

NEWS

So long Andy and welcome Monica

Kathryn Knight*

Throughout its long history, Journal of Experimental Biology has had an unbroken association with the field of biomechanics, from Sir James Gray to McNeil Alexander and Dick Taylor. So, when Bob Boutilier (JEB Editor-in-Chief 1994–2003) decided to appoint an Editor dedicated to overseeing peer review of this area at the beginning of the new millennium, he turned to an established member of the community, Andy Biewener, at the Concord Field Station, Harvard University, USA. However, after 20 years and steering hundreds of manuscripts through peer review, Biewener is stepping down from his role as a JEB Editor and we are delighted to welcome Monica Daley from the University of California, Irvine, USA, to the team in his place.

‘I first came across JEB when I was an undergrad Zoology major at Duke University and began reading a few papers linked to a project in my biomechanics course taught by Steve Wainwright’, says Biewener, who eventually went on to publish his first single-authored JEB paper as a graduate student in 1982. ‘I became interested in size and biomechanical scaling effects on locomotion, as scaling effects on the energetics of locomotion was the key focus in Dick Taylor’s lab at Harvard at that time’, Biewener explains. More recently, he has switched focus to discover how birds manoeuvre to fly through cluttered environments and how muscle function dynamics integrates with neural control over a range of locomotion behaviours.

Since joining the editorial team in 2001, Biewener has dealt with manuscripts covering biomechanics and animal locomotion – both terrestrial and in the air and water – neuromotor control and function, scaling, skeletal biomechanics and adaptation to exercise. He pinpoints the breadth of research published by JEB as one highlight of his time with the journal and the collaborative nature of the editorial team and JEB community as another. ‘JEB supports a great community of scholars at all career stages as a result of the critically fair, constructive review process and of the quality of science published’, he says. In addition, Biewener acknowledges the dedicated reviewers that sympathetically guide each manuscript through peer review, saying how much he appreciates their commitment to maintaining the journal’s reputation for high-quality publications.

Reflecting on developments at the journal over the past two decades, Biewener recalls handling hard-copy paper manuscripts that had to be dispatched manually to referees across the globe in the early days; a far call from the modern convenience of online manuscript submission systems. Admitting that he will miss working with the tightknit team of Editors and attending the journal’s annual symposium, ‘which exposed me to new fields and scientific approaches’, Biewener says that he is looking forward to spending more time reading and hopes to take the opportunity to expand his scientific horizons. ‘Perhaps I’ll consider a new writing project’, he hints with a smile.



Andy Biewener (left) is stepping down after 20 years as an Editor and Monica Daley is taking his place on the team.

Selecting Biewener’s successor, JEB Editor-in-Chief Craig Franklin says, ‘Monica Daley’s great science and expertise in biomechanics, along with her enthusiasm and excitement for comparative physiology and biomechanics made her the standout choice as our new JEB handling editor’. Growing up with her father and sister in Salt Lake City, USA, Daley credits the NASA space programme with kindling her passion for science. ‘I watched the space shuttle launches and imagined becoming an astronaut’, she remembers. Fortunately, her dad always emphasised the importance of education and Daley describes how he has been an incredibly powerful role model in her life, bringing her up to be a strong and independent woman.

With little experience of higher education in her family, Daley only applied to one university – her local school, the University of Utah – also receiving a full scholarship to support her education. ‘I had no idea I might be competitive elsewhere’, she admits. And, it was during her sophomore (second) year that she discovered her passion for biomechanics when she attended David Carrier and Dennis Bramble’s Animal Biology class. ‘I was fascinated by the idea that physics and engineering principles could be used to understand animal function’, she says, eventually joining their labs as an undergraduate researcher. ‘I’ve been hooked on biomechanics ever since!’, she laughs.

Following her undergraduate experiences, Daley applied for PhDs in several labs, including Andy Biewener’s in Harvard, USA, and recalls how awestruck she felt when she received her offer from Harvard’s Organismal and Evolutionary Biology graduate programme. Arriving in Biewener’s lab in 2000, Daley focused on understanding how guinea fowl take stumbles in their stride and remembers being inspired by the work of Claire Farley (University of Colorado, USA), and Dan Ferris (University of Florida, USA), who she eventually joined for a postdoctoral fellowship.

However, about a year into her postdoc, Daley applied for a lectureship at the Royal Veterinary College (RVC), UK. ‘The job provided the opportunity to do comparative experimental

*Author for correspondence (kathryn.knight@biologists.com)

biomechanics across a range of species that would have been difficult anywhere else', she explains. Although the move to the UK so early in her career was daunting, she knew that she would not have to establish a laboratory from scratch, thanks to the RVC's exceptional facilities. During her time in the UK, Daley's interests shifted increasingly toward understanding the role of non-mechanical factors, such as sensorimotor control, learning and personality in animal locomotion and the different ways they impact how individuals manoeuvre through the environment.

After nearly 12 years in Britain, Daley and her spouse decided to return to the USA with their young family. 'It was difficult to live so far from extended family support for so many years', she says, and the opportunity to join the Department of Ecology and Evolutionary Biology at the University of California, Irvine, USA, was too good to pass up. However, she admits that the relocation could have been smoother. 'My kids had no idea how many things would change until we arrived, particularly since the Covid-19 pandemic started so

soon after our move. They have missed their friends. It was a big transition', she says.

And it was not long after their return that Daley received the call from Craig Franklin inviting her to join the JEB team. 'I was so incredibly honoured to be invited into this role, because JEB has felt like my scientific home since I published my first PhD chapter here in 2003'. Although she feels the responsibility of stepping into Biewener's editorial shoes, she is reassured that she is joining the already well-established team of Sheila Patek and Sanjay Sane. 'I have such excellent colleagues to learn from', she says.

Wishing Daley the best for the future, Biewener says, 'Monica is incredibly smart, an extremely talented and creative experimentalist and she will bring a deep understanding to how the different fields of biomechanics intersect. Importantly, she will be a fair arbiter of reviewer assessments. I am confident that she will do a superb job'. And Franklin adds, 'We are sad to see Andy depart but delighted to welcome Monica to the JEB team'.