"Greatest Minds on ADHD" Series

BALANCING THE BRAIN

An Interview with Dr. Robert Melillo

Hosted by Dr. Yannick Pauli

www.unritalinsolution.com

Dr. Yannick Pauli: Welcome to the Unritalin Solution's "Greatest Minds on ADHD" Interview Series. I am your host Dr. Yannick Pauli and today I have with me a very special individual; very special because he has been dedicating his life to and has been doing lots to serve children and families, children that suffer from ADHD, dyslexia, autism and other neurobehavioral disorders and that man is Dr. Robert Melillo. So Dr. Melillo welcome to the show.

Dr. Robert Melillo: Thank you for having me. I am really excited about being here with you.

Dr. Pauli: Excellent. Well you know, Dr. Melillo is a very special man and you will realize that as I will be sharing with you some of the accomplishment that that he has made. You know, Dr. Melillo is a man of many hats. He is an author and has published three books one of which is called "**Neurobehavioral Disorders of Childhood**", it is a book for health care professionals. In 2010, he has published a book for the lay public called "**Disconnected Kids** – The Groundbreaking Brain Balance Program for Children with Autism, ADHD, Dyslexia, and Other Neurological Disorders" and in April of 2011 his new book will be coming out which he will be talking about in a few minutes here. Hi new book is called "**Reconnected Kids** – Help Your Child Achieve Physical, Mental, and Emotional Balance". Beyond being an author he is also founder of the Brain Balance Centers, which has I think there are about 34 centers now in the United States. He is also the executive director of the F.R. Carrick Research Institute as well as of the Children Autism Hope project. But before anything, he is a clinician, he is helping children out there but he is also a researcher. He is the coeditor of the *Journal of Functional Neurology, Rehabilitation and Ergonomics*. He is the president of the "International Association of Functional Neurology And Rehabilitation" and he is also completing a Ph.D. in cognitive neuropsychology so quite a busy and productive man.

Anything I missed Dr. Melillo?

Dr. Melillo: No, that was pretty much that was a good introduction actually. Thank you very much.

Dr. Pauli: Okay good. So you know, this was just to and you know no brag about you but really to get people to understand the breadth of your implication in the field of ADHD. So why don't we start with your sharing a little bit of your background and the training that you had and really what got you interested into that field of ADHD, autism, and other neurobehavioral disorders.

Dr. Melillo: Sure well one of the things that always attracted me to chiropractic was the fact that it was founded in neurology. I was always interested in neurology even before, when I was very young, and the fact that chiropractic combined more of a rehabilitative approach to neurological-type problems was what really attracted me in the profession and attracted me also to neurology and rehab as to the subspecialties and so what really impacted me more than anything else was when I was a student, I saw Dr. Ted Carrick speak and he was really the founder of chiropractic neurology.

I saw him speak and he just blew me away with his knowledge and his skills and I knew that this was the man that I wanted to study and emulate and so as soon as I graduated I went and spent time with him and as soon as he started teaching courses in chiropractic neurology, I was one of the first people to register and I was in the first graduating class back in 1990 and he was also one of the leaders in looking at rehabilitation. Soon after that I started actually teaching for Dr. Carrick and his institute and in teaching chiropractic neurology around the early 90s or mid 90s we started to develop the concept of hemispheric balance. We started to look at the literature and see that there was more involved with what we were doing in chiropractice than just affecting the body and the spine. That we were actually impacting the brain and we started to look at this idea of hemispheric imbalances in the brain and how we could change that and so we were doing that at a high level and I was doing at a very high level in my practice, combining very high level rehabilitation and we were combining different subspecialties like medicine and physical therapy and chiropractic and nutrition, but around 1994 and 1995 somebody asked me to do some research into the growing problem of ADHD, which I didn't know a lot about at that time. But I did have three small children and when I saw that it was increasing so rapidly and dramatically when I saw that between 1990 and 1995 in United States the use of Ritalin had increased 250%, it was very alarming to me not only as a professional but especially as a parent and then I did start to notice that my older son was showing signs of ADHD and from there that is really kind of what started my interest in looking at children and doing research into you know, what was actually happening in the brain of these children with ADHD.

Dr. Pauli: One thing that you mentioned that is very interesting to me is the concept of a growing epidemic. Could you go into some other statistics as it relates to ADHD and autism especially, and explain why is it growing so fast? Why are there some many more children being diagnosed with those kinds of problems?

Dr. Melillo: Sure. It is very important that you raised this issue because one of the main things that I have been trying to do is go around and raise awareness that we are facing an epidemic of these disorders. The statistics are pretty staggering. When you look at autism for instance less than 20 years ago it was diagnosed approximately one out of every 10,000 children in the United States and now recently it has been shown that it is less than one in one hundred. ADHD, the Center for Disease Control in United States in November came out with the statement saying that 10% of children or one out of every 10 children in the United States is diagnosed with ADHD and again you know, I do a lot of lecturing around the world and obviously you are over in Europe, and everywhere we go we find that these problems are pretty similar, it is not just the United States. This problem it is something that is happening all over, it is not just a Western problem. My book has been released in China and Korea and I know that in the Asian countries it is a bigger problem as it is in the Western countries. When we look at over all disabilities including things like dyslexia and learning disabilities we are looking at about 25% of children now qualified for a formal diagnosis or in need of special education in the United States and that is growing. I mean that doesn't seem like there is any signs of it slowing down in anyway. When you start to realize that

it's a real problem and some people still question whether these are real numbers or real statistics but I can assure you that most of the current research that's come out and there is numerous researches that have confirmed this. It is not just that we are recognizing these disorders more or that we are more familiar with them because we changed the diagnostic criteria in the 90s. All of those factors combined have only been shown to explain maybe 25% of the increase over the past two decades. So that 75% of the cases that we see being diagnosed now are cases that never existed before. They would have never been this way, 10, 15, 20 years ago. So, when you look at such a rapid increase over such a short period of time the next question is why.

