The 6th Annual Workshop of the Undergraduate Research in Mass Spectrometry Interest Group

ASMS 2015, St Louis MO, May 31-June 4, 2015

Elaine Marzluff (Grinnell College) and J.C. Poutsma (William and Mary) co-chairs Assisted by Elizabeth Stemmler (Bowdoin College)

The interest group sponsored a workshop on "Getting the Most out of Undergraduate Mass Spectrometry Research" on Wednesday, June 3 with a panel discussion designed for undergraduates attending the ASMS meeting and focused on how to leverage undergraduate research experiences into success in graduate school and industry as well as how faculty mentors could best facilitate undergraduate experiences.. The panel featured Leslie Hicks(UNC), Jack Williams(Mercyhurst), Jay Forsythe(Georgia Tech) and Christine Hughey(James Madison). Members of the panel each briefly spoke about benefits of undergraduate research and then answered questions on how to facilitate undergraduate mentoring and successful undergraduate experiences, how to leverage an undergraduate research experience in mass spectrometry into the next position. This workshop was attended by over 30 undergraduate students and mentors.

In addition, the Interest Group organized and sponsored a variety of activities at this year's meeting aimed at undergraduates and faculty at primarily undergraduate institutions.

- Tutorial for Undergraduates and Graduate Students attending ASMS for the first time. Sunday, May 31, 2015 4:00-4:45pm. Professor Elizabeth Stemmler of Bowdoin College gave a presentation on "Making the most of ASMS: What to see, hear and do". Topics covered included navigating the program, tips on networking, and basics of mass spectrometry. This session had about 60 attendees, about 2/3 graduate students and 1/3 undergraduate students.
- 2) Undergraduate Poster Session, Sunday May 31 during the opening reception. This year's poster session, organized by Darrin Smith and Dil Ramanathan, featured 33 entries. This session provides undergraduates a valuable opportunity to present their research to multiple experts (judges). We used the first 15 minutes of the opening mixer for an undergraduate reception time. This timing worked well, providing students a chance to both enjoy the refreshments and also to mingle before their presentation. The central location in the room resulted in a lot of casual attendees beyond just the students and judges involved with the session, resulting in a very well-attended poster session.
- 3) Lunch with the Experts, Monday June 1. Undergraduates were invited to attend a lunch in the exhibit hall for informal discussions with former ASMS award winners and rising stars. About 30 students and 6 experts participated in this event.

Future Leadership. Next year Megan Gessel, University of Puget Sound, will join as co-chair. Elaine Marzluff will continue for one more year in that role.

Not part of the report but other things for consideration by ASMS

The advertising of all events was much better this year, with prominent inclusion of events for undergraduates in the program materials. We propose ASMS consider if some of these might also be included in the "meeting at a glance" flyer.

1) The opening forum on "What to see, do and hear at ASMS" benefited from a new time this year by a dramatic increase in attendance. It also was most helpful to participants to have this earlier (last year it

was Monday morning). From informal conversations with ASMS staff and board members, it sounds like this session should continue to be facilitated by the undergraduate research interest group. We now have 4 people (Elizabeth Stemmler, Allison Dannell, Elaine Marzluff and JC Poutsma) who can present the lecture and a successful set of materials for running this session. We propose ASMS staff, as they did this year, arrange room and advertise the session and the undergraduate interest group arrange the facilitators and program.

- 2) The poster session continues to be a success. Darrin Smith and Dil Ramanathan are willing to continue organizational duties for another year. Having dedicated reception time and food tables has made this a much more successful event for undergraduates. The biggest challenge is figuring out who will be presenting. As we shared information by email, we ended up with several conflicting sets of excel sheets. Proposal: Since we have had fairly steady participation and poster distribution, we do initially planning for session and arranging judges assuming those numbers. ASMS does initial contact with students, verifying status and participation. 3 weeks prior to meeting Cindi (ASMS) sends the final list of presenters, and we will make groupings. Potential help? Could we identify/define "undergrad" in an information box—appears that some international attendees may not know the term. Also, we can make clear our intent is to capture research done as an undergraduate—ok if the student graduated in May when meeting is in June, for example.
- 3) Thank you to ASMS for providing the meals for our students and experts. This event continued to be a highlight for all who participated. The round table format and ease of food acquisition was very helpful. Putting signs at both entrances to exhibit hall might have helped people find it more readily. Proposal: We would like to discuss if, moving forward, ASMS staff issue the invitations and manage RSVP's for the "experts". We are happy to provide a (long!) list of people who can be rotated through.
- 4) Contact information for new leadership: Megan Gessel <<u>mgessel@pugetsound.edu</u>>

Other things for consideration by future leadership:

- 1) Possible leaders: Dil Ramanathan has expressed interest in being a co-chair for 2017.
- 2) Both at the meeting and through email correspondence to our various calls on the interest group for ideas, we have heard interest in setting up mentoring networks (or at least a list serve for communication). ASMS is, I think working on the latter, but future leaders of the interest group might consider the former.
- 3) This year we did not have a separate gathering for research directors who work primarily with undergraduates. We did discuss some best practices in our workshop. The needs of directors and undergraduate students are not always best served in a single workshop, so consideration of how to best serve these different constituencies of the interest group is warranted.