

**Dianne Hannemann /DBZ Day 10 2021 Feldenkrais Summit interview by
Cynthia Allen (Informal edited notes from Katarina Halm 210622)**

NOTING:

<https://www.linkedin.com/in/diane-hannemann>

Diane Hannemann, PhD

Integrative Health Strategist | Science Communications

Washington DC-Baltimore Area476 connections **Policy & Program Solutions |**

Science Communications

Yale University

About

Health science and policy expert with two decades of experience in the public and private sectors translating science advancements, building strategic collaborations and co-creating innovative programs to improve health in the U.S. and the Asia-Pacific. Currently cultivating a revolution to foster whole person health strategies across the health ecosystem.

As a biochemist-biophysicist, I am driven to understand how the body communicates at the molecular level and how these systems can be supported to optimize health. This passion fuels all of my work at the intersection of science, policy and health education.

Cynthia Allen interviewing:

I'd like to introduce you to **David Zemach-Bersin**. He studied with Moshe Feldenkrais for over 10 years in the US, in Europe and Israel. He has been directing Feldenkrais® training programs and teaching around the world for many years.

Now, he has kept his private practice going since 1977. He's a graduate of UC Berkeley with post-graduate work in physiological psychology. And he's the co-author of Relaxercise, which is a fabulous audio, video and book, actually. Then he has many other kinds of audio and video programs. And he has served in the Feldenkrais community in all kinds of ways and has his company called

Feldenkrais Access, as well as the Feldenkrais Foundation, and we'll hear a little bit more about the Feldenkrais Foundation tonight.

And of course we also have over here, **Diane Hannemann**. Diane is an integrative health strategist and biochemist with more than 20 years of experience translating science into federal policy, innovative research programs, partnerships, and communications to improve health. She has received her PhD in molecular biophysics and biochemistry from Yale University, and she's **currently completing her fourth year in the Feldenkrais training program of Baltimore**.

So I really like throwing in this research topic. I wish that we could do it maybe every year, but I don't think we have quite enough robust research just to do it every single year, but we're getting close. And so this is another year for us to look at what's happening in the area of research. David, we've actually had presented one of your programs twice.

Carolyn Palmer presented your program here tonight in the research tract, but also we heard [Jill Van Note] talk about her experience as the sort of lead Feldenkrais teacher, perhaps, in that program, in the Move Your Brain theme day. Move Your Brain theme. I'll stop there. [inaudible] Day was actually too much. It was just too much. So, Move Your brain.

And David, can you maybe, what were you thinking when you decided to come up with that program? And how did that develop for you?

In 1978, I already began to do programs for the elderly, so I quizzed one of my teachers, Gaby Yaron, some of you may have heard of her, and sadly no longer with us, on lessons in chairs because the audience, the population that I was engaged with, these people, these women, I should say, did not wear pants. So this is again, 19... You figure. That was 1978. And they were probably all in their eighties.

So they're 19th-century ladies. Also have on high heels? Yeah, they didn't do flat shoes.

That's right. They weren't going to lie down. And after the first year, I realized they weren't going to lie down or it was going to be uncomfortable and a challenge for them to get up. And so I had that core group of lessons that I started to work with that, generously, Gaby Yaron gave to me. That was already something, it was a blessing to teach my grandparents' generation.

And in '79, I think it was, or maybe it was '80, Moshe actually did a program for the elderly. He did a day for the elderly at a Maryland center for senior citizens. I know a lot of people believe that we should not have a thematic approach to teaching the Feldenkrais Method, but Moshe had no problem with that. Then I had conversations with him about it and in 1983, I thought the most radical thing to do would be to do sitting lessons, a set of sitting lessons, for people at work, people who sit on the job, because then I could see that...

You were hearing a lot about, remember carpal tunnel? And these issues that had to do with the new arrangement of the workplace, which meant people sitting for long periods of time and fundamentally sitting eight, 10 hours a day. That resulted in the book Relaxercise.

Then about, oh, must be now 10 years ago, I took the Relaxercise lessons, added maybe four lessons to them and created the Moving Forward program. What was really different with the program that Carolyn tested, that I also created, is that people did the lessons and chairs and then there was a set of things to do after that in standing, holding onto a chair in front of them so there were no balance issues, but things to integrate the lessons into standing or walking.

