

The truth behind the vaccine cover-up

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Abstract

On June 7-8, 2000 a secret conference was held at the Simpsonwood Conference Center in Norcross, Georgia to discuss a study examining the link between increasing doses of Thimerosal and neurodevelopmental disorders. The study was done using the Vaccine Safety Datalink (VSD) database, an official governmental data bank collecting patient vaccination information on the children from the health maintenance organizations (HMOs) being paid to participate. Attending were 51 scientists, representatives of pharmaceutical vaccine manufacturing companies and a representative of the World Health Organization; the public and the media were unlawfully excluded. The conclusions of this meeting were quite startling, since it confirmed a dose-response link between Thimerosal and neurodevelopmental disorders that held up to rigorous statistical analyses.

In their discussion, they make plain why the meeting was held in secret: the conclusions would have destroyed the public's confidence in the vaccine program, and more importantly, their faith in vaccine authorities. When the results of this study were published three years later in the journal *Pediatrics*, the "problem" had been fixed, in that by adding another set of data from a third HMO, reorganizing the criteria for inclusion and restructuring the patient groupings, a less than statistically significant link was demonstrated. In my analysis I discuss the more outrageous statements made during the meeting and how accepted experts in the field of mercury neurotoxicity were excluded from the meeting.

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I was asked to write a paper on some of the newer mechanisms of vaccine damage to the nervous system, but in the interim I came across an incredible document that should blow the lid off the cover-up being engineered by the pharmaceutical companies in conjunction with powerful governmental agencies.

It all started when a friend of mine sent me a copy of a letter from Congressman David Weldon, M.D. to the director of the CDC, Dr Julie L. Gerberding, in which Congressman Weldon alludes to a study by a Doctor Thomas Verstraeten, then representing the CDC, on the connection between infant exposure to Thimerosal-containing vaccines and neurodevelopmental injury. In this shocking letter, Congressman Weldon refers to Dr. Verstraeten's study, which looked at the data from the Vaccine Safety Datalink and found a statistically significant correlation between Thimerosal exposure via vaccines and several neurodevelopmental disorders including tics, speech and language delays, and possibly ADD.

Congressman Weldon questions the CDC director as to why, following this meeting, Dr. Verstraeten published his results almost four years later in the journal *Pediatrics* to show just the opposite, that is, that except for tics, there was no statistically significant correlation to any neurodevelopmental problems related to Thimerosal exposure in infants. In this letter, Congressman Weldon refers to a report of the minutes of this meeting held in 2000, which exposes some incredible statements by the "experts" making up this study group. The group's purpose was to evaluate and discuss Dr. Verstraeten's interim results and data and make recommendations that would eventually lead to possible alterations in existing vaccine policy.

I contacted Congressman Weldon's legislative assistant and he kindly sent me a complete copy of this report. Now, as usual in these cases, the government did not give up this report willingly; it required a Freedom of Information Act lawsuit to pry it loose. Having read the report twice and having carefully ana-

lyzed it, I can see why they did not want any outsiders to see it. It is a bombshell, as you shall see.

To help the reader understand the importance of this report, in this analysis I will not only describe and discuss this report, but also will frequently quote their words directly and supply the exact page number so others can see for themselves.

The official title of the meeting was the "**Scientific Review of Vaccine Safety Datalink Information.**" This conference, held on June 7-8, 2000, at Simpsonwood Retreat Center in Norcross, Georgia, assembled 51 scientists and physicians, five of whom represented vaccine manufacturers. These included Smith Kline Beecham, Merck, Wyeth, North American Vaccine and Aventis Pasteur.

During this conference, these scientists focused on the study of the Datalink material, whose main author was Dr. Thomas Verstraeten and who identified himself as working at the National Immunization Program of the CDC. It was discovered by Congressman Weldon that Dr. Verstraeten left the CDC shortly after this conference to work for the Belgian operations of the pharmaceutical maker GlaxoSmithKline—a recurring regulated agency/regulated-industry pattern that has been given the name "a revolving door". It is also interesting to note that GlaxoSmithKline was involved in several lawsuits over complications secondary to their vaccines.

To start off the meeting, Dr. Roger Bernier, Associate Director for Science in the National Immunization Program (CDC), related some pertinent history. He stated that Congressional action in 1997 required that the FDA review mercury being used in drugs and biologics (vaccines). To meet this mandate, the FDA called for all the registered manufacturers of drugs, including vaccines, to submit the mercury information about their drug products. He notes that a group of European regulators and manufacturers met on April 1999 and acknowledged the situation but made no recommendations or changes. In other words, it was all for show.

At this point Dr. Bernier makes an incredible statement (page 12). He says, **“In the United States there was a growing recognition that cumulative exposure may exceed some of the guidelines.”** By guidelines, he is referring to guidelines for mercury exposure safety levels set by several regulatory agencies. The three guidelines were set by the ATSDR (The Agency for Toxic Substances and Disease Registry), the FDA (Food and Drug Administration), and the EPA (Environmental Protection Agency). The most consistently violated safety guideline was the mercury-in-food limit set by the EPA. He further explains that he is referring to children being exposed to Thimerosal in vaccines.

Based on this realization that they were violating safety guidelines, he says that this then **“resulted in a joint statement of the Public Health Service (PHS) and the American Academy of Pediatrics (AAP) in July of last year (1999), which stated that as a long term goal, it was desirable to remove mercury from vaccines because it was a potentially preventable source of exposure.”** (Page 12)

As an aside, one has to wonder, where was the Public Health Service and American Academy of Pediatrics during all the years of mercury use in vaccines and why didn't they know that, number one, they were exceeding regulatory safety levels and secondly, why weren't they aware of the extensive literature showing deleterious effects on the developing nervous system of babies? As we shall see, even these “experts” seem to be cloudy on the mercury literature.

Dr. Bernier notes that in August 1999 a public workshop was held in the Lister Auditorium in Bethesda by the National Vaccine Advisory Group and the Interagency Working Group on Vaccines to consider Thimerosal risk in vaccine use. And based on what was discussed in that conference, Merck, one manufacturer of a U.S.-licensed hepatitis B vaccine (HepB) moved to license a “no Thimerosal” formulation for young children but kept making and distributing its Thimerosal-preserved HepB formulation into the mid 2000s while GlaxoSmithKline, the other U.S.-licensed HepB maker apparently moved to license a reduced-Thimerosal formulation; apparently, neither firm moved to recall the existing Thimerosal-preserved doses. It is interesting to note that the media took very little interest in what was learned at that meeting and it may have been a secret meeting—probably because it was also a meeting that was not, as required by law, announced publicly. As we shall see, there is a reason why they struggle to keep the contents of all these meetings secret from the public.

Dr. Bernier then notes on page 13 that on October 1999 the Advisory Committee on Immunization Practices (ACIP) **“looked this situation over again and did not express a preference for any of the vaccines that were Thimerosal free.”** In this discussion he further notes that the ACIP concluded that the Thimerosal-containing vaccines could be used but the **“long-term goal”** is to try to remove Thimerosal as soon as possible.

Now, we need to stop and think about what has transpired. We have an important group here, the ACIP that essentially plays a role in vaccine policy affecting tens of millions of children every year. And, we have evidence from the Thimerosal meeting in 1999 that the potential for serious injury to the infant's brain is so serious that a recommendation for removal

becomes policy. In addition, they are all fully aware that tiny babies are receiving mercury doses that exceed even EPA safety limits for adults, yet all they can say is that we must “try to remove Thimerosal as soon as possible.” Do they not worry about the tens of millions of babies who will continue receiving Thimerosal-containing vaccines until they can get around to stopping the use of Thimerosal?

It should also be noted that it is a misnomer to say “removal of Thimerosal” since they are not removing anything. They just plan to stop adding it to future vaccines once they use up existing stocks, which entails millions of doses. And incredibly, the government allows them to do it. Even more incredibly, the **American Academy of Pediatrics** and the **American Academy of Family Practice** similarly endorse this insane policy. In fact, they specifically state that children should continue to receive the Thimerosal-containing vaccines until new Thimerosal-free vaccines can be manufactured at the will of the manufacturers. It was disclosed that Thimerosal was in all influenza, HepB and DPT vaccines, as well as most DtaP vaccines

Had vaccine safety been their primary concern, as it should be, the most obvious solution was to recommend only single-dose vials, which require no preservative, coupled with a ban on the use of any mercury compound in the manufacture of all drugs. So, why didn't they make this or at least a “no Thimerosal” recommendation? “Oh,” they exclaim, “it would add to the cost of the vaccine.” Of course, we are only talking about a few dollars per vaccine at most, certainly worth the health of your child's brain and future. They could use some of the hundreds of millions of dollars they waste on vaccine promotion every year to cover the cost for the poor. Yet, that would cut into some fat-cat's profit and we can't have that.

As they begin to concentrate on the problem at hand we first begin to learn that the greatest problem with the meeting is that they know virtually nothing about what they are doing. On page 15, for example, they admit that there is very little pharmacokinetic data on ethylmercury, the form of mercury in Thimerosal. In fact, they say there is no data on excretion and the data on toxicity is sparse; yet it is recognized to cause hypersensitivity, neurological problems, and even death, and it is known to easily pass the blood-brain barrier and the placental barrier.

Therefore, what they are admitting is that we have a form of mercury that has been used in vaccines since the 1930s and no one has bothered to study the effects on biological systems, especially the brains of infants. Their defense throughout this conference is **“we just don't know the effects of ethylmercury.”** As a solution, they resort to studies on methylmercury because there are thousands of studies on this form of mercury. The major source of this form is seafood consumption.

