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November 30, 2007

ORIGINAL

VIA UPS DELIVERY

Clerk
United States Court of Federal Claims
717 Madison Place, NW
Washington, D.C. 20005

Re: In Re: Claims for Vaccine Injuries Resulting in Autism Spectrum Disorder, or a Similar Neurodevelopmental Disorder v. Secretary of Health And Human Services
Autism Master File
Our File No. 054500 - Omnibus Autism Proceeding

Dear Clerk of Court:

Enclosed for filing in the case file captioned above is the original and two copies of the medical expert report of petitioners' expert Elizabeth A. Mumper, M.D. in the compensation claim of Alexander Krakow. This report is submitted both in support of petitioners' theory that exposure to the mercury contained in certain pediatric vaccines was a substantial contributing cause of some or all of the injuries at issue in the Omnibus Autism Proceeding, and in support of Alexander's individual claim. Petitioners anticipate relying on this testimony in hearings on "test cases" currently scheduled for May 2008.

A copy of this expert report is simultaneously being filed in Krakow v. Secretary of Health and Human Services, Case No. 1:03-00632-UNJ.

Very truly yours,

Thomas B. Powers
Attorney at Law

Enclosures
cc: John Fabry, Esq., Williams Kherkher Hart Boundas, LLP (via UPS and email)
Vincent J. Matanoski, Esq., U.S. Department of Justice (via UPS and email)
Special Master George Hastings, US Court of Federal Claims (via UPS and email)
Special Master Denise Vowell, US Court of Federal Claims (via UPS and email)
Special Master Patricia Campbell-Smith, US Court Federal Claims (via UPS and email)
Staff Attorney, Joseph Lowe, US Court of Federal Claims (via email)

Professional opinion about the role of thimerosal containing vaccines In the case of Alexander Krakow

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Qualifications:
Background and Qualifications:

MD 1980 Medical College of Virginia
Internship in Pediatrics 1980-81, University of Massachusetts
Residency in Pediatrics 1981-83, University of Virginia
Chief Residency in Pediatrics 1983-84, University of Virginia
Private Practice Pediatrics 1984-1989, Lynchburg, VA
Director of Pediatric Education 1989-2000, Lynchburg Family Practice Residency
CEO, Advocates for Children, 2000-present
Medical Director, Autism Research Institute, 2005 – present
Founder, RIMLAND Center, 2007

Experience in Treating Children with Autism Spectrum Disorders

During my pediatrics residency I received the usual and customary training in how to care for children with neurodevelopmental disorders. Since developmental and behavioral problems were a special interest of mine, I attracted a population of such patients during my time in private practice and while serving as Director of Pediatric Education at a University of Virginia affiliated family practice residency program.

In 2000, I established Advocates for Children to help meet what I perceived as unmet needs in my community for the increasing numbers of children with neurodevelopmental and behavioral disorders. We have just opened The RIMLAND Center, which will serve as a training facility for clinicians interested in learning about the medical problems of children with autism. We have over 3000 patients, and care for children not only in central Virginia, but also from other states and countries. At least 500 of our patients have autism spectrum disorders and other neurodevelopmental disabilities. A large proportion of our general pediatric patients have chronic diseases.

Krakow - case summary:

- During the first 18 months of life, Alex appeared to be developing normally as documented in the medical records. He was noted to have ~10 words by 16-18 months of age.
- His medical problems included mild valvular pulmonic stenosis diagnosed in early infancy, with reassuring echocardiogram at day 6 of life, and follow-up at 18 months by cardiology with diagnosis of "very mild valvular pulmonic stenosis, otherwise good health"
- Allergies were first suspected at 6 months of life
- He had at least 5 courses of antibiotics prior to age 2 years, given for ear infections and protracted upper respiratory infections
- He was seen several times for loose and/or foul smelling stools and/or acute gastroenteritis prior to the age of 2 years
- At his 2-year check up, there was concern that his speech was not progressing, and that he had lost some words. Hearing was tested soon after and documented to be normal.
- He received flu shots in November 2001 and December 2001, and soon after was noted to have red fingers, act listless, and develop hypotonia. He lost speech completely and was unable to grip items as before.
- During the 6 months after his 2-year birthday, parents noted gaze aversion and unresponsiveness when his name was called. They consulted Dr. Marvin Boris in June 2002, who began investigating possible reasons for the developmental and speech regressions and recommended therapeutic strategies to deal with his medical and developmental problems.

Summary of expert medical opinion about the case of Krakow

- My professional opinions in this case are based on a careful review of Alexander Krakow's complete medical records, my clinical experience with the medical problems associated with regressive autism, my role teaching doctors how to evaluate and treat children with autism, and my extensive review of the medical literature with regards to regressive autism, mercury toxicity, and the interaction between genetic predispositions and environmental factors.
- My review of the literature, clinical experiences with hundreds of children with regressive autism and conversations with researchers as a result of my role at the Autism Research Institute have led me to agree with the expert reports about causation prepared by Dr. Vas Aposhian, Dr. Richard Deth and Dr. Sander Greenland in this case.
- In my best professional judgment, with a reasonable degree of medical certainty, taking into account the specific medical facts about this particular child and applying my general knowledge obtained as described above, it is more likely than not that the thimerosal in the childhood

vaccines Alexander Krakow received was a substantial contributing factor to his neurodevelopmental problems.

Analysis of specific facts in the case of Alex Krakow with regard to thimerosal and its effects:

Thimerosal exposure:

- Based on my review of this patient's immunizations records, and given the limitations that some of the dates on my copy were difficult to read, it appears that Alex received 212.5 mcg of ethyl mercury by the age of 2 years via thimerosal containing vaccines given according to the usual and customary schedule
- He received his first dose of Hepatitis B vaccine containing thimerosal at birth
- He received two additional 25 mcg of ethyl mercury via doses of thimerosal containing flu vaccine in November 2001 and December 2001
- The combination of thimerosal containing vaccines, including the flu vaccines, resulted in a cumulative ethyl mercury exposure of approximately 262.5 mcg by the time Alex was 25 months old

In my best medical judgment, review of Alex Krakow's medical case is consistent with an increased vulnerability to the toxic effects of thimerosal exacerbated by co-existing antibiotic use.

Clinical evidence:

- Alex had received at least 5 courses of antibiotics during the first 2 years of life.
- He had several documented episodes of diarrhea in proximity to the administration of thimerosal containing vaccines

In addition, we have evidence that Alex Krakow had impaired methylation biochemistry and deficient detoxification ability with improvements in clinical status when his methylation biochemistry, cellular redox status and detoxification systems were improved.

Laboratory evidence of impairments in detoxification and impact of mercury on Alex's physiology:

- A thiol profile documented adenosine of 0.563, S-adenosine-homocyteine of 10.35, cysteine of 134.85, methionine of 23.35, and glutathione of 4.36. Thiol biochemistry is crucial for the body to handle heavy metal exposures; poor thiol biochemistry would be expected to impair the child's ability to handle mercury and other heavy metals.

- Alex was demonstrated to be heterozygous for 2 mutations (C677T and A 1298-C) in the methyltetrahydrofolate reductatase enzyme, which is important in methylation biochemistry functioning, and could be a contributing factor to difficulty handling mercury exposures via thimerosal containing vaccines.
- A porphyrin profile obtained on August 9, 2006, after 3 years of interventions designed to improve his detoxification abilities and remove mercury and other heavy metals from his system, demonstrated a pattern interpreted by the lab as "moderate mercury toxic effect." At a time when the normals for precoproporphyrin were 2-5 nmol/gram of creatinine, the patient demonstrated a precoproporphyrin of 22 nmol with urine creatine of 649. Precoproporphyrin is a marker specific for mercury; no other substance is known to cause an elevation.

Analysis of this case in relation to the literature:

- Infants are born at risk: 1 in 6 children born today is predicted to have blood levels of mercury high enough to impair neurological development (Stern 2005, Ref. # 0131[1]).
- Antibiotics potentiate mercury toxicity (Rowland, 1984, Ref. # 0187)
- Mercury has myriad manifestations of toxicity: Mercury is the classic prototype demonstrating the ability of heavy metals to have myriad manifestations of toxicity depending on the biochemical individuality of the victim, route of exposure, dose effects and synergistic toxicities (Blaxill, Redwood et al. 2004, Ref. # 0259).
- Normal infants immunized per routine recommendations can meet criteria for acute mercury toxicity: The CDC has defined mercury poisoning as a blood mercury level greater than 10 mcg/L (2005). The Stajich study looked at normal infants after hepatitis B vaccination. One infant developed a post vaccine mercury level of 23.6 mcg/L, which meets CDC criteria to qualify as a case of acute mercury poisoning (Stajich, Lopez et al. 2000, Ref. # 0249). The presence of such high blood levels is consistent with significant inter-individual variability.

Clinical evidence compatible with damage from mercury:

- Mercury is an immune disrupter, upsetting the balance between TH1 immunity, which defends the body against bacteria, viruses and fungal infections and TH2 immunity. Alex has clinical documentation of food allergies and low levels of immunoglobulins.
- Mercury has been documented to induce autoimmunity. Alex developed several different autoimmune diseases. He developed autoimmune

[1] All reference numbers are taken from Petitioners' Master Reference List of Medical Literature, Nov. 2007. CD-ROMS containing copies of all articles with a linked index are on file with the court. A copy of the list is attached to this report.

thyroiditis, for which he had to be supplemented with prescription thyroid replacement. The thyroid gland is particularly susceptible to thyroid damage. He demonstrated an autoimmune response to his own myelin, the nerve sheaths that are crucial for processing neurologic messages.

- On November 20, 2002, Dr. Krigsman reviewed the results of Alex's intestinal biopsies with the parents. He demonstrated multiple reactive hyperplastic lymphoid follicles in the ileal mucosa and nodular or diffuse inflammatory infiltrates of lymphocytes in the colon. His gastric and esophageal mucosa were unremarkable. Immunohistochemical studies of this pathology are consistent with an autoimmune process.
- Mercury has been documented to damage DPPIV (dipeptidyl peptidase), which is a digestive enzyme responsible for breaking down gluten (in wheat products) and casein (in dairy products). Alex had documented laboratory evidence of intolerance to casein, and evidence of clinical improvements on the gluten free casein free diet. In the absence of other reasons, such as celiac disease, to explain his intolerance to gluten and casein, my best medical judgment is that his mercury exposure was a substantial contributing factor.
- The clinical picture described in which Alex had red fingers, listlessness, new onset hypotonia, unresponsiveness to name, loss of previous ability to grip and complete loss of speech is consistent with direct neurotoxic effects of mercury and consistent with classic descriptions of mercury toxicity.
- Dr. Boris documented by physical exam his hypotonia and diagnosed chronic inflammatory neuropathy, which is consistent with the effects of mercury on the developing nervous system as documented in the literature cited in this report.
- When nutritional and medical interventions directed towards enhancing his body's detoxification pathways were undertaken, these symptoms improved.

