Editor's Notebook: Bernard Rimland, Ph.D.

Defeat Autism Now! 2002: Progress at warp speed!

"Research that makes a difference." That's how I titled a recent letter to the donors who keep the Autism Research Institute and its work going. And our research really is making a difference!

Developments—important developments—are occurring so fast it is hard to keep up, and the word is getting out. We were expecting around 800 attendees at our May DAN! conference in Boston. We were hardly prepared for the 1200 parents and physicians who showed up. We heard over and over again, "This is the best DAN! yet!" "Things are really coming together!" "Everyone is excited by what is being discovered!" And it's true.

Let me backtrack about four decades into ancient history. The Autism Research Institute (originally called the Institute for Child Behavior Research, since hardly anyone had ever heard of autism) was founded in 1967 because in those days research on the cause and the biomedical and educational treatment of autism was virtually nonexistent. Something needed to be done.

As the number of autistic children increased, and as public awareness of autism improved, partly as a result of the film *Rain Man*, more research on autism was getting underway, but unfortunately, most of this research centered around clinical trials of the effects on autistic individuals of drugs that had been developed for adult depression, or on where in the brain the malfunction was occurring. Such research might or might not pay off in a decade or two, or three, but had little relevance to developing safe and effective treatments for living or soon-to-be-born autistic children.

The Autism Research Institute responded to this deplorable situation by establishing its Defeat Autism Now! (DAN!) project in 1995. With the collaboration of my two brilliant colleagues, pediatrician Sidney Baker, M.D., and chemist (and fellow parent) Jon Pangborn, Ph.D., we convened the first DAN! think tank of approximately 30 cutting-edge scientists and physicians from the U.S. and overseas. The group included neurologists, neurophysiologists, biochemists, psychiatrists, pediatricians, immunologists, gastroenterologists, and other specialists whose expertise we felt was critical in planning our strategy for a concerted war against autism. The group began an intensive and very successful collaboration. Sid Baker and Jon Pangborn produced a 40-page Defeat Autism Now! Clinical Options Manual which was first published in 1996. Revised editions were published in 1997, 1999, and 2001. The 2001 revision is 161 pages, and the 2002 edition (to be ready for our October 25-27 DAN! Conference in San Diego) will undoubtedly pass the 200-page mark.

But progress in autism research is best measured not in pages, but in children helped, and there the results have also been spectacular.

As our readers know, there has been an enormous upsurge in the prevalence of autism, despite the initial denials by the medical establishment about the reality of the increase. One of the consequences of the upsurge in autism has been the increasing num-

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bers of autistic children born to parents who are physicians. These physician-parents are typically mainstream doctors who try mainstream approaches with their children, only to find, to their dismay, that the mainstream approach virtually never helps. Many of these physician-parents have joined the DAN! movement, often with excellent results. At the Autism Society of America conference in San Diego last July, ARI sponsored a panel of parent physicians-Paul Hardy, Jeff Bradstreet, Miriam Jang and Amy Holmes-whose autistic spectrum children had improved greatly under the DAN! approach. These physicians then became DAN! doctors, treating hundreds of other autistic children, usually with considerable success, in their medical practices. At the 2002 ASA convention, which will be held in July in Indianapolis, we will have another panel of parent-physicians-Jerry Kartzinel, Paul Hardy, Bryan Jepson, and Alan Lewis. ARI makes videotapes of these parent panels available at low cost as a means of educating the public and the medical establishment about the value of the DAN! approach.

Parents play an important role in the DAN! movement. Six of our original team of 30 which met in Dallas in 1995 were parents and 10 of the 19 speakers at our Boston DAN! conference were parents of children on the autistic spectrum.

A last-minute addition to the Boston DAN! program was the presentation of new and startling data by parent Amy Holmes, M.D., who had collected baby hair (first haircut) samples from 43 autistic boys and 14 normal control boys. Since, as readers of the

ARRI are very much aware, mercury is a highly toxic, highly suspect probable cause of many cases of autism, Amy and everyone else expected to see high levels of mercury in the hair of the autistic boys, as compared to the mercury levels in the normal control boys. The exact opposite was found to be true. As a full time professional researcher for my entire adult life, almost 50 years, I have seldom if ever seen more striking data. The hair level of the mercury in the autistic boys was almost undetectable, clustering very close to zero (mean = .39). The highest level of mercury in the autistic sample was equal to or less than the lowest level of mercury in the hair of the normal boys (mean 6.8)!

The reason for this strangely counterintuitive finding was immediately apparent: the mercury which had entered the body of the autistic boys from various environmental sources (including vaccines) was being sequestered in their bodies—in the kidneys, in the brain, and in other organs—while it was being excreted from the bodies of the normal boys, as shown by the mercury levels in their hair.

Amy Holmes' findings lent strong support to the hypothesis, proposed by another DAN! researcher, William Walsh, Ph.D., that a major cause of autism is the inability, probably genetic in origin, to excrete heavy metals, especially mercury. Dr. Walsh has been studying metallathioniein (MT), a protein which has, as one function, the regulation of metals, both nutrient metals (eg., zinc, copper) and toxic metals (eg., mercury, lead) in the body. At a recent ARI/DAN! think tank, Dr. Walsh presented the preliminary results of his research on the use of nutritional supplements to increase MT production in autistic patients. The results, though so far based on a small number of cases, are encouraging. Dr. Walsh has located a scientist in Canada who has developed a method of measuring MT, but no clinical laboratory has the technology available as yet. Dr. Pangborn, one of the 47 researchers and clinicians at the recent think tank, hopes to make the MT testing available at one or more medical laboratories before long.

Yet another great development: Each participant in our think tank was presented with a copy of the just published *Children with Starving Brains* by Jaquelyn McCandless, M.D., the grandmother of Chelsey, an autistic child. This excellent and informative book is subtitled, "A Medical Treatment Guide for Autism Spectrum Disorders." It will go a long way toward making the DAN! approach more accessible to the families, and the physicians, who are dedicated to helping our children.