#415 – Exploring Consciousness and Health with Marilyn Schlitz, Ph.D.

interview by David Van Nuys, Ph.D.

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Dr. Dave: My guest today is Marilyn Schlitz, Ph.D., president emeritus and senior fellow at The Institute of Noetic sciences, and, among other things, we'll be discussing her research on consciousness and mind body medicine. You can find out more about Dr. Schlitz by visiting our show notes for this episode on ShrinkRapRadio.com. Now, here's the interview:

Dr. Marilyn Schlitz, welcome to Shrink Rap Radio.

Marilyn: Thank you, I'm delighted to be here.

Dr. Dave: Well, I'm delighted to have you. I've heard your name over the years from lots of different sources. We travel in similar circles, and I think we know many of the same people. Now, you've had a long term affiliation with IONS, which stand for the Institute of Noetic Sciences, having served as president and then senior fellow and researcher. Some of our listeners may not be aware of IONS, so why don't we start with you telling us about the institute, its mission and its activities

Marilyn: Great, well, thank you for asking. Yeah, I have worked with ions for over 21 years and it was founded just a little over forty years about by Edgar Mitchell, who was one of the Apollo 14 astronauts, and Edgar had been trained as a navy test pilot as well as an MIT engineer, and when he was selected for the Apollo program it was obviously a great and historic moment. He describes his experience of being the captain who manned the little lunar module that took them from the Apollo capsule the moon and back, so he's one of those few people who has actually had the opportunity to actually walk on the moon. And he describes the great moment for him, not on that moon walk, but on the journey home. And because his part of the mission was complete, he had the window seat. And he was able to watch the earth, the sun and the moon rising and setting as they rotated their way back into the earth's atmosphere. And obviously, that was just an enormously brilliant epiphany type moment for anybody. For Edgar it led to kind of two responses. The first was, as he looked out at planet earth, suspended in the vastness of space, and all its pristine beauty and wonder, he felt a kind of pain. He recognized that there's an enormous amount of suffering that happens on our planet and yet he didn't see that as he was kind of looking down at this whole planet, he didn't see divisions of states, or nations, or race or gender. He didn't see any of that. He began to realize that maybe the great frontier wasn't really outer space, but understanding inner space and what was it within us that leads to this kind of suffering that we impose on ourselves and each other. The second aspect of his epiphany was a kind of unit of consciousness. He felt interconnected with everything... with the solar

system, with the colleagues he was sharing the Apollo capsule with, and knowing that our molecular structure connects all of us and entangles all of us in fundamental ways. So he came back to planet earth and really wasn't prepared for this kind of spiritual opening that he had, so he went around and he talked to people who were experts at religious and spiritual traditions as well as scientists who were really attempting to understand the mysteries, the powers and the potentials of consciousness as the source of our understanding of ourselves and the world. So that really led him to begin a pursuit and he then formed the Institute of Noetic Sciences in 1973. And, in that time then, the organization has been inspired to build bridges between these kind of spiritual experiences that people have with them the rigor and discernment that comes from science. And so, taking that same kind of emphasis, and that same intention, that, you know, rallied nations around the Apollo program ... to really begin to understand how it is that we can better understand ourselves. IONS had been a research organizations, has sponsored research in a variety of different areas, mind body medicine, parapsychology, subtle energies, areas that kind of lie outside the mainstream, but which are very common in terms of peoples experiences, and then bringing the science to that experience. It's also an educational organization, there's a really active educational program, there's a retreat center, and there's a membership. So there's a lot of ways people can engage, and the website is definitely something for people to check out, which is just http://noetic.org

Dr. Dave: Wow, that's a great capsule background. In fact, the very first interview I ever did was with Edgar Mitchell, for human behavior magazine way back in 1974, and I remember that maybe he had just started Noetic Sciences, or it was a gleam in his eye at that point, but, he really did a good job of building an institution that has endured and that has got membership and influence all around the world.

