# The Practical Implications of the New Metaphysics of Race for a Postracial Medicine: Biomedical Research Methodology, Institutional Requirements, Patient-Physician Relations

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Perez-Rodriguez and de la Fuente (2017) assume that although human races do not exist in a biological sense ("geneticists and evolutionary biologists generally agree that the division of humans into races/subspecies has no defensible scientific basis," 36), they exist only as "sociocultural constructions" and because of that maintain an illusory reality, for example, through "racialized" practices in medicine. The authors convincingly postulate the removal of the ongoing practices "required by the NIH [National Institutes of Health] of utilizing racial identification as a demographic characteristic with assumed biological implications" (36), because they may unintentionally contribute "to perpetuating the fallacy of natural differences between persons of different skin color, which has been used in the past to advance the cause of racial discrimination" (36). Agreeing with the main postulates formulated in the article, we believe that the authors treat this problem in a superficial manner and have failed to capture the current state of the field of knowledge in science and the humanities. In our commentary, we want to highlight two main omissions, and to notice three important implications for "a postracial medicine."

First, the authors do not engage with the extensive scientific and philosophical debates (Hochman 2016) about the significance and metaphysics of race and ignore attempts to redefine the folk conception of "race" in a more scientifically informed way. Their thesis that the concept of race does not have any biological reality is underanalyzed and may be understood in different ways, for example, that \*there are no scientifically interesting genetic differences between races; or \*there are no scientifically interesting nongenetic, but still real and relevant for health care characteristics of people belonging to different races, for example, psychological (see the next paragraph). Let us start with

genetic differences. In a strong sense, analyzed by the authors, race in a folk understanding of this concept is an objective representation of human biological diversity, and there are six geographically defined races representing the major biological differences. The authors convincingly criticize this scientifically unreliable understanding of race as a mere cluster of contingent phenotypic features like skin or eye colors that are supposed to have correlations with some genetic, physiologic, and biochemical functions (see the ingenious analogy with ear length). In a weak sense, mostly overlooked by the authors, "race" is understood not in this folk sense, but rather as genetic (or "biogeographical" as the authors call it) ancestry that may correlate with various biological traits and that could be picked out not by selfreporting or observer reporting, but by genomic clustering techniques. Perez-Rodriguez and de la Fuente try to quickly dismiss this approach ("not warranted by any existing scientific data," 38), but surprisingly, they cite a paper that criticizes not this approach, but one particular biotechnology startup company that tried to make a business out of it (Gannett 2014). It is an important omission because there is evidence that measures of race, understood as genetic ancestry, can improve clinical care, for example, in the case of lung diseases or lymphoblastic leukemia (for a review see Mersha and Abebe 2015).

Second, the authors underestimate the psychological reality of races and therefore ignore the social causation, which may play an important role in human development and health. This does not mean that an objectively existing race (in a folk understanding of this concept) determines some biologically important differences between people, but rather that being a representative of a given social group (we presume that the racial criterion is just one of many possible) may affect health in numerously

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different ways. Therefore, as long as the folk category of race influences the construction of social reality, we should not get rid of the concept of race (understood as a social construct) from medicine. As an example, factors such as stress resulting from being a member of a minority can affect the development of certain mental or physical illnesses. Studies suggest that representatives of minorities have elevated risk of first-episode psychosis regardless their socioeconomic status and living conditions (Kirkbride et al. 2017). It is very likely that this phenomenon is associated with daily experience of racism, xenophobia, social exclusion, and stress related to migration. The effects of long-term stress or trauma can also be passed down from generation to generation through epigenetic mechanisms, especially through the maternal line. For example, the descendants of people who experienced the Holocaust have a lower level of cortisol, similar to those who personally experienced trauma (Yehuda et al. 2016). Other health problems associated with traumatic experiences (such as low birth weight, which often leads to cardiovascular diseases) probably can also be transmitted epigenetically. As a result, psychological and health problems inherited from the ancestors significantly reduce the ability of an individual and his or her social group to improve their socioeconomic situation and increase the level of stress and trauma, which can lead to a self-perpetuating circle of exclusion. "This is why we can speak of matrilineal family cycles of biosocial suffering and exclusion in racialized groups" (Ramirez-Goicoechea 2013, 80). Although most of the environmental factors influencing people's health can be described without reference to their race, it should be taken into account that in some cases the psychological consequences of the sense of racial identity and the social consequences resulting from it are not reducible to other variables.

Both of these issues have serious implications on three different levels that are confused by the authors under the one label of "a postracial medicine."

1. Biomedical research methodology. Race (genetic ancestry) or health consequences of socially understood ethnicity, may be relevant in the context of biomedical research methodology and may help calculating the absolute risk to be diagnosed with some diseases. The narrow understanding of race leads the authors to claim that race "as a socially constructed concept" should only be used "for recruitment in biomedical research as a vital matter of public health policy," because its terminating could "lead to misrepresentation of minorities." But they maintain that race should not be used "as a parameter of biological comparison." We do not see any good reason why should we limit or hinder research that could help in unpacking and isolating the ancestral or social influence of etiological importance within and between ethnic groups. Merely finding health differences between people does not mean discrimination and does not have to result from it.

