Author’s response to reviews

Title: From two-tiered health systems to a two-tiered personalized medicine?

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Hamilton, January 21th 2015
Dear Editor,

We are pleased to submit our debate article ‘From two-tiered health systems to a two-tiered personalized medicine?’ for consideration to the journal BMC Medical Genomics. This manuscript is the first to provide a global vision of big data challenges in a global translational medicine perspective. Our society is evolving from a two-tiered health system to two-tiered personalized medicine that is mirrored by a growing lag between our ability to generate and analyze big data. Omics facilities are restricted to the richer countries, and personalized medicine is therefore likely to widen the already growing gap in health systems between high and low-income countries. This review describe the bottlenecks that slow-down the transition from conventional to personalized medicine at the global scale: i) generation of cost-effective high-throughput data; ii) hybrid education and multidisciplinary teams; iii) data storage and processing; iv) data integration and interpretation; and v) individual and global economic relevance. Forward strategies to accelerate the transition to personalized medicine for everyone are proposed. We hope that this review will stimulate important breakthroughs in the field of transformative medicine. Overcoming these limitations may boost the nation-wide implementation of omics facilities in clinical settings. The subsequent economies of scale may in turn favor the access to personalized medicine to disadvantaged nations, repelling the growing shadow of two-tiered personalized medicine. I feel that this manuscript may be of great interest for the readers of BMC Medical Genomics. The authors have no conflict of interest and have not submitted this article for publication in another journal.

Best regards,
David Meyre