

Fatimah L.C. Jackson, Ph.D.

Fatimah L.C. Jackson, Ph.D., received her B.A. (with honors and Distinction) in 1972, M.A. in 1978, and Ph.D. in 1981 in biological anthropology, all from Cornell University (Ithaca, NY). Her minors were in population genetics and human parasitology. She has done additional course work at the Centers for Disease Control and Prevention (Atlanta, GA), Helena Laboratories (San Francisco, CA), and Computer Learning Center (San Francisco, CA). Her undergraduate honors thesis was conducted in Roxbury, MA while her doctoral dissertation was based on research done in the Republic of Liberia (West Africa). Currently she is a professor and distinguished scholar teacher in the Department of Anthropology, an affiliate professor in the Department of Biology, and a member of the Graduate Faculty of Nutrition at the University of Maryland at College Park.

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Abstract

Ethnogenetic Layering as an Alternative to the Race Model

Background: Traditionally, studies in human biodiversity, disease risk, and health disparities have defined populations in the context of typological racial models. However, such racial models are often imprecise generalizations that fail to capture important local patterns of human biodiversity.

Aim: More explicit, detailed, and integrated information on relevant geographic, environmental, cultural, genetic, historical, and demographic variables are needed to understand local group expressions of disease inequities. This paper details the methods used in ethnogenetic layering (EL), a non-typological alternative to the current reliance of the biological racial paradigm in public health, epidemiology, and biomedicine.

Subjects and methods: EL is focused on geographically identified microethnic groups or MEGs, a more nuanced and sensitive level of analysis than race. Using the MEG level of analysis, EL reveals clinical variations, details the causes of health disparities, and provides a foundation for bioculturally effective intervention strategies. EL relies on computational approaches by using GIS-facilitated maps to produce horizontally stratified geographical regional profiles which are then stacked and evaluated vertically. Each horizontal digital map details local geographic variation in the attributes of a particular database; usually this includes data on local historical demography, genetic diversity, cultural patterns, and specific chronic disease risks (e.g. dietary and toxicological exposures). Horizontal visual display of these layered maps permits vertical analysis at various geographic hot spots.

Results and conclusions: From these analyses, geographical areas and their associated MEGs with highly correlated chronic disease risk factors can be identified and targeted for further study.

Reference List – Fatimah Jackson, PhD

Jackson, FLC 2008 Ethnogenetic Layering (EL): An alternative to the traditional race model in human variation and health disparity studies. *Annals of Human Biology* Mar-Apr;35(2):121-144.

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