Marilyn: I think that's right, and if it was in 1974, that would have been about a year after he founded the organization. It's interesting what a small world we live in. But, I agree with you, it's been an organization that has attracted diverse kinds of disciplines and perspectives and it has a kind of staying power that I think is really important for the planet. There's so many ways in which we continue to face these kinds of uncertainties in today's world. They have an organization that really wants to understand the nature of our worldviews and it is that how our belief systems can inform our behaviors ...you know, what is it that science can offer us to better understand the nature of our own inner landscape? So, I am delighted to hear that you have such a long relationship.

Dr. Dave: Yeah, and in passing here, I just have to note that some considerable part of its success and its endurance has been due to your efforts as long-time president and senior fellow and so on. and that you helped to bring direction and respectability to the scientific efforts to explore some of these so called marginal areas. Another person who I've interviewed, and who I know you must have worked with is Dean Radin, and I interviewed him back in 2009 on the topic of scientific parapsychology. I'm under the impression that you also were involved in

parapsychological research, so what can you tell us about your work in that area?

Well, first, thank you for your kind words, and its been a labor of love, and an opportunity to really be creative and really think out of the box, and do it with a kind of discipline and discernment that I think science offers. Yes, I've been involved in actually the whole way I cam into the field was, back in 1977 I encountered two books, one was called Psychic Exploration by Edgar Mitchell, the Apollo 14 astronaut, and that book really stimulated me and excited me with the idea that we were living in a kind of revolutionary period, and rather than thinking about the paradigm shift as being something about the material word, its also really, trying to understand the powers and potentials within us. And so, Edgar's book and that interest in psychic phenomena and parapsychology, bringing the science to these kinds of experiences that people report was really a great fascination for me, so I ended up in California, studying with experimental psychologist Robert Morris, at the university of California, Irvine, and then I was at the Orion Center in Durham, North Carolina for three years doing experimental research in psychic healing, remote viewing, Ganzfeld research, I did studies in all of those areas, and then I went to San Antonio Texas and went to the Mind Science Foundation for a decade, had the privilege of working with William Braud and Helmut Schmidt, both of whom were legends in the field of experimental parapsychology. That then took me out to work in Silicon Valley where I was part of the DIA, CIA sponsored parapsychology research program there, and at that time I held a fellowship at Stanford in the psychology department, on psychical research, and so all of that kind if set me up in terms of my background and research experience. I got a call on day that invited me to come and work at the Institute of Noetic Sciences and that was a very wonderful opportunity for me that has had long term benefits. But, yeah, so I have had an interest in how we take these experiences that people have, whether its telepathy or precognition, that sense of using our intention to heal another person at a distance ... I've been very interested in how would you take those claims made by people and bring them into a controlled laboratory type setting. I'm also trained as an anthropologist and so my interest is also in "How do these experiences influence how we live our lives?" That's been kind of the purpose behind a lot of the work I've done over the years.

Dr. Dave: Yeah, now I was looking at your bibliography of articles that you've published that is on your website, and I must say that it's been...it's very impressive. You've been very busy.

Marilyn: It's busy, yes it is. And it continues to be so, that's the good news.

Dr. Dave: So, I'd like to drill down on some of these things, for example, remote viewing, I know that was associated with the Stanford research institute and Russell Targ and maybe if you just say about what you found in that. Was that the one that also had some CIA involvement? **Marilyn:** Yeah, they were funded for about 20 years through the government, some of it, most of it classified as part of the intelligence gathering initiative that the government was interested in. And so, they developed a protocol, they called remote viewing, the idea that one person can gain information about a distant geographical location without any sensory information. A lot

of the work that they did at SRI was demonstration based. So they were really trying to solve problems. Where was the missile hidden, that kind of thing. So, they were very serious issues that they were looking at. At the time I began my research career, I was working at Wayne State in Detroit and I found an experimental psychologist who also had an interest in this kind of field, and he gave me Targ and Puthoff's book, Mind Reach, and that was another really catalytic book for me where it started us doing experiments, and we began very informally with each other. I'd be the outbound experimenter and I'd go look at something and he'd describe it, and then we'd switch roles, and had some incredibly interesting experiences. I remember one day we decide to finally bring in a "subject" and she was psychic, or self-reported psychic, and so he was the outbound person and she described what she perceived and then he asked me, "Well, what did you get?" And I said "Well, I'm the experimenter here, the objective detached person," and he said "Oh, yeah, yeah ...but you must have felt something." and I said "Well, this little image kept coming to my mind, and it was like an omega shape," and I drew it, and he got all excited and he took us over to the location, where he'd been sitting, observing, and it happened to be a building that had this big omega sign etched in the side of the building. was a moat around the building, and a little fence around the moat, made up of these little omega symbols.