And that's the program then that, what would you call, the complete fruition of what began with that germ in 1978. And that was quite a bit, actually. I highly recommend the Relaxercise program, which can still be purchased, by the way.

Yeah. And it's very good. That wasn't enough for you, you wanted to have research.

That's right. When we first started the program, adapting it, as I said, and got funding from the Feldenkrais Foundation, which luckily I was part of, so I could influence the decisions. And Jill was, as you said, one of the teachers, and Jill actually helped me with the editing on the last iteration of the program. We had

that placed in about 20 different senior centers, satellite centers in Manhattan. There were a couple in Brooklyn, a couple in Queens, and it's only COVID that stopped that. I'm sure we'll go back to it.

It's been going on many years, now, correct?

Yeah. I think it's close to 10, that we trained the first group. And it was, is a beautiful mentoring setup where there's a lead teacher, as you rightly called Jill, and then there are trainees who are not necessarily practitioners, who assist.

So if it's a large class, you could have two or three assistants for that teacher. And they're walking around the room, actually helping people who have cognitive impairment, right, movement impairments, and they need individual attention. In a traditional [ATM] settings, it's verboten to come over and help somebody or to touch them, et cetera.

But if you want people in their eighties and nineties to have success, I think they warrant and deserve a little personal attention. So that was the model.

Beautiful. What excites you about that particular research project, Diane, when you heard, and you read the paper, I know, as well as listening to Carolyn Palmer's presentation?

Yeah. Well, so much. First of all, I think testing this work while providing this work and testing it in older adults is so important right now for so many reasons. We have a burgeoning aging community, boomers want to stay active, stay healthy. And as we know, the Feldenkrais Method can do so much to really support functional aging. So just even the target group, just seeing that work and seeing it tested is very exciting. The design of it is really nice in so many ways. For one, the idea of engaging several senior centers creates an order of magnitude to not only reach a broad range of people, and people that may likely not have been exposed to the Feldenkrais Method before, but it gets the study numbers up for that study. So any results that come out of it just have much more power. That sometimes is the critique that we get, where the pilot studies are incredibly important to test an idea and can be important to get further funding.

When you can increase those numbers to over, I think my notes said there were 100, 114. Yeah. But over 100 people in that study. I look at NIH clinical trials

all the time and that's an extremely respectable number. That is exciting. And third, I would say is, it's really important to think about that aspect of training the people that are going to be actually implementing the program because you get consistency for how the program is being rolled out. I believe Carolyn said they also train them in measurement, so that they were assessing how the people were moving and what they were measuring, the same across the board even though they were at different locations. All of that really contributes to the quality of the results that they got.

So all around, it was great. And I'm always plugging the... Oh my gosh, it's right behind you. The blue book that I give to everyone, the Relaxercise. .. [crosstalk] .. It's so helpful for older adults that are just starting with the Feldenkrais Method, because I know for my own mother, she felt very intimidated in a group class.

David, you mentioned how they often need, older people maybe because of hearing or just not being used to being in group classes, can feel intimidated and are worrying if they're doing it right.

By having the Relaxercise, being able to look, I think, for anyone developing a program, having CDs and a book that they can just look at, and feel they have that extra support and do it in the privacy of their home.

I just think it's a nice program to be able to test because it can be rolled out. I can imagine through clinicians or physical therapists, to then be able to recommend these exercises for people doing movement at home. I know an occupational therapist who played it on lunch breaks for years for staff and patients to do, just to sit down and do it from the tapes. So it's very transportable and I would say it also works really great with any kind of office sitting-type worker as well. There's so many reasons why people sit, but it definitely also works for an office.

David, I piggyback on what Diane was saying. I think, and I'd like to know what you think, something that really was exciting about Carolyn's research. Firstly, she's a long time experienced researcher. So that's one thing about knowing which tests to give, et cetera, et cetera. And they give a wide battery of tests. But I feel like she offered us, generously gave to us, a language for explaining the theory. Or even explaining the method and her whole notion about an adaptive growth model and how she described, of course she's describing Relaxercise specifically in the

paper, but how she described the Feldenkrais Method.

I feel like we can run with that for a few years easily, until the next new model comes out. But I really resonated and I wonder if you did, too. I really resonated with her way of defining the method.

