015 to the present. We report on our progress through the directives to the committee from the CASCA Board as well as our own initiatives within the community. Some directives have evolved according to our better understanding of the levers which CASCA can control and the complexity of some proposed initiatives. We highlight what has been accomplished and note where we have identified areas that need additional work to proceed. These will be described in greater detail in the white paper from the EIC.

1. Inception and charge from the CASCA Board

The Equity and Inclusivity Committee (EIC) of CASCA was formed as the “Diversity and Inclusivity Committee” in 2015 at the behest of the CASCA Board. As such, it is one of the newest CASCA committees. From the CASCA Board, the EIC received the following list of charges.

1. Taking a critical look at our ethics statement and making suggestions to the Board for improvements.
2. Preparing a section on the CASCA web page summarizing best practices for hiring and for inclusivity in the workplace. (Even curating a list of links and suggested reading would be useful).
3. Moderating an open discussion session on inclusivity at the CASCA AGM.
4. Maintaining a database of diverse candidates for colloquium speakers. This would involve contacting people pro-actively to get their permission to add them to the list.
5. Compiling national statistics on women and minorities in Astrophysics and make these publicly available on the CASCA website.
6. Acting as points of contact for people in the community who feel harassed, with a particular focus on CASCA meetings.

The committee was renamed the “Equity and Inclusivity Committee” in mid-2016. The committee is referred to as the EIC henceforth in this document, even when describing actions from 2015-2016.

2. Mission Statement

At the first meeting of the EIC, it was felt that a simple mission statement that will serve as a point of reference for ideas and initiatives brought to the committee would have merit.

The Diversity and Inclusivity Committee will undertake initiatives that will encourage members of CASCA (and their organizations) to foster diversity among participants in astronomical research. Our goal is for CASCA to serve as an example of inclusiveness to the broader scientific community.

3. Membership

Current membership of the EIC:

Brenda Matthews (NRC-Herzberg) Chair, 2015 - present
Emmanuel Fonesca, postdoctoral fellow (McGill) 2018 - present
Bryan Gaensler (Dunlap Institute) 2015 - 2019
Daryl Haggard (McGill) 2018 - present
Margaret Ikape, graduate student (Toronto) 2018 - present
Kristine Spekkens (Queen’s) 2016 - present

Former EIC members:

Pauline Barmby (Western) 2015 - 2017
Julie Hlavacek-Larrondo (Montreal) 2015 - 2018
Lauren Hetherington, grad student rep (Toronto) 2015 - 2017

Our CASCA Board representatives have been Pauline Barmby (2015-2016) and Kristine Spekkens (2016-present).

The original concept of the membership for the committee was two year terms, though members have shown flexibility with these terms in order to avoid all members rotating off at once. We would like to maintain a membership of at least 6 individuals, including the Board representative. In late 2017, we decided that the committee should include at least one graduate student and one postdoctoral fellow.

Brenda Matthews (chair) was originally scheduled to rotate off in 2017. The committee recommended extending her term for 2 years, and thus she should consider rotation off

the committee in 2019. Ideally, someone currently on the committee could assume the Chair role.

The committee has also discussed enlarging the committee to enable a better distribution of work and contribution of more diverse opinions into the actions of the EIC.

4. CASCA Board Initiatives

4.1 CASCA Ethics Statement

Several professional societies now have updated and extensive codes of ethics in astronomy (e.g., AAS, ASA) and other fields (in Canada and internationally).

Since this first directive from the Board, it has been recognized by the Board (and the EIC) that there are several significant issues with the development of an Ethics Statement. It is felt that the CASCA Mission Statement needs to be updated to include issues such as inclusivity, diversity and climate. In turn, the Values statement for the society can then reflect the values needed to achieve those aspects of the mission. Both of these changes will need approval from the CASCA community. Only then can an Ethics statement be developed and to do this properly, legal expertise will need to be consulted.

The current status of this initiative is on hold, though EIC expects to be consulted on changes to the Mission and Values statements of CASCA. For suggestions regarding the timeline and content of these statements, we refer to our planned White Paper on future EIC effort.

4.2 Hiring Guidelines for Equity and Diversity

At our inaugural meeting, the committee agreed that this would be a useful and welcome resource for hiring committees; a draft of hiring recommendations was produced and sent to the Board in May 2017. However, it is not clear how action from CASCA will impact EDI in universities or NRC, since it is not a body that directly hires. Most universities now have fairly strict EDI related hiring guidelines for faculty at least, and our capacity to affect change here is likely limited.