Dr. Dave: Oh, wow...

So, it gave me some ideas that perhaps I have these capacities. I did much better than the psychic did, in the experiment we did, which was also kind of interesting. Not really what I wanted to hear, honestly. I was really, at that point, wanting to be somebody who was playing by the rules of science, and science really values objectivity. So, that led me to do an experiment out in California, which...it was a controlled random study looking at people. hypotheses was, "Can everybody do remote viewing," because the SRI people were really working with a very gifted group of people they had calibrated over the years, and we got significant results in that, and that was my first publication in 1979. I presented it at a conference at the parapsychological conference, which is going to be held here in California in this year in August, coming up. The parapsychological association, and so I presented there and both Targ and Puthoff were present in the audience, and they invited me to come to SRI and it turns out years later I learned that because I had done that study, and because I wasn't part of their formal program, it actually was used by the researchers to gain more funding for a couple more years of their pursuit because they had some independent corroboration of their findings. So, that was kind of fun, and we proceeded to do a number of other remote viewing experiments, some in which I was the viewer, and we had that under controlled circumstances, and in all of those studies that I did, we ended up with statistically significant results, under double blind protocols, so it really gave me a sense that there was something about information transfer that lies beyond what we understand via conventional sensory exchange of information.

Dr. Dave: Now, some of your articles used a couple of other terms, and I'm wondering, are

these synonyms of remote viewing or are you talking about something else...one was remote staring, and the other was covert observation.

Marilyn: Yeah, I know, we have changed our terminology over the years. The remote staring was different. In that research we were more interested in whether one person could intentionally influence another persons physiology at a distance. What we did with those experiments is, test the claims made by healers, that they can use their minds to heal somebody at a distance. What you find in the real life situation is that there are so many variables going on that it's really hard to understand if it's some kind of wishful thinking, suggestion, placebo, you know...what was happening. And so, we developed a research protocol....this is primarily research I began when I was working with William Braud at the Mind Science Foundation. William had been very interested in looking at psychic healing. I actually went to work with him specifically so I could learn from him and work with him. So, we designed the experiments where we invited a psychic or a healer ... somebody, maybe it was a health practitioner, into the laboratory, and we had another person in a distant room, and we were monitoring their physiology, and at that point it was primarily the autonomic nervous system, and in particular, the galvanic skin response, of the sweat in the palms of the hands. That's an autonomic response, and that's something that people volitionally control, at least not under normal circumstances. The idea was to measure the physiology of one person and then have this healer in another room, at random times throughout the session, attempt to influence the distant person. So they would be intending or not intending. And then, at the end of the experiment, what you're able to do is measure the average amount of autonomic nervous system activity during the intention or staring periods as compared to the control periods. And you're able, then, to do a statistic on that, and we found that over fourteen formal experiments that we did together, there was a statistically significant deviation from chance, about a 33% deviation, which is pretty interesting, and suggests that there is something about our intention that can transcend our normal mind-body understanding.

Dr. Dave: Ok, now, I'm going to want to come back to that, but covert observation... was that the same thing or was that something different?

Marilyn: Yeah, those are all...we manipulated the conditions of the experiment in different ways, so sometimes the person was looking at the physiological readout of an chart recorder, back in the days when we used a chart recorders. Sometimes we had a video camera on the distant person, so the healer would sometimes see the image of the distant person, and sometimes they wouldn't. So the idea was to measure the difference in the physiological activity of the remote subject when the healer was staring at them as compared to the control conditions. I continued that research when I went to Stanford, actually, and we did a couple of experiments there.

