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NIH Agency Report
Submitted by CDR David Diwa

October 31, 2011. Perinatal Antidepressant May Affect Brain Development
Rats exposed to an antidepressant just before and after birth had altered behaviors and substantial brain abnormalities. The findings raise questions about how perinatal antidepressants might influence brain development in people. A team led by Dr. Rick Lin of the University of Mississippi Medical Center, Jackson, used rats as a model to investigate the effects of SSRIs on brain development. The scientists gave citalopram, an SSRI, to male and female rat pups prenatally and postnatally and examined their brains and behavior as they grew up. The work was supported by several NIH institutes, including the National Institute of Mental Health (NIMH). Results appeared online before print on October 24, 2011, in the *Proceedings of the National Academy of Sciences*.
http://www.nih.gov/researchmatters/october2011/10312011antidepressant.htm

October 24, 2011. Study Points to Potential Treatment for Sickle Cell Disease
Scientists corrected sickle cell disease in adult laboratory mice by activating production of a special blood protein normally produced only before birth. The approach may lead to new treatments for people with the blood disorder. A research team led by Dr. Stuart Orkin set out to explore a more targeted approach to raising fetal hemoglobin by blocking production of a protein called BCL11A. The team—at Harvard Medical School, Children's Hospital of Boston and the Howard Hughes Medical Institute, Boston—had previously demonstrated that BCL11A suppresses the production of fetal hemoglobin soon after birth. Their work was funded by NIH's National Heart, Lung and Blood Institute (NHLBI), National Cancer Institute (NCI) and National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). The study appeared in the October 13, 2011, online edition of *Science*.
http://www.nih.gov/researchmatters/october2011/10242011sickle.htm

October 13, 2011. NIH Funds Development of New Broad-Spectrum Therapeutics
Five-Year Contracts Could Total $150 Million, Support Research with Emerging Infectious Disease and Biodefense Applications Four companies are to develop broad-spectrum therapeutics—antibiotics, antivirals and an antitoxin—to prevent or treat diseases caused by multiple types of bacteria or viruses, under contracts awarded by the National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health. Total funding for the four contracts could reach $150 million over a maximum five-year period.
http://www.niaid.nih.gov/news/newsreleases/2011/Pages/BroadSpectrumTherapeutics.aspx

October 11, 2011. Experimental Vaccine Protects Monkeys from Blinding Trachoma
NIH-Developed Vaccine Based on Live, Attenuated Chlamydia Bacteria. An attenuated, or weakened, strain of *Chlamydia trachomatis* bacteria can be used as a vaccine to prevent or reduce the severity of trachoma, the world's leading cause of infectious blindness, suggest findings from a National Institutes of Health study in monkeys. "This work is an important milestone in the development of a trachoma vaccine," noted Anthony S. Fauci, M.D., director of the National Institute of Allergy and Infectious Diseases (NIAID) at NIH. "If this approach demonstrates continued success, the implications could be enormous for the tens of millions of people affected by trachoma, a neglected disease of poverty primarily seen in Asia and sub-Saharan Africa."
http://www.niaid.nih.gov/news/newsreleases/2011/Pages/TrachomaVax.aspx