Clinical evidence of improvement with medical treatments, including those directed at removing mercury and improving the body's natural detoxification and immune mechanisms:

- When Dr. Boris evaluated Alex in June of 2002 and began treating him with interventions designed to improve his detoxification pathways and treat his medical problems, improvements in his developmental status was documented in sequential office notes. Specifically, Dr. Boris tracked improvements in behavior, social interactions and language over time.
- Alex showed improvements in GI and developmental status when begun on the gluten free casein free diet.
- Dr. Boris prescribed methylcobalamin injections, designed to improve methylation biochemistry and parents reported behavioral improvements in his behavioral, social and speech profile noted on many sequential office visits.

- On October 10, 2002, Dr. Boris prescribed chemet (DMSA, a chelating agent approved by the FDA for treating lead toxicity and demonstrated in Dr. Nataf's studies to lead to improvement in porphyrin profiles of children with documented mercury toxicity). He documented in his medical records that he discussed the mercury protocol with the family.
- On April 27, 2003, evaluation of the urine for toxic metals showed extreme excretion of mercury (15 with normal unprovoked <3) and lead (48 with normal unprovoked <15), providing evidence of excretion of mercury in response to therapeutic strategies being used by Dr. Boris.

Laboratory evidence of immune dysregulation, endocrine disruption and autoimmunity:

- Anti-myelin antibodies: CNS myelin IgG titers 1:32 (titers <1:8 expected), CNS myelin IgA titers 1:64 (titers < 1:8 expected). This is compatible with a toxic encephalopathy.
- Positive myelin basic protein antibodies reported by Dr. Boris compatible with autoimmune neuropathy
- Autoantibodies to thyroid: antimicrosomal antibodies 1:1600 (normal <1:100) and antithyroglobulin antibodies 1:400 (normal < 1:100). This is a dramatic production of autoantibodies against a vital gland to regulate metabolism.
- Thyroid peroxisomal antibodies 12.4 (normal <2)
- Thyroid stimulating hormone elevated on several occasions. Patient required treatment with thyroid replacement.
- IgG level low at 635 (normal 673-1734) on one occasion and 605 on another. At other times, was low on certain IgG subsets.

Analysis of Alex's clinical and laboratory evidence with regard to the medical literature.

- Intermittent larger doses of mercury as given in vaccine injections bypass the normal protective mechanisms found in the gut that are designed to protect against oral exposures. Children have not had the opportunity to evolve mechanisms to protect against injected ethylmercury. My best medical judgment, based on clinical experience and studying the medical literature is that injected thimerosal in bolus doses is associated with more risk of toxicity than a chronic low-dose daily intake of oral mercury (Grandjean and Jorgensen 2005, Ref # 0210).

- Numerous mechanisms of thimerosal toxicity have been demonstrated Thimerosal is metabolized to thiosalicylate and ethylmercury, which is taken up by organs and degraded to Hg2+ (Qvarnstrom, Lambertsson et

al. 2003, Ref. # 0246). Thimerosal is documented to cause DNA damage (Baskin, Ngo et al. 2003, Ref. # 0253) and inhibit mononuclear phagocytosis (Rampersad, 2005, Ref. # 0211).

- Pathologic brain injury has been documented in response to thimerosal. Subclinical mercury poisoning induced experimentally in monkeys (levels less than 50 mcg mercury/kg body weight/day) demonstrated pathologic brain changes including decreased numbers of astrocytes and increased activated microglia without any noticeable clinical manifestations (Charleston, Body et al. 1996, ref. # 0116). Recent autopsy studies of autistic brains demonstrated activation of microglia and the innate immune system, but not adaptive immunity. Burbacher demonstrated in primates that injected organic mercury was associated with persistence of inorganic mercury in the brain (Burbacher, Shen et al. 2005, Ref. # 0251)

- Patients with autism have been demonstrated to have increased oxidative stress [James, 2004, Ref. # 0005]. "Oxidative stress (endogenous or environmental) may contribute to the development and clinical manifestations of autism" [James, 2006, Ref. # 0049]. Alex had this testing done and treatments directed to improving his oxidative stress and disordered thiol biochemistry.

- Metabolic perturbations are very common in children affected by the recent autism epidemic. James and colleagues described fundamental abnormalities in methylation and transulfuration biochemistry in autistic children when compared to neurotypical control children. Autistic children had low methionine, low cysteine, low reduced glutathione, increased oxidized glutathione, and abnormal redox ratios. Normalization of the redox ratios occurred with nutritional supplementation, including methylcobalamin, betaine and folinic acid (James, Cutler et al. 2004, Ref. # 0005). These findings were later confirmed in a larger cohort of autistic children compared to neurotypical children (James, Melnyk et al. 2006, Ref. # 0049). My clinical experience has validated the methylation and transulfuration abnormalities described by Dr. James, and our patients demonstrate clinical improvements when we utilize strategies to support methylation biochemistry, as occurred in Alex.

- Glutathione deficiencies impair ability to excrete thimerosal. Impaired methylation biochemistry leads to glutathione deficiencies, which are present in the vast majority of our autistic patients and over 75% of autistic children (James, Cutler et al. 2004, Ref. # 0005). Since glutathione is such a crucial intracellular anti-oxidant, has vital roles for detoxification function, modulates T cell function, and helps regenerate intestinal epithelium, treatment strategies designed to normalize the ratio of reduced to oxidized glutathione often lead to clinical improvements, and was part of Alex's therapeutic regimen.

- Autistic children demonstrate mercury toxicity. One recent prospective study of 115 children with autism demonstrated porphyrinuria when compared to 119 control children [Nataf et al., 2006, Ref. # 0065]. When compared to the control group, children with autism had a mean increase of 2.6-fold ($p < 0.001$) in urinary coproporphyrin. A subgroup of these autistic children underwent oral chelation therapy with DMSA which resulted in a significant reduction in mean urinary coproporphyrin and precoproporphyrin ($p = 0.002$), indicating that the urinary porphyrin elevation was not genetic in nature but due to the toxic metals removed [Nataf, 2006, Ref. # 0065]. This test was not widely used in the autism community at the time Alex began treatments for the mercury toxicity diagnosed by Dr. Boris, so we do not have the advantage of knowing what the impact of mercury toxicity on his porphyrin pathways was prior to chelation.

- Abnormal immune responses to dietary proteins and brain cells: Vojdani et al. demonstrated immune responses to dietary proteins, gliadin, and cerebellum peptides in children with autism. A sub-group of patients with autism produced antibodies against Purkinje cells and gliadin peptides, providing further evidence of a link between the gut, brain and immune system (Vojdani, O'Bryan et al. 2004, Ref. # 0094). Alex's intestinal problems and improvements when he was begun on gluten free casein free diet raise concern that he is in this clinical category.

- Improvements argue for environmental components. Reported cases of improvements or recoveries from autism have been published in the academic literature [Mundy, 1997, Ref. # 0145; Dawson, 2003, Ref. # 0154; Fein, 2005, Ref. # 0150; Kelley, 2006, Ref. # 0144]. Alex's improvements argue against purely genetic causes for his autism and make thimerosal exposure more likely as a contributing factor.

Absence of alternative explanations for Alex's developmental regression:

Alex received a thorough evaluation for alternative genetic and infectious explanations for his neurodevelopmental deterioration including but not limited to:

- Evaluation for MeCP2 abnormalities (Rett) – normal
- Prader-Willi/Angelman genetic testing – normal
- MRI of the brain – normal
- Guanidinoacetate methyltransferase deficiency – normal
- Herpes simplex titers – negative
- HHV 6 titers - negative

Thimerosal effects:

Referring to Dr. Vas Aposhian's report submitted to the court:

- He cited Pichichero's work on non-autistic children and Burbacher's work with primates as evidence for deposition of mercury in the brain after thimerosal containing vaccines.
- He reported that Pardo and Vargas documented the presence of neuroinflammation with activation of the brain's innate immune system.
- He explained the concept of developmental windows of increased vulnerabilities to toxins.
- He articulated the concept that there are variable vulnerabilities to exposure to mercury, based on other modifying factors and genetic predispositions, citing the fact that not all children exposed to mercury containing teething powders developed Pink disease
- He reviewed the toxicokinetics of thimerosal.

Referring to Dr. Richard Deth's report submitted to the court:

- He described the detrimental effects of thimerosal on cellular redox status and glutathione levels.
- His experiments demonstrated the potent inhibition of neuronal methionine synthase by thimerosal at concentrations far below the plasma level of one thimerosal containing vaccine.
- He reported that thimerosal is known to be toxic to human cortical neurons, and induces apoptosis (programmed cell death).
- He described how thimerosal interferes with cellular production of glutathione, which is a crucial mechanism for the body to deal with heavy metal toxicity.
- He explained how thimerosal induces oxidative stress and interferes with sulfate metabolism, which is crucial for getting rid of toxins and heavy metals.

Summary:

- In my best medical judgment based on my understanding of the medical literature some of which is cited above and my clinical experience, Alex is a child whose neurodevelopmental problems were exacerbated by mercury exposure in vaccines.
- Delayed manifestations of neurotoxicity as evidenced by emerging symptoms of autism many months after his exposure to mercury in vaccines are consistent with the pattern of developmental toxins.
- He seemed to acutely deteriorate after the age of 2, coincident with receipt of 2 flu vaccines a month apart. This is consistent with reaching a toxic tipping point, in my judgment.
- Clinically, he fits the picture of a child with genetic predispositions which acted together with environmental triggers to develop neurologic impairments.

- Thimerosal reduces cellular glutathione, which is the body's major intracellular anti-oxidant, and serves vital roles in maintaining the gut epithelium, preserving immune function, and enabling adequate detoxification. Alex demonstrated problems in all these areas.
- Thimerosal has devastating effects on methylation biochemistry, which ironically is the main way the body attempts to deal with heavy metal toxicity. My clinical experience in conjunction with my understanding of the published works of Drs. James and Deth, lead me to have grave concerns about the clinical consequences of thimerosal exposure in this child with impaired methylation biochemistry.
- Alex had documented mercury exposures via thimerosal and demonstrated mercury excretion after clinical measures to enable him to get rid of some of his mercury body burden He had clinical problems compatible with the expected effects of thimerosal toxicity, especially with his dramatic autoimmune problems. He showed clinical improvements in his developmental status following measures to treat his oxidative stress, detoxification systems, and immune functioning, leading me to conclude that thimerosal was a substantial contributing factor in the development of his neurodevelopmental and language regression.

the **RIMLAND CENTER**
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In the case of Alexander Krakow:

The opinions expressed in this report are held by me to a reasonable degree of medical and scientific likelihood. I reserve the right to supplement this report in light of any additional scientific or medical literature that may be published during the pendency of this claim in the NVICP, or in light of any relevant change in Alex Krakow's medical condition.