Why is it happening? And most parents are told and most doctors believe that these problems are purely genetic and so when we look at that we can say well it doesn't completely make sense. Because we know that there is no such thing as a genetic epidemic; that you can't explain genes as a driving force behind something that's increasing so rapidly and dramatically besides the fact that most of individuals with autism will never actually have children. So if in fact it was purely genetic problem - like sickle cell anemia or Huntington disease - then in fact the disease would be decreasing not increasing because the majority people that have it do not pass on their genes. But what is confusing is that when we look at autism, we realize that it has one of the highest inheritability quotients of any disorder, meaning it seems to run in families clearly. So if that is the case, then how do we explain that.

There is this new concept of what we look at called epigenetics, which means epigenetic states that we are not looking at altered DNA or bad genes or mutated genes. We are looking at actually environmental factors and how they are impacting or interacting with genes and are affecting the expression of genes during development and these genes seem to be the genes that are mostly responsible for building functional connection in the brain. So that as the child is developing and maturing or even prenatally as their brain is maturing, different environmental factors that we are not completely sure of at this point in time, what those may be, but probably lifestyle factors the same factors that are driving the epidemic of obesity or diabetes or heart disease, that these factors are interacting with genes and are not allowing them to come online and turn on when they are supposed to so what we simply see is that the brain of these children seem to be less connected, especially long range connections between the two hemispheres and they seem to be areas of the brain that are desynchronized. They cannot coordinate multiple areas of the brain to work together at the same time.

Dr. Pauli: So, basically what you are saying is that you aren't the source of the problems is a electrical imbalance; because lot of parents are actually told that as you said it is a genetic problem and there is imbalance in the chemistry that then need specific drugs to get back into balance. So what you are saying is that is actually more of an electrical communication problem right?

Dr. Melillo: Yes and that is really very clear as far as with the top researchers right now the concept of functional disconnection, which is really a physical electrical imbalance in the brain. It is really the leading theory right now. The oldest theory of looking a

chemical imbalances is in the brain really does not explain what we see happening in autism or these other disorders; it is really kind of too simplistic of a model and most researchers are looking at a much more functional complex model that really involve as we said genes being turned on to build connections to bring different areas of the brain to come together at the same time. This is really what makes the human brain unique; what makes the human brain unique is the fact that we can coordinate multiple areas of our brain in huge network of cells to come online at the exact same moment of time.

The fact that we have very asymmetric brain which means that the two sides of our brain are very different – more so than any other species or any other animal – and so when we can combine all these different centers on both sides of the brain that do unique things and we combine them together in unique ways it gives humans certain level of an intellect that no other animal has, that is way beyond any other species. And that can't be explained purely by genetics, because we share 85% of the same genes as mice, we share 99% of the same genes as chimpanzees but yet we are so much more intelligent and we realize that this coordination of our brain that makes us unique but it also means that any little problems that interfere with the ability to coordinate areas of the brain can have a big impact on the human brain and especially during development.

Dr. Pauli: That is…that is really interesting. Could you expand on this concept of hemisphericity and how actually it's altering this ability of the brain to communicate properly?

Dr. Melillo: The idea that we can coordinate multiple areas of the brain together is what makes the human brain unique and the fact that the two sides of our brain do completely different things and combining them together again gives us unique abilities. But what seems to be happening in children with autism and ADHD and dyslexia is during development nothing is injured, nothing is damaged, because that's one of the misconception that people often think of a long with the fact they think there must be a gene mutation. They think that there must be some sort of damage in these children's brains but that is why these problems are so mysterious because there isn't any injury in their brains. What seems to be happening is that one side of the brain is not maturing at the same rate as the other side of the brain. So that networks within the brain can coordinate with one another. We do not develop both sides of our brain at the same time. The right side of the brain develops in the womb and for the first two to three years of life; and then for next three years it is approximately the left side of the brain and then it switches back and forth. So if something impacts the development of the brain prenatally or in the first couple of years of life, it is more likely to interfere with the development of the right hemisphere.

If both sides of the brain do not mature at the same rate what we end up with is one side of the brain has a very fast processing speed. The brain as it matures, the brain cells gets larger, they get thicker, and they get faster impulses. When the child is born they have very little of the brain actually there: about 25% of their weight of

the brain is actually there. The brain weighs about 350 g at birth but yet in the adult size it will be about 1350 g and by three years of age it is going to be 90% of that size. So in the first three years it is going to be the majority of the brain growth occurs. Anything that interferes with the genes turning on and developing the brain will affect the development of the size of the brain cells; it is not creating more of brain cells and the majority of the growth of the brain is increasing the size of each brain cell making sure that we have more insulation around the brain cells so we can get faster impulses and mostly the growth is building new connection between areas of the brain.

