

112_Huffines_Sports_Med_Wilmore.MP3

Tim Lightfoot. Hello and welcome to the weekly Podcast from the Huffines Institute For Sports Medicine and Human Performance. I'm your host, Tim Lightfoot and I want to thank you for taking the time to download and listen to us today. Every week we bring you an interesting individual from the world of sports medicine and human performance and this week is certainly no exception. We are so excited to have the originator, the founder of the Huffines Institute for Sports Medicine, Dr. Jack Wilmore with us on the Podcast. Welcome to the Podcast, Jack.

Jack Wilmore. Thank you very much. It's my pleasure.

Tim Lightfoot. And we're so glad to have you here. Let me tell the folks a little bit about you and then we'll just jump in into our conversation. Dr. Wilmore has a background that would probably take us about two hours to read if we read everything so I'm going to give you some highlights and we'll put a more concise bio up on the website that you can look at with links in the show notes. But Dr. Wilmore got his PhD from the University of Oregon in Physical Education. He has worked as a faculty member at a wide variety of institutions including Ithaca, the University of California, both at the Berkeley and Davis campuses, the University of Arizona and the University of Texas at Austin. He was one of those different faculty members that actually worked at Austin at UT System and then came and worked here at Texas A&M for several years where he was department chair. And as I said in the fall of 1999 is when he started the Institute for Sports Medicine and Human Performance here. It has been said by many people that Dr. Wilmore has been one of the most influential exercise physiologists in the world during his career. So we're really pleased to have you here on the Podcast and I thank you for taking the time to be with us.

Jack Wilmore. Well thank you. It's certainly my pleasure.

Tim Lightfoot. So let's just start off...since we are doing this Podcast and we're celebrating this week the 10th Anniversary of the naming of the Huffines Institute for Sports Medicine Human Performance, let's talk a little bit about the history of the institute and what was the, what was the germ or the idea that gave you thought let's put together this institute here at Texas A&M?

Jack Wilmore. Well during the short period of time I was there I met a lot of people on campus faculty in various departments and colleges. They were very much interested in the whole concept of sports medicine and a number of them were interested in doing collaboration and we sort of...that sort of led to the idea of maybe we could develop some type of an institute that would provide sort of a home base of coordinating the efforts of these individuals, provide lab space, provide a core group of researchers that could focus on the larger problems and be able to go out and get large grants from NIH and NASA and other funding agencies that would be funding work in these areas.

Tim Lightfoot. Yeah I'm not sure people realize how broad based research in, we'll call it sports medicine in human performance is. Yeah. Can you speak a little bit about that, about all the different disciplines that are involved?

Jack Wilmore. Well it's very interesting because sports medicine arguably could be described as being generated out of the discipline of physical education. Almost all of the early leaders came from physical education backgrounds. But at that point in time, most of these people were trained in physiology, in biomechanics and other areas and they've gone on to get further work in those areas either in their doctoral work or in their post-doctoral training. And so we had a number of individuals that were interested in doing collaborative work or research across disciplines attacking problems, in terms of general health, the role of physical activity and in promoting health and maintaining health. The role of understanding better how athletes perform and how we can improve athletic performance and also reduce the risk of injuries.

[0:05:00]

The whole health domain, the role of exercise and reducing the risk of obesity and helping in the treatment of obesity, and it goes on and on and on. I think a lot of the earlier work came in the area of cardiology and the early collaborators in medicine were people that had come from cardiovascular backgrounds as cardiologists, cardiovascular surgeons, etcetera.

Tim Lightfoot. So it continues to interest me that...it seems like there are so many fields now that have we'll say discovered exercise for as a potential treatment for a wide variety of conditions and you were on the forefront of that especially in some of your work with the cardiology folks.

Jack Wilmore. It was a lot of fun because they were interested and, of course, they had far more resources than we did. Physical education was not a very well funded discipline and was very helpful as far as obtaining research grants and everything to have them onboard early on. And also tremendous ideas and also the ability to utilize their expertise in their various disciplines. They could be doing things that we could never do as far as invasive procedures.