Elizabeth Mumper, MD 11/30/07

Elizabeth Mumper, MD Date

PETITIONERS' MASTER REFERENCE LIST - REFERENCE NUMBER SORT

MASTER REFERENCE NUMBER	AUTHOR	TITLE	CITATION	DATE
0001	Halsey NA, Goldman L	Balancing Risks and Benefits: Primum non nocere Is Too Simplistic	Pediatrics;108:466-7	8/2/2001
0002	McRill C, Boyer LV, Flood TJ, Ortega L	Mercury Toxicity Due to Use of a Cosmetic Cream	Journal of Occupational and Environmental Medicine;42:4-7	1/1/2000
0003	Nierenberg DW, Nordgren RE, Chang MB, Siegler RW, Blayney MB, Hochberg F, Toribara TY, Cernichiari E, Clarkson TW	Delayed Cerebellar Disease and Death after Accidental Exposure to Dimethylmercury	New England Journal of Medicine;338 (23):1672-76	6/4/1998
0004	Andrews, N et al	Thimerosal Exposure in Infants and Developmental Disorders: A Retrospective Cohort Study in the United Kingdom Does Not Support a Causal Association	Pediatrics, Vol 114, No. 3, September 2004	9/1/2004
0005	James SJ, Cutler P, Melnyk S, Jernigan S, Janak L, Gaylor DW, Neubrander JA.	Metabolic biomarkers of increased oxidative stress and impaired methylation capacity in children with autism.	Am J Clin Nutr. 2004 Dec;80(6):1611-7.	12/1/2004
0006	Costa LG, Aschner M, Vitalone A, Syversen T, Soldin OP	Developmental neuropathology of environmental agents.	Annu Rev Pharmacol Toxicol. 2004;44:87-110.	1/1/2004
0007	James SJ, Slikker W 3rd, Melnyk S, New E, Pogribna M, Jernigan S	Thimerosal neurotoxicity is associated with glutathione depletion: protection with glutathione precursors.	Neurotoxicology. 2005 Jan;26(1):1-8.	1/1/2005
0008	Humphrey ML, Cole MP, Pendergrass JC, Kiningham KK	Mitochondrial mediated thimerosal-induced apoptosis in a human neuroblastoma cell line (SK-N-SH).	Neurotoxicology. 2005 Jun;26(3):407-16.	6/1/2005
0009	Rimland B	Treatment Options for Mercury/Metal Toxicity in Autism and Related Developmental Disabilities: Consensus Position Paper	Autism Research Institute	2/1/2005
0010	Counter S, Buchanan L, Ortega F	Neurocognitive screening of mercury-exposed children of Andean gold miners.	Int J Occup Environ Health. 2006 Jul-Sep;12 (3):209-14.	7/1/2006
0011	Blaxill, MF	What's going on? The question of time trends in autism	Public Health Reports, Nov-Dec 2004;119:536-551	1/1/2004
0012	Croen LA, Grether JK	Response: A Response to Blaxill, Baskin, and Spitzer on Croen et al. (2002), the changing prevalence of autism in California.	J Autism Dev Disord. 2003 Apr;33(2):227-229	4/1/2003
0013	Haley, B	Mercury Toxicity: Genetic Susceptibility and Synergistic Effects	Medical Veritas 2 (2005) 535–542	2/1/2005
0014	Heron et al.	Thimerosal Exposure in Infants and Developmental Disorders: A Prospective Cohort Study in the United Kingdom Does Not Support a Causal Association	Pediatrics; Vol 114; No. 3; September 2004:577-583	9/1/2004
0015	Hornig, M, et al	Neurotoxic Effects of Postnatal Thimerosal Are Mouse Strain Dependant	Molecular Psychiatry 2004:1-13	5/4/2004
0016	Hu, L et al.	Neutron activation analysis of hair samples for the identification of autism.	Poster presentation:Trans Am Nucl Soc 2003;89	1/1/2003
0017	Lorscheider et al.	Degenerative Neuron (Snail Brain Video)	U of Calgary Video	00/00/0000
0018	Windham GC, Zhang L, Gunier R, Croen LA, Grether JK	Autism spectrum disorders in relation to distribution of hazardous air pollutants in the San Francisco Bay Area.	Environ Health Perspect. 2006 Sep;114 (9):1438-44.	9/1/2006
0019	Verstraeten, T	Letters to the Editor: Thimerosal, the Centers for Disease Control and Prevention, and GlaxoSmithKline	Pediatrics. 2004 Apr;113(4):932	4/1/2004

0020	Stratton K, Gable A, McCormick, C	Immunization Safety Review: Thimerosal-Containing Vaccines and Neurodevelpmental Disorders - ADVANCE COPY	ADVANCE COPY Report of the Institute of Medicine 2001	10/1/2001
0021	Parran DK, Barker A, Ehrich M.	Effects of thimerosal on NGF signal transduction and cell death in neuroblastoma cells.	Toxicol Sci. 2005 Jul;86(1):132-40. Epub 2005 Apr 20.	4/20/2005
0022	Luyster R, Richler J, Risi S, Hsu WL, Dawson G, Bernier R, Dunn M, Hepburn S, Hyman SL, McMahon WM, Goudie-Nice J, Minshew N, Rogers S, Sigman M, Spence MA, Goldberg WA, Tager-Flusberg H, Volkmar FR, Lord C.	Early regression in social communication in autism spectrum disorders: a CPEA Study	Dev Neuropsychol. 2005;27(3):311-36	1/1/2005
0023	Ashwood P, Wakefield AJ	Immune activation of peripheral blood and mucosal CD3+ lymphocyte cytokine profiles in children with autism and gastrointestinal symptoms	J Neuroimmunol. 2006 Apr;173(1-2):126-34. Epub 2006 Feb 21	4/1/2006
0024	Herdman ML, Marcelo A, Huang Y, Niles RM, Dhar S, Kiningham KK	Thimerosal induces apoptosis in a neuroblastoma model via the cJun N-terminal kinase pathway	Toxicol Sci. 2006 Jul;92(1):246-53. Epub 2006 Apr 19	4/19/2006
0025	Brown L	Thimerosal Induces Programmed Cell Death of Neuronal Cells via Changes in the Mitochondrial Environment	The UCI Undergraduate Research Journal	00/00/0000
0026	Burbacher TM, Shen DD, Liberato N, Grant KS, Cernichiari E, Clarkson T	Comparison of blood and brain mercury levels in infant monkeys exposed to methylmercury or vaccines containing thimerosal.	Environ Health Perspect. 2005 Aug;113 (8):1015-21	08/00/2005
0027	Heyer NJ, Bittner AC Jr, Echeverria D, Woods JS	A cascade analysis of the interaction of mercury and coproporphyrinogen oxidase (CPOX) polymorphism on the heme biosynthetic pathway and porphyrin production.	Toxicol Lett. 2006 Feb 20;161(2):159-66. Epub 2005 Oct 7	2/20/2006
0028	Amin-Amin-Zaki L, Majeed MA, Greenwood MR, Elhassani SB, Clarkson TW, Doherty RA	Methylmercury poisoning in the Iraqi suckling infant: a longitudinal study over five years.	J Appl Toxicol. 1981 Aug;1(4):210-4.	8/1/1981
0029	Baron-Cohen S, Knickmeyer RC, Belmonte MK	Sex differences in the brain: implications for explaining autism.	Science. 2005 Nov 4;310(5749):819-23	11/4/2005
0030	de Bruin EI, Verheij F, Wiegman T, Ferdinand RF	Differences in finger length ratio between males with autism, pervasive developmental disorder-not otherwise specified, ADHD, and anxiety disorders.	Dev Med Child Neurol. 2006 Dec;48 (12):962-5	12/1/2006
0031	Buyske S, Williams TA, Mars AE, Stenroos ES, Ming SX, Wang R, Sreenath M, Factura MF, Reddy C, Lambert GH, Johnson WG	Analysis of case-parent trios at a locus with a deletion allele: association of GSTM1 with autism.	BMC Genet. 2006 Feb 10;7(1):8 [Epub ahead of print]	2/10/2006
0032	Charleston JS, Body RL, Mottet NK, Vahter ME, Burbacher TM	Autometallographic determination of inorganic mercury distribution in the cortex of the calcarine sulcus of the monkey Macaca fascicularis following long-term subclinical exposure to methylmercury and mercuric chloride.	Toxicol Appl Pharmacol. 1995 Jun;132 (2):325-33	6/1/1995
0033	Charleston JS, Bolender RP, Mottet NK, Body RL, Vahter ME, Burbacher TM	Increases in the number of reactive glia in the visual cortex of Macaca fascicularis following subclinical long-term methyl mercury exposure.	Toxicol Appl Pharmacol. 1994 Dec;129 (2):196-206.	12/1/1998
0034	Clarkson TW, Nordberg GF, Sager PR.	Reproductive and developmental toxicity of metals.	Scand J Work Environ Health. 1985 Jun;11 (3 Spec No):145-54	6/1/1985
0035	Clarkson TW, Magos L	The toxicology of mercury and its chemical compounds.	Crit Rev Toxicol. 2006 Sep;36(8):609-62	1/1/2006

