Vision science: based on real events or evidence-based real events?

Rodrigo M. Torres

Director of OCF

Contact

Dr. Rodrigo M. Torres Consejo Argentino de Oftalmología Tte. Gral. Juan Domingo Perón 1479, planta baja (C1037 ACA) Buenos Aires +54 (11) 5199-3372 romator7@gmail.com

Oftalmol Clin Exp (ISSNe 1851-2658) 2025; 18(2): e128-e129.

https://doi.org/10.70313/2718.7446.v18.n2.428

It is true that technological advances transform fictional pasts into present realities. *OCE*'s editorial a year ago addressed this topic under the title "The visionary fictions of a myopic man like Borges and the need to imagine hypotheses and their metamorphosis into evidence". The following editorial continued the topic with "Beliefs in ophthalmology: bread and circuses", and ended 2024 with another editorial column dealing with the take-off of artificial intelligence³. We began 2025 by talking about looking beyond ophthalmology to look at our needs and future areas of professional expertise⁴.

This editorial follows the incessant construction of *OCE*, which is oriented to stimulate the creation and originality of the peer community without losing common sense and the necessary perception of reality. When in a novel, movie, series or documentary we see the phrase based on real events, it means that it is inspired by events that really happened, but the story, the protagonists or certain aspects of the narrative are derived from reality, although there may be some changes or creative adaptations. Does this apply to the practice of ophthalmology? Does this apply to research in vision sciences?

We should not confuse freedom, imagination and originality with fiction, ignorance and pseudo-realities lacking creativity that some people "copy and paste", aimlessly, without or with the intention of disorienting, misinforming and confusing. It is the scientific method that determines —taking into account bioethical aspects—

that our territory is that of real facts based on evidence.

Innovating, developing, researching and practicing medicine are complementary but different activities that share the scientific method in their path. A path where the way forward prioritizes the need to solve problems of patients or of a community. But we are in a present where we are used to consult everything with devices that respond through artificial intelligence (AI) programs that seem to have become our personal oracles. We must understand and remember that we need to build on a structure of scientific thought that gives us the guidelines to be inside reality, in the universe of imagination.

Therefore, in this issue of *OCE* you will find different articles that follow the path of innovation, development, research and practice of medicine in the growing field of vision sciences. A leading clinician-scientist from Greece discusses what the research directions of the European and American glaucoma societies are on the horizon. A narrative review describes the contribution that many of us did not know about regenerative medicine and cell therapy from Rosario, where creativity does not only produce super soccer players and great musicians. Among our original articles you will find topics on stem cell regeneration in an experimental model, a study on the normality of OCT values in pediatric population, the analysis of how train drivers' vision is evaluated, a study about the perception of Argentine ophthalmologists on innovation in ophthalmology and artificial intelligence, the creation of a clinical score for amoebic keratitis and the development of adaptive frames for myopia control lenses. In addition, clinical cases where the rare and the everyday managed to overcome peer validation when we all know that genetics, even if we do not see it, is always there. Surgical techniques and images to learn and not forget. All this constitutes

the present issue of the *Oftalmología Clínica y Experimental* journal, a peer-reviewed scientific publication of vision sciences, made in Argentina with authors from different parts of the world.

The great need to "be shown" in the academic environment, together with the lack of training and creativity that come from the tempting accessibility of "clicking" computer programs that say what we want to hear, is causing that both *OCE* and most scientific journals receive a great amount of pseudo scientific papers with false information, where artificial intelligence tools, instead of being used as supports for scientific validation, end up being co-authors of fictions. We ask authors to use AI-based assistance tools, to constantly verify the contents to prevent us from the need to reject papers where we find, for example, the creation of fictitious references.

In OCE, any similarity with reality is true. Because the content of OCE is not based on real facts: OCE is reality based on scientific evidence.

References

- 1. Torres RM. Las ficciones visionarias de un miope como Borges y la necesidad de imaginar hipótesis y su metamorfosis en evidencias. *Oftalmol Clin Exp* 2024; 17(2): e153-e154. doi:10.70313/2718.7446.v17.n02.315.
- 2. Torres RM. Creencias en oftalmología: necesidad de pan y circo. *Oftalmol Clin Exp* 2024; 17(3): e324-e326. doi:10.70313/2718.7446.v17.n03.341.
- 3. Torres RM. Alrededor de la inteligencia artificial, alrededor del ojo y alrededor del mundo, OCE está creciendo. *Oftalmol Clin Exp* 2024; 17(4): e481-e483. doi:10.70313/2718.7446.v17. n04.380.
- 4. Torres RM. La visión y misión de OCE mira más allá. *Oftalmol Clin Exp* 2025; 18(1): e4-e6a. doi:10.70313/2718.7446.v18.n1.409.