We first build connections locally in our close neighbors that we reach out to other cells that are nearby in the same hemisphere and make connections to those cells and those cells connect back. As the brain grows and as it gets faster and it starts to be able to reach out to more and more areas of the brain, we are able to bring more areas together so that they can connect and that they can come online at the same time. Eventually we get longer-range connections that form between the two sides of the brain that allow us to coordinate both sides of the brain to work together and get multiple areas from both sides of the brain to be able to come online at the same time. If one side of the brain is maturing at a slower rate because environmental factors are interfering in some way with that, what we end up getting is one side of the brain has a very fast processing speed and the other side of the brain has relatively slow processing speed, and it looks like an old and a new computer with different processing chips. They both work independently but they can't share information together and this is exactly what we see in children with autism, we see that their local short-range connections are stronger than normal but their long-range connections between the two sides of the brain are actually under connected and the areas of the brain on both sides are desynchronized.

Dr. Pauli: You are talking about this difference in brain activation. One of the thing that really baffles a lot of parents and educators and teachers is the fact that those children have you know, parts of them that are within normal or even above normal where they are great at some things and some of the part of themselves where they are really deficient and it is difficult for parents or teachers to really understand why they have strong sides and weak sides. Would this hemisphericity or what you are talking about explain that?

Dr. Melillo: Exactly. That is…that is one of the things that stands about these children is what is called the unevenness of skills that these children are not delayed in everything. When you look at somebody with a true genetic form of mental retardation something like a Fragile X Syndrome or Down Syndrome what you don't see in those children is unevenness of skills, everything is pretty much globally delayed for their age. But in children with ADHD and autism and dyslexia what you see is that they have certain skills that are very delayed for their age but then they have other skills that may be average for their age or in some cases even significantly advanced for their age in the same child. Some children you can see literally genius level skills in certain areas along with mentally retarded level of skills in other areas. And there has never been model, scientific model, that really explain that before, but when you look at the concept of functional disconnection and hemisphericity it explains it perfectly.

And it is exactly what we see in the neurology. We see that certain areas of the brain as we said are locally more connected than normal. So they actually have more connectivity and coherence or faster electrical activity in certain areas of their brain than normal people and then in other areas of brain they have other areas that are less coherent or that are less connected than what we see in typical developing child so that you see these functions that they have near that. So they have certain areas that they have more electrical power and coherence, they have areas that are bigger or area that are physically smaller or less mature than we would expect to see and along with that we see that these functions that are associated with those areas are also unbalanced in a way where certain things they do very well and certain things they do very poorly.

Dr. Pauli: You mentioned that environmental factors played a very important role in impeding some of those genes to get turned on. In your experience as clinician, what are some of the most common factors that you found that are interfering with proper brain development?

Dr. Melillo: Well, I think that the single most important thing that I think has occurred over the past two decades is the fact that the children are, because of the development of technology, are having less and less early motor activity. The foundation of the brain is primarily built with the child first being able to move, and as they move and interact with their environment they stimulate their sensory organs to engage with the environment around them and that is where the majority of the initial stimulus of the brain comes from, that turns on the genes that helps the brain tells to grow larger and faster and connect to other areas. I think with the development of technology and with the changes that we see in our society, that children are less and less active at earlier ages and they are not interacting with their environment as much.

75% of children in the United States start their lives in daycare because both parents are working and we know that the children in daycare do not have as much physical activity with their environment or with their parents or other people as children who are raised by their parents primarily. We know that more children are not allowed to kind of crawl around early and that many of them will start off with certain types of problems that interfere with their movements like they do not have release of something known as infantile or primitive reflexes. These are all factors that I think are very significant. I mean when you look at in the United States 25% of four year old are obese. There is only way that a four year old child becomes obese and it is not because they are eating too much. It is because they are not moving enough. So, I think the combination of technology and computers and video games and television that is one major factor along with the fact that parents are afraid to let their children outside as they did in years gone by and the fact that both parents are working because there are more economic stressors.

Also combined with the fact that we have mothers and fathers that are more stressed out and are also more unhealthy, more obesity, so that all of these factors affects hormones and it affect chemicals in the body of both parents that can alter the gene

expression because that is where things are about epigenetic is that what things we know about epigenetics is that without changing the actual DNA with just turning off the segment of DNA that can happen from a parent altering their diet or their vitamin intake or being exposed to toxin or stress hormone that turned off gene in the parents can be passed on not only to their own children but could also be passed up to at least 11 generations that we know of. So this is why it can run in families and it can be inherited but it does not have to do with actually changing or altering the DNA. It just has to do with the changing the expression of the DNA. So I think that changes in physical activities and behavior in both parents and children as well as diet as well as some exposure to toxin or a combinations of those things are what is driving the changes and why we see such an epidemic rise of these behaviors and disorders.

Dr. Pauli: Fascinating. Fascinating. For the parents who will be listening to these recording what would you suggest as far as getting their children moving, could you give us may be two or three suggestions of as far as movement is concerned, may be as far as nutrition, you know, which kind of sports would be better for these children, what type of food they should eat, could you give us two or three tips that parents could start implementing to help their children?