0036	Counter SA, Buchanan LH, Ortega F, Laurell G.	Elevated blood mercury and neuro-otological observations in children of the Ecuadorian gold mines.	J Toxicol Environ Health A. 2002 Jan 25;65 (2):149-63	1/25/2002
0037	Courchesne E.	Neuroanatomic imaging in autism.	Pediatrics. 1991 May;87(5 Pt 2):781-90	5/1/1991
0038	Courchesne E, Townsend J, Saitoh O	The brain in infantile autism: posterior fossa structures are abnormal.	Neurology. 1994 Feb;44(2):214-23	02/00/1994
0039	Faure AV, Grunwald D, Moutin MJ, Hilly M, Mauger JP, Marty I, De Waard M, Villaz M, Albrieux M	Developmental expression of the calcium release channels during early neurogenesis of the mouse cerebral cortex	Eur J Neurosci. 2001 Nov;14(10):1613-22	11/1/2001
0040	Fombonne E, Zakarian R, Bennett A, Meng L, McLean-Heywood D	Pervasive developmental disorders in Montreal, Quebec, Canada: prevalence and links with immunizations.	Pediatrics. 2006 Jul;118(1):e139-50	7/1/2006
0041	Freeman HC, Sangalang GB	A study of the effects of methyl mercury, cadmium, arsenic, selenium, and a PCB, (Aroclor 1254) on adrenal and testicular steroidogeneses in vitro, by the gray seal Halichoerus grypus.	Arch Environ Contam Toxicol. 1977;5 (3):369-83	01/01/0977
0042	Goth SR, Chu RA, Gregg JP, Cherednichenko G, Pessah IN	Uncoupling of ATP-mediated calcium signaling and dysregulated interleukin-6 secretion in dendritic cells by nanomolar thimerosal.	Environ Health Perspect. 2006 Jul;114 (7):1083-91	7/1/2006
0043	Tordjman S, Ferrari P, Sulmont V, Duyme M, Roubertoux P	Androgenic activity in autism.	Am J Psychiatry. 1997 Nov;154(11):1626-7	11/1/1997
0044	McGinnis WR	Oxidative stress in autism.	Altern Ther Health Med. 2004 Nov-Dec;10 (6):22-36; quiz 37, 92	11/1/2004
0045	Woods JS, Echeverria D, Heyer NJ, Simmonds PL, Wilkerson J, Farin FM	The association between genetic polymorphisms of coproporphyrinogen oxidase and an atypical porphyrinogenic response to mercury exposure in humans.	Toxicol Appl Pharmacol. 2005 Aug 7;206 (2):113-20	8/7/2005
0046	Werner E, Dawson G	Validation of the phenomenon of autistic regression using home videotapes.	Arch Gen Psychiatry. 2005 Aug;62(8):889-95	8/1/2005
0047	Palmer RF, Blanchard S, Stein Z, Mandell D, Miller C	Environmental mercury release, special education rates, and autism disorder: an ecological study of Texas.	Health Place. 2006 Jun;12(2):203-9	6/1/2006
0048	Chauhan A, Chauhan V	Oxidative stress in autism.	Pathophysiology. 2006 Aug;13(3):171-81. Epub 2006 Jun 12	8/1/2006
0049	James SJ, Melnyk S, Jernigan S, Cleves MA, Halsted CH, Wong DH, Cutler P, Bock K, Boris M, Bradstreet JJ, Baker SM, Gaylor DW	Metabolic endophenotype and related genotypes are associated with oxidative stress in children with autism.	Am J Med Genet B Neuropsychiatr Genet. 2006 Dec 5;141(8):947-56	12/5/2006
0050	Jedrychowski W, Jankowski J, Flak E, Skarupa A, Mroz E, Sochacka-Tatara E, Lisowska-Miszczyk I, Szpanowska-Wohn A, Rauh V, Skolicki Z, Kaim I, Perera F	Effects of prenatal exposure to mercury on cognitive and psychomotor function in one-year-old infants: epidemiologic cohort study in Poland.	Ann Epidemiol. 2006 Jun;16(6):439-47. Epub 2005 Nov 7	11/7/2005
0051	Kemper TL, Bauman ML	The contribution of neuropathologic studies to the understanding of autism.	Neurol Clin. 1993 Feb;11(1):175-87	2/11/2000
0052	Kern JK, Jones AM	Evidence of toxicity, oxidative stress, and neuronal insult in autism.	J Toxicol Environ Health B Crit Rev. 2006 Nov-Dec;9(6):485-99	11/1/2006
0053	Lutchmaya S, Baron-Cohen S, Raggatt P, Knickmeyer R, Manning JT	2nd to 4th digit ratios, fetal testosterone and estradiol.	Early Hum Dev. 2004 Apr;77(1-2):23-8	4/1/2004
0054	Oliveira FR, Ferreira JR, dos Santos CM, Macedo LE, de Oliveira RB, Rodrigues JA, do Nascimento JL, Faro LR, Diniz DL	Estradiol reduces cumulative mercury and associated disturbances in the hypothalamus-pituitary axis of ovariectomized rats	Ecotoxicol Environ Saf. 2006 Mar;63(3):488-93	3/1/2006
0055	Mutkus L, Aschner JL, Syversen T, Shanker G, Sonnewald U, Aschner M	In vitro uptake of glutamate in GLAST- and GLT-1-transfected mutant CHO-K1 cells is inhibited by the ethylmercury-containing preservative thimerosal	Biol Trace Elem Res. 2005 Summer;105(1-3):71-86	7/1/2005

0056	Muraoka Y, Itoh F	Sex difference of mercuric chloride-induced renal tubular necrosis in rats--from the aspect of sex differences in renal mercury concentration and sulfhydryl levels	J Toxicol Sci. 1980 Aug;5(3):203-14	8/1/1980
0057	Olivieri G, Novakovic M, Savaskan E, Meier F, Baysang G, Brockhaus M, Muller-Spahn F	The effects of beta-estradiol on SHSY5Y neuroblastoma cells during heavy metal induced oxidative stress, neurotoxicity and beta-amyloid secretion	Neuroscience. 2002;113(4):849-55	1/1/2002
0058	Wallin M, Hartley-Asp B	Effects of potential aneuploidy inducing agents on microtubule assembly in vitro	Mutat Res. 1993 May;287(1):17-22	5/1/1993
0059	Walker SJ, Segal J, Aschner M	Cultured lymphocytes from autistic children and non-autistic siblings up-regulate heat shock protein RNA in response to thimerosal challenge	Neurotoxicology. 2006 Sep;27(5):685-92. Epub 2006 Jun 16	9/1/2006
0060	Vahter M, Mottet NK, Friberg L, Lind B, Shen DD, Burbacher T	Speciation of mercury in the primate blood and brain following long-term exposure to methyl mercury	Toxicol Appl Pharmacol. 1994 Feb;124 (2):221-9	2/1/1994
0061	Sakamoto M, Kakita A, Wakabayashi K, Takahashi H, Nakano A, Akagi H	Evaluation of changes in methylmercury accumulation in the developing rat brain and its effects: a study with consecutive and moderate dose exposure throughout gestation and lactation periods	Brain Res. 2002 Sep 13;949(1-2):51-9	9/13/2002
0062	Orct T, Blanusa M, Lazarus M, Varnai VM, Kostial K	Comparison of organic and inorganic mercury distribution in suckling rat	J Appl Toxicol. 2006 Nov-Dec;26(6):536-9	11/1/2006
0063	Warfvinge K	Mercury distribution in the neonatal and adult cerebellum after mercury vapor exposure of pregnant squirrel monkeys	Environ Res. 2000 Jun;83(2):93-101	6/1/2000
0064	Vahter ME, Mottet NK, Friberg LT, Lind SB, Charleston JS, Burbacher TM	Demethylation of methyl mercury in different brain sites of Macaca fascicularis monkeys during long-term subclinical methyl mercury exposure	Toxicol Appl Pharmacol. 1995 Oct;134 (2):273-84	10/1/1995
0065	Nataf R, Skorupka C, Amet L, Lam A, Springbett A, Lathe R	Porphyrinuria in childhood autistic disorder: implications for environmental toxicity	Toxicol Appl Pharmacol. 2006 Jul 15;214 (2):99-108. Epub 2006 Jun 16	7/15/2006
0066	Sager PR, Aschner M, Rodier PM	Persistent, differential alterations in developing cerebellar cortex of male and female mice after methylmercury exposure	Brain Res. 1984 Jan;314(1):1-11	1/1/1984
0067	Sorensen FW, Larsen JO, Eide R, Schionning JD	Neuron loss in cerebellar cortex of rats exposed to mercury vapor: a stereological study	Acta Neuropathol (Berl). 2000 Jul;100(1):95-100	7/1/2000
0068	Yel L, Brown LE, Su K, Gollapudi S, Gupta S	Thimerosal induces neuronal cell apoptosis by causing cytochrome c and apoptosis-inducing factor release from mitochondria	Int J Mol Med. 2005 Dec;16(6):971-7	12/1/2005
0069	Vargas DL, Nascimbene C, Krishnan C, Zimmerman AW, Pardo CA	Neuroglial activation and neuroinflammation in the brain of patients with autism	Ann Neurol. 2005 Jan;57(1):67-81	1/1/2005
0070	Streit WJ, Mrak RE, Griffin WS	Microglia and neuroinflammation: a pathological perspective	J Neuroinflammation. 2004 Jul 30;1(1):14	7/30/2004
0071	Poling JS, Frye RE, Shoffner J, Zimmerman AW	Department of Neurology and Neurosurgery, Johns Hopkins Hospital, Baltimore, MD, USA	J Child Neurol. 2006 Feb;21(2):170-2	2/1/2006
0072	Pardo CA, Vargas DL, Zimmerman AW	Immunity, neuroglia and neuroinflammation in autism	Int Rev Psychiatry. 2005 Dec;17(6):485-95	12/1/2005
0073	Connors SL, Crowell DE, Eberhart CG, Copeland J, Newschaffer CJ, Spence SJ, Zimmerman AW	beta2-adrenergic receptor activation and genetic polymorphisms in autism: data from dizygotic twins	J Child Neurol. 2005 Nov;20(11):876-84	11/1/2005
0074	Cheslack-Postava K, Fallin MD, Avramopoulos D, Connors SL, Zimmerman AW, Eberhart CG, Newschaffer CJ	beta2-Adrenergic receptor gene variants and risk for autism in the AGRE cohort	Mol Psychiatry. 2007 Mar;12(3):283-91. Epub 2007 Jan 2	3/1/2007
0075	Muhle R, Trentacoste SV, Rapin I	The genetics of autism	Pediatrics. 2004 May;113(5):e472-86	5/1/2004