The frontier may instead be HQP hiring guidelines, which is already on the board's radar regarding grad student offer acceptance dates at least (a motion will be tabled at the CASCA AGM to recommend a harmonized date for accepting first-round grad school offers). I note that the AAS has recently released a detailed report about enhancing EDI at the graduate level:

<https://aas.org/media/press-releases/aas-issues-recommendations-d%26i-graduate-education>

Current effort. The hiring recommendations have not been posted to the CASCA website. No effort is currently underway.

4.3 Moderating an open discussion session on inclusivity at the CASCA AGM.

This was the first of the CASCA Board mandated items to the EIC to be executed.

The session, held at the Winnipeg annual meeting in 2016 to introduce the committee and its mission statement to the CASCA community, was presented as primarily a “discussion session” in which 2-3 generic scenarios were presented, providing time for the audience to discuss the best response/solution in groups. This was done as a plenary session, with 1 hour of time allocated. Matthews, Barmby and Hetherington were the session facilitators.

Attendance was very good and much of the session was interactive. Participants were asked to discuss in groups how people should respond to various scenarios in which they could find themselves related to bullying or intimidating behaviours. Following this session, the Committee submitted a summary article of the event to eCass, including the scenarios and the range of recommended responses compiled during the meeting.

The EIC will present a report on its cumulative activities at the 2019 CASCA AGM based on this report to the LRP. In addition, we will present a poster on the current demographics of the community.

4.4 Diversity Database

The EIC’s advice to the CASCA Board was that a database was unlikely to be an effective long-term mechanism to produce enhanced diversity in speakers. Without active maintenance of the database, it would rapidly become obsolete or incomplete, and other than gender, it was unclear how other minority statuses would be highlighted. Ideally, a way for members to self-declare and keep that information on record would be preferable. The committee felt that the best way to achieve this would be through the CASCA directory and individual profiles. The addition of a category of keywords on area of research and another on demographic status which were optional and searchable would provide access to the same kind of information without the need to maintain a database. This has been achieved with the 2018 upgrades to the CASCA membership database, which was also essential to enable demographics studies of the community (see Section 4.5 below), though we note that the member listing viewable by the public is not searchable.

Although some fine tuning should be done to make the public database more user-friendly, the private one for CASCA use is effective and allows for search on field of study, which allows selection of topics for colloquium speakers.

4.5 National statistics on women and minorities (i.e., “Demographics”)

Existing demographics surveys of the Canadian astronomical community exist for 1990 - 2005 (AAS Status, 2007) as authored by Michael Reid and Brenda Matthews. No other statistical data exist for the intervening years. These surveys are sex-disaggregated surveys (binary) and do not address minorities. It is legally complicated to ask about race on surveys in Canada.

Compilation of demographics over time is one of the activities that is regarded as core to the EIC. It is expected of national committees by the IAU, and it is the only way to assess whether initiatives have positive impacts on equity and diversity over time.

There are numerous challenges to the assembly of demographic data. The committee got so far as to create a new survey in 2017 to be executed along the lines of the surveys done in 2001 and 2006, but we quickly realized that the methodology would no longer work. The approach historically had been to send surveys to department chairs asking them to assess their astronomical members into binary (men/women) categories for students, postdocs and faculty, including divisions of faculty levels. This is no longer a viable means to conducting such a survey. The reasons are two-fold: this information is regarded as private, so they would likely ask each individual whether or not it was acceptable that they be included in the poll, and they are also completely uncomfortable with assigning a gender to anyone. This makes it clear that even generating sex-disaggregated (which is really what we have been working with to date) data would be a challenge.

The EIC considered collecting demographic information from registration data at CASCA meetings. One issue with this is the limited number of CASCA members at any given CASCA meeting. Even assessing demographics through CASCA membership categories fails to capture all individuals doing astronomy in Canada, since not all astronomers are members of CASCA.

Despite these obvious issues, it has been deemed essential that CASCA find a way to assess its demographics. The Canadian government has adopted a methodology for assessment of demographics called GBA+ (Gender-Based Analysis Plus) and they expect in any communication (e.g. memoranda to cabinet, such as the one which secured funding for TMT or would be put forward for funding to SKA) to see a breakdown of demographics for gender, language, indigenous status and disabilities.

