## GENES AND COGNITIVE ABILITIES

Mendel's laws of inheritance published in 1866 were rediscovered in 1900, independently by three botanists Hugo de Vries, Carl Correns and Erich von Tschermak. This paved the way for genetic research, including that in man. Some of it, however, did not end well. The book "The Kallikak Family: A Study in the Heredity of Feeble-Mindedness" (1912), by Henry H. Goddard, used a simplistic interpretation of Mendel's laws to trace the hereditability of intelligence, moral ability, and criminality in a large family. This book has been very influential in the infancy of the eugenics movement, first in America and then in the world (in Germany in particular). In the last 100 years since then our understanding of human heredity has come a long way.

A recent paper in <u>Molecular Psychiatry</u> reports a genome-wide analysis study which estimates that ~10,000 genes modulate cognitive ability. The authors, Huguet *et al.*, conclude: "these results suggest that a large proportion (56%) of the coding genome covering all molecular functions influences cognitive abilities. One may therefore view the genetic contribution to cognitive difference as an emergent property of the entire genome not restricted to a limited number of biological pathways".