Autism Research Review INTERNATIONAL

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Reviewing biomedical and educational research in the field of autism and related disorders

California: \$34 million allocated for autism spectrum disorders research

On June 30, California Governor Gray Davis signed a bill granting \$34 million to support medical research into the causes and treatment of neurodevelopmental disorders such as autism, attention deficit disorder, and dyslexia at the Medical Investigation of Neurodevelopmental Disorders (M.I.N.D.) Institute at the University of California Medical School at Davis, near Sacramento. As a result of this bill, California now equals or outspends federal funding for autism research.

Since the M.I.N.D. Institute was launched by parents, researchers, and physicians in 1998, it has funded 19 studies investigating autism, dyslexia, Tourette's syndrome, attention deficit hyperactivity disorder, Asperger

Evidence mounts for epidemic of autism

As reported in earlier issues of the ARRI (9/3, 13/1, 13/2, 13/4), dramatic increases in autism, up to 1,000%, are being reported by school districts and agencies for the disabled across the country and around the world. Among new reports:

The Cambridge study. Investigators at the Autism Research Centre at Cambridge University in England have just reported that 57 of every 10,000 children between five and 11 years of age in the target area they studied suffered from autism. Their study involved 43,472 children in Cambridgeshire schools, and counted as "autistic" only children officially diagnosed with the disorder.

The CDC Brick Township study. The Centers for Disease Control and Prevention (CDC) recently released its long-awaited study, conducted at the insistence of alarmed parents of Brick Township, New Jersey. The CDC confirmed what the parents have long suspected: a huge upsurge in cases of autism, both mild and severe.

In 1997, parents of autistic children in Brick Township banded together and conducted a survey that revealed a prevalence of autism far higher than the then-accepted prevalence of 1 in 2,000 children. The CDC continued on page 2

syndrome, and related disorders. One of the first grants, awarded to a team from the California Birth Defects Monitoring Program,

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Rick Rollens, Institute co-founder

may lead to the development of the first promising test to identify some newborns who may develop autism or mental retardation (see below).

Rick Rollens, parent of an autistic child and one of the founders of the M.I.N.D. Institute, said, "Funding made available today will take us far in finding the causes, effective treatments, and cures for a broad spectrum of neurodevelopmental disorders. The M.I.N.D. Institute is now well on its way to becoming the premier autism research center in the world."

As many as 20 percent of all children are estimated to suffer from some sort of neurodevelopmental disorder, and recent studies show increases of up to 1,000 percent in autism (see adjacent article). "Increasing numbers of neurodevelopmental disorders reported by California regional centers during

the past five years are very disturbing, not only for families, but also in terms of economic impact," Tom Anders, interim director of the M.I.N.D. Institute, notes. "The cost of providing lifetime care for children with mind disorders is huge, and increasing. We need to understand these disorders, treat these conditions, and stop the drain of precious financial resources." It is estimated that it costs an average of \$2 million to care for an autistic child through his or her lifetime, and a severely autistic child may cost \$80,000 to \$90,000 a year.

While autism research will be a primary focus of the M.I.N.D. Institute, Rollens notes that "the Institute is unique in investigating the gamut of neurodevelopmental disorders." Researchers in a range of fields including molecular biology, genetics, immunology, pharmacology, and behavioral science will be involved in M.I.N.D.-sponsored research efforts.

Editor's note: Parents everywhere owe an enormous debt of gratitude to Rick Rollens, the parent whose hard work has accomplished so much in California. As we go to press, the June 10th issue of Newsweek is expected to feature a major article on autism, with Russell Rollens, Rick's son, on the cover. Thank you, Rick!—BR

Can risk for autism be spotted in newborns?

Newborns at risk for autism or mental retardation may someday be identified by testing for levels of certain chemicals that play a crucial role in nervous system development, according to preliminary research conducted by the California Birth Defects Monitoring Program (CBDMP) in collaboration with other state and federal agencies.

Karin Nelson and colleagues examined stored blood samples collected during the early 1980s from newborns later identified as having autism, mental retardation, or cerebral palsy. Samples from about 60 children in each disability group were analyzed. The researchers also examined the

blood samples of children who did not develop disabilities.

They report, "Most children with autism or mental retardation had concentrations of two or more of the measured neuropeptides or neurotrophins in peripheral blood in the earliest days of life that exceeded the levels indicated, while few children with cerebral palsy and no control child did." In particular, the researchers found strikingly high levels of four specific proteins in 95 percent of children later determined to have autism or mental retardation. However, results did not distin-

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