It takes them awhile to get the two forms of mercury straight, since for several pages of the report they say methylmercury is in Thimerosal rather than ethylmercury. They can be forgiven for this. On page 16, Dr. Johnson, an immunologist and pediatrician at the University of Colorado School of Medicine and the National Jewish Center for Immunology and Respiratory Medicine, notes that he would like to see the incorporation of wide margins of safety, that is **3 to 10-fold margins of safety to “account for data uncertainties.”** What he means is that there are so many things we do not know about this toxin

that we had better use very wide margins of safety. For most substances the FDA uses a 100-fold margin of safety.

The reason for this, which they do not mention, is that in a society of hundreds of millions of people, there are groups of people who are much more sensitive to the toxin than others. For instance, the elderly, the chronically ill, the nutritionally deficient, small babies, premature babies, those on certain medications and those with inborn defects in detoxification, just to name a few. In fact, premature babies and low birth weight babies were excluded from the main study since (1) some had the highest mercury levels, (2) these would be hard to study, and (3) they had the most developmental problems possibly related to the mercury. In other words, including these babies might endanger their claims of safety.

It should also be noted that all participants at this conference ignored the differences in total mercury exposure among infants and small children living in different geographical areas. For example, a child's mother who had dental amalgams, who regularly eats high-methylmercury-containing seafood and lives in an area with high atmospheric mercury levels will have much higher total mercury exposure than one exposed to little dietary, dental, and environmental mercury.

Also on page 16, Dr. Johnson makes an incredible statement, one that defines the problem we have in this country with the promoters of these vaccines. He states, **“As an aside, we found a cultural difference between vaccinologist and environmental health people in that many of us in the vaccine arena have never thought about uncertainty factors before. We tend to be relatively concrete in our thinking.”** Then he says, **“One of the big cultural events in that meeting... was when Dr. Clarkson repetitively pointed out to us that we just didn't get it about uncertainty, and he was actually quite right.”**

This is an incredible admission. First, what is a “vaccinologist”? Do you go to school to learn to be one? How many years of residency training are required to be a “vaccinologist”? Are there board exams? It's an ill-defined term used to describe people who are obsessed with vaccines, not that they actually study the effects of the vaccines, as we shall see throughout this meeting. Most important is the admission by Dr. Johnson that he and his fellow “vaccinologists” are so blinded by their obsession with forcing vaccines on society that they never even considered that there might be factors involved that could greatly affect human health, the so-called **“uncertainties”**. Further, he admits that he and his fellow “vaccinologists” like to think in concrete terms; that is, they are very narrow in their thinking and wear blinders that prevent them from seeing the numerous problems occurring with large numbers of vaccinations in infants and children. Their goal in life is to vaccinate as many people as possible with an ever-growing number of vaccines.

On page 17 his **“concrete thinking”** once again takes over. He refers to the Bethesda meeting on Thimerosal safety issues and says, **“there was no evidence of a problem, only a theoretical concern that young infants' developing brains were being exposed to an organomercurial.”** Of course, as I shall point out later, it is a lot more than a “theoretical concern”. He then continues by saying, **“We agree that while there was no evidence of a problem, the increasing number of vaccine**

injections given to infants, was increasing the theoretical mercury exposure risk.”

It's hard to conceive of a true scientist not seeing the incredible irony of these statements. The medical literature abounds with studies on the deleterious effects of mercury on numerous enzymes, mitochondrial energy production, synaptic function, dendritic function, neurotubule dissolution and excitotoxicity—yet he sees only a “theoretical risk” associated with an ever increasing addition of Thimerosal-containing vaccines. It is also important to note that these geniuses never even saw a problem in the first place, it was pressure from outside scientists, parents of affected children, and groups representing them that pointed out the problem. They were, in essence, reacting to pressure from outside the “vaccinologist club” and, therefore, had not discovered internally that a problem even “might” exist.

In fact, if these outside groups had not become involved, these “vaccinologists” would have continued to add more and more mercury-containing vaccines to the list of required vaccines. Only when the problem became so obvious, that is of epidemic proportion and the legal profession became involved, would they have even noticed there was a problem. This is a recurring theme in the government's regulatory agencies, as witnessed with fluoride, aspartame, MSG, dioxin and pesticides issues.

It is also interesting that Dr. Johnson did admit that the greatest risk was among low birth weight infants and premature infants. Now why would that be if there existed such a large margin of safety with mercury used in vaccines? Could just a few pounds of body weight make such a dramatic difference? In fact, it does, but it also means that normal birth weight children, especially those near the low range of normal birth weight, are also in greater danger. It also would mean that children receiving doses of mercury higher than the 75 ug in this study would be at high risk as well because their dose, based on body weight, would be comparable to that of the low birth weight child receiving the lower dose. This is never even considered by these “vaccinologist” experts who decide policy for your children.

Now this next statement should shock everyone, but especially the poor who might believe that these “vaccinologist” experts have their best interest in mind. Dr. Johnson says on page 17, **“We agree that it would be desirable to remove mercury from U.S. licensed vaccines, but we did not agree that this was a universal recommendation that we would make because of the issue concerning preservatives for delivering vaccines to other countries, particularly developing countries, in the absence of hard data that implied that there was in fact a problem.”**

So, here you have it. The data is convincing enough that the American Academy of Pediatrics and the American Academy of Family Practice, as well as the regulatory agencies and the CDC, all recommend its removal as quickly as possible because of concerns of adverse effects of mercury on brain development, but not for the children in the developing countries. I thought the whole idea of child health programs in the United States directed toward the developing world was to give poor children a better chance in an increasingly competitive world. This policy being advocated would increase the neurodevelopmental problems seen in poor children of developing countries

and of this country, impairing their ability to learn and develop competitive minds. Remember, there was a representative of the World Health Organization (WHO), Dr. John Clements, serving on this panel of “experts” who apparently never challenged this statement made by Dr. Johnson.

It also needs to be appreciated that children in developing countries are at a much greater risk of complications from vaccinations and from mercury toxicity than children in developed countries. This is because of poor nutrition, concomitant parasitic and bacterial infections, and a high incidence of low birth weight in these children. We are now witnessing a disaster in African countries caused by the use of older live virus polio vaccines that has now produced an epidemic of vaccine related polio, that is, polio caused by the vaccine itself. In fact, in some African countries, polio was not seen until the vaccine was introduced.

The WHO and the “vaccinologist experts” from this country now justify a continued polio vaccination program with this dangerous vaccine on the basis that now that they have created the epidemic of polio, they cannot stop the program. In a recent article it was pointed out that this is the most deranged reasoning, since more vaccines will mean more vaccine-related cases of polio. But then, “vaccinologists” have difficulty with these “uncertainties”. (Jacob JT. A developing country perspective on vaccine-associated paralytic poliomyelitis. Bulletin WHO 2004; 82:53-58. See commentary by D.M. Salisbury at the end of the article.)

Then Dr. Johnson again emphasizes the philosophy that the health of children is secondary to “the program” when he says, **“We saw some compelling data that delaying the birth dose of HepB vaccine would lead to significant disease burden as a consequence of missed opportunity to immunize.”** This implies that our children would be endangered from the risk of hepatitis B should the vaccine program stop vaccinating newborns with the HepB vaccine.

In fact, this statement is not based on any risk to U.S. children at all and he makes that plain when he states, **“that the potential impact on countries that have 10% to 15% newborn hepatitis B exposure risk was very distressing to consider.”** (page 18) In other words the risk is not to normal U.S. children but to children in developing countries. In fact, hepatitis B is not a risk until the teenage years and after in this country. The only at-risk children are those born to drug abusing parents, to mothers infected with hepatitis B, or to HIV infected parents.

Infectious disease authorities know that 90% of people infected with this virus either have a mild infection and recover or have no symptoms at all. Even pregnant women infected with the virus have only a 20% chance of transmitting the virus to their babies. According to statistics, the United States has one of the lowest rates of hepatitis B infection in the world, with only 53 cases of the infection being reported in children among 3.9 million births. In fact, there were three times as many serious complications from the vaccine as there were children who contracted the disease. The real reason for vaccinating the newborns is to capture them before they can escape the *vaccinologists’* vaccine program.

This is a tactic often used to scare mothers into having their children vaccinated. For example, vaccinologists say that if

children are not vaccinated against measles, millions of children could die during a measles epidemic. They know this is nonsense. What they are using are examples taken from developing countries with poor nutrition and poor immune function in which such epidemic death can occur. In the United States we would not see this because of better nutrition, better health facilities and better sanitation. In fact, most deaths seen during measles outbreaks in the United States occur in children in whom vaccination was contraindicated, when the vaccine did not work or in children with chronic, immune-suppressing diseases.

In fact, most studies show that children catching the measles or other childhood diseases have been either fully immunized or partially immunized. The big secret among “vaccinologists” is that anywhere from 20 to 50% of children are not resistant to the diseases for which they have been vaccinated.

Also on page 18, Dr. Johnson tells the committee that it was Dr. Walter Orenstein who **“asked the most provocative question which introduced a great deal of discussion. That was, should we try to seek neurodevelopmental outcomes from children exposed to varying doses of mercury by utilizing the Vaccine Safety Datalink data from one or more sites.”** (page 18)

I take from this no one had ever even thought of looking at the data that had just been sitting there all these years unreviewed. Children could have been dropping like flies or suffering from terrible neurodevelopmental defects caused by the vaccine program and no one in the government would have known. In fact, that is exactly what the data suggested was happening, at least as regards neurodevelopmental delays.

We should also appreciate that the government sponsored two conferences on the possible role of metals, aluminum and mercury, being use in vaccines, without any change in vaccine policy occurring after the meetings. These meetings were held a year before this year’s 2000 meeting and before any examination of the data which was being held tightly by the CDC (which was denied to other independent, highly qualified researchers). I will talk more about what was discussed in the aluminum conference later. It is very important and is only briefly referred to in this conference for a very good reason. If the public knew what was discussed at the aluminum meeting no one would ever get a vaccination using the presently manufactured types of vaccines again.

