Premature babies show signs of abnormal brain activity before birth

Even before they are born, premature babies may display alterations in the circuitry of their developing brains, according to a first-of-its kind research study by Yale School of Medicine researchers and their colleagues at the National Institutes of Health (NIH) and Wayne State University.

According to the authors, 10% to 11% percent of American babies are born prematurely. This new study suggest that factors contributing to early birth might also impact the brain's development in the womb, leading to significant neurodevelopmental disorders, such as autism, attention deficit hyperactivity disorder, and cerebral palsy.

. . .

The team found that systems-level neural connectivity was weaker in fetuses that would subsequently be born preterm. The findings were localized in left-hemisphere, pre-language regions of the brain.

"It was striking to see brain differences associated with preterm birth many weeks before the infants were prematurely-born," said Dustin Scheinost.

Laura Ment, professor of pediatrics and neurology at Yale School of Medicine, said these findings suggest that some prematurely born infants show changes in neural systems prior to birth.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: Brain impairments in premature infants may begin in the womb