



Plaza Mayor, Villa de Leyva, Colombia—photo by Dr Vasquez 2014

Interview with Dr Alex Vasquez by the *CAM Magazine* team regarding the CAM Summit in London on 20th June, 2015

Dr Vasquez's Personal and Educational Path, the 2015 CAM Summit, and Mitochondrial Medicine as the Conversational and Conceptual Hub for Interconnecting Nutrition, Lifestyle, Microbes, and Political Pollution—Beyond Nutritional Myopia into Social Contextualization



What sparked your interest in complementary and alternative medicine?

This interest just came "naturally" to me for several reasons, from several different directions. When I was a kid growing up in the 1970s, my father was a "health nut" – that was the label applied to people who participated in exercise and gave attention to the food that they eat. When we were together, he would give me cod liver oil blended in orange juice every morning, and I also recall that he was generally against the popular soda pop drinks of the day; we occasionally fasted, and we played tennis. I don't think that I received any specific ideas, but I received certain general concepts – namely that exercise and attention to food were both important, or at least worthy of consideration. My father also gave me two of my first nutrition books, the classics *Are you Confused* by Airola and *Nutrition and Physical Degeneration* by Price. Otherwise, I was a very active and somewhat athletic kid; I enjoyed racing bikes, running foot races, and playing basketball, football, and soccer. Perhaps due to a mix of somewhat random experiences, specifically in school (observing the behavior of my teachers), my social circle (seeing how my friend Robert's life was different from

Archive: Dr Vasquez's 2014 article "Mitochondrial medicine arrives to prime time in clinical care" has been archived at www.ICHNFM.org/reprints/2014mito.pdf

mine and seeing how he was discriminated against), my family (including my grandfather's early iatrogenic death), and the television shows (simplistic babble) that I watched as a child, I found myself democratically and socially inclined—meaning that I had a concern about society's wellbeing and believed in what I understood as democratic ideals; later, I was quite clear in my conviction that healthcare and medicine should function "in the real world for real people" rather than being directed by impractical pseudo-idealistic dogma that served a so-called "elite" minority. When I was 14 years old, I started to lift weights and take exercise and nutrition more seriously; I started reading nutrition books. When I was 16 years old, I transferred to a military high school and intensified my interest in exercise (particularly weight-lifting) and nutrition. Over many years, I also gained some experience in mixed martial arts (taekwondo, kung-fu, jiu-jitsu), and from this I gained an appreciation for how the mixing of different technical and tactical skills was generally more successful than studying and relying solely on one approach, no matter how well mastered; this obviously influenced my academic and clinical path later.

After high school, my first interest was to study English and Literature in college, and I later merged my

passion and exercise and nutrition to pursue a degree in chiropractic. In my first year of chiropractic college, I haphazardly attended a lunchtime lecture on naturopathic medicine and from this chance introduction decided to pursue naturopathic education following chiropractic. Following graduation from naturopathic medical school, I had a private practice and also taught Rheumatology and Orthopedics at Bastyr University; I practiced for seven years as a generalist seeing everything from allergies and autoimmunity to migraines and cancer, consulted for the nutrition industry, wrote several articles and books, and apprenticed myself to an experienced integrative medical doctor who would later encourage and endorse my attendance in an allopathic/osteopathic medical school.



Growing up in Texas under my step-father Wallace, a mechanical engineer from Texas A&M and the stereotype and epitome of a *hunting fishing hard-working* Texan who could build a house with this bare hands, turned out to be very influential. He taught my brother and me a respect for common sense, hierarchy, and hard work. I spent a lot of time as a child building things, from model planes and tanks to Legos to bikes and later furniture, decks, and porches; the process of construction is that of being able to create mental designs and then work the physical and logistical process of making those ideas tangible and usable. I think of those early experiences often when I am writing books and designing illustrations.

