

## Pre-Dental Club

This is a follow up from a previous email sent by Ron Valcarce about the use of the one-time funding for the American Chemical Society Conference specifically for the Pre-Dental Club. These funds allowed members in our club including myself to have many opportunities at the American Chemical Society Conference this Spring. It allowed us to work on and become co-authors on a research project that was not only accepted at a national conference, but also awarded for the use of analytical chemistry. The project itself was focused primarily on Fluoride use in dental products which is a great opportunity for us as pre-Dental students to learn about and build our resume from. The trip also featured tabling for many grad schools across the US and gave us the opportunity to get to know different programs and apply for research positions for those grad schools. There were also panels of chemists who were working side by side with dentists and dental schools that we were able to get to know more about to help us in transitioning to our next steps as students. We can not thank Student Clubs and Organizations for giving us the wonderful opportunities that this Conference has given us.

We have completed our travel to the ACS National Conference in Indianapolis, Indiana and our Spring undergraduate research recruiting event (Pizza and Posters). We are grateful for the club funds our students received which made this travel possible. For the American Chemical Society National Meeting in Indianapolis, Indiana, we had 27 students conducted undergraduate research and presented 6 conference presentations. This was a diverse group of students representing three different SLCC Schools and 17 different academic pursuits:

| Health Sciences         | Humanities & Social Sciences | Science, Mathematics & Engineering |
|-------------------------|------------------------------|------------------------------------|
| Pre-Medical             | Philosophy                   | Chemistry                          |
| Nursing                 | Music                        | Biology                            |
| Kinesiology             |                              | Nanotechnology                     |
| Pharmacy                |                              | Biotechnology                      |
| General Health Sciences |                              | Mechanical Engineering             |
| Pre-Veterinary          |                              | Chemical Engineering               |
| Pre-Dentistry           |                              | Materials Science                  |
|                         |                              | General Engineering APE            |

These students also belong to one or more SLCC clubs, ACS Chemistry Club, Pre-Medical Professions Club, Pre-Pharmacy Club, Pre-Dental Club, Nanotechnology Club, and the Biotechnology Club. Each of these clubs is affiliated with the American Chemical Society and students in these clubs hold membership as a student affiliate of the ACS.

At the ACS National Conference, these students participated in various scientific sessions where they presented 9 projects on the following research topics:

- **Inquiry-Based Structural Assessment of Two-Component Metal Nanostructures Electrodeposited in Patterned Polymer Templates**
- **Comparison of low-cost synthesis methods for pharmaceutical-grade purity of the anticonvulsant phenytoin using traditional reflux techniques verses microwave-assisted extraction**
- **Building a successful ACS Student Affiliate through professional development, community outreach, community service, and undergraduate research**
- **Analysis of volatile and semi-volatile flavor components in aged whiskey and filtered vodka using headspace gas chromatography/mass spectrometry**
- **Rearrangement of Indolizines and Quinolizinium Cations to quinolizinium salts by ring expansion**
- **Green synthesis of silver nanoparticles using tea leaf extract and evaluation of their stability and antibacterial activity**
- **Physical Nanotechnology Applications for Forensics: Development of Nano-features from Latent Fingerprints**
- **Evaluation of Commercial Fluoride Containing Products for Fluoride Species using Varied Sample Treatment**

Presenting at this national conference gave our students the opportunity to present alongside graduate students and professional career researchers where our students gained real-world insight from these professionals as well as receive valuable feedback on their projects. It should be noted that three of

our students on the fluoride project and two students from the phenytoin project received special undergraduate research presentation awards from the ACS.