Dr. Melillo: Sure, I think the simplest thing is you know, in old days, or days when I was growing up which wasn't that long ago two or three decades ago four decades ago, five decades ago there was on old model that basically you know, children came home from school, parents would have them do homework and then go outside until it is dark. My parents would never let me to sit around the house. Especially on a summer day when it was beautiful out and I think that is one of the most basic rules that parents can get back to. That when your child comes home from school you have them do their homework and then just force them to go outside just shut them outside. I remember reading a story by Richard Branson where he talked about that about how his parents would just they would just make him go outside and even it was cold out you have to go outside and use your imagination, interact with nature and with the environment, especially on a beautiful summer day. One of the things you can do is remove the temptation.
In my house I don't even have video games. I don't allow video games in my house or if I do if my child is exposed to video games I keep that very very restricted and I use that as a way of rewarding if anything. Also limiting the amount of TV or screen time in general to no more than an hour and a half to two hours a day maximum because when a child is in front of the TV screen or computer screen they are not moving their body. If you simply take that away from them what will happen is that they will find physical things to do. So it does even have to be a formal sport or anything like that, but of course anything where they have to run or things where they have to use their feet like soccer or football in Europe is a great sport because it uses an area of the brain called the cerebellum which is one of the areas that we see that is most under developed in children with ADHD and autism.

Nutritionally staying away from a high carbohydrate diet and making sure their children get protein and as they get proper amino acid to build areas of their brain and their

body and their chemicals in their brain. Making sure that they have organic foods as much as possible, trying to stay away from processed foods, try to get meat and fish that are not raised on corn, but rather on grass or greens because that gives you natural essential fatty acids that are very important, the omega 3s to build the brain. And you know, just trying to make sure that the child eats a healthy diet but what a lot of parents do not realize that many children will have dietary issues that are really secondary to their brain. If they are not moving their body and they aren't building their brain up and they don't have a balanced brain, you end up with an imbalance in the immune system where you can have an overreaction of the immune system and you also get an underdeveloped digestive system so you can't breakdown food and you can't get the nutrients and get the proteins that are needed to build the body and the brain and you may end up with what we call a leaky gut which may lead to food sensitivities or food allergies and just eliminating those foods or giving them vitamins isn't the whole answer. The whole answer is to make sure that their brain is working properly and then they wouldn't need any special diet or special vitamins, just a good natural diet.

Dr. Pauli: Great. Thank you so much. What would you recommend for a family that lives in a city, as far as getting their child moving?

Dr. Melillo: Well most cities there are parks, that are available trying to get them everyday to a park I think same type of thing have them come home, do their homework, and then get them out to a park of course in cities they may need closer supervision especially with small children but you know, trying to get them out and the advantage of living in a city is that you can walk everywhere, so you know, making sure that if you walk around the city or getting out everyday and just walking around would be great, I mean the advantage of being in a city and you are walking around is there is so much stimulus around you. There is so many sights and sounds and smells available and that just going out and walking around and interacting with the environment is great. And this is a big problem in cities because especially both parents are working and when the child comes home you know, and there is no supervision the parents are really afraid to just let their child go out. So making sure that they have some sort of supervision or somebody that can take them and make sure that they get out everyday and interact because children in cities are especially at risk of just staying in an apartment and you know the only way to keep them entertained is to have them watch TV or watch video games or play video games and so this is a real threat that have to be careful of.

Dr. Pauli: Thank you. Lets us imagine I am a parent and I am wondering whether my child may be suffering from ADHD or the type of neurobehavioral disorders or may be my child has recently been diagnosed and the medical doctor or neurologist or the pediatrician recommended some drugs and I do not really want to go that route. Could you explain how you would help as a clinician and maybe explain to parents and to us what your Brain Balance Centers, actually do and how they evaluate children and what they do with them to help them out?

Dr. Melillo: One of the things that I would recommend to people is if you have a question about your child, which more and more parents do, that the first thing you need to do is educate yourself or to seek out the advise of somebody who really knows what they are doing and knows what they are talking about. Unfortunately most of the people that are working with these children everyday really don't know that the current research is. Most of them are operating under a model that is over 50 years old and even most pediatricians aren't really up on the latest research. So I think that they should seek out people who are trained in functional neurology. I also think that my book "Disconnected Kids" is a very good resource for parents to first explain to them what is actually happening in their brain and then to give them a way of actually assessing their own child. I have a checklist in the book, multiple checklists, in the book that the parents can fill out that will give them a good idea if their child has a particular problem. We are not that interested in just labeling them with ADHD or autism, we are more interested in trying to see you know is there an imbalance in their brain and in their developing nervous system.

So the book really I think is a good way of looking at that in multiple areas, in motor development, in sensory processing and development, as well as their academic and cognitive skills and it also give them a lot of advises to how to look to see if their child may have food sensitivities or specific vitamin and mineral deficiencies that they may need to do something with. Once they assess their child or they go to somebody who specializes in functional neurology, or if they go to one of the Brain Balance Centers and in the Brain Balance Centers we do a very extensive evaluation. We literally will measure on each child over 1100 different functions in all of those areas that I just mentioned. So you know that is very extensive, that is kind of like the ultimate assessment that a parent can get but a typical functional neurologist is also very well trained and the book itself is also a tremendous resource for parents to evaluate their own child and really understand what is going on and then from there they can either take the book and use that to formulate a program that they can do it at home and I lead them through every step of how to do that at home. I get letters and e-mails everyday from people around the world that are using the book successfully to remediate every problem that is out there. So I know that the book itself is a tremendous resource but…

Dr. Pauli: By the way if you are listening to this recording driving your car, don't crash it trying to write down the book we will give you the resource and the links at the end.