Yes. Well, I absolutely agree. And I think that's the beauty of being able to partner with Feldenkrais practitioners that are involved in research or others that are working in fields, perhaps of neuroscience or rehabilitation, that have an appreciation for the practice, but can translate it into the theories.

They're able to marry.

That's right.. the biomedical emerging science, or known solid science. Yeah. To both benefit our knowledge and how we do the work, but then also to integrate it into as a solid example of some of these other theories that are established in the scientific community. That's right.

I really love it. I just want to remind participants that you can enter your questions in the Q&A, you can chat with each other on the side, be sure that you mark to chat with each other and panelists, everyone, not just panelists, because we're not as panelists going to be reading that section, but I will be taking things from the Q&A as we go along. So put them in the Question and Answer, the Q&A section.

So if we could travel from that study to the one that Tim [Sobey] did. So we go from Carolyn's study, which was a multi-location study, a multi-practitioner or interventionists study, multi-teachers, controlled, we go to Tim Sobey's study, which has some similarities in the setup, but also some differences.

I see someone asking where is Carolyn's study? You would find that as a link under Carolyn's replay. So just click on the replay for Carolyn's giveaway.

So Diane, what's the differences in the setups between Carolyn's study and then Tim's study, that we looked at. This virtual reality, back pain, Feldenkrais combo, compared to standard physical therapy, back pain treatment. There's some similarities, I think, in terms of size, actually very similar, but I think, Yeah.

Yeah, I think it was only one location. Correct? [crosstalk] He also had multiple practitioners. [crosstalk] practitioners or therapists.

Mm-hmm (affirmative). He had multiple practitioners and what I thought was

really innovative and a really nice model for others to build on is how he created a module or protocol so that he was addressing, I believe he used Allan [Castro's] elements of an effective Feldenkrais experience, and then designed the intervention that he was using with each person, to address one through five of those levels. And then he did in parallel, he worked with the physical therapist who was the control and they created, well, what would be somewhat of an equivalent in physical therapy.

So he was not only using the active control of physical therapy, which I think is another great addition.

We think about how do we create a controlled study in the Feldenkrais Method. You can always do a sham, which is general touching. As we know, general touching creates a neural response. So doing these active comparisons, which so much the yoga community is doing, doing that with the physical therapy was a wonderful comparison looking at low back pain because that tested that whole model of the core strength versus then movement.

I believe he was looking at flexion-extension using the Feldenkrais Method. So he created a real parallel comparison. I think the differences he saw just were that much stronger. So that's, I just think, a really nice model to carry forward for other Feldenkrais research. I'm just looking at my notes. It was just a very creative study.

I thought it was creative too, in that he takes this really feeling sense that we absolutely hone in people in the Feldenkrais Method and take it to another little level, which is to go, "Hey, here's a skeleton. Let's really get this superimposed within you. Let's start to imagine the vectors where this movement crosses with your skeleton and see if it allows you to become clearer about your hip joints, to become clear about your eyeball in your socket, and the ball, the socket of the eye."

So I found that to be something I wouldn't have thought of. I mean, when at first I saw the title of it and I went, "Oh, virtual reality? Where is that going to go?" Right? Yeah.

And it also had a pretty large number of recruitment. I think it had over 100 as well, which is unusual in a doctoral study from what I've seen. So I thought he did a great job with it.

Did you have anything you wanted to add with it, David?

Yeah, I really want to give a shout out to Tim because, firstly, it was an enormous amount of work. I would like to applaud that. Oh yeah. And I also have the word "creative" written down three or four times. I really felt like he has a unique ability to think outside the box. And I almost believe that he's doing something beyond. He's taking the work really beyond Dr. Feldenkrais.

I'm not sure that the rest of us, or many of us, are doing that. I feel like this is Feldenkrais Method 4A or something. I think he's doing something really remarkable. And I think he's an idiosyncratic, and I mean that in the best sense of the word, original thinker.

Yes. A really original thinker. Very original thinker.

And an original synthetic thinker. So yeah, it was beautiful. And I love the body schema, body image being brought in so much, because when I was in graduate school, there was still some resonating from the 1960s when body schema was really being studied and gender differences, cross-cultural differences in body schema, which was very, very interesting stuff.

