

# **AGeS Geochronology Workshop**

**Saturday October 8, 2022, 8 am-5 pm**

**Location:** Benson Earth Sciences Building, Room 380, University of Colorado Boulder

## **Organizers:**

Becky Flowers, University of Colorado Boulder

Ramon Arrowsmith, Arizona State University

James Metcalf, University of Colorado Boulder.

**Course Endorser:** *GSA Geochronology Division.*

**Overview** The AGeS (Awards for Geochronology Student) research program has been a catalyst for advancing geochronology science and education for the past 8 years. This workshop will further those goals by bringing together members of the geochronology community, including AGeS student grant recipients, mentors, lab directors, and scientists interested in furthering their understanding of modern geochronology and its applications. This symposium will be a broad and intensive discussion of geochronology *sensu lato* with presentations by invited experts and about the latest developments in technique, analysis, applications, and geoscience results. The program will include presentations by AGeS awardees and a roundtable discussion for community needs and AGeS feedback.

## **Morning:**

### ***Session 1: Community Geochronology efforts (Becky moderates)***

8:00-8:10: Welcome, Goals, and Overview of day – Becky Flowers/Ramon Arrowsmith

8:10-8:30: The AGeS<sup>3</sup> activity - Becky Flowers (CU)

8:30-8:50: Earth in Time Report – Andrea Dutton (UWisC)

8:50-9:10: The GAIN initiative – Lisa Park Boush (UConn)

9:10-9:30: Discussion/Break

***Session 2: Cross-cutting theme talks and AGeS-grad projects (Ramon moderates)***

9:30-10: Status of Stats in Geochronology – Noah McLean (Univ Kansas)

10-10:30: How to design a geochronology study – Kip Hodges (ASU)

10:30-11: Diversity in Geochronology: Best practices, cohorts, recruiting - Anika Knight (UNAVCO)

11-11:45: Five AGeS-Grad lightning science talks. (***Jim moderates***)

Overview of problem addressed, project design, science accomplished, and importance of AGeS in your graduate career. (6 min each).

Karissa Vermillion

Haley Thoreson

Joseph Biasi

Kurt Lindberg

Oyewande Ojo

11:45-1:15: Lunch. Sandwiches from Half-fast subs. (Gluten free, vegan, etc.)

**Afternoon:**

***Session 3: Geochronology Frontiers, Diversity, and AGeS projects (Jim moderates)***

1:15-2:00: Six AGeS-Grad lightning science talks. Overview of problem addressed, project design, science accomplished, and importance of AGeS in your graduate career. (6 min each)

Nick Meszaros

Nicolas Perez

Madeline Lewis

Kirsty McKenzie

Brian Penserini

Shanti Penprase

2-2:15: AGeS-DiG project talk. - Jacky Baughman (Humboldt State University)

2:15-2:30: AGeS-DiG project talk - Darryl Reano (ASU)

2:30-2:45: Frontiers in Quaternary Geochronology talk

"Magnetite as a target phase for cosmogenic  $^3\text{He}$  dating" - Florian Hofmann (UAF)

2:45-3: Frontiers in High-Temperature Geochronology talk

“U-Pb Thermochronology of Deep Continental Crust: Diffusion Rules?”

Francisco Apen (UCSB/Princeton)

3-3:15: Frontiers in Detrital Geochronology talk

"Opportunities and Challenges in Multi-chronometer Geochronology and

Thermochronology" - Julie Fosdick (UConn)

3:15-3:45: Discussion/Break

***Session 4: Focus Groups: Recommendations for AGeS<sup>3</sup>/Human Infrastructure in Geochronology (Ramon moderates)***

3:45-4:00 Introduction and overview of breakout group goals

4:00-4:30: Simultaneous 2-3 groups

- **TRaCE:** What are the needs of the community that AGeS-TRaCE might address? How can this program be most effective? (Blair Schoene facilitates, Ramon Arrowsmith scribes)
- **DiG and BAJEDI:** How can AGeS-DiG maximize its impact in engaging underrepresented groups in the Earth sciences? What are practical ways to integrate BAJEDI (belonging, accessibility, justice, equity, diversity, and inclusivity) throughout all AGeS activities? (Tammy Rittenour facilitates, Amy Myrbo scribes)
- **Human Infrastructure:** Given the three AGeS<sup>3</sup> subprograms, what is missing for the geochronology community in the realm of human infrastructure? (Becky Flowers facilitates, Jim Metcalf scribes)

4:30-5:00: Report out to larger group

5 pm: Workshop end