Dr. Dave: You know, something that's always fascinated me, and maybe it was the 'covert observation' phrase that triggered this for me, but you know how when you're yawning, and you

look around, and you notice somebody maybe in the automobile adjacent to you, they're yawning at the same time, and I've ... just in a causal, non-scientific way... I've wondered, boy, if yawning is somehow connected to the psychic center of the brain or what.

Marilyn: Yeah, that contagion that happens. There's also the idea that you're driving in your car and you get the sense somebody's looking at you, and you look over and sure enough they're staring at you. That was sort of the motivation behind some of the research that we did using the closed circuit television. Is it just some kind of subliminal perception that we're very hard-wired in our brains to detect motion. So, if somebody turned their head, maybe our peripheral vision picked up that head turn and caused us to respond. That's why bringing it into a laboratory setting was very helpful, because we could eliminate that kind of subtle sensory perception and really try to look at the kind of x-factor that motivates a lot of that research.

Dr. Dave: And you say that, in fact, you got significant results... and yet this vast scientific audience out there is very skeptical despite all the years and effort to conduct controlled parapsychological research it's mostly not taken very seriously, and I know you've spend time examining the skeptic versus proponent debate in parapsychology, so I'm wondering what conclusions have you come to in that regard?

Marilyn: Well, thank you for taking a serious look at my career. You've gone way back into some different dimensions of it. Yeah, I am an anthropologist, and my interest in sociology as science has led me to really be curious about truth construction. How is it that we know what we know, and what founds our belief? So, I have done some research in different ways, looking at the debate, and how people take different positions. What informs their opinions and their world views? What we found is that this kind of discourse that appeals to logic that the two sides make are very similar. What tends to shift people's perspective and their belief system is a first person experience. So when people describe having had an "I statement" kind of experience ... I observed something... I had a weird experience... I had a telepathic experience...I knew somebody was going to call before they called...all of those things tend to inform us. And it can also be, "I, as an experimenter, designed this study, and got these results, It can even be, "I have a friend who designed these experiments, and and that informed me." they got these results, and that informed me." So these first-person experiences are really fundamental. I think this question about what is the majority position on these experiences ... I think that this is an empirical question that really hasn't been addressed in recent times. If you look at who the mainstream scientist are today, you'll find a tremendous influence of Asian populations. The Indian population, Chinese, obviously, Taiwanese ... people who come from a culture where these kinds of extended human capacities are not anathema to our understanding of the nature of reality. In fact, they are kind of taken for granted. If you go to Japan, there's not as much skepticism there. There's more a kind of curiosity about, "Why would you need to do experiments on that?" You know, because they kind of take it for granted. So, really, I had proposed to the Gallup Institute at one point, and we just weren't able to raise the funds to do it.

You know, a Gallup survey of scientists in mainstream academia, who in the privacy of their own little offices, could answer a set of questions honestly ... you know, "Do you believe in this kind of thing?" "Have you had personal experiences?" Because my guess is the mainstream is very different than what it was, you know, forty years ago, and that we might find that there's a lot more acceptance of these ideas than we think. But, the truth is that science is based on materialism and physicalism. The idea that valid reality is something you can measure and manipulate. If you can't touch it, taste it...you know, sense it in some way, it's probably not real. And yet, what we've discovered, with this revolution in quantum physics, is that those assumptions, based on Newtonian models, are not necessarily wrong, but that they're incomplete. And we're discovering that there's a much more complicated, multi-dimensional world that we are living in. And so, I think that these kinds of observations that are being made in laboratories about psi phenomena, about psychic experiences, may find some theoretical basis in what's happening in quantum physics...the idea of entanglement, or interconnectedness. You know, these issues have become part of mainstream physics to the extent that we can begin to build on. You mentioned Dean Radin. He's done a lot of work in trying to apply some of the principles of non-locality, for example, to the experimental studies that he's doing in the laboratory. So, there may be an opportunity to have a kind of quantum leap in our understanding of our human potential as a result of this interface between what's happening in theoretical physics and what's happening in the laboratory of these anomalies researchers.