To be clear, I was a very good student and writer throughout all of my education, but – paradoxically – notably in high school, I wasn't a very strong reader; perhaps more accurately, I wasn't a very fast reader. Students were supposed to read quickly and arrive at the obvious *predetermined* conclusions; in contrast, I consider(ed) each word important and look(ed) for nuance, meaning, and implications. To become whatever definition of a stronger reader, I forced myself in my late teens and early twenties to read the most difficult and

diverse works that I could find, and of course this naturally lead me to the writings of Friedrich Nietzsche as well as to those of other writers and thinkers such as Robert Bly, Joseph Campbell, Henry Rollins, David Deida, Robert Moore, and Alice Miller in addition to quite a bit of poetry and fiction. Because of all of this extracurricular reading during various graduate programs in the health sciences, the intermixing of psychology with philosophy and medical science starting with molecular biology became natural to me; for me, all of these things merged together and were dependent upon each other. I think that one of the hallmarks of my work is the intermixing of various disciplines, not simply medical disciplines but disciplines outside of medicine and biological sciences, namely psychology, philosophy, and sociology. Music—ranging from The Sundays to The Smiths, from Metallica to Strunz & Farah—has also played a strong role in developing my thought patterns, appreciation for nuance, and openness to new ideas—even those that directly oppose my own.¹

You are the only person to have three doctoral healthcare degrees in three separate professions. What made you want to achieve this exceptional level of knowledge?

Many bypaths, including luck, led me here including my own inherent inclinations, as well as influence from my family. I was naturally a successful student, without making any effort to be so. Relatedly and perhaps even more interestingly, I also won a number of leadership awards as a young child (e.g., before age 12), again without even knowing what the concept of leadership meant; as I recall, I did not start studying leadership (per Nightingale and Waitley) until later in my teens. I would describe my family as a whole as "very average", intelligent but not very educated, with the exception of my father (from Colombia) who studied in France and America and earned at least one master's degree (Engineering) while also being a musician and entrepreneur. I was also influenced by social and musical events happening in the 1980s; a major theme at that time in punk rock and in the spoken word recordings from Rollins was that of being true, honest, "straight edge" and not being a "poser." I finished my last two years of high school at Riverside Military Academy, where I studied under an influential English teacher (Charles Christophersen, who taught me, "If you really want to understand something, then you should write it down.") and Physics teacher (Thomas J. Twomey, who taught me "If you take care of the numbers, then the numbers will take care of you."), and that environment also inspired and recognized my intellectual and academic inclinations. I think that right around the transition from my late teens to my early 20s, I also transitioned more strongly toward academics and eclectic learning. I started to have more

concrete intellectual ambitions, and my first influences in this area were my anatomy teacher in chiropractic college (William Gould PhD) and a seminar leader (Keith Innes DC), both of whom really impressed me with their academic abilities; they were my first personal contact with upwardly inclined intellectual competence. Reading *Meganutrients for Your Nerves*, which I picked up at a used book store, by H. L. Newbold when I was 22 years old definitely changed my life and committed me to the study of nutrition and orthomolecular medicine.

