

Drosophila Board Meeting: March 27, 2019

1. Fly Board President Bruce Edgar began with Introductions of new attendees.
2. He then gave a quick summary of some issues faced by our community. These included concerns about federal funding for our field and attendance at the Fly meeting. He announced a Focus group meeting later in the meeting which collected feedback on new ideas that might further enhance the Drosophila meeting.
3. Report from the ADRC Organizing Committee (Michael Buszszak)

Michael focused on differences from previous meetings. He discussed selection of the keynote and plenary talks. The emphasis was on great science, someone who had not presented before, with close attention paid to gender diversity. They changed abstract categories as described in Report, based on recommendations from previous organizers and survey responses (e.g combining microbiome with immunity, cell death with cell stress, and merging some categories based on abstract numbers from previous meetings). They deleted RNA Biology as it had the lowest number of abstracts, and could be accommodated in regulation of gene expression. Talk numbers were based on abstract numbers. They added a stand-alone Techniques and Technology Plenary session. They replaced one full talk in each session with several lightning talks/poster previews. The organizers were more heavily involved in fund-raising. He then opened this for discussion. Questions focused on the fact that attendance is down this year, and that this is a concern. He noted regional effects—there is not a large local population. He noted we need to think about how we can improve the meeting.

4. Sandler Lectureship Committee (Barbara Mellone)
There were 27 nominations (an increase from 19 in 2018). The initial rankings were based on Thesis Abstract and nomination letters. 3 finalists were chosen. She discussed the possibility of structuring nomination letters, to make these more helpful to the committee. Other suggestions were in the Report.
5. Report of the GSA Senior Director (Suzy Brown and Tracey D)
Suzy shared some positive aspects of the meeting-she emphasized its importance and shared positive comments from the survey. She then discussed the new Code of Conduct and its importance. Tracey thanked the organizers, and solicited further feedback, asking people to talk to her later in the meeting. She discussed ways to increase fundraising. She then talked about GSA strategic planning—it will include an evaluation of fiscal and intellectual merits of each of the GSA meetings. She then opened the floor for questions. Celeste Berg asked about the trends of financial success of Fly Meetings. Suzy and Tracey pointed out the complex set of things that affect financial success of a meeting. Rachel Cox asked how the Fly Meeting compares to other model organism meetings in this regard. Suzy noted that Drosophila meeting registration charges are still lower than other meetings, and declining slightly, whereas some other meetings (*C. elegans*) have stable attendance. Tracey pointed out that keeping meetings vibrant and sustainable is a key issue for the GSA. She emphasized that the GSA wants suggestions for how to keep

the ADCR vibrant and attractive to young and mid-career attendees. Laura Johnston noted that grant funding is currently low and this is a factor, because PI's can't afford to bring many lab members anymore. Mark Peifer pointed out that the *C. elegans* meeting is stable in attendance and their funding challenges are similar.

6. GSA and the Drosophila Board (Bruce Edgar for Denise Montell)
Denise Montell is the incoming GSA President. She sent a letter to be shared with the Board. Bruce read Denise's letter. She pointed out challenges faced by the GSA, especially the push for open access publishing and the potential impact on other GSA meetings. Denise noted that GSA meeting attendance is either steady or trending down. Noted upcoming effort of GSA to evaluate all of its model organism meeting, and potential impact of TGCA. Noted GSA strategic plan and new fundraising efforts—with a focus on new services for young and mid-career investigators.
7. Treasurer's Report (Michelle Arbeitman)
Michelle reported that the Board's funds are invested with Vanguard. The Board needs to discuss the custodial agreement, and take action on this within the next months. She asked members to send comments to Bruce and Michelle. She will work with the Presidents to decide on how to use funds to create new travel awards and discuss naming options. The GSA stepped in to support the Finnerty awards, which had run out of money. Bruce requested volunteers for a Working Group to get this off the ground. Erika Bach volunteered—Michelle and Erika are seeking additional volunteers to join this effort.
8. Victoria Finnerty Undergraduate Award (Amanda Norvell)
Amanda briefly summarized her report. There were 29 applications—slightly up from 2018. There were 2 rounds of review—for quality of research and added value (e.g. PUI, going to grad school, diversity, overcome hardship). The total available was \$5000. 15 awards were made. Each was \$500 or less. Bruce asked how many facilitate student attendance. Amanda noted that student's had to register before Awards are made, but students can cancel without penalty if finances preclude attendance.
9. Image Award (Nasser Rusan)
David Bilder cycled off and Elizabeth Chen cycled on the Award committee. They increased presence on Twitter, and sent out the request for submissions closer to the deadline (by mistake but it may have been a good idea). David created the Image Award Poster which will be distributed as a bonus for attendees. There were 85 total submissions (a 25% increase). The Awards will be presented tomorrow.
10. 2020 Fly Meeting @ TAGC (Helen McNeill)
The organizers are trying to balance excitement of mixing communities with retaining value to Drosophila community. There will be a Drosophila mixer, and gathering sites for fly people. Abstract review will start with the organism group and then go to a pan-organism committee. There will be about 100 Drosophila talks (less than the 160 at the Fly Meeting). There will be mixed organism but topically themed poster sessions, and a common technology session. Celeste Berg asked about workshops. Suzy said they will