Despite what was discussed in the aluminum meeting and the scientific literature on the neurotoxicity of aluminum, Dr. Johnson makes the following remark; **“Aluminum salts have a very wide margin of safety. Aluminum and mercury are often simultaneously administered to infants, both at the same site and at different sites.”** Also on page 20, he states, **“However, we also learned that there is absolutely no data, including animal data, about the potential for synergy, additivity or antagonism, all of which can occur in binary metal mixtures...”**

It is important here to appreciate a frequently used deception by those who are trying to defend an indefensible practice. They use the very same language just quoted, that is, that there is no data to show, etc., etc. They intend it to convey the idea that the issue has been looked at and studied thoroughly and no toxicity was found. In truth, it means that no one has looked at

this possibility and there have been no studies that would give us an answer one way or the other.

In fact, we know that aluminum is a significant neurotoxin and that it shares many common mechanisms with mercury as a neurotoxin. For example, they are both toxic to neuronal neurotubules, interfere with antioxidant enzymes, poison DNA repair enzymes, interfere with mitochondrial energy production, block the glutamate reuptake proteins (GLT-1 and GLAST), bind to DNA and interfere with neuronal membrane function. Toxins that share toxic mechanisms are almost always additive and frequently synergistic in their toxicity. So, Dr. Johnson's statement is sheer nonsense.

A significant number of studies have shown that both of these metals play a significant role in all of the neurodegenerative disorders. It is also important to remember, both of these metals accumulate in the brain and spinal cord. This makes them accumulative toxins and therefore much more dangerous than rapidly excreted toxins.

To jump ahead, on page 23 Dr. Tom Sinks, Associate Director for Science at the National Center for Environmental Health at the CDC and the Acting Division Director for Division of Birth Defects, Developmental Disabilities and Health, asks, **“I wonder is there a particular health outcome that is related to aluminum salts that may have anything that we are looking at today?”** Dr. Martin Meyers, Acting Director of the National Vaccine Program Office, answers, **“No, I don't believe there are any particular health concerns that were raised.”** This is after an aluminum conference held the previous year that did, indeed, find significant health concerns and extensive scientific literature showing aluminum to be of great concern.

On page 24 Dr. William Weil, a pediatrician representing the Committee on Environmental Health of the American Academy of Pediatrics, brings some sense to the discussion by reminding them that, **“there are just a host of neurodevelopmental data that would suggest that we've got a serious problem. The earlier we go, the more serious the problem.”** Here he means that the further back you go during the child's brain development, the more likely the damage to the infant. I must give him credit; at least he briefly recognized that a significant amount of brain development does take place later—that is after birth. He also reminds his colleagues that aluminum produced severe dementia and death in dialysis cases. He concludes by saying, **“To think there isn't some possible problem here is unreal.”** (page 25)

Not to let it end there, Dr. Meyers adds, **“We held the aluminum meeting in conjunction with the metal ions in biology and medicine meeting, we were quick to point out that in the absence of data we didn't know about additive or inhibitory activities.”** Once again we see the “no data” ploy. There is abundant data on the deleterious effects of aluminum on the brain, a significant portion of which came out in that very meeting.

Dr. Johnson also quotes Dr. Thomas Clarkson, who identifies himself as associated with the mercury program at the University of Rochester, as saying that delaying the HepB vaccine for 6 months or so would not affect the mercury burden (page 20). He makes the correct conclusion when he says, **“I would have thought that the difference was in the timing. That is**

you are protecting the first six months of the developing central nervous system.”

Hallelujah, for a brief moment I thought that they had stumbled on one of the most basic concepts in neurotoxicology. Then Dr. Meyers dashed my hopes by saying that single, separated doses would not affect blood levels at all. At this juncture, we need a little enlightenment. It is important to appreciate that mercury is a fat soluble metal. That is, it is stored in the body's fat. The brain contains 60% fat and therefore is a common site for mercury storage. Now, they establish in this discussion that about half of methylmercury is excreted over several months when ingested. A recent study found that ethylmercury has a half-life of 7 days.

A significant proportion of the mercury will enter the brain (it has been shown to easily pass through the blood-brain barrier) where it is stored in the phospholipids (fats). It should also be appreciated that when cleared from the blood, the ethylmercury enters the bowel, where it is re-circulated many times over—each time depositing more mercury in the child's brain.

With each new vaccine dose, and remember, at the time of this conference, these children were receiving as many as 36 doses of these vaccines by age 2 years, many of which contained mercury—another increment of mercury is added to the brain storage depot. This is why we call mercury an accumulative poison. They never once, not once, mention this vital fact throughout the entire conference. Not once. Moreover, they do so for a good reason; it gives the unwary, those not trained in neuroscience, assurance that all that matters here is blood levels.

In fact, on page 163, Dr. Robert Brent, a developmental biologist and pediatrician at Thomas Jefferson University and Dupont Hospital for Children, says that we don't have data showing accumulation and **“that with the multiple exposures you get an increasing level, and we don't know whether that is true or not.”** He redeems himself somewhat by pointing out that some of the damage is irreversible and with each dose more irreversible damage occurs and in that way it is accumulative.

On page 21 Dr. Thomas Clarkson makes the incredible statement implying that he knows of no studies that show exposure to mercury after birth or at six months would have deleterious effects. Dr. Isabelle Rapin, a neurologist for children at Albert Einstein College of Medicine, follows up by saying that **“I am not an expert on mercury in infancy”** but she knows it can affect the nerves (peripheral nervous system). So, here is one of our experts admitting that she knows little about the effects of mercury on the infant. My question is: Why is she here? Dr. Rapin is a neurologist for children at Albert Einstein College of Medicine who stated that she has a keen interest in developmental disorders, in particular those involving language and autism, yet she knows little about the effects of mercury on the infant brain.

This conference is concerned with the effects of mercury in the form of Thimerosal on infant brain development, yet throughout this conference our experts, especially the “vaccinologists”, seem to know little about mercury except limited literature that shows no toxic effects except at very high levels. None of the well known experts were invited, such as Dr. Michael Aschner from Bowman Grey School of Medicine or Dr. Boyd Haley, who has done extensive work on the toxic effects

of low concentrations of mercury on the CNS (Central Nervous System). They were not invited because they would be harmful to the true objective of this meeting, and that was to exonerate mercury in vaccines.

Several times throughout this conference, Dr. Brent reminds everyone that the most sensitive period for the developing brain is during the early stages of pregnancy. In fact, he pinpoints the 8th to 18th week as the period of neuromaturation. In fact, the most rapid period of brain maturation, synaptic development and brain pathway development, is during the last three months of pregnancy continuing until two years after birth. This is often referred to as the **“brain growth spurt”**. This is also not mentioned once in this conference, again because if mothers knew that their child’s brain was busy developing for up to two years after birth, they would be less likely to accept this safety of mercury nonsense these “vaccinologists” proclaim.

The brain develops over 100 trillion synaptic connections and tens of trillions of dendritic connections during this highly sensitive period. Both dendrites and synapses are very sensitive, even to very low doses of mercury and other toxins. It has also been shown that subtoxic doses of mercury can block the glutamate transport proteins that play such a vital role in protecting the brain against excitotoxicity. Compelling studies indicate that damage to this protective system plays a major role in most of the neurodegenerative diseases and abnormal brain development as well.

Recent studies have shown that glutamate accumulates in the brains of autistic children, yet these experts seem to be unconcerned about a substance (mercury) that is very powerful in triggering brain excitotoxicity.

It is also interesting to see how many times Dr. Brent emphasizes that we do not know the threshold for mercury toxicity for the developing brain. Again, that is not true. We do know and the *Journal of Neurotoxicology* states that anything above 10µg (micrograms) is neurotoxic. The WHO in fact states that there is no safe level of mercury.

On page 164 Dr. Robert Davis, Associate Professor of Pediatrics and Epidemiology at the University of Washington, makes a very important observation. He points out that in a population like the United States you have individuals with varying levels of mercury from other causes (diet, living near coal-burning facilities, etc.) and by vaccinating everyone you raise those with the highest levels even higher and bring those with median levels into a category of higher levels. The “vaccinologists” with their problem of “concrete thinking” cannot seem to appreciate the fact that not everyone is the same. That is, they fail to see these “uncertainties”.

To further emphasize this point, let’s consider a farming family that lives within three miles of a coal-burning electrical plant. Since they also live near the ocean they eat seafood daily. The fertilizers, pesticides and herbicides used on the crops contain appreciable levels of mercury. The coal-burning electrical plant emits high levels of mercury in the air they breathe daily and the seafood they consume has levels of mercury higher than EPA safety standards. This means that any babies born to these people will have very high mercury levels.

Once born, they are given numerous vaccines containing even more mercury, thereby adding significantly to their already high mercury burden. Are these “vaccinologists” trying to

convince us that these children don’t matter and that they are to be sacrificed at the alter of “vaccine policy”?

Recent studies by neurotoxicologists have observed that as our ability to detect subtle toxic effects improves, especially on behavior and other neurological functions, we lower the level of acceptable exposure. In fact, Dr. Sinks brings up that exact point, using lead as an example. He notes that as our neurobehavioral testing improved, we lowered the acceptable dose considerably and continue to do so. Dr. Johnson had the audacity to add, **“The smarter we get, the lower the threshold.”** Yet, neither he, nor the other participants seem to be getting any smarter concerning this issue.

Dr. Robert Chen, Chief of Vaccine Safety and Development at the National Immunization Program at the CDC, then reveals why they refuse to act on this issue. He says, **“the issue is that it is impossible, unethical to leave kids unimmunized, so you will never, ever resolve that issue. So then we have to refer back from that.”** (page 169) In essence, immunization of the kids takes precedence over safety concerns with the vaccines. If the problem of vaccine toxicity cannot be solved, he seems to be saying, then we must accept that some kids will be harmed by the vaccines. In fact, we are now seeing that the harm from the vaccines exceeds the benefit of disease prevention.