Tim Lightfoot. Do you see that kind of collaboration continuing and growing in the future or as...you think we're about at the peak of that.

Jack Wilmore. I think it's still going on and I think just looking at the American College of Sports Medicine and how much its grown. And basically the American College of Sports Medicine was started primarily by people in physical education, I would say the majority, but in collaboration with physicians that were very much interested in exercise. And that was a very major part of the early...I would say emphasis of the American College of Sports Medicine.

Tim Lightfoot. Yeah. I think so many people have such a...or have had such a negative view of physical education they don't realize how many ties and how many links are too much of the preventive medicine literature that's coming out now between exercise and physical education folks that are out there.

Jack Wilmore. That's an excellent point and I think, in many ways, this was a way of trying to help get the whole area of physical education better grounded in an academic environment and getting the respect that it was due.

Tim Lightfoot. Yeah, very important. So you mentioned ACSM. You were president of ACSM, been involved for a long time with American College of Sports Medicine. As you said it's grown tremendously. What do you think the future...I guess let's back up. As soon as you're saying ACSM, one of the things I'd like to ask folks that have had such a history like you have had and you've been involved in exercise phys. probably during the time when it grew the most in the United States...I think probably in 1968 I think the numbers were that there were probably just a handful of exercise physiology labs around the country and now everybody has an exercise physiology lab. Where's that going? Is that going to continue or are we going to see a decrease or what are we doing? What do you think the big challenges are?

Jack Wilmore. You've asked a very important question and this is...we have a local organization here where we live called SAPS. It's a Southern Arizona Exercise Physiology Society and it's...Dave Lamb and Charlie Tipton and myself.

Tim Lightfoot. Now there are two names the audience may not be familiar with but they are also giants in the field of exercise phys.

Jack Wilmore. Right. And have been around a long time. And we meet once a month and we...among our discussions are really is the concern that we're disappearing in many universities. Many universities really don't have physical education research oriented programs today. And I think the problem has been many of the physiologists in order to get funding, in order to get prestige and so forth, have integrated into physiology departments or environmental physiology groups or whatever it might be and unfortunately we're seeing, I think an unfortunate turn where physical education itself is really losing in this...in what I perceive to be not the best situation.

Tim Lightfoot. Yeah. And I think it's interesting you bring this up because this is a topic of conversation here in the department recently and that is that, we're concerned that we're missing the students who are our traditional student base and that is, the kids who wanted to go into physical education now the curriculums are being focused on pre-medical school and pre-PT and

pre-OT and there's less of an emphasis and actually almost no emphasis on kids who want to come in and be coaches, who want to be physical educators.

[0:10:05]

And so we're a little bit concerned sometimes that our modern [???kinesiology 0:10:09] programs may be ignoring our traditional students.

Jack Wilmore. I fully agree. It's like we're turning our back on the very discipline that got us started and that's very unfortunate.

Tim Lightfoot. Yeah. Because I think we don't have those kids and we don't have...we don't...also don't have future leaders in our field.

Jack Wilmore. Yes, exactly.

Tim Lightfoot. Yeah. We'll miss the future Jack Wilmore's and Charlie Tipton's and Dave Lamb's.

Jack Wilmore. Yeah. I mean it's very kind of you to say that but we look today at what's going on in the research and we stand amazed at the progress. But I guess we stood on the shoulders of those that came before us and now we're the, we're the people whose shoulders others are now standing on, so.

Tim Lightfoot. How can we bring back this emphasis then in physical education? That's one of the things that we need to be cautious about.

Jack Wilmore. And that's a good point because you know just to take the very obvious problem today of obesity, if you don't have good physical education programs I think everybody now has conceded that it's very difficult to treat obesity. It's very difficult to get people that are obese to have any significant weight loss and to maintain the weight loss so really prevention is the key and you have to start prevention early on, early on. Even after birth just the way newborns are fed and so forth, what they're getting the types of food and all. And so that's I think unfortunate we're going to be losing ground I think in this area of trying to get people more active, trying to get them to eat better and to just have good positive health habits.