Dr. Melillo: Yes. And, but certainly again an evaluation by a functional neurologist and then put together a treatment plan that can work with the child or they can seek out one of our Centers where we have actually almost 50 of them now that are either open in the process of opening in about 21 different states and we hope that next year we are probably going to be expanding throughout different part to the world where we have a waiting list of about 50 people around the world in Australia, in Europe, in Asia that want to open centers and bring it to their community. So there are lots of resources for parents that they can go to get information and to also get help with either doing a program at home or they can actually go and have somebody

put together a program for them. You know, our centers what happens is the parent will bring the child in for an initial evaluation and then we will explain to them for about two hours what those results are and what the program is all about that we recommend and each child is different. Then if the parent decides to enroll their child in our centers we will see that child three times a week for an hour with a combined program that combined sensory and motor based training along with cognitive and academic training. We will also meet with the parent to device a home program that includes behavioral modification and we also will recommend a specific blood test and then we will recommend a specific diet and nutritional interventions at home as well. So it is a very comprehensive program but the core of that is also in the book "Disconnected Kids" as well.

Dr. Pauli: Great. Could you talk a little bit about some of the results that you get because you published a study last year about the effect of hemisphere specific remediation, could you just share with our listeners some of the results that you have got and you know it might be shocking for some people to hear what is possible actually but could you explain a little bit what you have found?

Dr. Melillo: Yeah absolutely I think it is shocking for people here because again when they hear from people that these are purely genetic problems and they are often told that there is not much taken hope for that the child will never be able to get rid of these problems that basically are doomed for the rest of their life and the best you can only hope to do is to compensate for these problems. But as you said there was one article that was published in the *International Journal of Adolescent Medicine and Health* which is a fully peer-reviewed indexed medical journal that examined our program and looked at 60 children from two of our centers that were randomly selected and who had been diagnosed with ADHD. They went through our program and after 12 weeks they were reassessed. 82% of those children no longer met the criteria for ADHD after 12 weeks. Furthermore we had 60% of those children had at least a two grade level increase by standardized academic testing in multiple academic areas and 35% had a four grade level of increase in multiple academic areas after 12 weeks. So we see that you know, these are huge changes that really make a big difference and we are ongoing doing a number of other control studies and we have a number of other outcome studies that will be probably released by the end of this year looking at autism and dyslexia and Asperger syndrome as well. Again they show a similar type of success rates mostly children that we work with autism or high functioning autism will require more than 12 weeks. They usually require more like six months or more but we get also extremely good results and we have had many children that have completely been recovered from autism or from other high functioning autism and from the other disorders as well. So you know we have shown that you can remediate these problems completely that you can eliminate these problems whether it is tic disorders like Tourette, whether it is OCD, whether it's ADHD, dyslexia, learning disabilities, conduct disorders. We worked with all of these disorders and had success and will be publishing a lot of those results as time goes on.

Dr. Pauli: This is quite impressive. In fact it is so impressive that you know, some

parents may have gone through so many different therapies with no or limited results that they have almost lost hope and when you share the possibilities they have a hard time believing it. What would you tell them, for these people who have tried a lot of things with you know, not getting the results that they were looking for?

Dr. Melillo: Well I think what happens a lot is that when people read my book "Disconnected Kids", even professionals, when they read that book they realize that it is a completely new model that nobody has ever put it together like this before for these types of problems and the other thing is that they read it in and say wow this makes a lot of sense, I mean this really answers all of the questions. And I think what most people have been finding is that when they go to their doctors most commonly or to other people that are working with the children and even all these people are very well trained and well meaning and trying very hard, they really don't understand what is actually happening in the brain. And this is the bottom line with us, it all started with me with understanding and trying to understand what is actually happening in the brain and then the program that we developed was really built from the bottom up, really looking at brain research which no other program really has done that.

Most of the programs that are working with children really come from the ideas that how do we just manage this particular symptom, you know, we see one symptom. A child has a problem with visual processing or with eye movements or they have a problems with auditory processing or they have a problem with behavior or diet, or nutrition or academics and they only look at that one piece of the puzzle and try to remediate that one piece and they do think to try to manage that particular symptom without really looking at the big picture and really understanding what is actually happening in the brain. Our program has started with looking at the brain and then looked at all of the different pieces as part of that. So what we do it put together a program that is extremely comprehensive where we do all of those things, will do visual stimulation, auditory stimulation, tactile, smell, we work with their diet, we work with their academics, we work with their behavior, we work on everything that is going on with that child and we do it individually to the child but also directed towards what is particularly happening in the brain, meaning we are trying to reestablish normal communication by correcting the underlying imbalance which is the actual problem. So I think when parents understand how comprehensive this approach is and how new and cutting edge it is, but yet that is based on the latest brain research and that it was built from the very beginning on brain research, I think they understand you know, why it is so powerful and why we can get changes that nobody else can get.

Dr. Pauli: I think it is a good segue to one more thing that I wanted to talk about with you and this is this idea of your commitment to research. Could you share with our listeners a bit more about your involvement in the F.R. Carrick Research Institute and the Children Autism Hope Project?