Dr. Brent makes the statement that he knows of no known genetic susceptibility data on mercury and therefore assumes there is a fixed threshold of toxicity. That is, that everyone is susceptible to the same dose of mercury and there are no genetically hypersensitive groups of people. In fact, a recent study found just such a genetic susceptibility in mice. In this study researchers found that mice susceptible to autoimmunity developed neurotoxic effects to their hippocampus, including excitotoxicity, not seen in other strains of mice. They even hypothesize that the same may be true in humans, since familial autoimmunity increases the likelihood of autism in offspring. (Hornig M, Chian D, Lipkin WI. Neurotoxic effects of postnatal Thimerosal are mouse strain dependent. *Mol Psychiatry* 2004 Sep.;9(9):833–45).

For the next quotation you need a little discussion to be able to appreciate the meaning. They are discussing the fact that in Dr. Verstraeten’s study frightening correlations were found between the higher doses of Thimerosal and problems with neurodevelopment, including ADD and autism. The problem with the study was that there were so few children that had been administered Thimerosal-free vaccines, that a true control group could not be used. Instead they had to use children getting 12.5µg of mercury as the control and some even wanted to use the control dose as 37.5µg. So the controls had mercury levels that could indeed cause neurodevelopmental problems. Even with this basic flaw, a strong positive correlation was found between the dose of mercury given and these neurodevelopmental problems.

It was proposed that a group of children receiving non-Thimerosal vaccines be compared to those who had Thimerosal. In fact, we later learn that a large group of children could have been used as a Thimerosal-free control. It seems that for two years before this conference, the Bethesda Naval Hospital had been using unlicensed reduced-Thimerosal vaccines in place of the U.S.-licensed Thimerosal-preserved vaccines to immunize their outpatient children. Unfortunately, in general,

these children were too young for the symptoms of neurodevelopmental-regressive autism to be manifest when Verstraten began his studies in the late 1990s.

So, now to the quote: Dr. Braun responds to the idea of starting a new study using such Thimerosal-free controls by saying, **“Sure we will have the answer in five years. The question is what can we do now with the data we have?”** (page 170) Well, we have the answer to that, they simply covered this study up, declared that Thimerosal is of no concern and continued the unaltered policy. That is, they can suggest that the pharmaceutical manufacturers of vaccines remove the Thimerosal but not make it mandatory or examine the vaccines to make sure they have removed it.

Let us take a small peek at just how much we can trust the pharmaceutical manufacturers to do the right thing. Several reports of major violations of vaccine manufacturing policy have been cited by the regulatory agencies. This includes obtaining plasma donations without taking adequate histories on donors as to disease exposures and previous health problems, poor record keeping on these donors, improper procedures, and improper handling of specimens.

That these are not minor violations is emphasized by the discovery that a woman with variant Mad Cow Disease was allowed to give plasma to be used in vaccines in England. In fact, it was learned only after the contaminated plasma was pooled and used to make millions of doses of vaccines that her disease was discovered. British health officials told the millions of vaccinated not to worry, since the “experts” have no idea if it will really spread the disease.

Contamination of vaccines is a major concern in this country as well, as these regulatory violations make plain. It is also important to note that no fines were given, just warnings.

Conclusions by the study group

At the end of the conference, a poll was taken asking two questions. One was, Do you think that there is sufficient data to make a causal connection between the use of Thimerosal-containing vaccines and neurodevelopmental delays? Second, do you think further study is called for based on this study?

First, let us see some of the comments on the question of doing further studies. Dr. Paul Stehr-Green, Associate Professor of Epidemiology at the University of Washington School of Public Health and Community Medicine, who voted yes, gave as his reason, **“The implications are so profound these should be examined further.”** (page 180) Meanwhile, Dr. Brent interjects his concern that the lawyers will get hold of this information and begin filing lawsuits. He says, **“They want business and this could potentially be a lot of business.”** (page 191)

Dr. Loren Koller, Pathologist and Immunotoxicologist at the College of Veterinary Medicine, Oregon State University, is to be congratulated for recognizing more is involved in the vaccine effects than just ethylmercury (page 192). He mentions aluminum and even the viral agents beings used as other possibilities. This is especially important in the face of Dr. R. K. Gherardi’s identification of macrophagic myofasciitis, a condition causing profound weakness and multiple neurological syndromes, one of which closely resembled multiple sclerosis.

Both human studies and animal studies have shown a strong causal relationship to the aluminum hydroxide or aluminum phosphate used as vaccine adjuvants. More than 200 cases have been identified in European countries and the United States and have been described as an “emerging condition”.

Here are some of the neurological problems seen with the use of aluminum hydroxide and aluminum phosphate in vaccines. In two children aged 3 and 5 years, doctors at the All Children’s Hospital in St. Petersburg, Florida described chronic intestinal pseudo-obstruction, urinary retention, and other findings indicative of a generalized loss of autonomic nervous system function (diffuse dysautonomia). The 3-year old had developmental delay and hypotonia (loss of muscle tone). A biopsy of the children’s vaccine injection site disclosed elevated aluminum levels.

In a study of some 92 patients suffering from this emerging syndrome, eight developed a full-blown demyelinating CNS disorder (i.e., multiple sclerosis) [Authier FJ, Cherin P, *et al.* Central nervous system disease in patients with macrophagic myofasciitis. *Brain* 2001;124:974–83]. This included sensory and motor symptoms, visual loss, bladder dysfunction, cerebellar signs (loss of balance and coordination) and cognitive (thinking) and behavioral disorders.

Dr. Gherardi, the French physician who first described the condition in 1998, has collected over 200 proven cases. One third of these developed an autoimmune disease such as multiple sclerosis. Of critical importance is his finding that even in the absence of obvious autoimmune disease there is evidence of chronic immune stimulation caused by the injected aluminum, known to be a very powerful immune adjuvant.

The reason this is so important is that there is overwhelming evidence that chronic immune activation in the brain (activation of microglial cells in the brain) is a major cause of damage in numerous degenerative brain disorders, from multiple sclerosis to the classic neurodegenerative diseases (Alzheimer’s disease, Parkinson’s and ALS). In fact, I have presented evidence that chronic immune activation of CNS microglia is a major cause of autism, attention deficit disorder and Gulf War Syndrome.

Dr. Gherardi emphasizes that once the aluminum is injected into the muscle, the immune activation persists for years. In addition, we must consider the effect of the aluminum that travels to the brain itself. Numerous studies have shown harmful effects when aluminum accumulates in the brain. A growing amount of evidence points to high brain aluminum levels as a major contributor to Alzheimer’s disease and possibly Parkinson’s disease and ALS (Lou Gehrig’s disease). This may also explain the 10X increase in Alzheimer’s disease in those receiving the flu vaccine 5 years in a row. (Dr. Hugh Fudenberg, in press, *Journal of Clinical Investigation*). It is also interesting to note that a recent study found that aluminum phosphate produced a 3X elevation in blood levels of aluminum, as did aluminum hydroxide (Flarend RE, Hem SL, *et al.* In vivo absorption of aluminum-containing vaccine adjuvants using 26Al. *Vaccine* 1997 Aug.-Sept.;15:1314–8).

Of course, in this conference, our illustrious experts tell us that there is “no data showing an additive or synergistic effect between mercury and aluminum.”

Dr. Rapin expressed her concern over public opinion when this information eventually gets out. She says (page 197), they

are going to be captured by the public and we had better make sure that **“(a) we counsel them carefully and (b) that we pursue this because of the very important public health and public implications of the data.”** Dr. Johnson adds, **“the stakes are very high....”** From this, how can one conclude anything other than the fact that at least these scientists were extremely concerned by what was discovered by this study examining the Vaccine Safety Datalink material? They were obviously terrified that the information would leak out to the public. Stamped in bold letters at the top of each page of the study were the words: **“DO NOT COPY OR RELEASE”** and **“CONFIDENTIAL”**.

This is not the wording one would expect on a clinical study of vaccine safety; rather you would expect it on top-secret NSA or CIA files. Why was this information being kept secret? The answer is obvious—it might endanger the vaccine program and indict the federal regulatory agencies for ignoring this danger for so many years. Our society is littered with millions of children who have been harmed in one degree or another by this vaccine policy. In addition, let us not forget the millions of parents who have had to watch helplessly as their children have been destroyed by this devastating vaccine program.

Dr. Bernier on page 198 says, **“the negative findings need to be pinned down and published.”** Why was he so insistent that the **“negative findings”** be published? Because he said, **“other less responsible parties will treat this as a signal.”** By that he means, a signal of a problem with Thimerosal-containing vaccines. From this, I assume he wants a paper that says only that nothing was found by the study. As we shall see, he gets his wish.

In addition, on page 198, Dr. Rapin notes that a study in California found a 300X increase in autism following the introduction of certain vaccines. She quickly attributes this to better physician recognition. Two things are critical to note at this point. She makes this assertion on better physician recognition without any data at all, just her wishful thinking. If someone pointing out the dangers of vaccines were to do that, she would scream “junk science”.