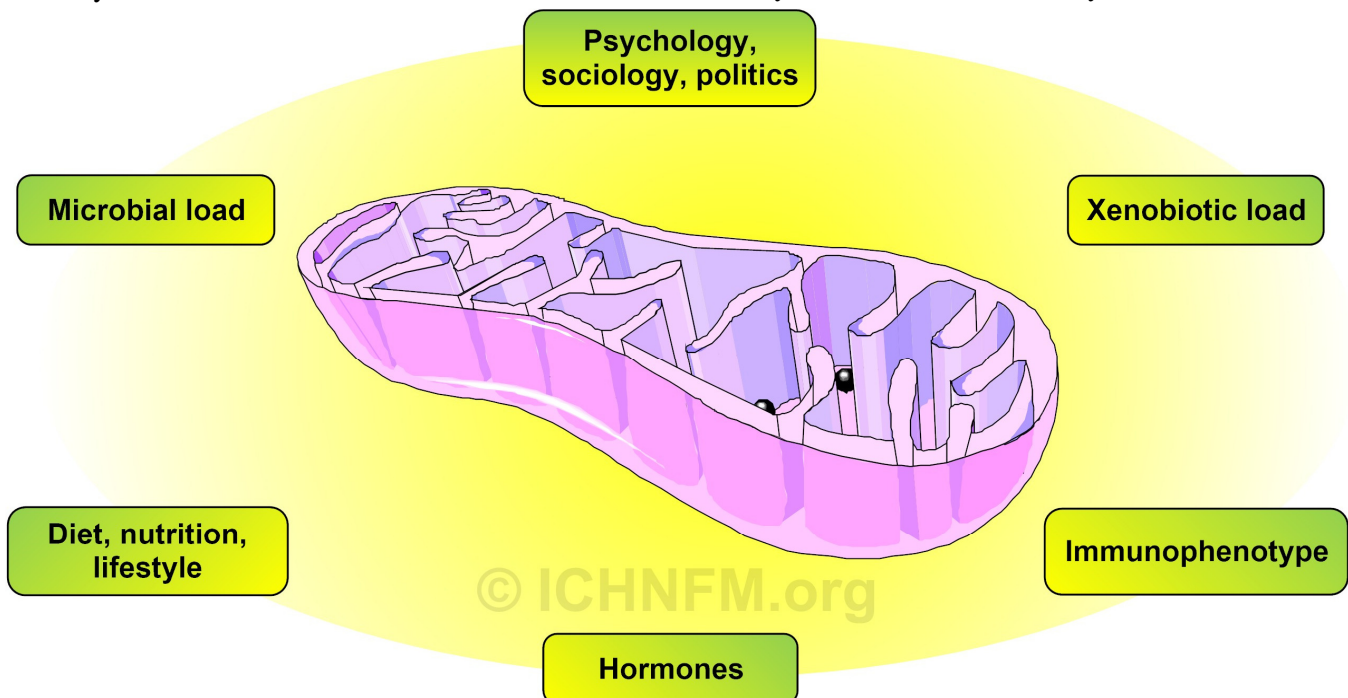
For me, chiropractic was the embodiment of my interests in nutrition and physical health, and naturopathic medicine represented my interest in eclecticism and a more detailed study of nutrition and botanical medicines. Since my first year of chiropractic college, I had been an aggressive "library researcher", quite frequently skipping class in order to search through volumes of research and photocopy articles, and by the time I was 23 years old I started publishing my own letters and articles. I progressed pretty quickly here, and when I was 24 years old I wrote my first letter that would later be published in the American College of Rheumatology's journal *Arthritis and Rheumatism*.² I graduated from chiropractic college the day after I turned 25 years old and immediately enrolled in naturopathic school, graduating in 1999.

After several years of integrative medical practice in a group setting, I was encouraged by my medical mentor (Manso³) to attend allopathic medical school. At that time, I wanted to pursue another doctorate degree, and I wanted to challenge myself to do the most difficult thing I could find, for both intellectual and psychological reasons. University of North Texas was then and has continued to

be ranked one of the best medical schools in the country; I also wanted to learn what might be a better and more sophisticated method of education and instruction than that to which I had been previously exposed. Both of these goals were accomplished: the methods of instruction were highly sophisticated, ultimately detailed, without compromise and without mercy. Largely, I wanted to achieve what Nietzsche referred to as perspectivism, and my judgment was and has been that the only way to achieve this is to submit to the study and mastery of various disciplines.

You have written many books, including 'Rheumatology v3.5', and 'Mitochondrial Nutrition and Endoplasmic Reticulum Stress in Primary Care, Second Edition.' What interested you in these subjects?

Mitochondrial function serves as a model of interconnection, influenced by nutrition, exercise, microbes especially bacteria and viruses, as well as social and political events. One can use the study of mitochondria as a conversation piece and focal point for observing the confluence of various aspects of life; some of these aspects are simple and palatable (e.g., nutritional biochemistry) while others force us to deepen and mature our understanding of the world in which we live. I will span the breadth of these topics and their practical implications during my presentation at the 2015 CAM Conference in London. Endoplasmic reticulum stress generally accompanies mitochondrial dysfunction; they are positively related and self-reinforcing. Autoimmunity is the culmination of systemic inflammation and very clearly includes mitochondrial dysfunction.



