

# Report on the International Sedimentological Congress, Quebec.

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## INTRODUCTION

Eleven geoscience students received travel grants from an SEPM NSF Award to attend the 20th International Sedimentological Congress in Quebec, Canada, August 13-17, 2018. The awards were made in conjunction with the Sedimentary Geology Division of GSA and covered the student's expenses to attend the meeting. The students come from a wide cross-section of the geoscience community based on gender, ethnicity, age and degree program. This report includes their impressions and experiences at the meeting.

## OVERVIEW

Overall the conference was considered a great learning experience by all of the awardees. The conference brought together a different and more diverse group of researchers than other North American-based conferences they had previously attended. Being able to connect with this group was greatly appreciated and helped to build a larger global network. The conference schedule included numerous group activities involving most or all of the attendees such as the icebreaker, daily group lunches, poster sessions, keynote speakers, and a banquet. These events made it easy to meet and socialize with other students and researchers, thereby facilitating discussion and collaboration in a more casual setting. Other opportunities, such

as the mid-conference Wednesday break, allowed time to culturally explore Quebec City and the surrounding area or to participate on one day field trips.

The conference was an excellent opportunity to learn from and connect with sedimentologists from around the world. Each day was fully packed and exhausting in a good way. The days were essentially a full 12 hours where even the breaks were opportunities to chat and exchange ideas on research and learnings.

A major aspect of the meeting was the value of interdisciplinary investigation. While a growing trend among top universities is for interdisciplinary work; plenty of work still remains siloed. This can occur not only between disciplines but even just between different research groups in the same building. The study area of sediment transport, in particular deep-water sediment gravity flows, is one where interdisciplinary investigation was highlighted at the meeting and advanced its understanding in the earth science community.

Another takeaway is that as the world of stratigraphy and hydraulics becomes increasingly (and appropriately) linked, the community needs to do its best to educate itself and ensure that hydraulics engineers are teaching and learning from stratigraphers and vice versa.

Finally this conference was a great venue for experiencing the idea of

the risks and rewards associated with research and specifically modelling and the evolution of models.

## TECHNICAL SESSIONS COMMENTS

Overall hearing and seeing some very different approaches and models is a good reminder to keep an open mind, ask questions, and work from observations to test hypothesis rather than rushing to support anticipated or desired conclusions.

### Some of the memorable presentations include:

- Several on mudrocks and shales – their diagenesis and sequence stratigraphic aspects
- What the rock record actually preserves – depositing, eroding or bypassing specific environments
- Carbon storage in deep-water deposits - a single depositional event can bring in carbon from a wide range of ages and sources
- How flows are highly complex and deposits can have wildly different characteristics depending on when and where along the duration or length of a flow they formed.
- Multiple posters and talks that discussed sediment provenance from a variety of ages from Holocene to Mesozoic.
- The impact of bioturbation on reservoir properties and the use of various imaging techniques to evaluate the bioturbation.

## CULTURE

Opportunities, such as the mid-conference break, to explore Quebec City and the surrounding area allowed time to walk around and watching street performers in Old Quebec, visiting the citadel and the Plains of Abraham, and watching a fireworks show over the St. Lawrence River.

It was important to experience an area where English was not the primary language because it gives perspective on the world as a whole. Language barriers can hold someone up from something as simple as ordering a coffee or having a conversation about sedimentary environments. In regards to global culture the awardees noted that they met and exchanged contact information with professors and students from Spain, Italy, the US, China, Norway, Germany, France, and England among other countries. This was a great networking experience.

Specifically meeting people that have immigrated to Canada was interesting as it is easy to have a US-centric view of the immigrant experience, so it was neat to hear about that experience in Canada from locals in Quebec City.



*Figure 1. Informal discussions with new friends.*

*Photo S. William*



*Figure 2. Checking out an outcrop on a Wednesday Field Trip.*

*Photo F. Tamakloe*



*Figure 3. Some of the 'old' Quebec City architecture.*

*Photo L. Fritz*



*Figure 4. The food.*

*Photo A. Cummings*