Second, Dr. Weil on page 207, attacks this reasoning when he says, **“the number of dose related relationships are linear and statistically significant. You can play with this all you want. They are linear. They are statistically significant.”** In other words, how can you argue with results that show a strong dose/response relationship between the dose of mercury and neurodevelopmental outcomes? The higher the mercury levels in the children the greater the number of neurological problems. He continues by saying that the increase in neurobehavioral problems is probably real. He tells them that he works in a school system with special education programs and **“I have to say the number of kids getting help in special education is growing nationally and state by state at a rate not seen before. So there is some kind of increase. We can argue about what it is due to.”** (page 207)

Dr. Johnson seems to be impressed by the findings as well. He says on page 199, **“This association leads me to favor a recommendation that infants up to two years old not be immunized with Thimerosal-containing vaccines if suitable alternative preparations are available.”** Incredibly, he quickly adds, **“I do not believe the diagnosis justifies com-**

ensation in the Vaccine Compensation Program at this point.” It is interesting to note that one of our experts in attendance is Dr. Vito Caserta, the Chief Officer for the Vaccine Injury Compensation Program.

At this point Dr. Johnson tells the group of his concerns for his own grandchild. He says, (page 200) **“Forgive this personal comment, but I got called out at eight o’clock for an emergency call and my daughter-in-law delivered a son by C-section. Our first male in the line of the next generation and I do not want that grandson to get a Thimerosal-containing vaccine until we know better what is going on. It will probably take a long time. In the meantime, and I know there are probably implications for this internationally, but in the meanwhile I think I want that grandson to only be given Thimerosal-free vaccines.”**

So, we have a scientist sitting on this panel which will eventually make policy concerning all of the children in this country, as well as other countries, who is terrified about his new grandson getting a Thimerosal-containing vaccine but he is not concerned enough about your child to speak out and try to stop this insanity. He allows a cover-up to take place after this meeting adjourns and remains silent.

It is also interesting to note that he feels the answers will be a long time coming, but in the mean time, his grandson will be protected. The American Academy of Pediatrics, The American Academy of Family Practice, the AMA, CDC and every other organization will endorse these vaccines and proclaim them to be safe as spring water, but Dr. Johnson and some of the others will keep their silence.

It is only during the last day of the conference that we learn that most of the objections concerning the positive relationship between Thimerosal-containing vaccines and ADD and ADHD were bogus. For example, Dr. Rapin on page 200 notes that all children in the study were below age 6 and that ADD and ADHD are very difficult to diagnose in pre-schoolers. She also notes that some children were followed for only a short period.

Dr. Stein adds that in fact the average age for diagnosis of ADHD was 4 years and 1 month, a very difficult diagnosis to make with the guidelines, as published by the American Academy of Pediatrics, limiting diagnosis to 6 to 12 year olds. Of course, he was implying that too many were diagnosed as ADHD. Yet, a recent study found that the famous Denmark study that led to the announcement by the Institute of Medicine that there was no relationship between autism and the MMR vaccine, used the same tactic. They cut off the age of follow-up at age six.

It is known that many cases appear after this age group, especially with ADD and ADHD. In fact, most learning problems appear as the child is called on to handle more involved intellectual material. Therefore, the chances are that they failed to diagnose a number of cases by stopping the study too early.

Several of the participants tried to imply that autism was a genetic disorder and therefore could have nothing to do with vaccines. Dr. Weil put that to rest with this comment, **“We don’t see that kind of genetic change in 30 years.”** In other words, how can we suddenly see a 300% increase in a genetically related disorder over such a short period? It is also known that there are two forms of autism, one that is apparent at birth and one that develops later in childhood. The former has not

changed in incidence since statistics have been kept; the other is epidemic.

One interesting exchange, which involves two studies in children born to mothers consuming high intakes of mercury-contaminated fish, ends up providing their justification for the view that mercury is of no danger to children vaccinated with vaccines containing Thimerosal. One study in the journal *Neurotoxicology*, examined children living in the Republic of Seychelles. This study examined the effect of prenatal exposure to mercury through the mother's consumption of fish high in methylmercury,

A battery of developmental milestone tests were done and no adverse effects were reported in the study done by Dr. Clarkson and co-workers, the very same person in this conference. He never mentions that a follow-up study of these same children did find a positive correlation between methylmercury exposure and poor performance on a memory test. In a subsequent study of children living on the Faroe Islands exposed to methylmercury, researchers also found impairments of neurodevelopment. This experiment was done by scientists from Japan.

Throughout the remainder of this discussion, Dr. Clarkson and others refer to these two studies. When they are reminded that the Faroe study did find neurological injury to the children, they counter by saying that this was prenatal exposure to mercury and not exposure following birth as would be seen with vaccination. The idea being that prenatally the brain is undergoing neural formation and development making it more vulnerable. As I have mentioned, this rapid brain growth and development continues for two years after birth and even at age 6 years the brain is only 80% formed.

Dr. Clarkson keeps referring to the Seychelles study which demonstrated that the children reached normal neurodevelopmental milestones as shown by a number of tests. Dr Weil points out on page 216 that this tells us little about these children's future brain function. He says, **"I have taken a lot of histories of kids who are in trouble in school. The history is that developmental milestones were normal or advanced and they can't read at second grade, they can't write at third grade, they can't do math in the fourth grade and it has no relationship as far as I can tell to the history we get of the developmental milestones. So I think this is a very crude measure of neurodevelopment."**

In other words, both of these studies tell us nothing about the actual development of these children's brain function except that they reached the most basic of milestones. To put this another way, your child may be able to stack blocks, recognize shapes and have basic language skills, but later in life he/she could be significantly impaired when it came to higher math, more advanced language skills (comprehension) and ability to compete in a very competitive intellectual environment, like college or advanced schooling. The future of such children would be limited to the more mundane and intellectually limited jobs.

Postnatal brain development, that is from birth to age six or seven, involves the fine tuning of synaptic connections, dendritic development and pathway refinement, all of which prepare the brain for more complex thinking. These brain elements are very sensitive to toxins and excessive immune stimulation

during this period. This fact is never mentioned at the conference.

In addition, it must be remembered that the children in these two studies were exposed only to methylmercury and not the combined neurotoxic effect of mercury, aluminum and excessive and chronic activation of the brain's immune system (microglia). This is what makes it so incredible, that several of these "vaccinologists" and so-called experts would express doubt about the "biological plausibility" of Thimerosal or any vaccine component causing neurodevelopmental problems. The medical literature is exploding with such studies. The biological plausibility is very powerful.

Mercury, for example, even in low concentrations, is known to impair energy production by mitochondrial enzymes. The brain has one of the highest metabolic rates of any organ and impairment of its energy supply, especially during development, can have devastating consequences. In addition, mercury, even in lower concentrations, is known to damage DNA and impair DNA repair enzymes, which again plays a vital role in brain development. Mercury is known to impair neurotubule stability, even in very low concentrations. Neurotubules are absolutely essential to normal brain cell function. Mercury activates microglial cells, which increases excitotoxicity and brain free radical production as well as lipid peroxidation, central mechanisms in brain injury. In addition, even in doses below that which can cause obvious cell injury, mercury impairs the glutamate transport system, which in turn triggers excitotoxicity, a central mechanism in autism and other neurological disorders. Ironically, aluminum also paralyzes this system.

On page 228, we see another admission that the government has had no interest in demonstrating the safety of Thimerosal-containing vaccines despite over 2000 articles showing harmful effects of mercury. Here we see a reference to the fact that the FDA **"has a wonderful facility in Arkansas with hundreds of thousands of animals"** available for any study needed to supply these answers on safety. The big question to be asked is – So, why has the government ignored the need for research to answer these questions concerning Thimerosal safety? You will recall in the beginning the participants of this conference complained that there were just so few studies or no studies concerning this "problem".

Again, on page 229 Dr. Brent rails about the lawsuit problem. He tells the others that he has been involved in three lawsuits related to vaccine injuries leading to birth defects and concluded, **"If you want to see junk science, look at those cases...."** He then complains about the type of scientists testifying in these cases. He adds, **"But the fact is those scientist are out there in the United States."** In essence, he labels anyone who opposes the "official policy" on vaccines as a junk scientist. We have seen in the discussion who the "junk scientists" really are.

Knowing that what they have found can cause them a great deal of problems he adds, **"The medical/legal findings in this study, causal or not, are horrendous.... If an allegation was made that a child's neurobehavioral findings were caused by Thimerosal-containing vaccines, you could readily find a junk scientist who will support the claim with a reasonable degree of certainty."** On page 229 he then admits that they are

in a bad position because they have no data for their defense. Now, who are the junk scientists?

Is a “real scientist” one who has no data, just wishful thinking and a “feeling” that everything will be all right? Are real scientists the ones who omit recognized experts on the problem in question during a conference because it might endanger the “program”? Are they the ones who make statements that they don’t want their grandson to get Thimerosal-containing vaccines until the problem is worked out, but then tell millions of parents that the vaccines are perfectly safe for their children and grandchildren?

Dr. Meyers on page 231 put it this way, **“My own concern, and a couple of you said it, there is an association between vaccines and outcomes that worries both parents and pediatricians.”** He sites other possible connections to vaccine-related neurobehavioral and neurodevelopmental problems including the number of vaccines being given, the types of antigens being used, and other vaccine additives.

Dr. Caserta tells the group that he attended the aluminum conference the previous year and learned that metals could often act differently in biological systems when existing as an ion. This is interesting in the face of the finding that fluoride when combined to aluminum forms a compound that can destroy numerous hippocampal neurons at a concentration of 0.5 ppm in drinking water. It seems that aluminum readily combines with fluoride to form this toxic compound. With over 60% of communities having fluoridated drinking water this becomes a major concern.

It has also been learned that fluoroaluminum compounds mimic the phosphate and can activate G-proteins. G-proteins play a major role in numerous biological systems, including endocrine, neurotransmitters, and as cellular second messengers. Some of the glutamate receptors are operated by a G-protein mechanism.