Dr Vasquez's model of mitochondria as a "biosocial hub" interconnecting major extramitochondrial influences, processes:
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You are an internationally recognized speaker in the field of mitochondrial nutrition, what do you enjoy most about speaking to an audience?

Deconstructing illusions of delusional simplicity and false complexity while simultaneously embracing and celebrating authentic complexity and making it more manageable. If I can make the experience enjoyable, perhaps by intermixing a joke or nuance of social contextualization, then I consider that additionally successful. But the priority of any true educator is the transferral of information; jokes and bling are the priorities of entertainers. In the days of punk, we used to call this "all killer and no filler", and I think that is a funny and worthy—vernacular yet valid—aspiration.

Who inspires you in the CAM industry?

Reverent by nature, I would love to be inspired by multiple people, but the truth is that very few people add much depth or detailed expertise to their work, and even fewer demonstrate courage necessary to effect authentic change. Many people these days want to be seen as experts, but without having to muster the discipline and effort to actually become authentic experts; what we see these days are people publishing books and orchestrating big "summits" without having developed much depth to their material. When you see doctors publishing for the general public without having first innovated ideas and testing those ideas in professional arenas and peer-reviewed publications, you're seeing the choice of popularity over profundity.

The three people who come to my mind most readily as inspirational are Hong Kyu Lee MD PhD, Garth Nicolson PhD, and Jeffrey M Smith MBA. Dr Lee is a diabetologist and mitochondrial toxicologist in Korea, and to my knowledge he is the only researcher with the courage and integrity to state the obvious fact: we will never be able to achieve optimal public health worldwide when the population is being exposed to mitochondriopathic toxins and pollutants.⁴ *My extension of his work* holds that any conversation on the treatment or "control of the diabetes epidemic" is cowardly without including the importance of pollution control and the imperative for governments to assert and enforce regulations that protect and unburden the population from this ongoing chemical onslaught. Dr Nicolson is an authoritative scientist who co-discovered the fluid mosaic model of the structure of cell membranes⁵ and who has also published numerous papers on mitochondrial nutrition; those things alone are huge, but not necessarily heroic. What makes Garth a hero in my book is—as with anyone who earns a place on my "hero list", including Friedrich Nietzsche (philosopher who overturned mystical metaphysics) and Linus Pauling (two-time Nobel laureate

for Science and Peace), who has to demonstrate the combination of scientific acumen with social activism/engagement—is his willingness to pursue and disclose the truth, in this case about persistent microbial infections and the contamination of vaccinations; I feel very fortunate to have had Dr Nicolson present his work at our 2013 International Conference on Human Nutrition and Functional Medicine (articles and videos archived at www.ichnfm.org/events/MitochondrialMedicine). Jeffrey Smith⁶ is one of the few people on the planet with the courage to address the issues surrounding genetically modified/manipulated organisms/foods (GMO). *My perspective* is that the monopolization and corporate control of the food supply is a risk to national security for any nation that becomes dependent on patented seeds, and the international saturation of the population with pesticides is clearly contributing to the global burden of disease and suffering, in addition to the political use of these chemicals—for example, the use of glyphosate to poison the land and water of peasant farmers in Colombia.⁷ Impressively and very revealingly, especially given the direct connection with nutrition, detoxification, and clinical care, the functional medicine and clinical nutrition fields have remained virtually silent on these matters and have failed to address these concerns—this, despite the clarity of the sociopolitical and biomedical data. International College of Human Nutrition and Functional Medicine (ICHNFM.ORG), is the first and only organization in the field of nutrition and functional medicine to have published position statements on genetically modified foods, pesticides, vaccinations, human rights, and social contextualization.

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A few words about speaking at the CAM Summit

I have been presenting post-graduate lectures in integrative medicine, clinical nutrition, and functional medicine for 16 years; whereas in the past I would accept essentially all invitations, these days I only give presentations on a very selective basis. Over just the past few years, I have decided to speak only at events that attract more advanced attendees and deliver a higher level of information, and I have decided to work harder to present my more advanced information; the latter is challenging because we as presenters always have to cover

some introductory basic information and vocabulary within the time allotted. The challenge is to move from introductory concepts to social contextualization and teleological implications within a short amount of time; that is, to move from molecular biology to political sociology within the same continuum of conversation. Failing to do this is to promote the conceptual and practical fragmentation that currently plagues us, both as citizens and as participants in healthcare.