Our students also participated in various workshops, attended presentations and symposiums, and explored the Exposition where all the latest, most cutting-edge scientific instruments are unveiled and demonstrated. We also organized many social outings and activities that are designed to promote camaraderie and friendship among our affiliate members as you can see from our itinerary below:

| Saturday, March 25 |                                                 |        |                |
|--------------------|-------------------------------------------------|--------|----------------|
| Time               | Sessions                                        | Attire | Location       |
| 2:30PM             | Arrive from Salt Lake City & Check in to hotel. |        | Hotel Lobby    |
| 5:30 - 7:00 PM     | HOSTED MEAL                                     | Any    | Bazbeaux Pizza |
| 7:00- 10:00PM      | Group Activity                                  | Any    | TBD            |

| Sunday, March 26  |                                                                                   |                 |               |
|-------------------|-----------------------------------------------------------------------------------|-----------------|---------------|
| Time              | Sessions                                                                          | Attire          | Location      |
| 7:00-8:30AM       | Hotel Breakfast                                                                   | Any             | Hotel Lobby   |
| 8:00 AM           | Pick-up ACS Conference Credentials                                                | Any             | Hotel Lobby   |
| 8:30 - 9:30 AM    | Making the most of your ACS meeting - freebies                                    | Business Attire | Hall B        |
| 9:30-11:00AM      | Ins and outs of getting into graduate school                                      | Business Attire | Hall B        |
| 11:00-12:30PM     | *ChemDemo exchange - ATTENDANCE REQUIRED                                          | Club Shirts     | Hall A        |
| 1:00 - 4:00 PM    | Graduate school fair                                                              | Business Attire | Hall I        |
| 2:00 PM - 3:30    | Networking 101                                                                    | Business Attire | Hall B        |
| 4:00- 5:30 PM     | HOSTED MEAL - optional                                                            | Any             | Goodwood Indy |
| 6:45 PM - 8:30 PM | *Student chapter awards ceremony - ATTENDANCE REQUIRED [IF NOT AT POSTER SESSION] | Business Formal | Hall A        |
| 6:30PM - 9PM      | Analytical Chemistry POSTER SESSION                                               | Business Attire | Hall F-H      |
| 8:30 - 10:30PM    | Student social - usually food + fun offered                                       | Business Formal | Hall A        |

| Monday, March 27 |                                                                                                             |                 |              |
|------------------|-------------------------------------------------------------------------------------------------------------|-----------------|--------------|
| Time             | Sessions                                                                                                    | Attire          | Location     |
| 6:30- 9:30 AM    | Hotel Breakfast                                                                                             | Any             | Hotel Lobby  |
| 11:00- 5:00 PM   | Science Exposition - Career Networking                                                                      | Any             | TBD          |
| 11:30- 2:00 PM   | *Undergraduate research poster session - ATTENDANCE REQUIRED                                                | Business Formal | Hall F-H     |
| 2:30- 4:00 PM    | Eminent Scientist Lecture. Polly Arnold of Lawrence Berkeley National Laboratory                            | Any             | Hall B       |
| 3:00 - 5:00 PM   | *HOSTED MEAL - Catering in Hotel Lounge. BRING YOUR LAPTOP. <b>EPORFOLIO WORKSHOP</b> - ATTENDANCE REQUIRED | Any             | Hotel Lounge |
| 8:00-10:00 PM    | *Sci-Mix - Successful Student Chapter Poster Session                                                        | Business Formal | Hall F-H     |

| Tuesday, March 28 |                                     |        |                    |
|-------------------|-------------------------------------|--------|--------------------|
| Time              | Sessions                            | Attire | Location           |
| 6:30- 9:30 AM     | Hotel Breakfast                     | Any    | Hotel Lobby        |
| 11:00 AM          | CHECK OUT OF HOTEL                  | Any    |                    |
| 11:15-12:30 PM    | Gallery Pastry Bar - optional lunch | Any    | Gallery Pastry Bar |
| 12:30             | Head to airport                     | Any    |                    |

A highlight of this trip was when the ACS officers received the Outstanding Chapter Affiliate Award and Green Chemistry Award during the ACS Undergraduate Awards Presentation.

Another activity that our ACS officers and advisors arranged this trip was an ePortfolio dinner that was held the last evening of the conference. During this dinner, students came together to share and reflect on their experience and to showcase these High Impact Practice activities in their ePortfolios.

Below, I have also included a few photos of our experiences:















