

Interview with Dr. David Allan Peura: a Gastroenterologist of Gastroenterologists and a Master or Masters

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Fabian Emura (FE): It's Saturday July 7th of 2018, we are in Bogota D.C., Colombia and it is my great honor to interview a worldwide known Physician, honored for both his professional and personal accomplishments. He's been recognized for his broad, deep and sustained contribution to gastroenterology, and he is known as a "gastroenterologist of gastroenterologists" and a "master of masters." Ladies and gentlemen, let me introduce you to, from the University of Virginia, professor David Allan Peura.

David Peura (DP): Thank you very much Fabian.

FE: How are you today David?

DP: Well, a little bit tired. The altitude here in Bogota is a little different than Virginia. But otherwise, I'm excited to be here and... I always love coming, especially to see you.

FE: It is our great pleasure to have you here. I want to start this interview asking you about your parents and grandparents. How did they influence your life for you to be currently recognized as a "master of masters" and as a "gastroenterologist of gastroenterologists?"

DP: I think ever since I can remember as a child, my grandparents, actually my grandmother since I never really knew my grandfather, she was always telling me how important it was to be honest and forthright, and my parents were wonderful examples. My father was probably one of the most honorable people I have ever met in my life, and I still vividly remember many of the wonderful live examples he gave. And my mother also was responsible, really, for instilling in me perseverance. My grandparents, my grandmother and my parents also instilled in me a great faith; faith in God. One time in my life I thought I was going to be a missionary, so I had a wonderful upbringing. Those examples I think stood me very well later in life. In fact, one of the reasons I went into gastroenterology was because of my mother. My mother had gastrointestinal problems, and I remember those very vividly, so I can really empathize with my patients having lived with my mother's GI problems over the years.

FE: I know very well your family and also Kristin, your wife and want to ask you something about your marriage. You have been married for 48 years...

DP: Actually 49 years...

FE: Let me ask you, how did you met Kristin? And what has been her role in your life, in order for you to accomplish what you have now?

DP: Well, Kristin and I first met in college, in chemistry laboratory. Kristin's maiden name was Pattee and mine was Peura, so we had laboratories together alphabetically. So, we actually met freshmen year in college and I helped her through chemistry because she wasn't very good at chemistry. One day I was going to ask her out on a date, but that day she came in and she had actually been pinned. Pinning means she had a boyfriend, a very serious boyfriend, and so I said, "oh, ok" you know, I missed out. But, as luck would have it, our junior year in college, Kristin was no longer seeing that boyfriend, so Kristin and I met in a conference, a leadership conference in college, and we just hit it off and started dating. We got married when I was in medical school. Kristin says she helped me get into medical school, which is probably true, at the University of Vermont. After we got married, Kristin worked while I was going to school. She was a speech pathologist, and she drove a () big van throughout the rural areas of Vermont giving speech therapy to children in school systems. During medical school we had our daughter Jessica and during my residency, we had our son Brian, and Kristin stopped working to stay at home. She took care of the children, while I was pursuing my career. She has always been there, behind the scenes doing the things that needed to be done to keep the family happy and together. So, I probably never could have gotten where I am, unless it had been for her. Again, it was her support and ability to be a positive influence at home and also to be a positive influence to me ... always encouraging me (**Figure 1**).

FE: That's wonderful! Mama Kristin is behind the cameras; let's give her an applause. Let's move on to the army times. I know by reading your biography that you started fellowship in the army at the Walter Reed Army Medical Center. But I also know that you arose rapidly from being a regular officer to colonel, and at the same time, in parallel, you became an associate professor, starting right after fellowship, and that was quite fast! How did that happen?

DP: Well, the army is a very unique place. It's an environment in which I learned a lot, I learned patience, I learned discipline. Also I learned to get up early in the morning, because that is sort of a prerequisite in the military. In the army, you can advance at a very young age because people don't stay in the army for a long career. So there are always opportunities to advance and I was fortunate at that time because positions opened up, and I was asked to assume those positions of responsibility, especially clinical responsibility at a very young age. And so, I just happened to be in the right place at the right time! Also, I was surrounded by a

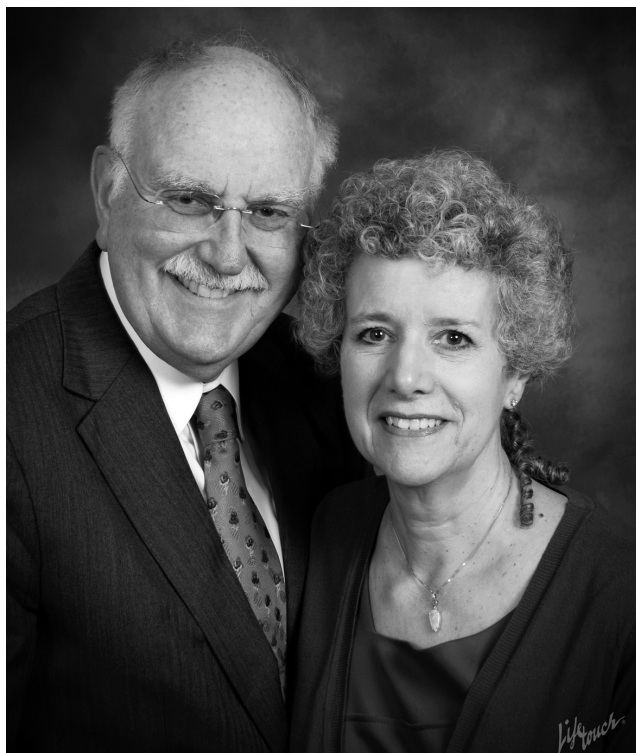


Figure 1. Dr. David Peura and his wife Kristin. Charlottesville, Virginia. October, 2015

wonderful group of colleagues who not only supported me and my clinical endeavors, but also at my research endeavors. Eventually, when I became a colonel and the consultant to the surgeon general in gastroenterology, I made the assignments and so I could pretty much determine my own fate. I chose to stay at Walter Reed and be a senior clinician, and also continue my research.

FE: I see. I want to ask you something very confidential I may say. You were working as an associate professor, you were doing research, you were considered an international world known speaker but also a father and grandfather. Dealing with all that situation, it happened that in 1997 Kristin was diagnosed with breast cancer. How did you manage that very challenging time in your family and your personal life and career?

DP: Well, frankly it was a shock. This is not something that you expect. As a physician you deal with illness all the time, everyday. But it is really difficult to deal with it when it is somebody in your own family. I think there are several things that got me through all of this and got our family through all of this. First of all, Kristin is a very strong individual. After an initial period of denial, I think she accepted her diagnosis and recognized that she was going to do

everything to fight it, and she is cured now. been over 20 years, so we would consider that a cure. I think we prayed a lot and we had a very strong faith. We had support from friends and also from our church community. I think all of those things were very important. I guess it brought home the fact that there's more to life than your career. Family is important, and there time family just had to become first priority, and other things were put on the back burner. But again, had Kristin not been the strong individual that she was, it would have been a much more difficult situation.

FE: David, the next question is about PPI's. For the long term PPI's therapy, it's been said that: First, without eradication of *H. Pylori* in infected patients, they have the potential risk of development or the promotion of atrophic gastritis, and therefore gastric cancer. Second, there is a common belief, mostly from patients, that the long-term usage of PPI's is related to Alzheimer's disease. What is your opinion?

DP: Well, first of all, it is important to recognize that long-term PPI's should be avoided when possible. I think there is always a risk benefit. All the international guidelines are pretty clear that individuals who are going to require long-term PPI's should be tested and treated for *H. Pylori*. The testing and treating is fairly easy to do, but it is also important to confirm that the infection has been eradicated, because there is this theoretical risk in certain individuals that they may progress their chronic gastritis to atrophy and gastric cancer. That's more common I think in Eastern Europeans, or patients from Central and South America, and maybe Asian patients. It is not as common in Western countries such as the United States. It is still good practice to confirm eradication of infection. Now, as far as side effects of chronic PPI's, dementia being the one you are concerned about, I suspect that this is a biased observation. Studies that have looked at these complications have largely been population case control trials. There has been no prospective trial done, and the risk of things like dementia, kidney disease, heart disease, bone disease, probably is not as great as one might expect by looking these retrospective studies. There is some evidence to suggest that chronic PPI's may lead to infections, such as *Clostridium difficile* and other intestinal infections. Is important that we counsel our patients giving them the confidence that the medicine we are prescribing are generally safe. Explain there is risk and benefit to this treatment. I think that there is unwarranted hysteria out there among some of our patients. They are very concern and they stop their medicine, because they read something in the newspaper. It is our responsibility as healthcare providers to give them the appropriate information. I try to counsel all of my patients that if they are going to require a long-term PPI treatment, then obviously

we will monitor them for side effects, but they should feel comfortable, since the medicines are generally very safe.