Over the next ten to fifteen pages, they discuss how to control this information so that it will not get out and if it does how to control the damage. On page 248 Dr. Clements has this to say: **“But there is now the point at which the research results have to be handled, and even if this committee decides that there is no association and that information gets out, the work has been done and through the freedom of information that will be taken by others and will be used in other ways beyond the control of this group. And I am very concerned about that as I suspect that it is already too late to do anything regardless of any professional body and what they say.”**

In other words, he wants this information kept not only from the public but also from other scientists and pediatricians until they can be properly counseled. In the next statement he spills the beans as to why he is determined that no outsider get hold of this damaging information. He says, **“My mandate as I sit here in this group is to make sure at the end of the day that 100,000,000 are immunized with DTP, Hepatitis B and if possible Hib, this year, next year, and for many years to come, and that will have to be with Thimerosal-containing vaccines unless a miracle occurs and an alternative is found quickly and is tried and found to be safe.”**

This is one of the most shocking statements I have ever heard. In essence, he is saying, I don’t care if the vaccines are

found to be harmful and destroying the development of children’s brains, these vaccines will be given now and forever. His only concern, by his own admission, is to protect the vaccine program even if it is not safe. Dr. Brent refers to this as an **“eloquent statement.”**

On page 253, we again see that these scientists have a double standard when it comes to their children and grandchildren. Dr. Rapin raises the point about a loss of an IQ point caused by Thimerosal exposure. She says, **“Can we measure the IQ that accurately, that this one little point is relevant?”** Then she answers her own question by saying, **“Even in my grandchildren, one IQ point I am going to fight about.”** Yet, they are saying in unison, in essence—“To hell with your children”—to the rest of America.

It is also interesting that they bring up the history of lead as a neurobehavioral toxin. Dr. Weil noted that the neurotoxicologists and regulatory agencies have lowered the acceptable level from 10 to 5µg. In fact, some feel that even lower levels are neurotoxic to the developing brain. Before the toxicologists began to look at lead as a brain toxin in children most “experts” assumed it was not toxic even at very high levels. Again, it shows that “experts” can be wrong and it is the public who pays the price.

Dr. Chen on page 256 expresses his concern about this information reaching the public. He remarks, **“We have been privileged so far that given the sensitivity of information, we have been able to manage to keep it out of, let’s say, less responsible hands....”** Dr. Bernier agrees and notes, **“This information has been held fairly tightly.”** Later he calls it **“embargoed information”** and **“very highly protected information.”**

That they knew the implications of what they had discovered was illustrated by Dr. Chen’s statement on page 258. He says, **“I think overall there was this aura that we were engaged in something as important as anything else we have ever done. So I think that this was another element to this that made this a special meeting.”** You may remember, Dr. Weil emphasized that the data analysis left no doubt that there was a strong correlation between neurodevelopmental problems and exposure to Thimerosal-containing vaccines. So if they understood the importance of this finding and this was the most important thing they have ever dealt with, why was this being kept from the public? In fact, it gets even worse.

Just so you will not doubt my statement that this audience of experts was not objective, I give you the words of Dr. Walter Orenstein, Director of the National Immunization Program at the CDC, on page 259. He tells the group, **“I have seen him (Verstraeten) in audience after audience deal with exceedingly skeptical individuals....”** “Exceedingly skeptical individuals” does that sound like objective scientists who wanted to look at the data with a clear mind, or were they scientists who were convinced before the meeting was held that there was no danger to children from Thimerosal or any other vaccine component?

In one of the closing remarks (page 257) Dr. Bernier says, **“the other thing I was struck by was the science”,** meaning the science expressed by the attendees of the meeting. Then Dr. Orenstein adds, **“I would also like to thank Roger Bernier who pulled off this meeting in rather short notice...”** Here is

a meeting that has been called one of the most important they have ever dealt with and we learn that it was “pulled off” on short notice. In addition, we were told that the results of this meeting would lead to eventual vaccine policy. He then has the nerve to add: **“In a sense this meeting addresses some of the concerns we had last summer when we were trying to make policy in the absence of a careful scientific review. I think this time we have gotten it straight.”**

Well, I hate to be the one to break the news, but he didn't get it straight. There was little or no science in this meeting; rather it was composed of a lot of haggling and nit picking over epidemiological methodology and statistical minutia in an effort to discredit the data, all without success. In fact, the so-called mercury experts admitted they had to do some quick homework to refresh their memories and learn something about the subject.

Conclusions

This top secret meeting was held to discuss a study done by Dr. Thomas Verstraeten and his co-workers using Vaccine Safety Datalink data as a project collaboration between the CDC's National Immunization Program (NIP) and four HMOs. The study examined the records of 110,000 children. Within the limits of the data, they did a very thorough study and found the following:

1. Exposure to Thimerosal-containing vaccines at one month was associated significantly with the **misery and unhappiness disorder** that was dose related. That is, the higher the child's exposure to Thimerosal the higher the incidence of the disorder. This disorder is characterized by a baby that cries uncontrollably and is fretful more so than that seen in normal babies.

2. A nearly significant increased risk of ADD with 12.5µg exposure at one month.

3. With exposure at 3 months, they found an increasing risk of neurodevelopmental disorders, including speech disorders, with increasing exposure to Thimerosal. This was statistically significant.

It is important to remember that the control group was not children without Thimerosal exposure but, rather, those at 12.5µg exposure. This means that there is a significant likelihood that even more neurodevelopmental problems would have been seen had they used a real control population. No one disagreed that these findings were significant and troubling. Yet, when the final study was published in the journal *Pediatrics*, Dr. Verstraeten and co-workers reported that no consistent associations were found between Thimerosal-containing vaccine exposure and neurodevelopmental problems. In addition, he lists himself as an employee of the CDC, not disclosing the fact that at the time the article was accepted, he worked for GlaxoSmithKline, a vaccine manufacturing company.

So how did they do this bit of prestidigitation? They simply added another HMO to the data: the Harvard Pilgrimage. (Additionally there were other manipulations, e.g., altering inclusion criteria, discarding children receiving the highest total dose, splitting children into separate groups, using only one HMO's data in some cases, expressing effects ratios in terms of

per dose of mercury.) Congressman Dave Weldon noted in his letter to the CDC Director that this HMO had been in receivership by the state of Massachusetts because its records were in shambles. Yet, this study was able to make the embarrassing data from Dr. Verstraeten's previous study disappear. Attempts by Congressman Weldon to force the CDC to release the data to an independent researcher, Dr. Mark Geier, a researcher with impeccable credentials and widely published in peer-reviewed journals, have failed and the CDC now claims that the original datasets Verstraeten *et al.* used have been “lost”.

It is obvious that a massive cover-up is in progress, as we have seen with so many other scandals, such as fluoride, food-based excitotoxins, pesticides, aluminum, and now vaccines. I would caution those critical of the present vaccine policy not to put all their eggs in one basket, that is, with Thimerosal as being the main culprit. There is no question that it plays a significant role, but there are other factors that are also critical, including aluminum, fluoroaluminum complexes, and chronic immune activation of brain microglia. I believe that repeated, closely spaced, sequential vaccinations given during the most active period of brain development is the major cause of autism.

In fact, excessive, chronic microglial activation can explain many of the effects of excessive vaccine exposure as I point out in two recently published articles. One property of both aluminum and mercury is microglial activation. With chronic microglial activation, large concentrations of excitotoxins are released as well as neurotoxic cytokines. These have been shown to destroy synaptic connections, dendrites and cause abnormal pathway development in the developing brain as well as in the adult brain.

In essence, too many vaccines are being given to children during the brain's most rapid growth period. Known toxic metals are being used in vaccines, interfering with brain metabolism and antioxidant enzymes, damaging DNA and DNA repair enzymes and triggering excitotoxicity. Removing the mercury will help but will not solve the problem because overactivation of the brain's immune system will cause varying degrees of neurological damage to the highly-vulnerable developing brain.

References

- [1] Lorscheider,FL; Vimy,MJ; Pendergrass,JC; Haley,BE. Mercury vapor exposure inhibits tubulin binding to GTP in rat brain: A molecular lesion also present in human Alzheimer brain From: FASEB J. 9(4):A-3845. FASEB Annual Meeting, Atlanta, Georgia, 10 March 1995.
- [2] Grandjean P, Budtz-Jorgensen E, White RF, Jorgensen PJ, Weihe P, Debes F, Keiding N Methylmercury exposure biomarkers as indicators of neurotoxicity in children aged 7 years. From: Am J Epidemiol 1999 Aug. 1;150(3):301–5
- [3] Albers JW, Kallenbach LR, Fine LJ, Langolf GD, Wolfe RA, Donofrio PD, Alessi AG, Stolp-Smith KA, Bromberg MB Neurological abnormalities associated with remote occupational elemental mercury exposure. Ann Neurol 1988 Nov.;24(5):651–9
- [4] Aschner M, Lorscheider FL, Cowan KS, Conklin DR, Vimy MJ, Lash LH Metallothionein induction in fetal rat brain and neonatal primary astrocyte cultures by in utero exposure to elemental mercury vapor (Hg0). From: Brain Res 1997 Dec. 5;778(1):222–32
- [5] Soederstroem S, Fredriksson A, Dencker L & Ebendal T The effect of mercury vapour on cholinergic neurons in the fetal brain: studies on the expression of nerve growth factor and its low- and high-affinity receptors. Developmental Brain Research 1995;85(1):96–108.
- [6] Drasch G, Schupp I, Hofl H, Reinke R & Roeder G. Mercury burden of human fetal and infant tissues. Eur J Pediatr 1994;153:607–10.

- [7] Szucs A, Angiello C, Salanki J, Carpenter DO Effects of inorganic mercury and methylmercury on the ionic currents of cultured rat hippocampal neurons. *Cell Mol Neurobiol* 1997 Jun.;17(3):273–88.
- [8] Coccini T, Randine G, Candura SM, Nappi RE, Prockop LD, Manzo L. Low-level exposure to methylmercury modifies muscarinic cholinergic receptor binding characteristics in rat brain and lymphocytes: physiologic implications and new opportunities in biologic monitoring *Environ Health Perspect*. 2000 Jan.;108(1):29–33
- [9] Sorg O, Schilter B, Honegger P, Monnet-Tschudi F Increased vulnerability of neurones and glial cells to low concentrations of methylmercury in a prooxidant situation. *Acta Neuropathol (Berl)* 1998 Dec.;96(6):621–7.
- [10] Liang YX, Sun RK, Sun Y, Chen ZQ, Li LH Psychological effects of low exposure to mercury vapor: application of a computer-administered neurobehavioral evaluation system. *Environ Res* 1993 Feb.;60(2):320–7.
- [11] Sundberg J, Jonsson S, Karlsson MO, Oskarsson A Lactational exposure and neonatal kinetics of methylmercury and inorganic mercury in mice. *Toxicol Appl Pharmacol* 1999 Jan. 15;154(2):160–9.
- [12] Inouye M., Murao K., Kajiwara Y., Behavioral and neuropathological effects of prenatal methyl Mercury exposure in mice. *Neurobehav.Toxicol Teratol* 1985;7:227–32.
- [13] Koos, *et al.* Mercury toxicity in pregnant women, fetus and newborn infant. *Am J Obstet And Gynecol.*, 1976;126:390–409.
- [14] Khera *et al.* Teratogenic and genetic effects of Mercury toxicity. The biochemistry of Mercury in the environment. Nriagu JO, ed. Amsterdam Elsevier, 503–18,1979.
- [15] Drasch G, Schupp I, Hofl H, Reinke R, Roeder G. Mercury burden of human fetal and infant tissues. *Eur J Pediatr* 1994 Aug.;153(8):607–10.
- [16] Yoshida M, Yamamura Y, Satoh H Distribution of mercury in guinea pig offspring after in utero exposure to mercury vapor during late gestation *Arch Toxicol* 1986 Apr.;58(4):225–8.
- [17] YuanY, AtchisonWD. Comparative effects of inorganic divalent mercury, methylmercury and phenylmercury on membrane excitability and synaptic transmission of CA1 neurons in hippocampal slices of the rat *Neurotoxicology* 1994;14(2):403–11.
- [18] Desi I, Nagymajtenyi L, Schulz H. Effect of subchronic mercury exposure on electrocorticogram of rats. *Neurotoxicology* 1996 Fall-Winter;17(3-4): 719–23.
- [19] Bucio L, Garcia C, Souza V, Hernandez E, Gonzalez C, Betancourt M, Gutierrez-Ruiz MC. Uptake, cellular distribution and DNA damage produced by mercuric chloride. *Mutat Res* 1999 Jan. 25;423(1-2):65–72.
- [20] Hua MS, Huang CC, Yang YJ Chronic elemental mercury intoxication: neuropsychological follow-up case study. *Brain Inj* 1996 May;10(5):377–84.
- [21] Grandjean P, Weihe P, White RF, Debes F. Cognitive performance of children prenatally exposed to “safe” levels of methylmercury. *Environ Res* 1998 May;77(2):165–72.
- [22] Hock C, Drasch G, Golombowski S, Muller-Spahn F, Willershausen-Zonnchen B, Schwarz P, Hock U, Growdon JH, Nitsch RM. Increased blood mercury levels in patients with Alzheimer's disease. *J Neural Transm* 1998;105(1):59–68.
- [23] Oskarsson A, Palminger Hallen I, Sundberg J. Exposure to toxic elements via breast milk. *Analyst* 1995;120(3):765–70.
- [24] Hock C, Drasch G, Golombowski S, Muller-Spahn F, Willershausen-Zonnchen B, Schwarz P, Hock U, Growdon JH, Nitsch RM. Increased blood mercury levels in patients with Alzheimer's disease. *J Neural Transm* 1998;105(1):59–68.
- [25] Wenstrup D, Ehmman WD, Markesbery WR. Trace element imbalances in isolated subcellular fractions of Alzheimer's disease brains. *Brain Res* 1990 Nov. 12;533(1):125–31.
- [26] Basun H, Forssell LG, Wetterberg L, Winblad B. Metals and trace elements in plasma and cerebrospinal fluid in normal aging and Alzheimer's disease. *J Neural Transm Park Dis Dement Sect* 1991;3(4):231–58.
- [27] Hock C, Drasch G, Golombowski S, Muller-Spahn F, Willershausen-Zonnchen B, Schwarz P, Hock U, Growdon JH, Nitsch RM. Increased blood mercury levels in patients with Alzheimer's disease. *J Neural Transm* 1998;105(1):59–68.
- [28] 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* 1997;18(2):315–24.
- [29] Opitz H, Schweinsberg F, Grossmann T, Wendt-Gallitelli MF, Meyer-mann R. Demonstration of mercury in the human brain and other organs 17 years after metallic mercury exposure. *Clin Neuropathol* 1996 May-Jun.; 15(3):139–44.
- [30] Sanfeliu C, Sebastia J, Cristofol R, Rodriguez-Farre E. Neurotoxicity of organomercurial compounds. *Neurotox Res*. 2003;5(4):283–305.
- [31] el-Fawal HA, Gong Z, Little AR, Evans HL. Exposure to methylmercury results in serum autoantibodies to neurotypic and gliotypic proteins. *Neurotoxicology* 1996 Summer;17(2):531–9.
- [32] Faustman EM, Ponce RA, Ou YC, Mendoza MA, Lewandowski T, Kavanagh T. Investigations of methylmercury-induced alterations in neurogenesis. *Environ Health Perspect*. 2002 Oct.; 110(Suppl . 5):859–64.
- [33] Reading R. Thimerosal and the occurrence of autism: negative ecological evidence from Danish population-based data. *Child Care Health Dev*. 2004 Jan.;30(1):90–1.
- [34] 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. *Anal Chem*. 2003 Aug. 15;75(16):4120–4.
- [35] Shanker G, Syversen T, Aschner M. Astrocyte-mediated methylmercury neurotoxicity. *Biol Trace Elem Res*. 2003 Oct.;95(1):1–10.
- [36] Zheng W, Aschner M, Ghersi-Egea JF. Brain barrier systems: a new frontier in metal neurotoxicological research. *Toxicol Appl Pharmacol* 2003 Oct. 1;192(1):1–11.
- [37] Kawase T, Ishikawa I, Orikasa M, Suzuki A. An assessment of the impact of Thimerosal on childhood neurodevelopmental disorders. Geier DA, Geier MR. *J Biochem (Tokyo)*. 1989 Jul; 106(1): 8-10. Aluminum enhances the stimulatory effect of NaF on prostaglandin E2 synthesis in a clonal osteoblast-like cell line, MOB 3-4, in vitro. *Pediatr Rehabil* 2003 Apr.-Jun.;6(2):97–102.
- [38] Geier MR, Geier DA. Thimerosal in childhood vaccines, neurodevelopmental disorders, and heart disease in the United States. *J Amer Physc Surg* 2003;8:6–11.
- [39] Allen JW, Shanker G, Tan KH, Aschner M. The consequences of methylmercury exposure on interactive functions between astrocytes and neurons. *Neurotoxicology* 2002;23:755–9.
- [40] Hansen JC, Reske-Nielsen E, *et al.* Distribution of dietary mercury in a dog. Quantitation and localization of total mercury in organs and central nervous system. *Sci Total Environ* 1989;78:23–43.
- [41] Zanolli P, Cannazza G, Baraldi M. Prenatal exposure to methyl mercury in rats: focus on changes in kynurenine pathway. *Brain Res Bull* 2001;55:235–8.
- [42] Olivieri G, Brack C, *et al.* Mercury induces cell cytotoxicity and oxidative stress and increases beta-amyloid secretion and tau phosphorylation in SHY5Y neuroblastoma cells. *J Neurochem* 2000;74:231–6.
- [43] Juarez BI, Mattinez M, *et al.* Methylmercury increases glutamate extracellular levels in frontal cortex of awake rats. *Neurotoxicology and Teratology* 2002;24:767–71.
- [44] Geier DA, Geier MR. An assessment of the impact of Thimerosal on childhood neurodevelopmental disorders. *Pediatric Rehabil* 2003;6:97–102.
- [45] Geier DA, Geier MR. A comparative evaluation of the effects of MMR immunization and mercury doses from Thimerosal-containing childhood vaccines on the population prevalence of autism. *Med Sci Monit* 1004;10: P133–9.
- [46] Baskin DS, Ngo H, Didenko VV. Thimerosal induces DNA breaks, caspase-3 activation, membrane damage, and cell death in cultured human neurons and fibroblast. *Toxicol Sci* 2003;74:361–8.
- [47] Pichichero ME, *et al.* Mercury concentrations and metabolism in infants receiving vaccines containing Thimerosal: a descriptive study. *Lancet* 2002;360:1737–41.
- [48] Murata K, Dakeishi M. Impact of prenatal methylmercury exposure on child neurodevelopment in the Faroe Islands. *Nippon Eiseigaku Zasshi* 2002;57:564–70.
- [49] Davidson PW, Myers GJ, et al (Clarkson TW-member of panel) Effects of prenatal and postnatal exposure from fish consumption on neurodevelopment: outcomes at 66 months of age in the Seychelles Child Development Study. *JAMA* 1998;280:701–7.
- [50] Palumbo DR, Cox C, *et al.* (Clarkson TW) Association between prenatal exposure to methylmercury and cognitive functioning in Seychellois children: a reanalysis of the McCarthy Scales of Children's Ability from the main cohort study. *Environ Res* 2000;84:81–8.
- [51] Hornig M, Chian D, Lipkin WI. Neurotoxic effects of postnatal Thimerosal are mouse strain dependent. *Mol Psychiatry*. 2004 Sep.; 9(9):833–45.

