Jade Bowers, Oregon State University, for her proposals: Investigating the link between an active stratovolcano and a long-lived supervolcano in Sumatra, Indonesia.

In northern Sumatra, Indonesia, an actively erupting composite stratovolcano, Mount Sina bung, poses numerous threats to the local communities. Previously thought to be a typical andesitic composite volcano related to the Sumatran volcanic arc, recent reconnaissance work by our research group has revealed that the chemical signature of the erupted products is anomalous and share characteristics with the Toba supervolcano, 30 km to the south (Mucek et al., in review), causing concern about what the current eruption will bring. While the current efforts of local geologists at Sinabung is focused on mitigating hazards, there is no study of the volcanic history and evolution of the magmatic system to inform the hazard assessment. This project will attempt to fill this gap and address the hypothesis that eruptions at Sinabung are tapping the Toba Caldera magmatic system. If pro the volcanic hazard assessment of northern Sumatra will have to be reassessed.