- 2. Institutional requirements. Nevertheless, the preceding conclusion leads to a dilemma: how to reconcile the methodological requirement of racial categorizing in research that may be justified either as a requirement of solidarity in health care that promotes relations of "recognition at an institutional level" (ter Meulen 2015) or as a move toward more personalized medicine (Perez-Rodriguez and de la Fuente 2017) without strengthening social biases about race or reinforcing racist discrimination. The problem may be seen by means of an analogy: Just hearing that female underachievement in mathematics may be due to genetic factors rather than social factors (no matter whether this is in fact true) "is enough to negatively affect women's performance, and reproduce the stereotype that is out there" (Kourany 2016). We believe that a similar problem may arise in the case of some ethnic populations and health-related habits and that there is a real danger, recognized by the authors, that categorization in medical research may lead to the reification of socially constructed racial identities as genetic categories. Thus, there is a need to develop "the ethics of apt categorization," in particular in the case of racial profiling in medicine (John 2013).
- Patient-physician relations. Psychological and neuroscientific research indicates that there are some universal mechanisms in human cognitive structures (e.g., perceptive narrowing) that in certain circumstances make people tend to treat representatives of other social groups (including other races) with greater indifference and lower empathy and understanding. There are studies that point to significant differences in the quality of communication between physicians and patients who represents minorities; for example, Caucasian physicians are more verbally dominant and less patient-centered in contact with African American patients (Johnson et al. 2004). This problem can be largely analyzed in terms of studies on the psychological mechanisms of reactions to representatives of other social groups, which are partly the manifestation of an unfamiliarity homogeneity effect (Malinowska 2016). With age, people specialize in recognizing faces of representatives of their own social group, recognizing the sounds of their own speech, and so on. At the same time, they tend to treat representatives of other social groups more superficially (more as an object, a symbol of a group) and with less empathy. Such reactions are automatic, but they can be controlled to a certain degree. Due to the plasticity of our cognitive structures, we can co-shape them through appropriate education and mobilization to a greater self-awareness and self-control (Kelly, Faucher, and Machery 2010). Work on solving this important problem is ongoing and needs to be considerably deepened because this issue will not be resolved by simply removing the term "race" from medical vocabulary, as the authors seem to suggest.

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### REFERENCES

Gannett, L. 2014. Biogeographical ancestry and race. Studies in History and Philosophy of Biological and Biomedical Sciences 47:173–84.

Hochman, A. 2016. In defense of the metaphysics of race. *Philosophical Studies*. First Online October 28, 2016. http://dx.doi.org/10.1007/s11098-016-0806-0.

John, S. 2013. Cancer screening, risk stratification and the ethics of apt categorisation: A case-study. In *Ethics in public health and health policy*, ed. D. Strech, I. Hirschberg, and G. Marckmann, 141–52. Dordrecht, The Netherlands: Springer.

Johnson, R. L., D. Roter, N. R. Powe, and L. A. Cooper. 2004. Patient race/ethnicity and quality of patient-physician communication during medical visits. *American Journal of Public Health* 94 (12):2084–90.

Kelly, D., L. Faucher, and E. Machery. 2010. Getting rid of racism: Assessing three proposals in light of psychological evidence. *Journal of Social Philosophy* 41 (3):293–322.

Kirkbride et al. 2017. Ethnic minority status, Age-at-immigration and psychosis risk in rural environments: Evidence from the SEPEA study. *Schizophrenia Bulletin*. First Online May 17, 2017. http://dx.doi.org/10.1093/schbul/sbx010.

Kourany, J. A. 2016. Should some knowledge be forbidden? The case of cognitive differences research. *Philosophy of Science* 83 (5):779–790.

Malinowska, J. K. 2016. Cultural neuroscience and the category of race: The case of the other-race effect. *Synthese* 193 (12):3865–87.

Mersha, T. B., and T. Abebe. 2015. Self-reported race/ethnicity in the age of genomic research: Its potential impact on understanding health disparities. *Human Genomics* 9 (1).

Perez-Rodriguez, J., and A. de la Fuente. 2017. Now is the time for a postracial medicine: Biomedical research, the National Institutes of Health, and the perpetuation of scientific racism. *American Journal of Bioethics* 17 (9):36–47.

Ramirez-Goicoechea, E. 2013. Life-in-the-making. Epigenesis, biocultural environments and human becomings. In *Biosocial becomings*. *Integrating social and biological anthropology*, ed. T. Ingold and G. Palsson, 59–83. Cambridge, UK: Cambridge University Press.

ter Meulen, R. 2015. Solidarity and justice in health care. A critical analysis of their relationship. *Diametros* 43:1–20.

Yehuda, R., N. P. Daskalakis, L. M. Bierer, H. N. Bader, T. Klengel, F. Holsboer, and E. B. Binder. 2016. Holocaust exposure induced intergenerational effects on FKBP5 methylation. *Biological Psychiatry* 80 (5):372–80.

## Social Meaning and the Unintended Consequences of Inclusion

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We appreciate the call for an "open debate" to "challenge a long-held belief that [race] was never, since its very prejudicial inception, scientifically justified." The title of the target article by Perez-Rodriguez and de la Fuente (2017) points to our two initial concerns. First, while the notion of a "postracial" medicine appears central, the authors give the concept scant analytic attention, leaving it up to readers to construct

the concept for themselves. We might assume that the concept refers to medicine that does not use or seek racial categorizations based on biology. While this criterion would be a laudable step forward, it belies the complexities of the "postracial" ideal as has been examined in great depth elsewhere (Bonilla-Silva 2010). The authors seem to suggest that we are living in postracial times already, and it's just that medicine and

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