Viewpoint: Precision medicine based on white populations could 'reinforce existing societal and economic inequalities'

Sequencing the human genome has shown us that we are mostly all made up of the same stuff, but it's the tiny variations in our coding that account for huge variations among people. In his most recent study, published earlier this month, [Esteban] Burchard's team at UCSF sequenced the entire genomes of 1,441 African American and Latino children with asthma and found a genetic variant that may be responsible for why the most popular asthma medication on the market, albuterol, often does not work for black and Latino children.

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The promise of personalized medicine is to exploit the variations in our genome, tailoring treatments and assessing risk of disease based on specific genes. But modern science has so far mostly ignored that those variations sometimes fall along ancestral lines.

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Teasing apart how much of that is genetic and how much of that is due to shared environments is a very difficult—but necessary—problem to solve.

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It is discrimination embedded deep in the annals of medicine, a slight resurfaced with every journal article that includes the disclaimer that the study population was of "mostly European descent."

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The result of all this is that without correction, precision medicine is on course to be a breakthrough that serves to reinforce existing societal and economic inequalities.

Read full, original post: Genetics Research Is Failing Most of the World's Population