



Journal of Optometry

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EDITORIAL

Interdisciplinary research in Optometry

La investigación interdisciplinar en Optometría

D. Robert Iskander (Topical Editor)



Institute of Biomedical Engineering & Instrumentation, Wroclaw University of Technology, Poland

It has been a great honour to be called to act as a topical editor for the special issue of the Journal of Optometry on interdisciplinary research. Because of globalisation, rapid increase in information technology capabilities and accumulative complexity of problems tackled by today's professionals, optometry, like most disciplines, becomes more and more interdisciplinary and provides a plethora of opportunities for collaborative research efforts. Those endeavours provide a fertile ground for transfer of knowledge between the disciplines and, in turn, act as effective drivers of innovation.

Nowadays collaboration is common for optometry and ophthalmology researchers. A good sense of that can be experienced, for examples, at one of the ARVO (The Associations for Research in Vision and Ophthalmology) meetings. There, next to optometry and ophthalmology professionals one can meet (in alphabetical order) biologists, chemists, electronics engineers, geneticists, information technology professionals, mathematicians, physicists, mechanical engineers, nanotechnologists, psychologists and zoologists, just to mention the few. This interdisciplinary character of optometry research made the job of the topical editor and the team of invited guest editors particularly exciting.

The response to call for papers published in the 5th Issue of the Journal of Optometry last year was overwhelming. We thank all contributors, including those who submitted excellent articles that we could not consider for this special issue. Space was critical and we needed to make many difficult decisions, but we are confident that those articles will find their place in other issues of the Journal of Optometry or other journals. We are particularly grateful

to all international reviewers who did excellent work in a timely fashion.

All accepted papers of this special issue are examples of strong interdisciplinary collaboration. The first two papers link optometry and ophthalmology professionals working on tear film and dry eye with information technology professionals developing signal and image processing algorithms. David Alonso-Caneiro et al. utilise the methodologies of texture analysis for dynamic videokeratography images in the aim to assess the quality of tear film surface while Celik Turgay et al. apply Gabor wavelets for automated gland segmentation in meibography infrared images. The third paper, by Carmen Dominguez-Godinez et al., continues the topic of tear film and considers the possibility of using soft contact lenses to improve the secretagogue role of a particular intracellular signal molecule

(diadenosine tetraphosphate) in promoting tear secretion. Further, Maryam Mousavi and Richard Armstrong provide a very comprehensive review on genetic risk factors associated with age related macular degeneration while Uday Kumar Addepalli et al. seeks an agreement between glaucoma specialists and experienced optometrists in gonioscopy and optic disc evaluation. Finally, Haya Shames et al. presents an interesting case report of an eight year old male with refractive instabilities caused by corneal distortions that were associated with chronic habit of abnormal eye rubbing where the interdisciplinary collaboration between professionals was essential to diagnosis.

As a final point, together with Thomas Millar, Jesús Pintor and Michael Mrochen, the Guest Editors, let me thank José M. González-Méijome, the editor-in-chief, for his enormous efforts and timely coordination of this Special Issue.

E-mail address: robert.iskander@pwr.wroc.pl