## Research links genetics, child cognitive development and disorders

How genes affect intelligence is complicated. Multiple genes, many yet unknown, are thought to interact among themselves and with environmental factors to influence the diverse abilities involved in intelligence.

A large new genetic study in thousands of children and adolescents offers early glimpses of the overall patterns and connections among cognitive abilities such as language reasoning, reading skill and types of memory. The findings may lead to new tools in understanding human cognitive development and neuropsychiatric disorders.

"This research is one of the first to use a molecular genetic approach to evaluate complex cognitive traits in a pediatric sample," said one of the study's two co-senior leaders, Hakon Hakonarson, M.D., PhD., director of the Center for Applied Genomics at The Children's Hospital of Philadelphia. "Uncovering the genetic architecture of these diverse cognitive abilities may offer new insights into cognitive development and may ultimately allow investigators to identify useful biomarkers for diagnosing and predicting risks of neuropsychiatric conditions."

Read the full, original story: Clues emerge to genetic architecture of cognitive abilities in children