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Independence • Initiative • Individualism

## Dear Editor,

I found Mr. Isaacs rebuttal of my paper, *Primus Metatarsus Supinatus (Rothbarts Foot): A Common Cause of Musculoskeletal Pain – Biomechanical vs Neurophysiological Model* passionate and interesting, yet misleading.

I would like to revisit several points that Mr. Isaacs raised in his rebuttal letter:

Mr. Isaacs states: "Rothbarts Foot is a condition in which the entire forefoot is inverted relative to the rearfoot". This statement is incorrect.

Rothbarts Foot is an inherited structural abnormality in which the embryological medial column of the foot (e.g., part of the navicular, internal cuneiform, first metatarsal and hallux) are in supinatus (structurally inverted) relative to the embryological lateral column of the foot. This is distinctly different from forefoot varum, where the entire forefoot (metatarsals 1 -5) are positionally inverted relative to the bisection of the calcaneus.

Apparently Mr. Isaacs did not read my paper published in the *Journal of Bodywork and Movement Therapies* (a peer reviewed publication) which describes the pathoembryological events that can result in an infant being born with Rothbarts Foot.

Cummings et al conducted a study at the University of Georgia to determine if the elevation of the first metatarsal could be accurately and reliably measured (both intrarater and interrater). Four examiners performed repeated measurements during two tests sessions separated by a week. Intrarater and interrater reliability (ICC (3,1)) ranged from 0.90 to 0.95 and 0.87 to 0.94, respectively. Day-to-day reliability (ICC (1,1)) ranged from 0.84 to 0.88 for all measures. They concluded that the elevation of the first metatarsal, pathognomonic of Rothbarts Foot could be reliably and accurately measured.

Mr. Isaacs questions the link between postural distortions and the development of osteodegenerative arthritis. He states: "So, provided the posture is not distorted all the weight bearing joints will last forever?" The answer, quite simply, is that when the weight bearing joints function around their anatomical neutral position (as occurs with a non distorted posture), they will function better and last longer (but not forever). Over my past 40 years of clinical practice, this has been my experience. Over my past 40 years of clinical research, this has been my observation.

Then Mr. Isaacs questions: "Has a study been carried out to test for correlation between Rothbarts Foot and a Kyphotic posture?" Apparently, Mr. Isaacs has not read two papers I published in the *Journal American Podiatric Medical Association* (2006, 2008) which statistically correlated foot twist (initiated by Rothbarts Foot) to postural distortions which are consistent with a kyphotic posture. Agreeably, more definitive studies need to be done in this area of postural mechanics.

And finally Mr. Isaacs questions my research that suggests (and which I firmly believe) that people with non twisting (hyperpronating) feet naturally have better posture, less joint and muscle pain and fewer visceral problems that people with twisting feet. He states that making this correlation is like saying "blond people are less likely to contract influenza". I can only answer Mr. Isaacs by saying that I have found Wolfs Law (function follows form) to be very germane when applied to postural mechanics. That is, by improving the function (attenuating foot twist); the posture (form) improves. When the posture (form) improves, many chronic musculoskeletal and visceral pain issues diminish. My research site is replete with many examples ([www.RothbartsFoot.es](http://www.RothbartsFoot.es)).

*Prof/Dr. Brian A. Rothbart*

### References:

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