0076	Li Z, Dong T, Proschel C, Noble M	Chemically diverse toxicants converge on Fyn and c-Cbl to disrupt precursor cell function	PLoS Biol. 2007 Feb;5(2):e35	2/1/2007
0077	Ashwood P, Wills S, Van de Water J	The immune response in autism: a new frontier for autism research	J. Leukoc. Biol. 2006 Jul;80(1):1-15. Epub 2006 May 12	7/1/2006
0078	Ashwood P, Kwong C, Hansen R, Hertz-Picciotto I, Croen L, Krakowiak P, Walker W, Pessah IN, Van de Water J	Brief Report: Plasma Leptin Levels are Elevated in Autism: Association with Early Onset Phenotype?	J Autism Dev Disord. 2007 Mar 9; [Epub ahead of print]	3/9/2007
0079	Herbert MR, Russo JP, Yang S, Roohi J, Blaxill M, Kahler SG, Cremer L, Hatchwell E	Autism and environmental genomics	Neurotoxicology. 2006 Sep;27(5):671-84. Epub 2006 Mar 28	9/1/2006
0080	Hertz-Picciotto I, Croen LA, Hansen R, Jones CR, van de Water J, Pessah IN	The CHARGE study: an epidemiologic investigation of genetic and environmental factors contributing to autism	Environ. Health Perspect. 2006 Jul;114 (7):1119-25	7/1/2006
0081	Clarkson TW, Magos L, Myers GJ	The toxicology of mercury--current exposures and clinical manifestations	N. Engl. J. Med. 2003 Oct 30;349(18):1731-7	10/30/2003
0082	Koller LD	Methylmercury: effect on oncogenic and nononcogenic viruses in mice	Am. J. Vet. Res. 1975 Oct;36(10):1501-4	10/1/1975
0083	Fagan DG, Pritchard JS, Clarkson TW, Greenwood MR	Organ mercury levels in infants with omphaloceles treated with organic mercurial antiseptic	Arch. Dis. Child. 1977 Dec;52(12):962-4	12/1/1977
0084	Shenker BJ, Rooney C, Vitale L, Shapiro IM	Immunotoxic effects of mercuric compounds on human lymphocytes and monocytes. I. Suppression of T-cell activation	Immunopharmacol Immunotoxicol. 1992;14 (3):539-53	1/1/1992
0085	Shenker BJ, Berthold P, Decker S, Mayro J, Rooney C, Vitale L, Shapiro IM	Immunotoxic effects of mercuric compounds on human lymphocytes and monocytes. II. Alterations in cell viability	Immunopharmacol Immunotoxicol. 1992;14 (3):555-77	1/1/1992
0086	Trasande L, Landrigan PJ, Schechter C	Public health and economic consequences of methyl mercury toxicity to the developing brain	Environ. Health Perspect. 2005 May;113 (5):590-6	5/1/2005
0087	Agrawal A, Kaushal P, Agrawal S, Gollapudi S, Gupta S	Thimerosal induces TH2 responses via influencing cytokine secretion by human dendritic cells	J. Leukoc. Biol. 2007 Feb;81(2):474-82. Epub 2006 Nov 1	2/1/2007
0088	Petruccioli L, Turillazzi P	Serum immunoglobulin levels in monkeys treated with methylmercury	Drug Chem Toxicol. 1990;13(4):297-307	1/1/1990
0089	Folstein S, Rutter M. Folstein S, Rutter M	Infantile autism: a genetic study of 21 twin pairs	J Child Psychol Psychiatry. 1977 Sep;18 (4):297-321	9/1/1977
0090	Bailey A, Le Couteur A, Gottesman I, Bolton P, Simonoff E, Yuzda E, Rutter M	Autism as a strongly genetic disorder: evidence from a British twin study	Psychol Med. 1995 Jan;25(1):63-77	1/1/1995
0091	Lainhart JE, Ozonoff S, Coon H, Krasny L, Dinh E, Nice J, McMahon W	Autism, regression, and the broader autism phenotype	Am. J. Med. Genet. 2002 Dec 1;113(3):231-7	12/1/2002
0092	Jick H, Kaye JA	Autism and DPT vaccination in the United Kingdom	N. Engl. J. Med. 2004 Jun 24;350(26):2722-3	6/24/2004
0093	Rogers SJ	Developmental regression in autism spectrum disorders	Ment Retard Dev Disabil Res Rev. 2004;10 (2):139-43	1/1/2004
0094	Vojdani A, O'Bryan T, Green JA, Mccandless J, Woeller KN, Vojdani E, Nourian AA, Cooper EL	Immune response to dietary proteins, gliadin and cerebellar peptides in children with autism	Nutr Neurosci. 2004 Jun;7(3):151-61	6/1/2004
0095	Landa RJ, Holman KC, Garrett-Mayer E	Social and communication development in toddlers with early and later diagnosis of autism spectrum disorders	Arch. Gen. Psychiatry. 2007 Jul;64(7):853-64	7/1/2007
0096	Mergler D, Anderson HA, Chan LH, Mahaffey KR, Murray M, Sakamoto M, Stern AH; The Panel on Health Risks and Toxicological Effects of Methylmercury	Methylmercury exposure and health effects in humans: a worldwide concern	Ambio. 2007 Feb;36(1):3-11	2/1/2007
0097	Weiss B, Clarkson TW, Simon W	Silent latency periods in methylmercury poisoning and in neurodegenerative disease	Environ. Health Perspect. 2002 Oct;110 Suppl 5:851-4	10/1/2002

0098	Summers AO, Wireman J, Vimy MJ, Lorscheider FL, Marshall B, Levy SB, Bennett S, Billard L	Mercury released from dental silver" fillings provokes an increase in mercury- and antibiotic-resistant bacteria in oral and intestinal floras of primates"	Antimicrob. Agents Chemother. 1993 Apr;37 (4):825-34	4/1/1993
0099	Trasande L, Schechter CB, Haynes KA, Landrigan PJ	Mental retardation and prenatal methylmercury toxicity	Am. J. Ind. Med. 2006 Mar;49(3):153-8	3/1/2006
0100	Counter SA, Buchanan LH	Mercury exposure in children: a review	Toxicol. Appl. Pharmacol. 2004 Jul 15;198 (2):209-30	7/15/2004
0101	Skare I, Engqvist A	Human exposure to mercury and silver released from dental amalgam restorations	Arch. Environ. Health. 1994 Sep-Oct;49 (5):384-94	9/1/1994
0102	Woo EJ, Ball R, Landa R, Zimmerman AW, Braun MM; VAERS Working Group, Center for Biologics Evaluation and Research, Food and Drug Administration, Maryland, USA	Developmental regression and autism reported to the Vaccine Adverse Event Reporting System	Autism. 2007 Jul;11(4):301-10	7/1/2007
0103	Mutter J, Naumann J, Guethlin C.	Comments on the article the toxicology of mercury and its chemical compounds" by clarkson and magos (2006)."	Crit Rev Toxicol. 2007 Jul;37(6):537-49.	7/1/2007
0104	Courchesne E, Redcay E, Morgan JT, Kennedy DP.	Autism at the beginning: microstructural and growth abnormalities underlying the cognitive and behavioral phenotype of autism.	Dev Psychopathol. 2005 Summer;17(3):577-97. Review.	6/1/2005
0105	Courchesne E	Brain development in autism: early overgrowth followed by premature arrest of growth.	Ment Retard Dev Disabil Res Rev. 2004;10 (2):106-11.	12/1/2004
0106	Zerrate MC, Pletnikov M, Connors SL, Vargas DL, Seidler FJ, Zimmerman AW, Slotkin TA, Pardo CA.	Neuroinflammation and behavioral abnormalities after neonatal terbutaline treatment in rats: implications for autism.	J Pharmacol Exp Ther. 2007 Jul;322(1):16-22. Epub 2007 Mar 30.	7/1/2007
0107	Rhodes MC, Seidler FJ, Qiao D, Tate CA, Cousins MM, Slotkin TA.	Does pharmacotherapy for preterm labor sensitize the developing brain to environmental neurotoxicants? Cellular and synaptic effects of sequential exposure to terbutaline and chlorpyrifos in neonatal rats.	Toxicol Appl Pharmacol. 2004 Mar 1;195 (2):203-17.	3/1/2004
0108	Herbert MR.	Large brains in autism: the challenge of pervasive abnormality.	Neuroscientist. 2005 Oct;11(5):417-40. Review.	10/1/2005
0109	Hill AB	The environment and disease: causation or association?	Proc R Soc Med 1965;58:295-300	1/1/1965
0110	Vineis P, Kriebel D.	Causal models in epidemiology: past inheritance and genetic future.	Environ Health. 2006 Jul 21;5:21. Review.	7/21/2006
0111	Atchison WD, Hare MF.	Mechanisms of methylmercury-induced neurotoxicity.	FASEB J. 1994 Jun;8(9):622-9. Review.	6/1/1994
0112	Rhodes MC, Seidler FJ, Abdel-Rahman A, Tate CA, Nyska A, Rincavage HL, Slotkin TA.	Terbutaline is a developmental neurotoxicant: effects on neuroproteins and morphology in cerebellum, hippocampus, and somatosensory cortex.	J Pharmacol Exp Ther. 2004 Feb;308(2):529-37. Epub 2003 Nov 10.	2/1/2004
0113	Akerboom TP, Bilzer M, Sies H.	The relationship of biliary glutathione disulfide efflux and intracellular glutathione disulfide content in perfused rat liver.	J Biol Chem. 1982 Apr 25;257(8):4248-52.	4/1/1982
0114	Boris M, Kaiser CC, Goldblatt A, Elice MW, Edelson SM, Adams JB, Feinstein DL.	Effect of pioglitazone treatment on behavioral symptoms in autistic children.	J Neuroinflammation. 2007 Jan 5;4:3.	1/1/2007
0115	Burbacher TM, Grant KS, Mayfield DB, Gilbert SG, Rice DC.	Prenatal methylmercury exposure affects spatial vision in adult monkeys.	Toxicol Appl Pharmacol. 2005 Oct 1;208 (1):21-8.	10/1/2005
0116	Charleston JS, Body RL, Bolender RP, Mottet NK, Vahter ME, Burbacher TM.	Changes in the number of astrocytes and microglia in the thalamus of the monkey Macaca fascicularis following long-term subclinical methylmercury exposure.	Neurotoxicology. 1996 Spring;17(1):127-38.	4/1/1996

0117	Goldman LR, Koduru S.	Chemicals in the environment and developmental toxicity to children: a public health and policy perspective.	Environ Health Perspect. 2000 Jun;108 Suppl 3:443-8.	6/1/2000
0118	Herbert MR, Ziegler DA, Deutsch CK, O'Brien LM, Kennedy DN, Filipek PA, Bakardjiev AI, Hodgson J, Takeoka M, Makris N, Caviness VS Jr.	Brain asymmetries in autism and developmental language disorder: a nested whole-brain analysis.	Brain. 2005 Jan;128(Pt 1):213-26. Epub 2004 Nov 24.	1/1/2005
0119	Joseph RM, Tager-Flusberg H, Lord C.	Cognitive profiles and social-communicative functioning in children with autism spectrum disorder.	J Child Psychol Psychiatry. 2002 Sep;43 (6):807-21.	9/1/2002
0120	Just MA, Cherkassky VL, Keller TA, Minshew NJ.	Cortical activation and synchronization during sentence comprehension in high-functioning autism: evidence of underconnectivity.	Brain. 2004 Aug;127(Pt 8):1811-21. Epub 2004 Jun 23.	8/1/2004
0121	Klauck SM	Genetics of autism spectrum disorder.	Eur J Hum Genet. 2006 Jun;14(6):714-20. Review.	6/1/2006
0122	LaSalle JM, Ritchie RJ, Glatt H, Lalande M.	Clonal heterogeneity at allelic methylation sites diagnostic for Prader-Willi and Angelman syndromes.	Proc Natl Acad Sci U S A. 1998 Feb 17;95 (4):1675-80.	2/17/1998
0123	Miller MT, Stromland K, Ventura L, Johansson M, Bandim JM, Gillberg C.	Autism associated with conditions characterized by developmental errors in early embryogenesis: a mini review.	Int J Dev Neurosci. 2005 Apr-May;23(2-3):201-19. Review.	5/1/2005
0124	Ming X, Stein TP, Brimacombe M, Johnson WG, Lambert GH, Wagner GC.	Increased excretion of a lipid peroxidation biomarker in autism.	Prostaglandins Leukot Essent Fatty Acids. 2005 Nov;73(5):379-84.	11/1/2005
0125	Miyazaki K, Narita N, Narita M.	Maternal administration of thalidomide or valproic acid causes abnormal serotonergic neurons in the offspring: implication for pathogenesis of autism.	Int J Dev Neurosci. 2005 Apr-May;23(2-3):287-97.	5/1/2005
0126	Pickett J, London E.	The neuropathology of autism: a review.	J Neuropathol Exp Neurol. 2005 Nov;64 (11):925-35. Review.	11/1/2005
0127	Rice C	Prevalence of Autism Spectrum Disorders --- Autism and Developmental Disabilities Monitoring Network, Six Sites, United States, 2000	MMWR Surveillance Summaries February 9, 2007 / 56(SS01);1-11	2/9/2007
0128	Shahbazian MD, Zoghbi HY.	Rett syndrome and MeCP2: linking epigenetics and neuronal function.	Am J Hum Genet. 2002 Dec;71(6):1259-72. Epub 2002 Nov 19. Review. No abstract available.	12/1/2002
0129	Shafer TJ, Meyer DA, Crofton KM.	Developmental neurotoxicity of pyrethroid insecticides: critical review and future research needs.	Environ Health Perspect. 2005 Feb;113 (2):123-36. Review.	2/1/2005
0130	Slotkin TA, Levin ED, Seidler FJ.	Comparative developmental neurotoxicity of organophosphate insecticides: effects on brain development are separable from systemic toxicity.	Environ Health Perspect. 2006 May;114 (5):746-51.	5/1/2006
0131	Stern AH	A revised probabilistic estimate of the maternal methyl mercury intake dose corresponding to a measured cord blood mercury concentration.	Environ Health Perspect. 2005 Feb;113 (2):155-63.	2/1/2005
0132	Stipanuk MH, Hirschberger LL, Londono MP, Cresenzi CL, Yu AF.	The ubiquitin-proteasome system is responsible for cysteine-responsive regulation of cysteine dioxygenase concentration in liver.	Am J Physiol Endocrinol Metab. 2004 Mar;286(3):E439-48. Epub 2003 Nov 25	3/1/2004
0133	Sugita M	The biological half-time of heavy metals. The existence of a third, slowest" component."	Int Arch Occup Environ Health. 1978 Jan 27;41(1):25-40.	1/27/1978
0134	Yao Y, Walsh WJ, McGinnis WR, Pratico D.	Altered vascular phenotype in autism: correlation with oxidative stress.	Arch Neurol. 2006 Aug;63(8):1161-4.	8/1/2006

