

Editor's Notebook: Bernard Rimland, Ph.D.**Sid Baker, M.D., and the Medigenesis breakthrough**

Sidney M. Baker, M.D., who is arguably the world's most knowledgeable autism doctor, one of the founders of the Autism Research Institute's Defeat Autism Now! (DAN!) project, and the primary author of the DAN! Clinical Options Manual, has recently launched the Medigenesis website. Medigenesis is designed to provide a quantum leap forward in the health care of everyone on the planet, including most definitely autistic children and their families.

One of the major stumbling blocks which makes medical progress exceedingly difficult is the fact that individuals differ from each other in an amazingly large number of ways, and, in each of those ways, to an amazingly large degree. The ancient observation, "One man's meat is another man's poison," illustrates the paradoxical individual differences that have made medical progress so difficult.

Examples of more recent vintage:

- Some individuals are one million times as sensitive to mercury toxicity as others!

- In a study of the amount of alcohol needed to cause drunkenness in a group of subjects, some subjects became drunk on as little as one-fourth of an ounce of alcohol. Others required ten times as much alcohol to bring about the same effect.

- A study of the effects of morphine on 29 normal subjects showed a huge variety of symptoms: 18 of the subjects became nauseated, 16 very sleepy, 13 dizzy, and 9 drunk; 9 suffered severe itching, and 7 severe speech impairment.

- Before vitamin C's ability to prevent scurvy was discovered, hundreds of thousands of sailors died of this disease. However, while half of a ship's crew might die because a lack of fresh fruits and vegetables led to vitamin C deficiency, many other crew members seemed to thrive and show little or no effects from vitamin C deprivation.

- In studies of B vitamin needs, normal, healthy individuals differed in their requirements by over 2,000%.

For more examples, see *Biochemical Individuality* by Roger J. Williams, or the article on "Individuality" by Williams and myself, in the *Encyclopedia of Psychiatry, Neurology, and Psychoanalysis*.

Until now, the only way medical practitioners could try to cope with the massive individuality problem was by encouraging "family doctors," to take personal and family uniqueness into account. In the late 1950s I wrote a paper on "Applications of Statistical Concepts and Computer Technology to Medical Diagnosis and Research" in a vain attempt to prod the government research laboratory where I worked to explore the problem. Little was being accomplished, nor was there interest in accomplishment.

Enter Sid Baker. I met him in 1978, as a result of our mutual interest in the role of nutritional supplements in treating behavior problems in children. I had just given a talk to a medical school audience full of highly skeptical physicians. I was prepared for a barrage of unfriendly questions. At the beginning of the question-and-answer period, Sid Baker, a pleasant looking fellow whom I had noticed sitting in the front row, rose to say, "Most of you know me. I was chief resident here some years ago. I want to say that I fully endorse what Dr. Rimland has said about the role of vitamins in treating children's behavior problems. As a pediatrician who has spent many years in treating such children, I have tried every treatment modality which has come to my attention, and I have found that nothing I have tried works as quickly or as well as megavitamin therapy." I, and the audience, were stunned by his statement. The hostility I was expecting evaporated.

Neither Sid nor I knew then that the other was also fascinated by the challenge of individuality and the promise of computers as the best way to crack the individuality barrier. Sid, however, did more than simply write a paper on the topic. He pursued the matter diligently, becoming a professor of Medical Computer Sciences at the Yale University Medical School, and began designing the software that is now available to everyone at low cost on the Internet, at Medigenesis.com. Sid describes the Medigenesis concept as providing the opportunity to have an intelligent conversation with a database.

The largest autism database in the world, in terms of sheer *number* of individuals, is the Autism Research Institute database with over 34,000 autistic individuals. But Sid Baker's autism database, which is growing daily as new cases are added, is by far the world's *deepest* autism database, containing as it does detailed information about each child's diagnostic symptoms, characteristics, and results of numerous medical tests and interventions.

The database is designed to help make sense of the fact that what we glibly refer to as "autism" is in fact a multiplicity of subtypes of children who fall on the autism spectrum, and who thus share certain symptoms, but who suffer from a very large variety of probably interactive causes. There is no such thing as "autism." There are subtypes of children—clusters of children—sharing some or all of many possible symptoms and causes.

Only powerful computers can deal with such complexity. And Medigenesis is the tool that makes it possible for computers to deal with that complexity. As Sid points out in some of his lectures, the *microscope* gave us the capacity to see details that are extremely small. The computer, when properly em-

ployed, becomes a *macroscope*, an instrument for seeing an overview—the big picture—for the first time.

Medigenesis collects massive amounts of data from individuals, children and adults, not only normal, healthy folks, but victims of every malady you can think of. It collects and compiles their individual characteristics, their symptoms, and their response to every treatment they have tried. Medigenesis then allows you to use its programs to find your nearest virtual "clones" (persons most similar to you or to your autistic child) so you can learn what worked for your "clone" and what therefore might also work for you. Stated differently, it finds others who fit your profile and/or your autistic child's profile, so you can benefit from your profile-mate's experience, and he/she/they can benefit from your experience. One mother wrote this about her experience with Medigenesis:

"Over the years we've tried many, many different things for my son, who has autism and all the bowel and immune system problems that go along. I finally have an easy way of charting his treatments, his responses to these treatments (both good and bad), his symptoms as they improve or worsen, and so forth. And the options I got, when I finally ran his cluster report, were fascinating. For example, one of the top options presented was secretin—which is certainly the thing that has helped clear up his diarrhea most. When I tightened his cluster, lamisil was presented as having a 75% chance of good result. This is interesting because we just started a big anti-yeast campaign. This tool is really quite remarkable."

The Autism Research Institute helped Dr. Baker for several years with grants to help pay for the extensive programming required by the development of his autism database. In gratitude for ARI's support of his efforts over those years, Dr. Baker has arranged to provide ARI with donations from the fees earned from those users of Medigenesis who indicate they learned about Medigenesis from ARI by entering code ARI20011 when they begin using Medigenesis.

To use Medigenesis, go to www.medigenesis.com and create an anonymous account, selecting a user name and pass code of your choice. Then enter medical, developmental, and family history information, lab results, and details of treatments and reactions. The system sorts these data and generates a report listing possible treatment options that have helped others like you, or your child. ARRI readers who use the Medigenesis system between April 1 and September 1 will receive a 25% discount.

An exciting development! Tell ARI if Medigenesis helps your child.