

## **CORTEX MATURES FASTER IN YOUTH WITH HIGHEST IQ**

Youth with superior IQ are distinguished by how fast the thinking part of their brains thickens and thins as they grow up, researchers at the National Institutes of Health's (NIH) National Institute of Mental Health (NIMH) have discovered. Magnetic resonance imaging (MRI) scans showed that their brain's outer mantle, or cortex, thickens more rapidly during childhood, reaching its peak later than in their peers - perhaps reflecting a longer developmental window for high-level thinking circuitry. It also thins faster during the late teens, likely due to the withering of unused neural connections as the brain streamlines its operations. Drs. Philip Shaw, Judith Rapoport, Jay Giedd and colleagues at NIMH and McGill University report on their findings in the March 30, 2006 issue of "Nature".

"Studies of brains have taught us that people with higher IQs do not have larger brains. Thanks to brain imaging technology, we can now see that the difference may be in the way the brain develops," said NIH Director Elias A. Zerhouni, M.D.

For more information about this study, see the press release available at:  
<http://www.nimh.nih.gov/press/youthcortexiq.cfm>