FE: And we as gastroenterologists must be assured that the patient gets cured from *H. Pylori* right? So, any test that we have at hand, we should prescribe it in order to know if the patient was cured or not.

DP: Yes, I think the international guidelines are pretty clear on that. People who are going to be taking chronic proton pump inhibitors should be tested and treated for *H. Pylori*. While the testing and treating is important, the confirmation of cure is also important because unfortunately the therapies we have available for *H. Pylori* are only going to cure the infection 70% of the time. This means that about a third of the people that receive treatment are going to continue to be infected.

FE: Right, and that is a major problem in South America. In relation also to *H. Pylori*, I know that professor Barry Marshall, our common friend, was given the Nobel Prize in 2005, but years before the 2005, he worked with you at the University of Virginia. You were his boss. So the question is, did Barry influence you, or did you influence Barry?

DP: Well, I think it worked both ways. When I joined the faculty of the University of Virginia in 1990, Barry was there. Barry, if you know him, sometimes has a difficult time focusing and he is all over the place, so one of the things I think I did with Barry was try to focus him. I was director of clinical services, so I did oversee his activities and I tried to protect his time. What I would do is, assign him to clinics or various duties that would still give him time to pursue his research and do his thing, so of speak. I also helped him with his research activities at the University of Virginia. We collaborated in develop the C13 urea breath test, and a variety of other things. But the reason I went to the University of Virginia when I retired from the army was to work with Barry. So I can say that he had a big influence on me, but I think if you ask him, he will probably say it was mutual that we really helped and respected each other.

FE: So about *Helicobacter* infection, what do you think is next? I mean, for the next decade, what is coming for diagnosis and treatment of *H. Pylori* in the world?

DP: Well, for diagnosis we have good tests to identify the infection. I think there are ways now using PCR technique that is going to be even more sensitive at detecting infection and using different molecular techniques on biopsy material or even stool to determine antibiotic resistance patterns. Those will help us direct therapy in the future. I think there are going to be more potent drugs available

to inhibit acid, and we recognize acid inhibition is essential for *H. Pylori* eradication. So utilization of those more potent acid inhibitors, the P-CABs, the potassium competitive acid blockers, probably will improve our ability to eradicate infection, and maybe even simplify our treatment regimens for *H. Pylori*. But, I think the future is really going to be vaccination. If we can come up with a vaccine that will prevent *H. Pylori* infection, or possibly, even a therapeutic vaccine, I think that will be the answer. Because right now is impractical on a population wide level to test and treat everybody that is infected. I think the future is going to be trying to prevent the primary infection from occurring.

FE: David, I know that esomeprazole acts helping antibiotics to be more effective against *Helicobacter*. But how about a, long acting PPI covering 24 hours like dexlansoprazole, in order to increase the activity of antibiotics and reduce resistance of the bacteria. Do you recommend that, or should we still use the first line therapy with esomeprazole as a PPI agent?

DP: It's clear that the more potent acid suppression and the longer duration of acid suppression improves *H. Pylori* eradication. Ideally, if you can keep the pH above 6 for a 24-hour period, it is much easier to enhance the effect of the antibiotics that you're using. There aren't a lot of data with the longer acting PPI's. However I think using them twice daily for a short period of time during the *H. Pylori* eradication would be helpful. And as I mentioned, the new class of drugs, the potassium competitive acid blockers, work very well, profoundly reducing acid. So I think those would be probably our future therapies, either double dose longer acting PPI or a P-CAB.

FE: And how about cost? You know, in Latin American countries, dexlansoprazole is a little bit more expensive.

DP: Right. I think cost is always an issue. But the cost of not eradicating infection is much greater than the cost of initial therapy. So if you have a little bit more expensive therapy that is more effective, you're probably better giving it. The most expensive therapy is a treatment that doesn't work so if you can have a very inexpensive regimen, but if it doesn't work, it is no good.

FE: I see your point. I want to come back to talk about you as a teacher at University of Virginia. I know that you were in charge of the morning rounds on Tuesday mornings, and you were called by residents "the big Kahuna"...What does this mean?

DP: I guess that's a name they gave me. A Kahuna comes from the Polynesian. Is sort of the big boss or the king. So I'm big, so that's why...

FE: Very big...