- [52] Ueha-Ishibashi T, et al. Property of Thimerosal-induced decrease in cellular content of glutathione in rat thymocytes: a flow cytometric study with 5-chloromethylfluorescein. *Toxicol in Vitro* 18: 563-569, 2004.
- [53] Ueha-Ishibashi T, et al. Effect of Thimerosal, a preservative in vaccines, on intracellular Ca^{+2} concentration of rat cerebellar neurons. *Toxicology* 195: 77-84, 2004.
- [54] Havarinasab S, Lambertsson L, et al. Dose-response study of Thimerosal-induced murine systemic autoimmunity. *Toxicol Appl Pharmacol* 2004;194:169–79.
- [55] Verstraeten T, Davis RL, DeStefano F, et al. Safety of Thimerosal-containing vaccines: a two-phase study of computerized health maintenance organization databases. *Pediatrics* 112: 1039-1048, 2003. (This is the published study that was discussed in the conference. Here the damaging data is erased and the public is told that Thimerosal-containing vaccines are perfectly safe. In this paper Dr. Verstraeten identified himself as working for the CDC, but in fact he is working for GlaxoSmithKline. The editors of the journal *Pediatrics* should have been willing to disclose this information once it was brought to their attention but they would not.)

References concerning aluminum

- [1] Murayama H, Shin RW, Higuchi J, Shibuya S, Muramoto T, Kitamoto T. Interaction of aluminum with PHFtau in Alzheimer's disease neurofibrillary degeneration evidenced by desferrioxamine-assisted chelating auto-clave method. *Am J Pathol*. 1999 Sep.;155(3):877–85.
- [2] Shin RW, Kruck TP, Murayama H, Kitamoto T. A novel trivalent cation chelator Feralex dissociates binding of aluminum and iron associated with hyperphosphorylated tau of Alzheimer's disease. *Brain Res*. 2003 Jan. 24;961(1):139–46.
- [3] Li W, Ma KK, Sun W, Paudel HK. Phosphorylation sensitizes microtubule-associated protein tau to $Al(3+)$ -induced aggregation. *Neurochem Res*. 1998 Dec.;23(12):1467–76.
- [4] Singer SM, Chambers CB, Newfry GA, Norlund MA, Muma NA. Tau in aluminum-induced neurofibrillary tangles. *Neurotoxicology*. 1997; 18(1):63–76.
- [5] Toda S, Yase Y. Effect of aluminum on iron-induced lipid peroxidation and protein oxidative modification of mouse brain homogenate. *Biol Trace Elem Res*. 1998 Feb.;61(2):207–17.
- [6] Sayre LM, Perry G, Harris PL, Liu Y, Schubert KA, Smith MA. In situ oxidative catalysis by neurofibrillary tangles and senile plaques in Alzheimer's disease: a central role for bound transition metals. *J Neurochem*. 2000 Jan.;74(1):270–9.
- [7] Xie CX, Yokel RA. Aluminum facilitation of iron-mediated lipid peroxidation is dependent on substrate, pH and aluminum and iron concentrations. *Arch Biochem Biophys*. 1996 Mar. 15;327(2):222–6.
- [8] Kawase T, Ishikawa I, Orikasa M, Suzuki A. Aluminum enhances the stimulatory effect of NaF on prostaglandin E2 synthesis in a clonal osteoblast-like cell line, MOB 3-4, in vitro. *J Biochem (Tokyo)*. 1989 Jul.; 106(1):8–10.
- [9] Jope RS. Modulation of phosphoinositide hydrolysis by NaF and aluminum in rat cortical slices. *J Neurochem*. 1988 Dec.;51(6):1731–6.
- [10] Blair HC, Finch JL, Avioli R, Crouch EC, Slatopolsky E, Teitelbaum SL. Micromolar aluminum levels reduce 3H-thymidine incorporation by cell line UMR 106-01. *Kidney Int*. 1989 May;35(5):1119–25.
- [11] Shainkin-Kestenbaum R, Adler AJ, Berlyne GM, Caruso C. Effect of aluminum on superoxide dismutase. *Clin Sci (Lond)*. 1989 Nov.;77(5): 463–6.
- [12] Kawase T, Orikasa M, Suzuki A. Aluminum fluoride- and epidermal growth factor-stimulated DNA synthesis in MOB 3-4-F2 cells. *Pharmacol Toxicol*. 1991 Nov.;69(5):330–7.
- [13] Gomes MG, Moreira CA, Mill JG, Massaroni L, Oliveira EM, Stefanon I, Vassallo DV. Effects of aluminum on the mechanical and electrical activity of the Langendorff-perfused rat heart. *Braz J Med Biol Res*. 1994 Jan.; 27(1):95–100.
- [14] Husaini Y, Rai LC, Mallick N. Impact of aluminum, fluoride and fluoro-aluminate complex on ATPase activity of *Nostoc linckia* and *Chlorella vulgaris*. *Biometals*. 1996 Jul.;9(3):277–83.
- [15] Blair HC, Finch JL, Avioli R, Crouch EC, Slatopolsky E, Teitelbaum SL. Micromolar aluminum levels reduce 3H-thymidine incorporation by cell line UMR 106-01. *Kidney Int*. 1989 May;35(5):1119–25.

- [16] Lai JC, Lim L, Davison AN. Effects of Cd^{2+} , Mn^{2+} , and Al^{3+} on rat brain synaptosomal uptake of noradrenaline and serotonin. *J Inorg Biochem*. 1982 Nov.;17(3):215–25.
- [17] Shainkin-Kestenbaum R, Adler AJ, Berlyne GM, Caruso C. Effect of aluminum on superoxide dismutase. *Clin Sci (Lond)*. 1989 Nov.;77(5): 463–6.
- [18] Department of Health and Human Services National Vaccine Program Office Presents: Workshop on Aluminum in Vaccines. Caribe Hilton International Hotel, San Juan, Puerto Rico: Jointly sponsored by: task Force for Child Survival and Development. May 12, 2000.
- [19] Varner JA, Jenson KF, Harvath W, Isaacson RL. Chronic administration of aluminum-fluoride or sodium-fluoride to rats in drinking water: alterations in neuronal and cerebrovascular integrity. *Brain Res* 1998;784:284–98.
- [20] Strunecka A, Pataocka J. Aluminum fluoride complexes: new phosphate analogues for laboratory investigations and potential danger for living organisms. Available online at www.fluoridation.com/brain3.htm.
- [21] Candura SM, Castildi AF, et al. Interaction of aluminum ions with phosphoinositide metabolism in rat cerebral cortical membranes. *Life Sci* 1991;49:1245–52.
- [22] Publicover SJ. Brief exposure to the G-protein activator $NaF/AlCl_3$ induces prolonged enhancement of synaptic transmission in area of rat hippocampal slices. *Expl Brain Res* 1991;84:680–4.
- [23] Brenner A. Macrophagic myofasciitis: a summary of Dr. Gherardi's presentations. *Vaccine* 2002;20(Suppl. 3):S5–6.
- [24] Lacson AG, D'Cruz CA, et al. Aluminum phagocytosis in quadriceps muscle following vaccination in children: relationship to macrophagic myofasciitis. *Pediatr Dev Pathol* 2002;5:151–8.
- [25] Flarend RE, Hem SL, White JL, Elmore D, Suckow MA, Rudy AC, Dandashli EA. In vivo absorption of aluminum-containing vaccine adjuvants using 26Al. *Vaccine* 1997;15(12-13):1314–8.
- [26] Authier FJ, Cherin P, et al. Central nervous system disease in patients with macrophagic myofasciitis. *Brain* 2001;124:974–83.
- [27] Gherardi RK. Lessons from macrophagic myofasciitis: towards definition of a vaccine adjuvant-related syndrome. *Rev Neurol (Paris)* 2003;159: 162–4.
- [28] Bergfors E, Trollfors B, Inerot A. Unexpectedly high incidence of persistent itching and delayed hypersensitivity to aluminum in children after the use of absorbed vaccines from a single manufacturer. *Vaccine* 22: 64-69, 2003.
- [29] Deloncle R, Fauconneau B, et al. Aluminum L-glutamate complexes in rat brain cortex: in vivo prevention of aluminum deposit by magnesium D-aspartate. *Brain Res* 2002;946:247–52.
- [30] Mundy WR, Freudenrich TM, Kodavanti PR. Aluminum potentiates glutamate-induced calcium accumulation and iron-induced oxygen free radical formation in primary neuronal cultures. *Mol Chem Neurobiol* 1997; 32:41–57.

References concerning lead

- [1] Naatala JT, Loikkanen JJ, et al. Lead amplifies glutamate-induced oxidative stress. *Free Radical Biology Medicine* 1995;19:689–93.
- [2] Morgan RE, Garavan H, et al. Early lead exposure produces lasting changes in sustained attention, response initiation, and reactivity to errors. *Neurotoxicology and Teratology* 2001;23:519–31.
- [3] Needleman HL, McFarland C, et al. Bone lead levels in adjudicated delinquents: A case control study. *Neurotoxicology and Teratology* 2002; 24: 711–7.
- [4] Dietrich KN, Ris MD, et al. Early exposure to lead and juvenile delinquency. *Neurotoxicology and Teratology* 2001;23:511–8.

My references

- [1] Blaylock R. Interaction of cytokines, excitotoxins, and reactive nitrogen and oxygen species in autism spectrum disorders. *J. Amer Nutraceutical Assoc* 2003;6:21–35.
- [2] Blaylock RL. The central role of excitotoxicity in autism spectrum disorders. *J Amer Nutraceutical Assoc* 2003;6:7–19.
- [3] Blaylock RL. Chronic microglial activation and excitotoxicity secondary to excessive immune stimulation: possible factors in Gulf War Syndrome and autism. *J Amer Phys Surg* 2004;9:46–51.