0135	Olney JW, Wozniak DF, Jevtovic-Todorovic V, Farber NB, Bittigau P, Ikonomidou C.	Drug-induced apoptotic neurodegeneration in the developing brain.	Brain Pathol. 2002 Oct;12(4):488-98. Review.	10/1/2002
0136	Andersen HR, Nielsen JB, Grandjean P.	Toxicologic evidence of developmental neurotoxicity of environmental chemicals.	Toxicology. 2000 Apr 3;144(1-3):121-7. Review.	4/3/2000
0137	Weiss B.	Vulnerability to pesticide neurotoxicity is a lifetime issue.	Neurotoxicology. 2000 Feb-Apr;21(1-2):67-73. Review.	2/1/2000
0138	Adams JB, Romdalvik J, Ramanujam VM, Legator MS.	Mercury, lead, and zinc in baby teeth of children with autism versus controls.	J Toxicol Environ Health A. 2007 Jun;70 (12):1046-51.	6/1/2007
0139	Aposhian HV, Aposhian MM.	Arsenic toxicology: five questions.	Chem Res Toxicol. 2006 Jan;19(1):1-15. Review.	1/1/2006
0140	Persico AM, Militerni R, Bravaccio C, Schneider C, Melmed R, Trillo S, Montecchi F, Palermo MT, Pascucci T, Puglisi-Allegra S, Reichelt KL, Conciatori M, Baldi A, Keller F.	Adenosine deaminase alleles and autistic disorder: case-control and family-based association studies.	Am J Med Genet. 2000 Dec 4;96(6):784-90.	12/4/2000
0141	Tecchio F, Benassi F, Zappasodi F, Gialloreti LE, Palermo M, Seri S, Rossini PM.	Auditory sensory processing in autism: a magnetoencephalographic study	Biol Psychiatry. 2003 Sep 15;54(6):647-54.	9/15/2003
0142	Birke G, Johnels AG, Plantin LO, Sjostrand B, Skerfving S, Westermark T.	Studies on humans exposed to methyl mercury through fish consumption.	Arch Environ Health. 1972 Aug;25(2):77-91.	8/1/1972
0143	Demiralp T, Herrmann CS, Erdal ME, Ergenoglu T, Keskin YH, Ergen M, Beydagi H.	DRD4 and DAT1 polymorphisms modulate human gamma band responses.	Cereb Cortex. 2007 May;17(5):1007-19. Epub 2006 Jun 2.	5/1/2007
0144	Kelley E, Paul JJ, Fein D, Naigles LR.	Residual language deficits in optimal outcome children with a history of autism.	J Autism Dev Disord. 2006 Aug;36(6):807-28.	8/1/2006
0145	Mundy P, Crowson M.	Joint attention and early social communication: implications for research on intervention with autism.	J Autism Dev Disord. 1997 Dec;27(6):653-76. Review.	12/1/1997
0146	Poo-Arguelles P, Arias A, Vilaseca MA, Ribes A, Artuch R, Sans-Fito A, Moreno A, Jakobs C, Salomons G.	X-Linked creatine transporter deficiency in two patients with severe mental retardation and autism.	J Inherit Metab Dis. 2006 Feb;29(1):220-3.	2/1/2006
0147	Wilson TW, Rojas DC, Reite ML, Teale PD, Rogers SJ.	Children and adolescents with autism exhibit reduced MEG steady-state gamma responses.	Biol Psychiatry. 2007 Aug 1;62(3):192-7. Epub 2006 Sep 6.	8/1/2007
0148	Christine Knickmeyer R, Baron-Cohen S.	Fetal testosterone and sex differences.	Early Hum Dev. 2006 Dec;82(12):755-60. Epub 2006 Nov 1	12/1/2006
0149	Zoroglu SS, Armutcu F, Ozen S, Gurel A, Sivasli E, Yetkin O, Meram I.	Increased oxidative stress and altered activities of erythrocyte free radical scavenging enzymes in autism.	Eur Arch Psychiatry Clin Neurosci. 2004 Jun;254(3):143-7.	00/00/0000
0150	Fein D, Dixon P, Paul J, Levin H.	Brief report: pervasive developmental disorder can evolve into ADHD: case illustrations.	J Autism Dev Disord. 2005 Aug;35(4):525-34.	8/1/2005
0151	Zhao R, Chen Y, Tan W, Waly M, Sharma A, Stover P, Rosowsky A, Malewicz B, Deth RC.	Relationship between dopamine-stimulated phospholipid methylation and the single-carbon folate pathway.	J Neurochem. 2001 Aug;78(4):788-96.	8/1/2001
0152	Sharma A, Kramer ML, Wick PF, Liu D, Chari S, Shim S, Tan W, Ouellette D, Nagata M, DuRand CJ, Kotb M, Deth RC.	D4 dopamine receptor-mediated phospholipid methylation and its implications for mental illnesses such as schizophrenia.	Mol Psychiatry. 1999 May;4(3):235-46.	5/1/1999
0153	Feinberg AP	Phenotypic plasticity and the epigenetics of human disease.	Nature. 2007 May 24;447(7143):433-40. Review.	5/24/2007
0154	Dawson G, Zanolli K.	Early intervention and brain plasticity in autism.	Novartis Found Symp. 2003;251:266-74; discussion 274-80, 281-97.	1/1/2003
0155	Sakamoto M, Kakita A, de Oliveira RB, Sheng Pan H, Takahashi H.	Dose-dependent effects of methylmercury administered during neonatal brain spurt in rats.	Brain Res Dev Brain Res. 2004 Sep 17;152 (2):171-6.	9/17/2004
0156	Knickmeyer RC, Wheelwright S, Hoekstra R, Baron-Cohen S.	Age of menarche in females with autism spectrum conditions.	Dev Med Child Neurol. 2006 Dec;48 (12):1007-8.	00/00/0000

0157	Dobbing J, Sands J.	Comparative aspects of the brain growth spurt.	Early Hum Dev. 1979 Mar;3(1):79-83.	3/1/1979
0158	Ingudomnukul E, Baron-Cohen S, Wheelwright S, Knickmeyer R.	Elevated rates of testosterone-related disorders in women with autism spectrum conditions.	Horm Behav. 2007 May;51(5):597-604.	5/1/2007
0159	Reynolds A, Laurie C, Lee Mosley R, Gendelman HE.	Oxidative stress and the pathogenesis of neurodegenerative disorders.	Int Rev Neurobiol. 2007;82:297-325.	1/1/2007
0160	Tamm C, Duckworth J, Hermanson O, Ceccatelli S.	High susceptibility of neural stem cells to methylmercury toxicity: effects on cell survival and neuronal differentiation.	J Neurochem. 2006 Apr;97(1):69-78. Epub 2006 Mar 8.	4/1/2006
0161	Stoiber T, Bonacker D, Bohm KJ, Bolt HM, Thier R, Degen GH, Unger E.	Disturbed microtubule function and induction of micronuclei by chelate complexes of mercury(II).	Mutat Res. 2004 Oct 10;563(2):97-106.	10/10/2004
0162	Colomina MT, Roig JL, Torrente M, Vicens P, Domingo JL.	Concurrent exposure to aluminum and stress during pregnancy in rats: Effects on postnatal development and behavior of the offspring.	Neurotoxicol Teratol. 2005 Jul-Aug;27 (4):565-74.	7/1/2005
0163	Coluccia A, Borracci P, Giustino A, Sakamoto M, Carratu MR.	Effects of low dose methylmercury administration during the postnatal brain growth spurt in rats.	Neurotoxicol Teratol. 2007 Mar-Apr;29 (2):282-7. Epub 2006 Oct 25.	3/1/2007
0164	Gilbert SG, Rice DC, Burbacher TM.	Fixed interval/fixed ratio performance in adult monkeys exposed in utero to methylmercury.	Neurotoxicol Teratol. 1996 Sep-Oct;18 (5):539-46.	9/1/1996
0165	Sandler et al.	Secretin treatment for autism.	N Engl J Med. 2000 Apr 20;342(16):1216-7; author reply 1218	4/20/2000
0166	Dobbing J	The later growth of the brain and its vulnerability.	Pediatrics. 1974 Jan;53(1):2-6. Review.	1/1/1974
0167	Vidair CA.	Age dependence of organophosphate and carbamate neurotoxicity in the postnatal rat: extrapolation to the human.	Toxicol Appl Pharmacol. 2004 Apr 15;196 (2):287-302. Review.	4/15/2004
0168	Newbold RR	Lessons learned from perinatal exposure to diethylstilbestrol.	Toxicol Appl Pharmacol. 2004 Sep 1;199 (2):142-50. Review.	9/1/2004
0169	Myers GJ, Davidson PW, Palumbo D, Shamlaye C, Cox C, Cernichiari E, Clarkson TW.	Secondary analysis from the Seychelles Child Development Study: the child behavior checklist.	Environ Res. 2000 Sep;84(1):12-9.	9/1/2000
0170	Miller MT, Stromland K.	Teratogen update: thalidomide: a review, with a focus on ocular findings and new potential uses.	Teratology. 1999 Nov;60(5):306-21. Review. No abstract available.	11/1/1999
0171	Ball LK, Ball R, Pratt RD	An Assessment of Thimerosal Use in Childhood Vaccines	Pediatrics;107:1147-54	5/1/2001
0172	Grandjean P, Weihe P, White RF, Debes F	Cognitive Performance of Children Prenatally Exposed to Safe" Levels of Methylmercury"	Environmental Research;77:165-72	5/1/1998
0173	Grandjean P	Mercury Risks: Controversy or Just Uncertainty	Viewpoint;114:512-5	11/1/1999
0174	Leong CW, Syed NI, Lorscheider FL	Retrograde degeneration of neurite membrane structural integrity of nerve growth cones following in vitro exposure to mercury	Neuroreport;12:733-8	3/26/2001
0175	Magos L, Brown AW, Sparrow S, Bailey E, Snowden RT, Skipp WR	The comparative toxicology of ethyl- and methylmercury	Archives of Toxicology;57:260-67	1/1/1985
0176	Grandjean P, Weihe P, White RF, Debes F, Araki S, Yokoyama K, Murata K, Sorensen N, Dahl R, Jorgensen PJ	Cognitive deficit in 7-year-old children with prenatal exposure to methylmercury	Neurotoxicology and Teratology;19(6):417-28	1/1/1997
0177	Halsey NA	Limiting Infant Exposure to Thimerosal on Vaccines and Other Sources of Mercury	Journal of American Medical Association;282:1763-1766	11/10/1999
0178	Bakir F, Damluji SF, Amin-Zaki L, Murtadha M, Khalidi A, Al-Rawi NY, Tikriti S, Dhahir HI	Methylmercury Poisoning in Iraq: An Interuniversity Report	Science;181(96): 230-41	7/20/1973