DP: And I guess they respected my clinical acumen, and that's why they called me the Kahuna. But I very much enjoy, in fact it keeps me young, working with fellows, I enjoy mentoring fellows, and probably my greatest joy is interacting with the fellows and trying to impart some of my clinical experience accumulated over the years to them. I have fellows who I may have trained almost three decades ago, who call me telling me how much they appreciated what I had done for them and I think that makes it worth getting up in the morning when you can positively influence younger colleagues. I think we as gastroenterologists need to recognize that we have to instill a degree of professionalism in our practice. What happens is that often times we are consulted not because somebody wants us to talk to a patient or give our opinion, but they want us to do a procedure, and that's a bad thing. While, we are physicians with a particular skill, endoscopy, we are physicians first. So professionalism is extremely important. I try to instill that in the fellows, the importance of talking to patients, touching patients. Now in this days and age of computers and electronic medical records it is so easy to avoid direct contact with patients. We must listen to our patients, empathize with them, and be humanistic in our approach to their conditions.

FE: I agree as well. I think I am just a good example, one example, of somebody that has been impacted by your life. I met you in Mexico in 2007 I think, for the National Congress of the Mexican Society, and that completely changed my life. But I know that you have encouraged many many physicians to study gastroenterology, because you are passionate about gastroenterology. And you have a lot of fellows and have been the mentor of many. I think you have really made an impact in their lives. What is the secret?

DP: The secret is just doing what comes naturally. I was brought up that way. Kristin always used to remind me that the prime dictum is to keep your patients foremost in mind. So I think I give this example to the fellows. In many ways I always ask fellows to make sure that when they are contemplating doing something, whether it be laboratory testing, or some sort of diagnostic testing or endoscopy, to make sure they are actually doing something for the patient, rather than just doing something to the patient. We have many things we can do to patients, but are we really doing them for the best reasons? So just being myself, I think is the secret, it's nothing special. And also giving practical advice. I may not be up with the latest science on everything, but again, I have a lot of practical knowledge, and I think the fellows appreciate that. Later, they will bring a patient centered practical approach to their future practices.

FE: Wonderful. Let me ask you about the three P's.

DP: The three P's of the Peura's Presidency. Well, when I was AGA president, I had this mantra of the three P's. The first P is "professionalism," and I just alluded to that a little bit earlier. It is important that we as gastroenterologists recognize that we are physicians first, and that we are physicians that have a tool, and we have unique knowledge that we can impart, but we should never look at ourselves strictly as endoscopists. We should be physicians who perform endoscopy. The second P is "political action." I think it is important that we advocate for our patients for access to healthcare to make sure that everybody is able to receive excellent care. And the third is "philanthropy." Philanthropy is something that has always been in the forefront of Kristin's and my life. Philanthropy doesn't have to necessarily involve giving money, but can be volunteering; giving time, giving other resources and also giving money. It is really to pay back what other people have given me or given our family over the years. And that's very important, because the future depends upon what we, in the present, are going to do to guarantee, that those who follow have the funds and resources to facilitate education and research. Kristin and I have sponsored an annual lectureship at DDW, just so that we can perpetuate medical education for the future (**Figures 2 and 3**).



Figure 2. The Peura family. Jessica (daughter), David, Kristin (wife), Jennifer (daughter-in-law) and Brian (son). Los Angeles, California during the AGA presidency meeting. May, 2006

FE: David, this is my last question. I know that you have given a lot to society, to humankind, to AGA, to your family, to your friends, but let me ask you what do you believe, at present time, what is your greatest legacy?

DP: Well, I'd like to think that my greatest legacy lies in all those people that I have influenced over the years, that I have had mentored, or trained, and instilled a little bit of myself in each of them. As for fellows, there has been almost 200 over a 30-35 year career with whom I have interacted. A little bit of me is in every one of those individuals, and as they relate to their patients, and their careers, I like to think that a little part of me is part of that interaction. Many of my trainees have chosen to continue in an academic career,

so they themselves are also doing research and influencing other people. I think the accomplishments and the career successes of everyone who I have come in contact with, and hopefully positively influenced, that's my greatest legacy.



Figure 3. Dr. David Peura and colleagues from the Department of Gastroenterology of University of Virginia in October 30, 2018. From left to right: Drs. Eric Sellers, Javelle Wynter, David Peura, Acott Cornella and Ross Buerlein.

FE: Thank you very much David. I think we are going to write this as an article in the Colombian Journal of Gastroenterology, and we are going to upload it in YouTube. It's been a pleasure, welcome back to Colombia again, and I feel very blessed having you here. Thank you (**Figure 4**).

DP: Thank you.



Figure 4. Drs. David Peura and Fabian Emura after the interview in July 7, 2018 at EmuraCenter, Bogotá DC.

Acknowledgments

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