be selected from community submissions. All will be in a single 2 hour session. There likely will be preference for cross-community workshops. There were too many in 2016—thus there is a need to be more selective. Bruce asked more about the details of sessions. Hugo Bellen addressed this. One major difference is that the quantitative and population and evolution group is its own community, for purposes of the meeting. There will only be a single Fly specific Plenary Session and it will only have three slots. Suzy noted there will be many more joint (mixed organism) plenary sessions. Lynn Cooley noted it will be about 50/50 pan-organism to community specific sessions, with the mixed organism session grouped topically. Drosophila will be the only organism community with concurrent organism specific sessions. Overall the new TAGC program should help integrate the different organism-specific communities better than the last TAGC.

11. Board Action items

- a. Bruce noted that a Focus Group of about 15 people at all career stages had been formed – “Building a better Fly Meeting”, and would meet on Thursday. Others can attend if they wish.
- b. Next, there was a discussion and vote on whether the ADRC Organizing Committee should have a mandate regarding diversity and representation of invited speakers and session co-chairs. Proposed text: "Efforts should be made each year to ensure that the organizers of the North American Drosophila Meeting and the speakers at the meeting should reflect the full diversity of the Drosophila community, along all dimensions of diversity."

After discussion, the measure passed by a strong majority. Subsequent to the meeting, the outgoing representative from Latin America, Juan Riesgo-Escover, wrote to the Board discussing his reasons for opposing this measure. He expressed a view shared by he and some of his Latin American colleagues, stating that they “strongly feel that whenever someone is asked to participate in the meeting in any guise it should be primarily because the underlying science and research is sound and of interest; in other words, we feel that privileging the science should be the first concern”. He shared the thought that “asking people because of who they are or represent, and not necessarily paying the highest attention to the quality of their research, we feel, is demeaning and patronizing. This is an important perspective that needs to be considered as we try to ensure that the speakers and session chairs reflect the diversity of our community while also ensuring strong scientific content.

- c. Mark Peifer noted that some members of the community have pointed out the lack of diversity on the Fly Board. Tracey noted that the GSA is creating a Diversity and Inclusion Committee. Debbie Andrew has incorporated volunteers into the Nominating Committee to try to diversify the next slate of nominees. The Committee includes Debbie, Iswar Hariharan, Tin Tin Su, Laura Reed, Patrick O’Grady and Noah Whiteman, Debbie has also initiated an effort to seek nominations from the

broader community, and an announcement of this effort will be circulated by Fly Base and in the GSA e-news.