0179	Grandjean P	Mercurial Uncertainties in Environmental Health	Annual of the New York Academy of Science;837:239-45	12/26/1997
0180	Grandjean P, Budtz-Jorgensen E, White R, Jorgensen PJ, Weihe P, Debes F, Keiding N	Methylmercury Exposure Biomarkers as Indicators of Neurotoxicity in Children Aged 7 Years	American Journal of Epidemiology;150 (3):301-5	8/1/1999
0181	Brunner M, Albertini S, Wurgler FE	Effects of 10 known or suspected spindle poisons in the in vitro porcine brain tubulin assembly assay	Mutagenesis;6(1):65-70	1/1/1991
0182	Clarkson TW	The Three Modern Faces of Mercury	Environmental Health Perspectives;110 (Suppl 1): 11-23	2/1/2002
0183	Davis LE, Kornfeld M, Mooney H, Fielder KJ, Haaland KY, Orrison WW, Cernichiari E, Clarkson TW	Methylmercury Poisoning: Long-Term Clinical, Radiological, Toxicological, and Pathological Studies of an Affected Family	Annals of Neurology;35(6): 680-6	6/1/1994
0184	Dally A	The Rise and Fall of Pink Disease	Society for the Social History of Medicine;10 (2): 291-304	1/1/1997
0185	Hargreaves RJ, Evans JG, Janota I, Magos L, Cavanagh JB	Persistent Mercury in Nerve Cells 16 Years After Metallic Mercury Poisoning	Neuropathology and Applied Neurobiology;14: 443-52	1/1/1988
0186	Takeda Y, Ukita T	Metabolism of Ethylmercuric Chloride-203 Hg in Rats	Toxicology and Applied Pharmacology;17 (1): 181-88	7/1/1970
0187	Rowland IR, Robinson RD, Doherty, RA	Effects of Diet on Mercury Metabolism and Excretion in Mice Given Methylmercury: Role of Gut Flora	Archives of Environmental Health;39(6): 401-8	11/1/1984
0188	Bjornberg KA, Vahter M, Berglund B, Niklasson B, Blennow M, Sandborgh-Englund G.	Transport of methylmercury and inorganic mercury to the fetus and breast-fed infant.	Environ Health Perspect. 2005 Oct;113 (10):1381-5.	10/1/2005
0189	Berglund M, Lind B, Bjornberg KA, Palm B, Einarsson O, Vahter M.	Inter-individual variations of human mercury exposure biomarkers: a cross-sectional assessment.	Environ Health. 2005 Oct 3;4:20.	10/3/2005
0190	Bjornberg KA, Vahter M, Petersson-Grawe K, Glynn A, Cnattingius S, Darnerud PO, Atuma S, Aune M, Becker W, Berglund M.	Methyl mercury and inorganic mercury in Swedish pregnant women and in cord blood: influence of fish consumption.	Environ Health Perspect. 2003 Apr;111 (4):637-41.	4/1/2003
0191	Ask K, Akesson A, Berglund M, Vahter M.	Inorganic mercury and methylmercury in placentas of Swedish women.	Environ Health Perspect. 2002 May;110 (5):523-6.	5/1/2002
0192	Thompson WW, Price C, Goodson B, Shay DK, Benson P, Hinrichsen VL, Lewis E, Eriksen E, Ray P, Marcy SM, Dunn J, Jackson LA, Lieu TA, Black S, Stewart G, Weintraub ES, Davis RL, DeStefano F; Vaccine Safety Datalink Team.	Early thimerosal exposure and neuropsychological outcomes at 7 to 10 years.	N Engl J Med. 2007 Sep 27;357(13):1281-92.	9/27/2007
0193	Offit PA	Thimerosal and vaccines--a cautionary tale.	N Engl J Med. 2007 Sep 27;357(13):1278-9.	9/27/2007
0194	Vahter M, Berglund M, Akesson A.	Toxic metals and the menopause.	J Br Menopause Soc. 2004 Jun;10(2):60-4. Review.	6/1/2004
0195	Dock L, Rissanen RL, Vahter M.	Demethylation and placental transfer of methyl mercury in the pregnant hamster.	Toxicology. 1994 Nov-Dec;94(1-3):131-42.	11/1/1994
0196	Sugarman SD	Cases in vaccine court--legal battles over vaccines and autism.	N Engl J Med. 2007 Sep 27;357(13):1275-7. No abstract available.	9/27/2007
0197	Mottet NK, Vahter ME, Charleston JS, Friberg LT.	Metabolism of methylmercury in the brain and its toxicological significance.	Met Ions Biol Syst. 1997;34:371-403. Review. No abstract available.	1/1/1997
0198	Lutz E, Lind B, Herin P, Krakau I, Bui TH, Vahter M.	Concentrations of mercury, cadmium and lead in brain and kidney of second trimester fetuses and infants.	J Trace Elem Med Biol. 1996 Jun;10(2):61-7.	6/1/1996
0199	Heyer NJ, Bittner AC Jr, Echeverria D, Woods JS.	A cascade analysis of the interaction of mercury and coproporphyrinogen oxidase (CPOX) polymorphism on the heme biosynthetic pathway and porphyrin production.	Toxicol Lett. 2006 Feb 20;161(2):159-66. Epub 2005 Oct 7.	2/20/2006

0200	Bjorkman L, Vahter M.	Comment on: "A cascade analysis of the interaction of mercury and coproporphyrinogen oxidase (CPOX) polymorphism on the heme biosynthetic pathway and porphyrin production" by Heyer et al. [Toxicol. Lett. 161 (2006) 159-166].	Toxicol Lett. 2007 Feb 28;169(1):91-2; author reply 93-4. Epub 2006 Nov 25.	2/28/2007
0201	Onishchenko N, Tamm C, Vahter M, Hokfelt T, Johnson JA, Johnson DA, Ceccatelli S.	Developmental exposure to methylmercury alters learning and induces depression-like behavior in male mice.	Toxicol Sci. 2007 Jun;97(2):428-37. Epub 2007 Jan 4.	6/1/2007
0202	Bjornberg KA, Vahter M, Grawe KP, Berglund M.	Methyl mercury exposure in Swedish women with high fish consumption.	Sci Total Environ. 2005 Apr 1;341(1-3):45-52.	4/1/2005
0203	Nordenhall K, Dock L, Vahter M.	Cross-fostering study of methyl mercury retention, demethylation and excretion in the neonatal hamster.	Pharmacol Toxicol. 1998 Mar;82(3):132-6.	00/00/0000
0204	Dock L, Rissanen RL, Vahter M.	Metabolism of mercury in hamster pups administered a single dose of 203Hg-labeled methyl mercury.	Pharmacol Toxicol. 1995 Jan;76(1):80-4.	1/1/1995
0205	Dave V, Mullaney KJ, Goderie S, Kimelberg HK, Aschner M.	Astrocytes as mediators of methylmercury neurotoxicity: effects on D-aspartate and serotonin uptake.	Dev Neurosci. 1994;16(3-4):222-31.	1/1/1994
0206	Aschner M, Rising L, Mullaney KJ.	Differential sensitivity of neonatal rat astrocyte cultures to mercuric chloride (MC) and methylmercury (MeHg): studies on K+ and amino acid transport and metallothionein (MT) induction.	Neurotoxicology. 1996 Spring;17(1):107-16.	4/1/1996
0207	Faro LR, Rodrigues KJ, Santana MB, Vidal L, Alfonso M, Duran R.	Comparative effects of organic and inorganic mercury on in vivo dopamine release in freely moving rats.	Braz J Med Biol Res. 2007 Oct;40(10):1361-5. Epub 2007 Jul 31	10/1/2007
0208	Morton NE.	Genetic epidemiology of hearing impairment.	Ann N Y Acad Sci. 1991;630:16-31. Review. No abstract available.	00/00/0000
0209	Ukita T, Takeda Y.	[Metabolic fate of mercury compounds]	Shinkei Kenkyu No Shimpo. 1969 Apr;13 (1):123-9. Japanese.	00/00/0000
0210	Grandjean P, Jørgensen PJ.	Measuring mercury concentration.	Epidemiology. 2005 Jan;16(1):133.	1/1/2005
0211	Rampersad GC, Suck G, Sakac D, Fahim S, Foo A, Denomme GA, Langler RF, Branch DR.	Chemical compounds that target thiol-disulfide groups on mononuclear phagocytes inhibit immune mediated phagocytosis of red blood cells.	Transfusion. 2005 Mar;45(3):384-93.	3/1/2005
0212	Tsubaki T and Irukayama K (Eds.)	Minamata Disease: Methylmercury Poisoning in Minamata and Niigata, Japan.	Elsevier, New York. 1977	00/00/0000
0213	Nordberg, GF, Fowler BA, Nordberg M, Friberg LT.	Handbook on the toxicology of metals,	3d edition, Academic Press 2007	00/00/0000
0214	Kjellstrom T, Kennedy P, and Mantell C	Physical and mental development of children with prenatal exposure to mercury from fish. Stage 1: Preliminary tests at age 4.	Report 3080. Solna, Sweden: National Swedish Environmental Protection Board.	00/00/0000
0215	Kjellstrom T, Kennedy P, Wallis S, Stewart A, Friberg L, and Lind B.	Physical and mental development of children with prenatal exposure to mercury from fish. Stage II: Interviews and psychological tests at age 6.	Report 3642. Solna, Sweden: National Swedish Environmental Protection Board.	1/1/1989
0216	Marques RC, Dorea JG, Bastos WR, Malm O	Changes in children hair-Hg concentrations during the first 5 years: Maternal, environmental and iatrogenic modifying factors.	Regulatory Toxicology and Pharmacology 49 (2007) 17–24	11/1/2007
0217	Makani S, Gollapudi S, Yel L, Chiplunkar S, Gupta S	Biochemical and molecular basis of thimerosal-induced apoptosis in T-cells: a major role of mitochondrial pathway	Genes and Immunity;3(5): 270-8	8/1/2002

