

***“Perspectives of the Advocacy Community”***  
IOM Workshop on *Autism and the Environment:*  
*Challenges and Opportunities for Research*

*April 18-19, 2007*



**Laura Bono, Board Member  
National Autism Association**

# **Declare autism a national health emergency and treat it with urgency.**

- | 1 in 150 children and roughly 1 in 65 families**
- | 36,000 otherwise normal toddlers will regress into autism in this year alone**
- | Harvard Study: \$3.2 million/child over a lifetime**
- | Society costs: Approx. 2 TRILLION dollars**
- | Insurance seldom pays because treatments aren't "research-based"**
- | Families devastated both economically and emotionally**
- | Murder/suicides are on the rise**

# Studying the environment over 15 years too late because of the:

- | **CDC's failure to declare an epidemic beginning with the 1989 birth cohort**
- | **CDC's failure to study time trends and research what changed in the environment**
- | **CDC's failure to examine the toxic and viral body burdens of autistic children**

## **Quote from CDC Press Release Julie Gerberding - February 8, 2007**

**“Our estimates are becoming better and more consistent, though we can’t yet tell if there is a true increase in ASDs or if the changes are the result of our better studies.”**

# What we could have been doing:

- | Commencing gene-envir. susceptibility research**
- | Studying mechanisms involved in response to environmental neurotoxicants**
- | Focusing on what changed in the environment and when**
- | Investigating any environmental triggers known to cause these symptoms**
- | Learning the biological mechanisms that have gone awry in the children and devising successful treatments**

# Autism is an environmentally triggered problem.

- | If it is environmental, then it is treatable and preventable.
- | It is **NOT HOPELESS** and lifelong.
- | It is **HOPEFUL**, with a possible cure.

# Autism is a whole-body problem.

- | **Immunological dysregulation with a unique inflammatory bowel disease**
- | **Oxidative stress, systemic inflammation, and severely disordered urine and serum chemistries including elevated porphyrins**
- | **Decreased methylation capacity, limited transsulfuration and glutathione deficiency**
- | **Increased toxic body burdens – primarily of heavy metals esp. mercury and lead**
- | **Chronic viral, fungal and bacterial infections**
- | **Central nervous system hypofusion/abnormal regulation of blood supply to the brain**
- | **Microglial activation, lipid peroxidation, mitochondrial dysfunction, inactive enzyme systems and exitotoxicity**

# Autism is treatable.

**The research paradigm needs to shift from autistic children are genetically defective to autistic children are sick.**

- | Grant money only to genetic vulnerability studies that have a clear environmental hypothesis**
- | Research the efficacy of detoxification treatments and biomarkers**
- | Study the children's biomedical imbalances and find more effective ways of intervening medically and nutritionally**
- | Investigate the role of vaccines, including thimerosal, aluminum and live viruses, on the health/neurodevelopment of autistic children**
- | Research the role of the immune, gastrointestinal and endocrine systems of the children**
- | Study the recovered children. What do their pre and post recovery body chemistries tell us?**

# **With biomedical treatments, there is hope for recovery.**

- | Leave no stone unturned**
- | Address the evidence implicating vaccine overload, mercury and aluminum from vaccines**
- | When treated biomedically, autistic children get better**
- | Research and produce successful antioxidant, methylation and blood brain barrier chelation treatments; as well as immune system, detoxification and inflammation interventions**

# **Hundreds of thousands of sick children are silently waiting.**

- | Pursue research and treatments that will impact the most lives as quickly as possible.**
- | Follow clues provided by evidence-based treatments.**
- | Institute a translational research protocol where clinicians who care for children with autism advise research into the most promising areas of intervention.**
- | Act with urgency. Follow the truth where ever it leads.**

# **RECOVERY is possible!**

- | Accelerate all environmental research**
- | Demand even more money to address the problem**
- | Issue RFA's/score proposals according to matrix goals**
- | Get answers, then interpret them expediently**
- | Continue to work the problem**

**Our hope starts with YOU.**