You don't hear, or I don't hear much about it these days, but the fact that Tim brought it back, I loved it. I really appreciated what he's doing. Yeah. I think if you want to study with someone original around how he's seen his extensive background as a physical therapist and married with the Feldenkrais Method, married with today's ways of thinking around maybe virtual reality, he's a great choice. And I appreciate that study, the creativity of it as well.

Then we went over to [Helga Boost] and we had these three case studies that she presented, and wow! I thought Tim's was sort of like a excitement. Tim's was excitement. He's got an exciting personality. He's all over the place, showing us different things.

We have Carolyn who is methodically clear about what she wants to accomplish within her presentation and research.

And then we have Helga, which touches our hearts, right? I mean, touches our hearts with the actual video and some of the story of these three individuals. And at the same time, she makes a couple of her own hypotheses. And at the same time,

she makes a couple of her own hypotheses that she's really been trying to understand what's been going on with her clients. And she wants to make a couple of hypotheses about what that might be.

Which one of you wants to start with Helga?

I'm happy too because I wrote to her. After watching her presentation, I actually reached out to her and told her how touched I was by her work, her rendering of it, her relationship with her clients. I'm going to see what I can do to have her documentation published. She has it in a published form as I'm sure you know, but it's as an e-document where the videos that we saw you can access in the document. So it's a beautiful piece of work. And I think that her skillset in terms of documenting functional integration, which is much more difficult in certain ways than documenting awareness through movement, I was impressed with.

You mentioned, I think the primary theoretical conjecture that I heard, was about this central processing idea. Central patterning. I haven't found yet the book that she referred to or the author she referred to who originated the theory. That there is learning at the spinal cord level, there's no doubt, there's been enough research the last, I don't know, six or seven years to tell us that the spinal cord itself is capable of learning.

Now, there's a lot of issues with if the spinal cord is producing those patterns, are they reproducible by the person? Because as we saw with, what was the gentleman's name? Michael, no Werner, that he wasn't aware of what was happening, he couldn't feel what was happening. It reminds me of Esther Thielen had that example that she used of stepping, where people would say, "Oh, gait is just something that is being generated from the brain spontaneously because we have that information. And you'll see how you hold an infant and it will take steps, so it's already there, it doesn't have to be learned." And Esther debunked that.

I felt there was some similarity there in the hopes that we're seeing some archaic, primitive residue that's there that walking is entirely generated and yet we feel has to be learned. There's actually more out there than one might think.

So I was just looking around a little bit and I found a paper from 2018 published in the Journal of Neurophysiology, which has a wonderful title by the way. This is not a Feldenkrais sort of title, Sherlock Holmes and the curious case of the human

locomotor central pattern generator.

I highly recommend it if you have some level of understanding of physiology, which mine is barely marginal, so this was a tough read for me. But basically it's almost like a review of the whole theory around central patterning generator networks. And there's a lot of research actually going back 100 years. But what is challenging, the research is more in animals, it's a very different thing when you are trying to get a human being upright.

But they do have, as you say David, babies which they put on little walking things and stimulate patterns. So they have seen it for sure, they're not quite sure if it's exactly just the spinal cord.

That's right. But they do know it's not coming from the brain in the typical sense, that it's something more localized. And also that there seems to be quite a bit of challenge where, for animals, you can actually teach them to walk on treadmills with support because of how we put the weight bearing on the individual. And it seems like from what I got, I'm not sure if I'm completely right this with this, but also because when they take a person who's had a spinal cord injury and they put them in a harness, their arms are often not able to be part of the pattern because they're using their arms to stabilize or help.

That may also be a reason why it's harder to take it further into the human actually learning to walk, where they get animals that are able to learn to walk on artificial sort of setups, treadmills, not an artificial treadmill, but an artificial walking experience with repetition animals do quite well. Human beings don't do as well with it.

I do think you're right. We're learning model, but I think it could be both end David.

For sure. It could be both end. It could be stimulate the pattern, which I think she stimulated at a maybe more local level, and they don't know. And then she starts to use even more of her Feldenkrais understanding to coach the person around, well, what can you feel? Well, what is there? And it turns out maybe there's a little bit more there. And then when they can recognize more, they get more and something like that.

I agree completely with you. I was just channeling Esther there for a moment. I think it's a good point, David.