0218	Burbacher TM, Sackett GP, Mottet NK	Methylmercury Effects on the Social Behavior of Macaca fascicularis Infants	Neurotoxicology and Teratology;12: 65-71	1/1/1990
0219	Ritvo ER, Freeman BJ, Scheibel AB, Duoong T, Robinson H, Guthrie D, Ritvo A	Lower Purkinje Cell Counts in the Cerebella of Four Autistic Subjects: Initial Findings of the UCLA-NSAC Autopsy Research Report	American Journal of Psychiatry;143(7): 862-66	7/1/1986
0220	Bailey A, Luthert P, Dean A, Harding B, Janota I, Montogomery M, Rutter M, Lantos P	A clinicopathological study of autism	Brain;121(Pt 5): 889-905	5/1/1998
0221	Allen G, Courchesne E	Differential Effects of Developmental Cerebellar Abnormality on Cognitive and Motor Functions in the Cerebellum: An FMRI Study of Autism	American Journal of Psychiatry;160(2): 262-73	2/1/2003
0222	Clements CJ, Ball LK, Ball R, Pratt RD	Thiomersal in Vaccines: Is Removal Warranted?	Drug Safety;24(8): 698-99	1/1/2001
0223	Pichichero ME, Cernichiari E, Lopreiato J, Treanor J	Mercury concentrations and metabolism in infants receiving vaccines containing thiomersal: a descriptive study	Lancet;360(9347): 1737-40	11/30/2002
0224	Burbacher TM, Rodier PM, Weiss B	Methylmercury Developmental Neurotoxicity: A Comparison of Effects in Humans and Animals	Neurotoxicology and Teratology;12: 191-202	5/1/1990
0225	Bauman ML	Microscopic Neuroanatomic Abnormalities in Autism	Pediatrics;87(5 Pt 2): 791-6	5/1/1991
0226	Schober SE, Sinks TH, Jones RL, Bolger PM, McDowell M, Osterloh J, Garrett ES, Canady RA, Dillon CF, Sun Y, Joseph CB, Mahaffey KR	Blood Mercury Levels in US Children and Women of Childbearing Age, 1999-2000	Journal of American Medical Association;289(13): 1667-74	4/2/2003
0227	Cheung MK, Verity MA	Experimental Methyl Mercury Neurotoxicity: Locus of Mercurial Inhibition of Brain Protein Synthesis In Vivo and In Vitro	Journal of Neurochemistry;44(6): 1799-1808	6/1/1985
0228	Committee on the Toxicological Effects of Methylmercury	Toxicological Effects of Methylmercury	National Research Council;	1/1/2000
0229	Suzuki T, Miyama T, Katsunuma H	Comparative Study of Bodily Distribution of Mercury in Mice After Subcutaneous Administration of Methyl, Ethyl and n-Propyl Mercury Acetates	Japanese Journal of Experimental Medicine;33(5): 277-82	1/1/1963
0230	Stehr-Green P, Tull P, Stellfield M, Mortensen P, Simpson D	Autism and Thimerosal-Containing Vaccines: Lack of Consistent Evidence for an Association	American Journal of Preventive Medicine;25 (2): 101-6	8/1/2003
0231	Institute of Medicine	Immunization Safety Review Committee: Thimerosal-Containing Vaccines and Neurodevelopmental Outcomes Public Meeting	National Academy of Sciences;	7/13/2001
0232	Zhang J	Clinical Observations in Ethyl Mercury Chloride Poisoning	American Journal of Industrial Medicine;5 (3): 251-8	1/1/1984
0233	Crump KS, Van Landingham C, Shamlaye C, Cox C, Davidson PW, Myers GJ, Clarkson TW	Benchmark Concentrations for Methylmercury Obtained from the Seychelles Child Development Study	Environmental Health Perspectives;108(3): 257-63	3/1/2000
0234	Folstein SE, PivenJ	Etiology of Autism: Genetic Influences	Pediatrics;87(5 Pt 2): 767-73	5/1/1991
0235	CDC	Vaccination Coverage Among Children Entering School - United States, 2002-03 School Year	Morbidity and Mortality Weekly Report;52 (33): 791-3	8/22/2003

0236	Baird G, Cass H, Slonims V	Clinical Review: Diagnosis of Autism	British Medical Journal;327(7413): 488-93	8/30/2003
0237	Holmes AS, Blaxill MF, Haley BE	Reduced Levels of Mercury in First Baby Haircuts of Autistic Children	International Journal of Toxicology;22(4): 277-85	7/1/2003
0238	Hviid A, Stellfeld M, Wohlfahrt J, Melbye M	Association Between Thimerosal-Containing Vaccine and Autism	Journal of American Medical Association;290(13): 1763-66	10/1/2003
0239	Madsen KM, Lauritsen MB, Pederson CB, Thorsen P, Plesner A, Andersen PH, Mortensen PB	Thimerosal and the Occurrence of Autism: Negative Ecological Evidence From Danish Population-Based Data	Pediatrics;112(3): 604-6	9/1/2003
0240	Yokoo EM, Valente JG, Grattan L, Schmidt SL, Platt I, Silbergeld EK	Low Level Methylmercury Exposure Affects Neuropsychological Function in Adults	Environmental Health: A Global Access Science Source;2(1): 1-11	6/4/2003
0241	Myers GJ, Davidson PW, Cox C, Shamlaye CF, Palumbo D, Cernichiari E, Sloane-Reeves J, Wilding GE, Kost J, Huang L, Clarkson TW	Prenatal methylmercury exposure from ocean fish consumption in the Seychelles child development study	Lancet;361(9370): 1686-92	5/17/2003
0242	Barregard L, Lindstedt G, Schutz A, Sallsten G	Endocrine function in mercury exposed cloralkali workers	Occupational and Environmental Medicine;51: 536-40	1/1/1994
0243	Parry JM	An evaluation of the use of in vitro tubulin polymerisation, fungal and wheat assays to detect the activity of potential chemical aneugens	Mutation Research;287: 23-8	1/1/1993
0244	Bradstreet J, Geier DA, Kartzinel JJ, Adams JB, Geier MR	A Case-Control Study of Mercury Burden in Children with Autistic Spectrum Disorders	Journal of American Physicians and Surgeons;8(3): 76-9	6/1/2003
0245	Jick H, Kaye JA	Epidemiology and Possible Causes of Autism	Pharmacotherapy;23(12): 1524-30	1/1/2003
0246	Qvarnstrom J, Lambertsson L, Havarinasab S, Hultman P, Frech W	Determination of Methylmercury, Ethylmercury, and Inorganic Mercury in Mouse Tissues, Following Administration of Thimerosal, by Species-Specific Isotope Dilution GC - Inductively Coupled Plasma-MS	Analytical Chemistry;75(16): 4120-24	1/1/2003
0247	Verstraeten T, Davis RL, DeStefano F, Lieu TA, Rhodes PH, Black SB, Shinefield H, Chen RT	Safety of Thimerosal-Containing Vaccines: A Two-Phased Study of Computerized Health Maintenance Organization Databases	Pediatrics;112(5): 1039-49	11/5/2003
0248	Kates WR, Burnette CP, Eliez S, Strunge LA, Kaplan D, Landa R, Reiss AL, Pearlson GD	Neuroanatomic Variation in Monozygotic Twin Pairs Discordant for the Narrow Phenotype for Autism	American Journal of Psychiatry;161: 539-46	1/1/2004
0249	Stajich GV, Lopez GP, Harry SW, Sexson WR	Iatrogenic exposure to mercury after hepatitis B vaccination in preterm infants	Journal of Pediatrics;136: 679-81	1/1/2000
0250	Sweeten TL, Posey DJ, Shankar S, McDougle CJ	High Nitric Oxide Production in Autistic Disorder: A Possible Role for Interferon-gamma	BIOLOGY PSYCHIATRY;55: 434-7	1/1/2004
0251	Burbacher TM, Shen DD, Lalovic B, Grant KS, Sheppard L, Damian D, Ellis S, Liberato N	Chronic maternal methanol inhalation in nonhuman primates (Macaca fascicularis): Exposure and toxicokinetics prior to and during pregnancy	NEUROTOXICOLOGY AND TERATOLOGY;26(2): 201-21	3/1/2004
0252	Opitz H, Schweinsberg F, Grossman T, Wendt-Gallitelli MF, Meyermann R	Demonstration of mercury in the human brain and other organs 17 years after metallic mercury exposure	CLINICAL NEURPATHOLOGY;15(3): 139-44	1/1/1996

0253	Baskin DS, Ngo H, Didenko VV	Thimerosal Induces DNA Breaks, Caspase-3 Activation, Membrane Damage, and Cell Death in Cultured Human Neurons and Fibroblasts	TOXICOLOGICAL SCIENCES;74(2): 361-68	8/1/2003
0254	Edelson SM, Rimland B, Grandin T	Response to Goldstein's Commentary: Interventions to Facilitate Auditory, Visual, and Motor Integration: Show Me the Data" "	JOURNAL OF AUTISM AND DEVELOPMENTAL DISORDERS;33(5): 551-55	1/1/2003
0255	Hightower JM, Moore D	Mercury Levels in High-End Consumers of Fish	ENVIRONMENTAL HEALTH PERSPECTIVES;111(4): 604-8	4/1/2003
0256	Krause H, He X, Gershwin E, Shoenfeld Y	Brief Report: Immune Factors in Autism: A Critical Review	JOURNAL OF AUTISM AND DEVELOPMENTAL DISORDERS;32(4): 337-45	8/1/2002
0257	Waly M, Olteanu H, Banerjee R, Choi S, Mason JB, Parker BS, Sukumar S, Shim S, Sharma A, Benzecry JM, Power-Charnitsky VA, Deth RC	Activation of methionine synthase by insulin-like growth factor-1 and dopamine: a target for neurodevelopmental toxins and thimerosal	MOLECULAR PSYCHIATRY;9: 358-70	1/1/2004
0258	Pendergrass JC, Haley BE, Vimy MJ, Winfield SA, Lorscheider FL	Mercury Vapor Inhalation Inhibits Binding of GTP to Tubulin in Rat Brain: Similarity to a Molecular Lesion in Alzheimer Diseased Brain	NEUROTOXICOLOGY;18(2): 315-24	1/1/1997
0259	Blaxill MF, Redwood L, Bernard S	Thimerosal and autism? A plausible hypothesis that should not be dismissed	MEDICAL HYPOTHESES;62: 788-94	1/1/2004

CERTIFICATE OF SERVICE

I hereby certify that on November 30, 2007, I served the foregoing **Expert Report Re Alexander Krakow from Elizabeth A. Mumper, M.D.** on the following individual(s):

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