From CASCA's 2018 registration roles, the EIC did a sex-disaggregated analysis of the current CASCA membership in lieu of a gender-based demographics survey, which required a means of self-reporting that was not available yet to the EIC.

Going through the membership list, we assigned a binary notation to each member. Based on those assignments, the results are the following:

1. ORD + ASSOC + CAP members: 207 M (79%) ; 55 W (21%)
2. PDF members: 34 M (71%); 14 W (29%)

3. STU members: 95 M (61%) ; 62 W (39%)

The CORP and RET members were not counted in the statistics.

Overall, the total (fractional) representation was 336 M (72%) and 131 W (28%), and we recovered the usual trend of the fraction of women diminishing at higher academic levels. This broadly addresses the current representation of women in Canadian astronomy with CASCA membership as a proxy for the entire community.

IN 2018, CASCA incorporated a means for the EIC to take snapshots of demographics within the CASCA membership profiles. The online profiles (initially updated yearly at membership renewal) fulfilled the requirements of self-reporting for not just gender, but many of the other factors requested by the governments gender-based analysis + (GBA+) methodology: physical disability, Indigenous status, visible minorities, age, year of PhD etc.. The EIC was consulted and helped develop the categories of the profile, being clear as well about why we are requesting this information. Members always had the option to choose “prefer not to answer”, but we have been clear that if everyone uses this option, it will be the same as having no information to give to government or other funding bodies that request it. While this method only tracks CASCA members, this is deemed to be the most complete way to understand our demographics evolution over time.

The current effort on demographics is ongoing. The Fall 2018 membership drive utilized the new profiles. The EIC is expected to analyze the data from the current database in time for the upcoming CASCA meeting, but this is TBD. The Fall 2019 membership drive did not utilize the online profiles; this is disappointing in that we now have no new demographics information for 2019. Going forward, the system put in place to monitor demographics needs to be robust, reliable and deemed secure by the membership, to encourage good uptake, sustained over a long period of time.

4.6 Points of Contact for CASCA members, especially at meetings.

4.6.1 Code of Conduct

By May 2016, the EIC had created a “Code of Conduct” for CASCA meetings. Our Code was modelled after the London Code of Conduct with additional insights from the IAU and AAS documents. The Code of Conduct applies primarily to conduct during meetings. We iterated with Christine Wilson (then CASCA Past-President) on the wording of the document. Once complete, it was translated into French by Luc Simard of NRC, who generously donated his time to do so. The code has been given to the LOC of the upcoming meeting to be posted online and distributed to participants. In subsequent years, it can be included as part of the registration process (i.e., by registering, participants will be acknowledging that they have seen the code and agree to abide by it).

The freshly drafted Code of Conduct was tested at the 2016 meeting when a CASCA member raised concerns about the title and abstract of one of the invited speakers.

Indeed, the language in the abstract was a violation of the code, which had been drafted after the abstract deadline. The title was amended for the presentation.

We recommended that the CASCA Board ensure that LOCs in future know that adherence to the Code of Conduct should be a visible requirement for those registering to attend CASCA meetings. This is now the standard for LOCs.

4.6.2 Points of Contact, enforcement of professional behaviour

This issue ties into the broader issue of Missions/Values/Ethics. When these issues are addressed, the chain of command for violations of the meeting code of conduct will be obvious (and presumably the same as for other Code of Ethics violations).

In the meantime, the very existence of the EIC provides a means by which CASCA members can identify a point of contact at CASCA meetings. LOCs also act in this capacity.

The EIC is supportive of building on this network, but from the outset, an issue is the ability of CASCA (both willingness and legally) to impose any significant penalty on offenders of its Code of Conduct, created by the LOC as one of its first actions in 2016.

It may be useful to decide whether any power/responsibility should be assigned to the LOCs or points of contact in regard to regulation and reporting of harassing behaviour at meetings. The IAU's newly drafted (but not yet finalized) policy requires reporting of incidents at its meetings up the chain. Such reports (at meetings and in general) can also be useful to serve as a repository of incidents over time. The AAS's CSW does retain such information which can be called on to determine whether someone has committed acts of harassment in the past. The AAS database has been used to put victims of harassers in touch with each other, for example. This is something CASCA should consider, on its own and in concert with AAS, but to date, we have not taken action in this regard.

