

March 2022

Dear Orthopaedic Companies,

Inclusive Orthopaedics

The BOA is committed to championing diversity and inclusion within Trauma and Orthopaedics and driving forward change.

'Invisible women', a best-selling book by Caroline Criado Perez in March 2019, shone a dazzling and frankly enraging light on a problem that female orthopaedic surgeons have experienced and frustratingly tolerated for decades. Our societal ergonomics have meant that tools in Orthopaedic surgery, have been and still are overwhelmingly designed for men and disadvantage a growing number of women surgeons.

During a recent meeting of the British Orthopaedic Association Diversity and Inclusion Women's Working Group it became clear that each of us had experienced frequent niggling problems using orthopaedic tools such as drills, arthroscopic instruments and screwdrivers. Our hands and wrists suffer due to the design mismatch in weight and handspan needed to operate these tools with optimal control. Many of us described repetitive strain injuries perpetuated by constant use of ill-designed tools for women with lack of ergonomic consideration. While the majority of male colleagues do not have these issues, some male surgeons also have smaller hands.

Research demonstrates that the optimal size and grip strength for tool design in men and women are different. Yet those with smaller hands have no option other than to use the single size tools available to us which almost universally have been designed using 'standard' (male) ergonomics.

The year is 2022, women are astronauts, vaccine scientists, racing car drivers and orthopaedic surgeons. We are increasingly present in orthopaedics, but the tools for us are not. Currently women make up 7% of orthopaedic consultants, 20% of trainees and over 50% of medical students, so this number and the need for better designed tools will continue to rise.

It is not only women who would benefit from an alternative approach to the design of tools. This approach could help others who have had to adapt to the one size fits all approach, for

example left handed surgeons, those with disabilities, or those that generally struggle with heavy weight power tools.

We would like to challenge this status quo. We ask you to join us in an exciting new drive to make orthopaedic tools more inclusive and invest in designing for the whole orthopaedic workforce. Orthopaedic companies are known for their innovation, so we hope we can utilise your expertise and work with you on either or both of these practical initiatives toward real progress.

1) Partner with the BOA and help fund a collaborative research initiative '**Size Matters - Ergonomics for Inclusive Orthopaedics**' to collect data on our workforce's needs and optimal tool ergonomics.

2) Commit to designing inclusive and ergonomically favourable tools for the entire orthopaedic workforce and present your company's initiatives and regular updates to the **BOA Diversity and Inclusion Committee**.

We look forward to hearing from you.

Roshana Mehdian – BOA Diversity and Inclusion Working Group Representative
Deborah Eastwood – BOA Vice President

Cc: ABHI