- d. Distribution and naming of Travel Awards from the Drosophila reserve fund was dealt with earlier.
12. Drosophila Board Elections Committee (Laura Johnston)
Tin Tin Su and Noah Whiteman were added to the committee. Laura discussed their efforts to increase diversity. One mechanism to address this was creating contests between two candidates of the same gender. Marianna Wolfner will be President Elect—others are named in the report. There was a minor glitch in the balloting—President Elect was left off first ballot. Despite this number of votes was among the highest ever. Bruce noted that 702 votes is still a pretty low number. We should try to publicize this election more broadly.
13. Primarily Undergraduate Institutions (Amanda Norvell)
There are several workshops and activities targeted to this community in the meeting, including the focus on undergraduate researchers. She pointed out the workshop on inclusive teaching and research Thursday evening. They have added ribbons to identify undergraduate students on badges.
14. Advocacy and Communications (Michelle Arbeitman for Andreas Prokop)
Michelle directed us to Andreas' Report, which includes materials he is using in Manchester. His stats suggest this outreach effort is working. It is working well in Manchester but he is worried he is preaching to the choir. He is trying to get word out more broadly. We discussed ways it could be better publicized on Fly specific websites. Rachel Cox asked about whether there will be a Hill Day at TAGC. Hill Day would provide a structured opportunity for attendees to meet with their Congressional Representatives. Tracey noted that such an even will occur, and is tentatively scheduled for the Tuesday before the TAGC. Bruce noted that there is more room for work in this area.

Action items related to community:

- a. Appointment or election of another trainee representative to the Fly Board (Laura Johnston)
It's been viewed as a good change—should we expand it to two, and should it be an elected or appointed position. Lynn Cooley noted the positive aspects of this based on the GSA experience—they have one postdoc and one grad student, and also added an early and a mid-career scientist, who are elected. Tracey discussed this. David Bilder discussed the logistics, and importance of selecting the right person—probably not via election. Bruce brought it to a vote—add a grad student and a postdoc representative, each for a two year term. We will solicit self-nominations and the election committee will select. This passed unanimously. Laura Johnson asked if we would help support costs of attendance of the student reps—this will need to be discussed. There is a possibility of using travel fellowships for this.

- b. Online Forum for Drosophila researchers (Erika Geisbrecht).
Erika suggested the creation of an interactive forum like Slack for the Drosophila community, and solicited feedback on the idea. Brian Oliver pointed out the successful New PI Slack. Laura Reed noted Slack is not good for archiving. Kevin Cook discussed the history of this—old versions were not very well used, but the formats of these were not generally popular and are now outdated. There was general enthusiasm for this idea, and FlyBase (Norbert Perrimon) offered to help publicize it. Erika solicited feedback from the Board, and has begun to create a Working Group to spearhead this effort.

Resources and Projects

15. FlyBase (Norbert Perrimon & Susan Russo Gelbart)

FlyBase is doing well—this includes doing more of the same, along with several new innovations. He discussed Micropublications (<https://www.micropublication.org>). It reports results of single experiments or datasets, and will be directly incorporated into the Model Organism Databases. Flybase is part of The Alliance for Genomic Research (AGR). FlyBase will work closely with other Model Organism Databases (MODs) to integrate data sets and develop tools to enable cross-species analyses. This effort will have a major impact on the fly community, accelerating the development of models of human diseases. This going well. They are discussing how to add single cell RNA seq data and other large datasets, and trying to make these accessible. We're behind the human genome community in this regard. They are working with experts in these efforts, and will be part of a meeting at Janelia Research Campus about this. He next discussed curation, requesting help from the community, e.g, for gene summaries. He discussed funding, and the different agencies that contribute. They have had a reasonable response from request from labs to contribute, via the new user fee mechanism. 300 labs have contributed, \$196K was pledged, \$143K is in hand. However this will support only one or two salaries and is a small fraction of the total FlyBase budget. There were questions about mechanisms to contribute. This was clarified—e.g., NIH is now OK with a FlyBase user fee being included on your budget. There was a question about the disparity in costs between US/UK versus Europe, Canada, and other regions—he noted the reasoning behind it and discussed whether evening out costs might bring in more money, since at the moment very little comes in from Europe. Hugo noted that efforts to have European funding agencies contribute have failed. They mentioned that funding from The Alliance for Genomic Research (AGR) came in higher than expected, meaning that the amount needed from “lab fees” was reduced. Overall, Norbert concluded that the funding for FlyBase is stable for the current grant cycle, but not necessarily into the future beyond that. Hugo and Norbert reported that NIH has recognized (with community feedback) that we need individual Model Organism Databases, and so it is accepted that we will not totally replace FlyBase with with a unified AGR model in the near future.

