

## **International Collaboration and Colonial Networks in Francis Gano Benedict's racial metabolism research programme**

From 1925 until his retirement in 1937, Francis Gano Benedict, director of the Carnegie Nutrition Laboratory, coordinated an international project to measure the metabolism of different ethnic human populations, a project he called “racial metabolism” studies. Although Benedict was not the first to assume that energy metabolism and nutritional needs differed in these so-called “races”, as an internationally leading nutritional physiologist and director of a well-funded institution, he was in a unique position to oversee a research programme with global scope. This paper discusses the Benedict's racial metabolism research project, in which researchers measured the basal metabolism of individuals with non-European heritage and compared them to the metabolism norms Benedict had established in decades long studies in his Boston laboratory. It focusses, first, on the role of international collaboration and colonial, missionary and medical networks for the organization of the project and the recruitment and coordination of metabolism specialists and novices. It then turns to the challenges of international research practices and delocalization and the difficulties of transforming metabolism measurement into a field science. Finally, it looks to the role of human interactions: Successful basal metabolism measurement required collaboration between researcher and subject, a highly fraught relationship, when it was based, as colonial encounters typically were, on differences in power and on different possibilities for the expression of agency.

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