We note that the first CASCA at which the Code of Conduct was in force, the system of reporting did work. An issue was reported with the title and abstract of a talk; the EIC was informed and discussed with the CASCA President, who approached the individual, who changed his title. The Code had not been in place at the time that abstracts were being submitted.

4.6.3 Recruitment of people for Astronomy Allies

The EIC has discussed increasing the number of recognized Astronomy Allies in the country. It was felt that, regardless of the mentoring program status, it would be useful for Canada for more Canadians to be Astronomy Allies. Recently, however, Ally Henry Ngo noted that the program seems to be waning, with great difficulty in getting new allies accepted due to how distributed the current allies are.

5. EIC Initiatives

In addition to the charges of the CASCA Board, the EIC has itself identified initiatives in line with its mission statement. Many of these were identified in the first meeting. It will be critical to get the questions right in the first iteration of this survey, since then subsequent surveys can be inter-compared more reliably.

5.1 Climate Survey

At its first meeting, the EIC discussed the merits of a “climate survey” which would poll individual members of the community about their professional experiences. Although this was identified early on as a very important priority for the EIC, it took some time to bring it about.

The climate survey was designed to assess the experience of CASCA members with regard to working environment, experiences of harassment and perceptions of gender equality/inequality. Care was taken to ensure that our survey addressed the questions appropriately and produced robust data on the frequency of bullying and harassment experienced in the CASCA community. The ultimate goal is to identify areas of concern so that these can be addressed, resulting in an improved workplace experience for everyone.

Several challenges (all manageable) were identified in launching such a survey. The content of the survey must be carefully considered to ensure that the resulting data provide useful information the community can act upon. We had hoped to model after the US survey, which we have failed to obtain from our US counterparts, who tell us they cannot release such information until the survey is published. In addition, there were privacy issues to be considered; who will look at the data and interpret the findings? Pauline Barmby sought advice from colleagues and had an interested response from a member of the sociology department at Western. She followed up with him on the draft version of the climate survey.

The survey draft continued to evolve through 2017; the Board’s feedback was sought for several versions. The climate survey was launched and executed in Nov/Dec 2017. The response was ~150 members of CASCA. There were significant issues with the survey in execution, including additional amendments requested by EIC members and major issues with the survey company hired to conduct it.

It was decided to restrict access to the survey data. It was analyzed by EIC members Spekkens and Matthews, who have signed NDAs with the CASCA Board. A preliminary analysis of the data was presented at the 2018 CASCA meeting in Victoria via poster presentation. The poster was submitted for the EPO session. An article in eCass was also written to report the findings of the survey.

Briefly, the initial results from the survey revealed that while most respondents feel safe in their workplaces, a significant number of respondents report a serious incident within their work life. These incidents disproportionately impact women. Almost half (45%) of respondents reported experiencing at least one serious negative interaction during their careers. The rate of respondents who reported harassment due to gender was 32% (8% of men and 61% of women) while 62% of respondents (50% of men and 77% of women) reported witnessing harassment based on gender. Almost 30% of respondents reported either experiencing or witnessing harassment due to race, while that number was almost 40% for harassment due to religion.

The EIC still intends to author a more thorough report to the Board on the content in the Climate Survey. This is still TBD, but it is a high priority by the end of 2019.

5.2 Gender study of CanTAC

Kristine Spekkens (independently and then as part of the EIC) undertook a statistical gender study of the CanTAC process using data on PIs and reviewers (TAC members) and the outcomes of assessments from Dennis Crabtree in his capacity as CanTAC Secretary. There is sufficient data (200 proposals a year) to yield informative results.

NRC contracted a social scientist at Queen's University to look at the CANTAC review process and data (all names removed) provided by Dennis. The data set includes average scores for proposals for CFHT and Gemini between semesters 2012a and 2016b (~800 proposals total). The results of this study were presented in a poster to CASCA in 2017 and published in IEEE (Spekkens, Cofie & Crabtree 2018). The study found a strong bias against female non-faculty in particular.

In response to that study, NRC changed the CanTAC review process such that the PI is no longer identified among Co-Is.

5.3 LOC guidelines

The EIC noted early on that it should look at the guidelines to the LOCs as well as the CASCA membership applications to see if there are changes that could be made to better track meeting attendance and CASCA demographics.

