Member Spotlight

A monthly highlight featuring an ASEG member. All past member spotlights can be found in our newsletter archive.

We welcome **Prof Mark Jessell** under the spotlight in this issue as he shares his enlightening story!

Mark is a Professor and Western Australian Fellow at the Centre for Exploration Targeting at The University of Western Australia.

As a geologist, in research terms I have spent much of my career attempting to integrate geological and geophysical datasets in 2D & 3D maps and models. This has led some people to think I am a geophysicist, but direct contact with me soon disabuses them of this idea. When not thinking about 3D modelling, I have worked a lot on deformation microstructures, and the tectonics and metallogenesis of the West Africa Craton and the Guiana Shield.

Together with Corinne Debat and Nicholas Thebaud, I am director of the not-for-profit Agate Project (a spin-off of the WAXI consortium), which supports higher education in the Earth Sciences in Africa. WAXI and Agate have between them supported over 150 graduate and early career research projects, with the outcome that more than 20 of these awardees now have academic positions in universities in West Africa.

Part of WAXI & SAXI Teams.

1. ***For how long have you been a geophysicist?***
   I first became interested in geophysics as a lecturer at Monash University in the early-1990s.

2. ***What made you decide to be a geophysicist?***
   Being asked, with Rick Valenta, to teach a course on Remote Sensing.

3. ***What do you like most about being a geophysicist?***
   I enjoy the challenge of trying to integrate the precision of geophysical methods with the qualitative methods of geological field observations.

4. ***What reaction do you mostly get when you tell someone that you are a geophysicist?***
   I never call myself a geophysicist, except as a joke, to real geophysicists.

5. ***Your most respected geophysicist?***
   David Isles & Leigh Rankin for their pioneering work on geology/geophysics integration.

6. ***What aspect of geophysics do you enjoy most?***
   Coding (badly, ask anyone).

7. ***If you weren't a geophysicist, what would you be?***
   Run a cinema.

8. ***What is a challenge that you see in geoscience today, and how do you see the community overcoming it?***
   Recognition that societal challenges encapsulated by the basket of ESG considerations are not going away, nor should they. The younger community tends to be less offended by these considerations, so hopefully there will be a natural evolution in thinking.

9. ***When you are asked what you do – what do you do?***
   I am a structural geologist that likes playing with computers.

10. ***What's one thing that we wouldn't know about you?***
    My grandfather was a swindler and a jewel thief.

11. ***Where was your best sunrise/sunset location?***
    Sunset looking over Silverton, near Broken Hill.

12. ***What's one thing you wish someone had told you when you were at university?***
    Learn to act: pretend not to be scared (applies to talks too).

13. ***What is your best interview tip?***
    Learn to act: pretend not to be scared.

14. ***What are you reading at the moment?***
    ARC Linkage proposal, for submission this week!

15. ***What's your most treasured textbook?***
    Hobbs, Means & Williams (long since lost on lone).

16. ***Your funniest or worst field memory?***
    Sampling a dolerite dyke in southern Ghana, I tripped, and the weight of my backpack meant I did a 360 degree tumble, landed on my back and was completely unhurt. Unfortunately, everyone was watching.

17. ***Tell us about your best field meal?***
    Tinned sardines and baguette in the field in Burkina Faso.

18. ***What do you do in your spare time?***
    Travel, swimming, walking the dog, unpacking boxes (just moved house).

19. ***What is a challenge you have overcome and how did you do so?***
    Arriving in France with laughable language skills and (eventually) getting a job.

20. ***What is the best way that the ASEG could let the public know about geophysics and its benefit to the everyday life?***
    Give concrete examples of how the methods of Exploration Geophysics have many applications beyond exploration.

21. ***Where do you think exploration geophysics will head in the next 10-15 years?***
    More ML, more multi-physics integration, better integration of geophysics, petrophysics and geology (I hope).

22. ***Given a choice, would you prefer extra mentoring on the science, your career or the how to handle/explain exploration geophysics and its benefits to the community?***
    In the context of geophysics, I probably need mentoring on the science.

23. ***Do you think AI will take over your job or will the human element remain vital to exploration successes?***
    I hope it takes over the boring bits, but it will probably take over some of the fun stuff too.

24. ***What do you think of the covid impact on the geophysical industry?***
    It taught academics that flying a long way for a short meeting was senseless. Hopefully it taught universities that although online teaching was possible, it really wasn't a good idea except as a backup.