Tim Lightfoot. Yeah. How do we make that argument to people to get them to be more active? I mean the literature is certainly there showing that there are so many health benefits of being active on a regular basis and yet we still have trouble getting that across to society. Are there things that we need to do differently that we haven't done?

Jack Wilmore. So we're fighting a very uphill battle. You think at the...think of the things today that are impediments. I can remember when I was young we used to have neighborhoods and we used to get all the guys together in the neighborhood and go down and organize a football

game or a baseball game and it was all done by the kids themselves, no adults involved. And now we've got all of these formal groups, Little League, we've got Little League equivalence in basketball and football and so forth, soccer, kids have become highly specialized, they don't participate in all sports or they don't get the opportunity to try all sports and it appears that only about 20 to 30 percent of the kids growing up are getting much in the way of any activity at all and I think it's a shame that we don't have more recreation and sports opportunities for these people and encourage it.

Tim Lightfoot. Yeah. How do we get it back in schools? That seems like one of the first things that has gotten cut in whether it be middle school or high school and certainly at many universities now there's not a required activity component any longer, even though we know that's important. How do we get that back?

Jack Wilmore. That's a question I am not able to answer. I think it's something that I just don't know how you capture that. I don't know what strategy could be used to do that. It's important but you know everybody's fighting for the few hours available in schools today and we certainly need to educate our kids. But, you know, physical education is just as important long-term as far as the health span of the individual and that's one of the things that gets ignored. And many people realize too late in life that this is something that, you know, they eventually get on or get excited about exercise and appreciate the fact that they should have been doing this all throughout their life.

Tim Lightfoot. Yeah. Well to I guess maybe shift gears a little bit, one of the things that we try to do in the Podcast is try to help people understand why our guests have had such a passion. So let's I guess shift gears a little bit and talk. What got you interested in physical education and got you interested in pursuing exercise physiology?

Jack Wilmore. Well my father was a coach and he coached basketball and baseball and this sport was a very important part of our family.

[0:14:56]

And, in fact, when I was growing up it was very important for, you know, all kids and I think the very important thing that had happened back then is that kids took over the organization of the sports. They were smart enough to realize that if you had some of your friends that weren't too gifted and you were out playing baseball and you were a right handed hitter, you would bat left handed so they wouldn't feel badly, you know, getting in and playing and being part of a team. And then all of a sudden we have Little League come in and those kids unfortunately are now left out and only the ones that are really good are getting to play. So I think in some ways. over the course of the last 20, 30, 40 years or maybe more, we have made it difficult for some of the less talented kids that just don't have the natural talent to play sports, these kids get sort of, you know, washed out. Many of them get disappointed, they, you know, they just don't feel like

they're a part of a group and obviously there's other things for them to do but not from an activity's standpoint.

Tim Lightfoot. Yeah it's not about participation anymore, it's about competition at all ages, isn't it?

Jack Wilmore. And winning.

Tim Lightfoot. And winning, yeah.

Jack Wilmore. About trophy.

Tim Lightfoot. Yeah, yeah. So we have...well I guess...let me ask. What would you say to students who were thinking about coming into kinesiology now? That are interested in that profession? What words of advice would you give them as they think about plodding out their career over the course of the next 20 years?

Jack Wilmore. Well I think it's one of the most wonderful careers as possible. I look back and see all the many blessings I've had over the years, the people I've met, the opportunities I've had. You just don't know where it's going to take you and I'm sure you've seen the same thing in your career. You start out in one direction and all of a sudden you're in another. When I was first starting I had the privilege of getting...I had a temporary job at Ithaca College for nine months because I was finishing my dissertation and we were poor, dirt poor and had a baby and another one coming and so I had to get some work. And so while I did my dissertation I spent a year at Ithaca but then a job opened up at Berkeley and there was an environmental physiologist there by the name of Nila Pace and he just took me under his wing and all of a sudden I'm involved in space physiology. He's involved in, you know, putting a monkey up into space. So, I ended up spending a lot of time at NASA and going to a number of launches and then that spreads out into other areas where you start doing heat and cold studies and it's just incredible the opportunities that are available out there. So it's a lot of it has to do with people opening doors for you. And I think as you get older you begin to look back and appreciate what so many different people have done for you. And I have to say, first and foremost, was my physical education teacher and coach at a very small high school in the [?? 0:18:14] Valley, just north of Santa Barbara, California that just was an incredible role model for me and I think having a role model is just very important.