Dr. Melillo: Yeah…well like you said from the beginning, it really starts with understanding what is happening in the brain and understanding the research and also the best way to really have parents believe in what we do is to really produce the

research that proves that it is effective. And I understand that because there is a part of me as you said that is a research and I head up a research lab and we are doing a lot in that area I mean. We have come out with a number of new research papers over the past couple of years and we continue to do that. We also are developing collaborative efforts with other labs and universities around the world so that we have a number of great projects going on right now. We have our primary lab is in New York, the F.R. Carrick Research Institute and a division of that is known as the Children's Autism Hope project which that division is really focused on just researching and understanding autism. We looked at autism as the biggest mystery in neuroscience and if we can figure out that then it will open the door to research into many other areas like Parkinson's disease, and Tourette and ADHD and all these other disorders.

But in that lab in New York we primarily do psychologically based research, but we have also just signed an agreement with Hebrew University and with a lab called Herzog Hospital, which is a huge hospital that is affiliated with Hebrew University in Jerusalem. This is a hospital that is number two in the world for research at this point and they are very well known especially in neuroimmunology and in genetics. So we have taken over a lab there in that hospital where we are going to be doing primarily neuroimmunology and biochemical research to look at things like nutrition and to understand better the role that the brain plays in controlling the immune response and the digestive response and to possibly look at various types of supplements or even possibly medications that might affect the brain so that it helps affect the digestive system and the immune system in a better way. So we want to understand that role much better.

We are also doing some ongoing research in Cuba, with a gentleman named Calixto Machado, M.D., Ph.D. neurologist, and he is one of the leading people in the world in coma, but he is doing some ongoing studies looking at FMRI and looking at the brain of autistic children. We also believe that we are going to be doing a collaborative research project with one of the top labs in the world at Harvard this summer on ADHD, looking at hemispheric type treatment towards children with ADHD and looking at FMRI studies of the brain along with other neuropsychological measurements before and after when we do those types of treatment. So we have a lot of research ongoing in labs which is one aspect of what we are doing, but we also hope that eventually we can make what we are doing in our centers available for every child regardless of you know how much money their parents make or their ability to pay. And to do that we want to get school districts to pay for the program but to do that we know that we need thousands of bits of data and thousands of cases that we have shown success with.

So you know our centers were collecting these data everyday. The centers are designed to collect new data everyday on every child that we work with and this year alone in the United States we will probably work with about 10'000 children over the next two years we will work with over a hundred thousand children and we believe that in the next four or five years we will collect an up data that we can go to school systems and show that what we do is not only effective but also cost effective. And is

very important because in the United States not only are we recognizing that these problems are increasing at epidemic levels, but at the same time we are seeing that services to these children are being cut and special education programs are being cut because of the economy. So parents are left more and more without any resources and so if we can get school systems to pay for this because it actually reduces their cost and provide service to the parents, that is what we are looking to do. And we realize that research is really at the foundation of all of that.

Dr. Pauli: Great. Then you know, I asked you this was bit more of a you know, a 50,000 feet view of your work but I think it was important for the listeners to hear that because they to realize that it has grounded in science and that you are putting in lot of effort into showing that this new model is actually effective. Lets us return back more on probably some tips that are practical for parents who are listening to this could you talk a little bit about your new book "Reconnected Kids: help your child achieve physical, mental and emotional balance", what it is all about and how it can serve our listeners?

Dr. Melillo: Sure as you start working with more children through the book and through our centers what we found is that most parents came in and one of their chief complaints about other programs is you kind of raised before was that they really did not see a lot of dramatic changes in their child, that they went through the programs or they did the different types of interventions and they didn't really see a lot of difference in their child. When they start our programs or when they start the book, one of the things that we see is that they usually often notice dramatic changes in their child and especially in their children's behavior and in their functions. So they know that something is happening that did not happen before. But sometimes they also noticed that some of the behaviors that come on seem negative. Their child who may have been a perfectly easy going child before and now suddenly starts to say no and starts to become maybe oppositional or what looks like compulsive, or they start to cry or to they start to scream or they start to get emotions that they never had before. To some parents this can be alarming because they don't know is this a good thing or this is a bad thing. So, one of the things that we saw in our centers especially was abuse with majority of questions that we were getting from parents you know, what is happening with my child and is this good. So the first part of the book is really about explaining to them from a neurological standpoint that as we start to work with the child you may start to see changes in behavior that are normal and natural and are actually good.

What we see is that both sides of the brain control behaviors and the left side controls what we call approach behaviors and the right side is what we call avoidance behaviors and emotions are there to motivate them towards either of those behaviors. We have positive emotions that really motivate us to approach the world and go out there and seek out information and touch things and interact with things which is a left brain function; or we have negative emotions that sometimes will help to protect us that help us to withdraw or stop from doing things that are unnecessary or that aren't going to help us so that are potentially dangerous. So we have negative emotions that

motivate us to do those types of things. And with many children who that we work with the majority have these right hemisphere delays. When we look at ADHD or autism or Asperger's they have right hemisphere delays, so they may be very pleasant children and positive children but they have never developed a negative emotions and a negative behaviors of the right side of the brain. As we stimulate the right side of the brain what we often see is the onset of the some of these negative behaviors and negative emotions, which are normal and are natural and are necessary but the parent has never seen them before and they are also happening later in life than it would with a typical child because their brain is literally immature and delayed in that area.

