

2025 MGPV Division Distinguished Geological Career Award to Anita Lizzie Grunder: Acceptance

By Anita Grunder, Oregon State University
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Thank you to GSA and especially to the MGPV Division for being such good custodians of our community — for the meetings, field trips, publications, funding, and for recognizing and connecting us in so many meaningful ways. I am deeply honored and genuinely delighted to receive this award. My gratitude goes to my colleagues and friends who made this possible — particularly Shan de Silva, my Oregon State University colleague and fellow lover of silicic magmatic systems and the Altiplano. A thoughtful citation. Thanks also to Wendy Bohrsen, John Wolff, and Gerhard Wörner on the nominating committee — all outstanding scientists and equally fine humans. Wendy and I have shared humid days mapping on Isla Socorro and dry, hot days on Steens Mountain. She can write a petrologic modeling program *and* change a tire, which covers about everything you need in life. Gerhard's work in the Andes has always impressed me with its depth and field grounding. John Wolff has had a parallel career to mine in that he has worked on big silicic ignimbrites and flood basalts. I have always admired his petrologic insight and courage to think big. Thank you for making this possible. I would not be standing here without you and my geology family

I also want to thank the MGPV committee - Liz Widom, Alan Whittington, and Jade Star Lackey - and especially Alex Speer, who keeps us all going. If all these wise and wonderful people support this award, I'm more than happy to accept it.

The estate of James B. Thompson supports this award, and the MGPV website includes his memorable quote: "*True success in the laboratory should stimulate field investigations rather than discourage them. It would be embarrassing indeed if we were to construct an internally consistent geology, chemically and physically sound, perfect in fact but for one flaw: the lack of a planet to fit it.*" I extend my gratitude to the Thompson vision and implementation by MGPV. I have based my work in field studies and then used whatever geochemical, petrologic or modeling tools needed to solve problems or look for patterns in understanding how continental magmatic systems work and change in time. My field base is likely rooted in a childhood of outdoor activities, though oddly I never was a kid that collected rocks. Indeed, I thought Botany would be my path. The giant classes full of pre-meds at Berkeley made it hard to choose a biological field for a major. I was driven to choose the least populous science major I could find, which was paleontology. There were 5 majors total and 2 in my year. I regret to disappoint you in that I graduated in the bottom of my class.

My introductory geology course was taught by the late, great Wes Hildreth, and that's when it all changed. The labs involved mapping in the Berkeley Hills, and I was utterly seduced by the experience of querying the Earth firsthand. Wes later wrote me, "*You*

really have done it all. It's been quite a road since I tried to teach Intro Geology and you were the paleontology student who made it all worthwhile." His enthusiasm was contagious. Wes led me to Gail Mahood, and I became her field assistant in the Sierra la Primavera, Mexico. I also joined Wes and David Johnston in the Valley of Ten Thousand Smokes, Alaska. Those early experiences sealed my fate — and set the pattern for a career grounded in fieldwork, enriched by petrology and geochemistry. After a few years wandering through various labs, including the Berkeley geochronology lab, I settled at Stanford to work with Gail on my Ph.D. on the Calabozos caldera in Chile.

Looking back, I'm struck by how pioneering Gail Mahood and Elizabeth Miller were in the patriarchal landscape of the day. They fostered a lively, irreverent, and hard-working band of graduate students who became lifelong friends and colleagues. One of them, a particularly accomplished field geologist named John Dilles, turned out to be an exceptional partner in both professional and personal life. My deep thanks to Gail, Elizabeth, and that Stanford cohort — and to John, Anita Zoe, and Leo, who have tolerated and even joined in our field adventures and sabbaticals. I've also learned more about porphyry copper deposits than I ever expected and have come to appreciate that altered rocks can be just as instructive as fresh ones — a revelation for someone raised in the Carmichael school of only the freshest of the fresh.

After Stanford came Oregon State University — where I somehow spent 38 years. My job description balanced research and teaching in equal measure, with a touch of service thrown in. Over the years, OSU logos changed, departments merged, and we designed our own for VIPERs — the Volcanology, Igneous Petrology, and Economic Research group. Eventually we joined the new College of Earth, Ocean, and Atmospheric Sciences, where I also served as academic dean. And of course, the NSF logo was never far behind; I thank NSF for sustaining my research career, and especially program officers Sonia Esperança and Jenn Wade for setting such high professional and community standards.

My first major project — in east-central Nevada with Todd Feeley — tackled how differentiation processes evolve during prolonged crustal magmatism. We learned that at least twice the amount of basalt required for differentiation is also needed to thermally drive the system. Since then, I've worked with 28 graduate students (and countless undergraduates) on topics ranging from bimodal volcanism of the High Lava Plains to the Columbia River Basalts, Cascade volcanism, and the long-lived magmatism at the Aucanquilcha volcanic cluster in the Andes. Inferring the intrusive roots of volcanic systems has been a recurring theme, and the comparison between the Aucanquilcha system and the Tuolumne Intrusive Series remains a project close to my heart — and, yes, still in progress.

So many colleagues and friends have made my life interesting. I would love to list you all, but I have a time limit. For hosting life-affirming sabbaticals I thank George Bergantz, Tim Druitt and Peter Ulmer. For hilarity in the field and plenty of all kinds of work I thank my 28 grad students and many undergrads- you know who you are. My career is not possible

without you. With my students I have chased rhyolite ignimbrites and domes to various basalts in eastern Oregon and elsewhere in the Basin and Range, as well as in the Absarokas, the Cascades and the Andes. I have also enjoyed working with students in the classroom. It remains one of humanity's greatest achievements that we have institutions dedicated to the development of the mind and the creation of knowledge. It has been an honor and privilege to be at Oregon State University.

Teaching has been a passion with me, and I have received assorted teaching and mentoring awards. Central to my teaching have been field trips and labs, as the greatest learning impact is through things we personally experience. The impact of training students is certainly as important as research, societally, and in dollars. A simple calculation shows I have raised 2.8 million (not inflation corrected) in research funds, and my graduate students have paid at least 5 million in taxes. Education is a great national investment. And as the cartoon "Pearls before Swine" points out--- life is easier than you think, everybody passes.

And lastly, I have enjoyed service, as officer in professional organizations (GSA, AGU, IAVCEI, that we should all belong to keep our collective political voice alive), on various committees, as reviewer of all manner of thing. With several associates I helped start Muddy Creek Charter School, founded on experiential learning and rated as one of the best schools in the district and state.

Importantly, I am so very pleased that there is much overlap in the Venn diagram of my colleagues, students and staff, my family, and my friends. At the center of it is John, my life companion, our children, and this vibrant geological community has been a great network that continues to inspire and sustain me.

In closing, as I see it, I have been a good researcher, an excellent teacher, a pretty good mother, a good wife, a good colleague and friend, and an excellent builder and supporter of community. I am glad this adds up to a distinguished geologic career. It means a great deal to me to be receiving this award. Thank you so very much.