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First special edition updating progress on efforts to map human proteins

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Almost 10 years after completion of the Human Genome Project in 2003, scientists are making progress toward the next major goal in applying the genetic information in that "Book of Life" in medicine, leaders of an international research effort are reporting. A package of the latest updates on the goals, organization and achievements of the Chromosome-Centric Human Proteome Project (C-HPP) appear in a special issue of ACS' *Journal of Proteome Research*.

Young-Ki Paik, William S. Hancock and colleagues explain that C-HPP is a 10-year project, launched in 2011, in which a 25-member international scientific consortium will map and describe the complete set of proteins encoded by the DNA in human beings. Those proteins, collectively termed the human proteome, emerge from the instructions in DNA and genes and play a key role in health and disease.

In an editorial introducing the special edition, the first in an annual series anticipated by C-HPP, Hancock and Paik say the resulting knowledge will have numerous practical applications. "From this project, the research community can expect a full catalogue of proteins including novel drug targets, new diagnostic biomarkers and a parts list of the isoforms of cellular regulators such as major signaling pathways."

More information: "A First Step Toward Completion of a Genome-Wide Characterization of the Human Proteome" *J. Proteome Res.*, 2013, 12 (1), pp 1–5. DOI: 10.1021/pr301183a

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