So the book explains to them what to expect and shows them compared to other milestones how they can look at these emotions as what age they belong to. So a kid who is eight years old may actually be having the onset of emotions that a three year old would have but that is normal and then they may develop a four year old behavior and a five year old behavior so the parent can see even though there are negative behaviors that it is a positive development and it is normal progression. But also the second part of the book is now as the parent understands neurologically and is prepared and can monitor what is happening, they still need to know how to deal with these behaviors. So the second part of the book is not only for parents who have children with developmental or neurological issues but it is also for any parent because most parents now, 80% of parents are dissatisfied with their children behavior and so what we do is we teach them how to deal with negative behaviors based on brain research and based on our experience. And a lot of it starts with the parents so what we also do is we focus on the parent and getting the parent into a positive mental state and getting the parent to reconnect with their goals because lot of parents are bitter, and angry and frustrated and negative and overwhelmed and stressed out. So we need to get that parent positive because you can't just develop a behavioral planfor your child and force them to do things if the parents themselves are very negative or if they are not leading you know, a life that might be exemplary. So, the second part is really very motivational it is very directed towards the parent and then it teaches the parent how to approach their child's behavior and with them as an example and gets them to work with their child as the child's coach in building the child's own goals and dreams. So it uses the universal law of attraction, similar to the book "The Secret" and I use that in very practical terms to help the parent interact with all of their children and to reconnect with their children and their family values and to build family rules and to really help optimize their child's behavior and help their child reach their own goals and dreams.

Dr. Pauli: Great. How can our listeners get the book?

Dr. Melillo: Well, the book is going to be released on April 5th 2011 and they can get it either through bookstores through Barns and Noble borders or they can go on Amazon or they can go on almost any of the online stores and they can order it or they can pre-order it now if they'd like to or they can pre-order through their own bookstore but what we like to do is try to get a coordinated effort where when the book is first

released, we get as many people to purchase the book as possible so either now pre-ordering it or as soon the first week the book is released which is as we said April 5th 2011, if people can go in there and they need to go their bookstores and order it or order it online that would be great.

Dr. Pauli: And I really highly recommend to our listeners to get the book because you know, Dr. Melillo is really masterful at taking updated breakthrough scientific concepts and transforming it into very practical and effective applications to help to help your child. So, Dr. Melillo in the last few minutes we have together, is there any question I should have asked you or you would have wished I had asked you?

Dr. Melillo: Ah…you know, one of things I think that is important for parents or for professionals to understand is what is functional neurology? We used the term a few times and what does that mean. And I think that is an important thing for people understand that I believe that functional neurology is going to be the next evolution of health care, of the health care model. Traditional medicine has always been directed primarily at looking at emergency interventions, life-saving intervention, and really managing symptoms. So they look at different systems and manage the symptoms. There was another health care model called functional medicine that developed several years ago that really said that what we need to look and measure more functions because what people have now is not so much infectious diseases and life threatening, short-term type of diseases but rather more chronic illnesses and so functional medicine was more about looking at chronic illnesses and trying to measure functions of different systems rather than just to manage the symptoms.
And that was definitely an advanced evolution of the healthcare model, but the problem with functional medicine is that it doesn't look at neurology at all. It does not understand that the brain actually controls all of those systems and most of the people in functional medicine really don't know anything about the brain. They look at the digestive system and the immune system and they understand that and they understand that those things can affect the brain but that more often the brain is what is actually impacting their digestive system and their function. Most of the disorders that we see like heart disease and diabetes and irritable bowel syndrome and autoimmune disorders and all of those disorders that we don't traditionally look as brain related, along with things like depression and anxiety and schizophrenia and all other things we do look as brain related, but those are all interactive. And so understanding the brain as really the main thing that might be leading to a lot of these disorders is where the idea of functional neurology comes into play. And this is I think the next evolution and we are seeing a lot of people from many different subspecialties, not just chiropractic or chiropractic neurology, but also physical therapy and even traditional medicine is starting to move into this and we have a major conference that we are holding this year in Orlando in May from the 12th to the 15th 2011. We have a new association called the International Association of Functional Neurology and Rehab and as you said we also have a new journal called the J*ournal of Functional Neurology, Rehabilitation in Ergonomics* and in this conference we have some of the leading researches in the world that are coming to speak and we except that we are going to have a large number of health professionals from all over the world that are