And to think about it as yes end, and that is very much how we design so much of our Feldenkrais lessons is someone may do an ATM or have a wonderful FI experience but one thing we don't know, and it's almost a research question, is then when they stand up and they begin to move through their day or begin to move functionally, they become aware of maybe a different sensation or something being easier or smoother, and they don't have to understand or even know what happened on the mat or the table for that change to happen.

It's an interesting space when we're thinking about the spinal cord injury. And then I recall the little girl who had spinal bifida, and it was just miraculous as Helga was playing with her legs and using play and engaging the girl and giggling. And then the little girl just turned and the pattern rotated and she sat up and the doctors had not thought that was possible.

Something in the system was remembered.

That's right. Which is nice. Yeah. Beautiful. And our first case study, not Werner, but the first, Michael. I mean, Michael did go on to walk. And walk independently, we saw him first with crutches and then we saw him walking independently.

It's high quality work she's doing and over a long period of time and it's also high quality, as you said, David, documentation. Because I got to tell you, I taped a lot of these sessions. I mean, I can't even keep up with the taping after a while. I'm just like, "Oh my gosh, I'm done. I'm done." I don't even know what happened to it all.

I mean, you have to hire someone just to manage all the taping. I'm just totally impressed with it for sure.

Diane, can you tell us a little bit then what's different about case studies?

What are we ...

Well, there's so much richness in case studies and that's the brilliance of them, in that you can capture, which I think is particularly important with the Feldenkrais Method, the aspects of the person, their emotional state, their sense of their self image, how they're holding themselves, then the practical of what you're doing

with that individual. And then the combination of the qualitative and the quantitative information that you get out. So you're able to really see a robust evolution of their transformation.

And it has also captured things that may have not been measured or may have not been identified as a measure or a question on a questionnaire that would be in a larger study. The information is generally captured in a capsulated so that as people are doing later work or thinking about designing other studies. I love to think of case studies as a rich pool of information that people can draw from to really investigate and create those new questions, getting creative about what questions aren't we asking like Tim is doing so well.

And the way that Helga has documented, I mean, we've mentioned this multiple times, but the thoroughness and the organization of her documenting which she has done, and is such a gift to the Feldenkrais community but then also for potential researchers that maybe they've experienced a class or they're intrigued by the idea of looking at the Feldenkrais Method to expand upon their models. This gives them something really to look at, to understand, not just here's the end result, but how did they get there with these different individuals with these different stories? They're really powerful in that way.

They're limited in that it is in a small number of people, but they have value in their richness. It's how I think of that. It's also quite hard to get case studies published, although it's kind of hard to get much of anything published these days, because it's so voluminous, the competition is incredible. I mean, that could be also kind of a downside to it. Well, but I think if you know in advance, if someone does want to do a case study or has a remarkable case study, you can put them together as collections, but I think I just go back, they kind of stand on their own legs, such as Moshe's case of Nora. They stand on their own as just capturing so many layers of an experience.

And publishing, I'm excited how media is being able to be online and just how people are learning and how scientists are sharing information is changing. I mean, you'll always have to have the journal, but not everything has to be published in a peer-reviewed journal in order to inform a discussion or excite someone to do a bigger study, they can be used ...

That was the other piece is the example that the information that comes out of case studies can inform then the design of a much larger study that gets funded and

gets published. But without having those base pieces, it's tough to design a really effective big study. You need both sides.

Did you want to say anything more about ... I'm going to ask you a question, David, about something going back, unless you want to add something to that.

Yeah. Just a little bit that though I'm a big end kind of guy or I favor big end studies, if I could look to the future a tiny bit, wouldn't it be beautiful to have somebody like Helga teach practitioners how to do this level of documentation. So that we didn't look at Helga's work as being unusual, which I do. It was just beautiful.

But I think that there are practitioners who.. every day there are people producing these kinds of results. I think she's a very good practitioner, but I think there are many good practitioners. And to have more of this, though I don't know where it would go or what its value outside of the community would be, I think it would raise the bar on our discourse. And that's really, really important to me.

Well, actually, this kind of goes to what MG is saying, says maybe it's hard to publish case studies in traditional journals, but I agree with Diane scientists can share on social media, marketers can carry the excitement.

Where do you think we can watch case studies, from what channel? Do either of you have a favorite discussion board or recommendation for an internet resource?