Tim Lightfoot. And it's amazing. That's one of the things we talk to our students quite a bit about is network, number one. Don't ever hesitate to go introduce yourself. But also look around and see what the other people are doing in the field and find those mentors to help you out.

Jack Wilmore. Yes. And, in fact, going to regional and national meetings is a very good way of meeting people. And you've been to enough of these meetings to realize that there are very few of these people that are not willing to talk to students no matter what level. In fact, most of us are excited about being able to talk to students.

Tim Lightfoot. Right. It's great when someone's interested in what we're doing.

Jack Wilmore. Exactly, exactly.

Tim Lightfoot. One last question here and then we'll kind of start to wrap things up. What are the differences that you see between the past and the present exercise physiology world?

Jack Wilmore. Well past was much more...was much simpler. You could do a lot with a little bit of instrumentation although some of the instrumentation was difficult like learning how to use a [??? 0:19:33] analyzer and a [??? 0:19:35].

Tim Lightfoot. Oh yes. I have one of those still in my office by the way.

Jack Wilmore. Keep it, it's historic.

Tim Lightfoot. I'm telling you.

Jack Wilmore. But, you know, so from that standpoint, we learned a lot and patience was a major part of it, trying to figure out how to learn to work these things because they were very complex.

[0:19:54]

Then all of a sudden you have these automated systems for doing gas analyses and doing all the calculations and everything that used to have sit down and do on these little old calculators and it's just been amazing with the new equipment coming out. I think the one thing that many of us are concerned about that have come from the past is that you go into a lab and you start talking to people and you say well how often do you calibrate your equipment? And they say, well we don't need to, it's calibrated by the manufacturer and it's all taken care. We don't have to worry about that. And they don't realize that that's not necessarily the case. Some of the equipment's very good and doesn't drift much, but, you know, you do have equipment that you have to be, you know, on top of.

Tim Lightfoot. Yup. Yeah that's the scary attitude, isn't it?

Jack Wilmore. It is and...so I know there's a lot of things that are available today that weren't then back in, you know, 20, 30, 40 years ago and all the new toys that are out. And I just say that facetiously because they're a lot of fun to play with as well as very useful. But it's made it so much easier to do a lot more data collection in a short period of time.

Tim Lightfoot. And if used correctly, good quality data collection.

Jack Wilmore. Using Douglas bags and you've got 30 of them laying around from tree or 30 minutes of testing in a minute each in a Douglas bag, then you've got to go measure the volume and run it through a [??? Showlander 0:21:29] and that's very tedious. You maybe do one or two tests a day.

Tim Lightfoot. Yup. You're looking at multiple hours for each test.

Jack Wilmore. Exactly.

Tim Lightfoot. Yeah. Well we want to thank you so much for being with us today Jack. It's really been a pleasure to have you on with us. We ask all of our guests to give us a take home message for audience at the end of the Podcast. So what would be your take home message be?

Jack Wilmore. I think the most important thing to me is to find something that you're interested in, stay with it, appreciate the mentoring that you get and never forget your mentors.

Tim Lightfoot. Excellent take home message. And I want to thank you again for being with us today and I want to thank all of you that are listening for taking the time to download us and listen to us. And for those of you that are regular listeners, you know we have a Podcast question every week and here is one of our producers, Kelly, with the Podcast question of the week.

Kelly. What organization was started primarily by professionals in the field of physical education?

Tim Lightfoot. Excellent question. Be the first on to e-mail us the correct answer at Huffinespodcast@hlkn.tamu.edu and you'll win one of those nifty Podcast tee shirts. I keep saying make sure you send in your answer because we're running out of those tee shirts and if you want to keep your collection intact, you need to get one of these second edition's first. So thank you again all for downloading. Thank you again Jack for being with us.

Jack Wilmore. My pleasure.

[0:24:03]