

Editorial

In Line with the Worldwide Consensus about Genetic Tests for Sporting Talent Identification

Santos CGM^{1,2*} and Dornelas-Ribeiro M¹

¹Instituto de Biologia do Exército –IBEx, Brazil

²Laboratório de Biometria – Ladebio, Brazil

***Corresponding author:** Santos CGM, Instituto de Biologia do Exército - IBEx, Rua Francisco Manoel, 102 Benfica, Rio de Janeiro-RJ, Brazil

Received: March 16, 2017; **Accepted:** March 27, 2017;

Published: March 31, 2017

Keywords

Sports Genomics; Genetic polymorphisms; Genetic tests; SNP

Editorial

Easily, we can find on the internet companies providing services related to athletes “genetics panels”, promising selection of sports talent, to individualize physical training and to improve athletes performance.

As the Professor Claude Bouchard has already predicted, we are fully convinced of the importance of genetics in Physical performance. Besides that, it is undeniable that there are already important evidences showing that some genetic polymorphisms can be favorable to advantageous physiological responses to certain sports disciplines, based in observational and experimental studies. However, there is not enough experimental evidences to support a previous genetic test approach to help on selection of young talents or improving sports performance through a personalized training based in genotypes [1–3].

Besides that, the commercial feature that those tests assumed became them absurdly superiors as they are now. Companies consider their tests as lends of physical capacity, minimizing all the serious scientific work accomplished or physiologists over the last years. Because of this important commercial problem created, the most important researches in Genetic of Physical performance published some consensus [4–6] in the last years.

In line with this ethical effort, we at Austin Sports medicine, alert the professionals related on sports performance that the inter individual variability measured by limited genetic tests must be more deeply studied before to be applied on talents selection, with the risk of injuring ethical principles as well cause irreparable psychologics damages to a subject considered in eligible.

We know that the genomics tools came to improve but NEVER REPLACE, the knowledge, experience and the sensibility of the coaches about physical development.

References

1. Karanikolou A, Wang G, Pitsiladis Y. Letter to the editor: A genetic-based algorithm for personalized resistance training. *Biol Sport*. 2017; 34: 31–33.
2. Paulúcio D, Rs MN, Silva R, Fams P, Budowle B, Cg S. Letter to the editor: Are the doors opened to a genetic-based algorithm for personalized resistance training ? 2017; 34: 27–29.
3. Jones N, Kiely J, Suraci B, Collins D, de Lorenzo D, Pickering C, et al. A genetic-based algorithm for personalized resistance training. *Biol Sport* . 2016; 33: 117–126.
4. Webborn N, Williams A, McNamee M, Bouchard C, Pitsiladis Y, Ahmetov I, et al. Direct-to-consumer genetic testing for predicting sports performance and talent identification: Consensus statement. *Br J Sports Med* . 2015; 49: 1486–1491.
5. Camporesi S, McNamee MJ. Ethics, genetic testing and athletic talent: children's best interests and the right to an open (athletic) future. *Physiol Genomics* . 2016; 48: 191-195.
6. Loland S. Against Genetic Tests for Athletic Talent: The Primacy of the Phenotype. *Sport Med*. 2015; 45: 1229–1233.