I don't. I think we would create our own is what I was thinking when I was proposing just a minute ago, that I would think that with the people who get engaged with a Helga who teaches kind of the specifics of doing this kind of documentation, it would be a very democratic thing that we would publish for each other.

Maybe there'll be some kind of central depository. But for me, my big thing as a practitioner is to keep up with a science and that's really hard, but I do have one recommendation and that's a website called sciencedaily.com They ... Yeah, you like that? They call research from hundreds and hundreds of journals and publish just abstracts. That's all. That's all it is, is just abstracts synthesizing the studies. But, oh my gosh, I think 10 times a week I find something there that I feel like now I want to go find the original paper. Well, it turns out Tim [Sobey] is listening

in. He says Research Gate. He wants to suggest Research Gate. And Sharon Gordon says, "Hey, there's this whole wildness going on with a resource called clubhouse?"

Yes, there is. It is quite an adventure, clubhouse is. I'm not sure where that'll go yet but very interesting.

Now a question that came up just to back us up a little bit, David, is that Mary says Carolyn mentioned that there's a resource book on leading and structuring ATMs, Awareness Through Movement lessons for Feldenkrais practitioners. Is it available through you or through Feldenkrais resources?

I think what she is referring to is for the teachers in the Moving Forward Program. So that's what the program was called. The book that she did. She referred to kind of a manual that I made for them. I don't remember. It included the lessons and the rationale behind each lesson and then this pre and post things to do with the students. And then it gave them, how should I say it, Inductive talking points. Part of the problem, as we all know, even if you're 80 years old, is believing in yourself and believing that you have a plastic brain and believing that you have the capacity, even though you're 80 or 90 years old to change, to grow, to improve. And so I gave them about five pages of little ditties talking points.

So that's what I think Carolyn was referring to. And at some point I would love to make it available to everyone.

Okay. Marsha says, "David, Diane, Cynthia, could you start a place?" I think she's asking if three of us could start a place together for these research pieces online. I feel passionate about this in the UK. I supported a case to make Garrett [inaudible], a visiting professor at my institution to start the debate. I mean, it takes someone to get it started. It's a go for it.

Not me. I forbid myself from starting anything else. I'm killing myself for forbidding. I would really love to do this. I can tell you, I could really get into this idea.

How can we do it without you?

That's right do it without me.

How?

Oh, wow. Many ways. Let me count the ways.

Wonderful. Well, let's start talking a little bit about the future of where we could go with research, where we could go.

Diane, start laying out something to thrill us, to give us some encouragement about where this is going.

Oh, well, there's so much. I wonder how to answer that question. And then I try to figure out how to limit the answer to that question. I've spoken on this before, but I'm seeing just synergies where there's more overlap than ever than kind of the hot topics in the US, the NIH. But biomedical research from neuroplasticity to the whole idea of interoception. Scientists and neuroscientists are trying to understand how do we sense ourselves in place and how is that related to health, but they have limited tools on how they're looking at that. And the Feldenkrais Method is just custom made to expand that research. The Feldenkrais Method is a research tool, but then it's the Feldenkrais Method for just really supporting the human self in every way.

And I had mentioned earlier, I mean, aging is the big frontier. I was very excited that you included Cynthia Benjamin in the summit this year, talking about the moving together work that was led by the University of Berkeley. And now she has done the work to create it as an online program. That work that they originally did was they received an innovation award from the VA on that work, because they found it so transformative for older adults with memory loss to be able to sense themselves and have safe movement and to regain function in their home.

And I work with the NIA right now, the National Institute on Aging, and they have leapfrogged in investment from the US Congress in dementia, Alzheimer's and related dementia and that research.

They've moved up in the NIH echelon of having one of the largest budgets in the entire agencies. There are research opportunities for how do we help people age? How do people have resilience to dementia? And they're looking at neuroplasticity for that. And so I want to limit my answer and say, it's almost limitless.

And we are getting research like the work that Carolyn [Palmer] did to translate what is our work in the language of developmental science or these other areas of science.

That's what we need to bridge the gap, it's how to take what we know about the Feldenkrais Method and merge it with the known solid science and create almost a scientific translation, a language that can engage the broader biomedical and research community, because the theory is there.

And I think what is most exciting is just the synergies where the science more than ever is looking for ways to ask questions that I think the Feldenkrais Method can be a wonderful tool.