The facts are clear that humanity and our environment are in serious decline; witness the ongoing international war state, the corporate takeover of reality, climate change—now described as progressive and urgent, the rising tide of all diseases, and the impending loss of salt-water sea life, all of which threaten the sustainability of human life—as individuals, as nations, and as an international community. Should clinicians ignore these and thereby abdicate social responsibility? Of course not; but then, why do they? Does failing to include social contextualization have an impact on our treatment plans and interactions with our patients and clients? Of course; when we view patients out of their social context we put the blame on and give the treatment to the individual person, which is exactly what the social manipulators and drug companies love for us to do: ignore the societal patterns and political causes of depression and disease to focus on "individualized treatment plans" and send people home with shopping bags of pills of one persuasion or another. If we as educators and clinicians gave at least some modicum of attention to the pathogenic structures that frame our patients' lives, then we would have a better chance of succeeding clinically, as well.

Physicians and nutrition professionals face new challenges and responsibilities these days, and conference presentations need to address these new challenges and responsibilities; if we fail to do this as presenters and conference organizers, then clinicians will find themselves increasingly confused by the new data and—ultimately—distanced from their clinical and social goals. The responsibility of intellectuals these days extends beyond those that we appreciated earlier (famously per Chomsky⁸); while we still have the obligations to speak the truth and expose lies, these two alone are not sufficient in my opinion if we are to sustain the health and wellbeing

of our clients and of the public in these modern times. We also have to, explicitly, 3) present these truths in a manner that is socially contextualized, 4) articulate the teleological implications of opposing views, and 5) summarize and orchestrate the previous considerations into a cohesive conceptualization that directly addresses the rights of humanity and needs of a sustainable society; in Nietzschean terms, we have to eschew scientific positivism in favor of a nonmetaphysical antinihilistic "affirmation of the world as it is." The practices of medicine generally and clinical nutrition specifically do not exist isolated from these considerations; we cannot continue to support the false pretension that the practice of medicine and nutrition are separate from these realities. People have more access to information and generally

The practices of medicine generally and clinical nutrition specifically do not exist isolated from social and political considerations; we cannot continue to support the false pretension that the practice of medicine and nutrition are separate from these realities. People have more access to information and generally "know better" than to accept isolated and noncontextualized perspectives; more sophisticated audiences expect a contextualized conversation, not simply a linear direct run through nutritional biochemistry that crosses the presentation finish line to award a clinical checklist, a justified recipe for drugs and nutritional supplements. These days, post-graduate clinical presentations need to do more than simply recite news and research; we need to place clinical practice back into its social context, and we need to look beyond the myopia of isolated and decontextualized patient care.

"know better" than to accept isolated and noncontextualized perspectives; more sophisticated audiences expect a contextualized conversation, not simply a linear direct run through nutritional biochemistry that crosses the presentation finish line to award a clinical checklist, a justified recipe for drugs and nutritional supplements. These days, post-graduate clinical presentations need to do more than simply recite news and research; we need to place clinical practice back into its social context, and we need to look beyond the myopia of isolated and decontextualized patient care. The drug paradigm of healthcare seeks to keep clinical encounters isolated from

the larger reality so that the causative external social and political forces that shape the observed patterns of disease are left invisible, inarticulate and "nonverbal", and therefore not addressed. Our conversations need to include words and descriptions for the entirety of what is occurring, not simply the convenient morsels of reality that give happy answers to happy people with happy problems; our world and reality are more complex than that. For these reasons, I am looking forward to delivering a comprehensive-yet-manageable presentation on "mitochondrial medicine and inflammation" that includes appropriate "real world" contextualization and teleological—distinguished from the myopic and micromanagement recipes to which we are accustomed—solutions. The CAM Summit will be distinguished from other events by its sophistication and depth, and I am happy to contribute to those characteristics.



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