For several years now, the EIC has recommended in each report to the Board that CASCA create another category of presentations, such as "Community Initiatives and Demographics" that would allow CASCA members to present a second poster presentation in a non-science category. These types of presentations, that provide insight or analysis of the CASCA/Canadian/astronomical community, could then be a second poster presentation for authors, in addition to science ones. It is better that presentations in this category not be folded under EPO, since they are really community based and cover very different ground than EPO.

There has been progress in LOC guidelines at the Board level. Several EIC suggestions have been included, specifically the timing and duration of meetings (e.g., avoiding weekends whenever possible to increase inclusivity). There is increased coherence between the LOC guidelines and the Code of Conduct now.

5.4 Sexualized language in Science

The EIC discussed sexualized language in science prompted by a member experience at a meeting, specifically a (deliberately chosen) sexualized acronym for software. The EIC discussed how to manage this issue. It is clear that the presentation under discussion would have violated our Code of Conduct. So, as far as CASCA goes, we have a policy in place that regulates this at our meetings. Barmby wrote a short article for eCass about the perils of racy (even if clever) acronyms in astronomy.

5.5 White paper for the LRP

In December 2017, the committee discussed summarizing findings of the climate and demographics survey (now this requested report) and presenting new initiatives in a white paper to the LRP (EOI submitted by Kristine Spekkens).

6.EDI Efforts in Canadian science and World Astronomy

6.1 Pleiades Style Grant system and Athena SWAN accreditation

These programs were discussed several times by the EIC. There are polling questions on the climate survey about both of these programs, and a cursory look at the responses shows that > 55% of respondents are in favor of CASCA working to implement these. In both cases, negative responses were < 13% although this leaves quite a few people who are ambivalent or unsure.

The Athena SWAN style program is going to be called Dimensions in Canada and there is a pilot program planned at 15-20 universities of varying size and type.

6.2 NSERC Statistics

In 2017, the EIC had numerous discussions regarding obtaining gender based data on NSERC applications and success rates in astronomy. These data have not been forthcoming. NSERC released various summaries of information regarding recent allocations, but none of the datasets were broken down as we needed to see them. There were no statistics done in the NSERC analysis. Julie H-L and Kristine S. have undertaken analysis of the data from recent successful applicants, utilizing a program that assigns likely gender based on names. The plots created are interesting and suggestive that grants going to female applicants are lower in value than those to their male counterparts. We feel that these plots make it worthwhile to continue to press NSERC on this issue.

We think the best way to achieve this is to continue to press CAP to push for statistical analysis, which is something they want to do anyway. What we really want is a breakdown within the physics grouping as well. In the meantime, Julie is going to add the 2017 results into her own analysis and improve the statistics there.

As of May 2018, NSERC continued to hold back sex dis-aggregated numbers in discovery grants. The person in charge of gender diversity at NSERC did not know that the CAP liaison committee was given sex dis-aggregated results. NSERC is clearly not going to release those data. NSERC's EDI person is going to be visiting every department. If the CASCA Board wants to pursue this information further, then a more heavy handed approach may be needed: e.g., access to information request and then pursue the analysis ourselves.

7. EDI and Indigenous Peoples

The EIC has not tackled the issue of EDI and Indigenous Peoples, in part because we feel as though we lack the expertise to do so. We look forward to two white papers being submitted on the topic, led by Hilding Neilson:

1. Indigenizing the next decade of Astronomy
2. Our place on Maunakea: Canadian Astronomy listening to Native Hawaiian

For the past few years, the Westar lectureship has sent speakers to remote Canadian locations with a strong Indigenous presence, and therefore that there is an overlap between EDI and EPO here (indeed, the WP "Indigenizing the next decade of Astronomy" will blend the two).

8. Conclusion and Future Effort

The EIC is expanding in order to enhance our ability to move forward on several issues described above and to be described further in our planned WP. We also wish to enhance the diversity of the committee and will seek to do so in those we invite to join the committee.

The above describes our efforts since the committee's inception in 2015. The most critical efforts have gone into the climate survey and the construction of databases that will allow regular demographics sampling. Regular sampling of the climate of the community will require explicit surveys, and these should be done at an expected cadence so that dwell times between data collection are consistent.

Expanding EIC efforts beyond gender is being explored in various WPs and also in Canadian institutions (e.g., NRC through the federal government). The EIC may be able to track these demographics now, but discussion about how to enhance diversity overall (e.g., race, indigenous status, etc.) is warranted.