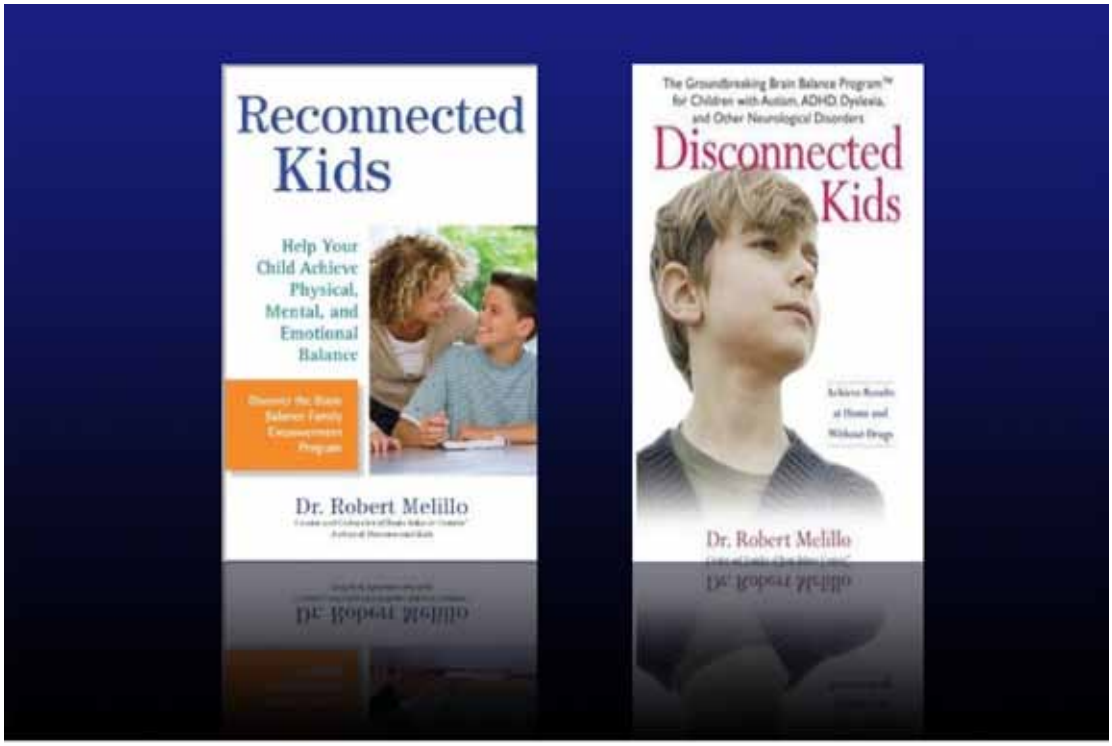
going to come down there. We believe that this will be the model of the future. So I think people should be aware of that and understand that looking for somebody who is trained in functional neurology for multiple conditions is what they may want to look for.

Dr. Pauli: Oh…great. Thank you so much and I think for you know, for the parents who will be listening to this recording probably the best thing they can do is buy your book the "Disconnected Kids" which is you know, great way to start into this new model. So Dr. Melillo, I thank you so much. Please stay on the line while I am saying good bye to our listeners here. I re-appreciate your sharing knowledge and wisdom. This was Dr. Yannick Pauli for the Unritalin Solution, our interview series "Greatest minds on ADHD" with Dr. Robert Melillo. Thank you so much, Dr. Melillo.

Dr. Melillo: Thank you.

Resources mentioned in the Interview

Dr. Robert Melillo's Books



Additional Resources

If you would like to listen or download Dr. Melillo's interview or to find more free interviews of the "Greatest Minds on ADHD" series, please visit:

http://www.unritalinsolution.com/adhdinterview

To access other written transcripts and other free ebooks about the natural management of ADHD, dyslexia, autism and other neurobehavioral disorders, please visit:

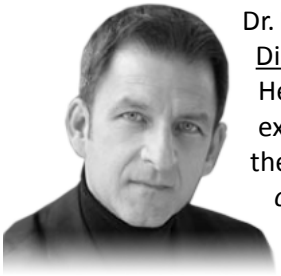
http://www.unritalinsolution.com/freeadhdebook

Get access to more free, practical and trustworthy information about helping your child, please visit our website. We have hundreds of articles, videos, interviews, ebooks and blog that is updates every week.

www.unritalinsolution.com

About

About Dr. Robert Melillo:



Dr. Melillo is a chiropractic neurologist and the author of "Neurobehavioral Disorders of Childhood", "Disconnected Kids" and "Reconnected Kids". He is also founder of the Brain Balance Centers. He is the current executive director of the F.R. Carrick Research Institute as well as of the Children Autism Hope project, as well as he coeditor of the *Journal of Functional Neurology, Rehabilitation and Ergonomics* and the president of the "International Association of Functional Neurology and Rehabilitation". He dedicates his life to helping children and families overcome ADHD, dyslexia, autism and other neurobehavioral disorders. He is currently completing a Ph.D. in cognitive neuropsychology.

About Dr. Yannick Pauli

Dr. Yannick Pauli is a chiropractor who has advanced training in functional neurology, nutrition and functional medicine. He also has advanced education in chiropractic paediatrics. He is the Director of the Centre Wellness NeuroFit in Lausanne, Switzerland. It is in this clinic that he runs Brain Potential, a holistic brain-based stimulation program that integrates various therapies to help children suffering from ADHD, dyslexia and other learning disorders, as well as other developmental disorders such as autism. Dr. Pauli has served as an expert on chiropractic and alternative and complementary medicine at the World Health Organization, was the 2004 recipient of the World Chiropractic Alliance "Chiropractor of the Year" Award and has published research on the effects of chiropractic on children suffering from dyslexia, as well as the effect of Network Spinal Analysis (a low-force approach to chiropractic) on the ability of adults with ADHD to concentrate. He is also the founder and current president of the Swiss Chiropractic Pediatric Association. He is the founder and chief editor of www.unritalinsolution.com , one of the fastest growing online resource about the natural management of ADHD and related disorders. Dr. Pauli is married with Cecilia and has two children: Noah and Megan.