16. Bloomington Drosophila Stock Center (Kevin Cook)

BDSC is currently splitting operations into two buildings, with backup stocks separate from main stocks. They are in the last year of a five year grant. They requested a 5% increase. They received good reviews but the funding level is not yet clear. A competing revision was submitted to support the Janelia split-GAL4 stocks, which are important but

low use. Overall use numbers are in the Report. They have doubled the number of stocks since 2010, though stock use is flat. They are now at the limit of the number of stocks that can be supported and will need to raise fees in 2020. The increase will be roughly 14-19%. Hugo asked about the very high inspection fees for stock shipment to Europe—can be 150-400 Euros per shipment. Kevin reported that a solution may be in the works, and noted that part of the problem is that many institutions don't do the paperwork correctly. Australia solved this with a centralized distribution center. David Bilder asked about how the changes in Janelia leadership may affect stock generation and maintenance. Hugo said this will not likely change things much.

17. VDRC Stock Center (Lisa Meadows)

Lisa reported finances are a bit low, and support from current sources will be cut in the coming year, and they need to find new ways to fund costs.

18. Kyoto Stock Center (Shinya Yamamoto for Toshi Takano-Shimizu)

He described an ongoing fly preservation project. They have established a protocol to remove germ cells, freeze the needle, and then transplant PGCs. It doesn't reduce costs. The current capacity is 400-800 stocks. They currently have verified at least a one-year success rate. They would like suggestions from the Board and the Community as to which stocks are most important for cryo-preservation.

19. Species Stock Center (Patrick O'Grady)

They moved to Cornell in October 2017 and have been shipping stocks for about a year. It is funded by an NSF grant. The website is currently primitive, but a new one will be out later this month. Celeste Berg asked whether most lines are sequenced—answer is yes.

20. Drosophila Gene Disruption Project (Hugo Bellen)

This group has switched to a CRIMIC strategy (targeted integration of MiMIC-like cassettes through CRISPR/Cas9 mediated homologous recombination) for tagging and disrupting genes. Their grant got a 14% score, but they still have not heard about funding.

21. Human cDNA Project (Hugo Bellen)

This group is generating a library of UAS-human cDNAs, as a combined effort of three different labs. They are seeking to generate a library of 8,000 epitope tagged human cDNAs that are conserved between Drosophila and human. They are now using a robotic cloning pipeline—they have 3500 clones in hand. They recently obtained a larger commercial collection of human clones.

22. Harvard Transgenic RNA Project (Jonathan Zirin)

They are continuing to make RNAi and CRISPR reagents. He noted their collaboration with Flybase. Usage numbers of RNAi stocks rose and are now stable; this might increase with the new CRISPR stocks. There is an expanded RSVP website—he reminded us to seek feedback. There was a discussion of off-target effects or other abnormalities.

23. Harvard Drosophila RNAi Screening Center (Stephanie Mohr)

They continue to support RNAi screens and have expanded into CRISPR screening. There is more information on posters at the meeting. They are expanding resources for proteomics, other databases, and increasing outreach.

24. Berkeley Drosophila Genome Project (Bruce Edgar for Sue Celniker)
They have ongoing and new projects. They have a new focus on the microbiome, the human cDNA clone resource, and are expanding curation of gene expression patterns, with MOD-ENCODE continuing but is re-named MODERN.
25. DGRC (Andrew Zelhof)
They have expanded personnel. They are searching the community and requesting resources. Funding is in good shape (in year 2 of a 5 year grant). Their usage is consistent. He invited us to come by their booth and examine new resources.
26. DIS (Jim Thompson)
He directed us to his report.

Final thoughts

Brian Oliver noted some new efforts from his group in annotation and re-annotation. Hugo Bellen noted email from Steve DiNardo, with concerns about the new and very onerous rules at Penn, based on longstanding NIH guidelines, for the use of transgenic flies. Hugo encouraged the Board to let the Fly Board President know if this an issue any other institution. Kevin Cook discussed the BDSC view on these NIH guidelines—he noted that an inventory of transgenics is probably required but records of all crosses are probably is not. BDSC has followed the NIH guidelines for many years, and has never been audited by NIH. He suggested we need to go to NIH to get the exemptions from these guidelines, similar to those the mouse community has already obtained. These exemptions would cover the whole fly community, simplifying compliance for institutions.

The Board meeting is adjourned and Board members are encourage to attend the nearby social at the new Faculty Forum.