Dr. Dave: Ok, that's all really fascinating and one of the things I had intended to ask you was whether or not there's been any wider acceptance of paranormal phenomenon among mainstream scientists than in the past in the West. I think you've spoken to that, and that Gallup poll really would have been a great thing to be able to refer to.

Marilyn: It would. It ended up being rather expensive, and we just didn't have the ... Deepak Chopra is a colleague and I've been working quite a bit with him, and he is been a scientific advisor for Gallup and we though it might be something we'd have an opportunity to do, but it ended up not being as simple as we had hoped. Another thing I'm interested in, and I've done a set of experiments working with a skeptic, a colleague of mine, he's a psychologist and a magician, and a card-carrying member of the skeptical community. He and I did a set of these remote staring experiments together and, interestingly enough consistently replicated our original findings. He got nothing, I got a positive effect, and that was curious, because everything was identical. We used the same protocol, the same laboratory, the same randomization procedures, the same equipment, the same subject population... everything was identical. So, if there was some kind of a systematic error in the protocol, it should have showed up in both data sets, but in fact, it didn't. We both found different kinds of results. Building on that, I have a study right now that we are just completing, and it's looking at whether the intention and belief of the experimenters influences the outcome of their studies. We recruited 32 experimenters all over the world and had them run 16 subjects each and we're just now in the process of breaking the blind and analyzing those data, so we'll see what happens. It's something that I find really

interesting at both kind of the ontological level of what does the science actually tell us, but I'm also really, really fascinated with worldviews and belief systems. You know, how does that impact what we see and perceive about the world we live in.

Dr. Dave: Well, it's long been maintained by people in parapsychology that a negative attitude could negatively affect the outcome of the any study, and people outside of the parapsychological community have regarded that as just totally self-serving and kind of a rationalization. So, it sounds like you're really trying to tackle that issue head on.

Marilyn: I think so, and we know from mainstream psychology and medicine that the experimenter effect is extremely important. The clinical effect is extremely important. So this is just sort of taking it one step further and seeing if there isn't something more than just the sensory communication that influences these kinds of effects.

Dr. Dave: Now, as time has gone on, your focus has kind of evolved away from parapsychology per se, and more into consciousness, and consciousness and healing. So let's focus on that a bit. What can you tell us about the role of consciousness in healing?

Marilyn: Well, I think, you know, what you said, looking at myself through a sociological lens, is that it's hard to continue to do research that has been so marginalized. You know, it's sometimes very frustrating that the work is not accepted, or it's considered to be inappropriate even to ask those questions. I have, since the beginning of my career, had an interest in healing, and looking at what is it that's going on in the bodies and minds of healers, and how does their intention and attention influence their role as practitioners. So, I began doing research on ... when I first came to the institute of Noetic Sciences, I was looking at spontaneous healings or spontaneous remissions, looked at how there is this kind of plasticity within us, that our emotions, our beliefs, our thoughts seem to have an impact on our biology, our immune system, our endocrine system, our nervous system. So, again, if you look forty years ago, that was heretical. We really didn't accept that there was a connection between the mind and the body. And people who were trying to do this, or were asking these kinds of questions, certainly within a scientific lens, were kind of considered to be the granola eating hippies in northern California over there in Rohnert Park. But, I think that has clearly changed. You see things like mindfulness meditation practices are in every major medical center today. Biofeedback was considered really marginal, and now is very, very mainstream. So, we know that things change with data and with awareness, because the population has shifted their interest. So, I became really interested in how one would look at remission and were there some qualities and capacities that people had that they shared within that community of people who had remissions from life-threatening illnesses. So, we did some both qualitative and quantitative research looking at what's called psychoneuroa immunology, the whole way in which our thoughts affect our immune system, again finding very encouraging results. In the remission community, what we found, we looked at people who were twenty years out from metastatic stage four diagnosis, and found twenty people who were still alive to tell their stories, and the thing they had in

common ... and it wasn't a controlled study really, it was very descriptive...was their kind of ...I'm going to say denial, that's a charged word ...but, their non-acceptance of the diagnosis, it just wasn't their time, and they weren't going. And that was interesting. So, it wasn't like they saw it as a remarkable recovery, they actually saw it as an unremarkable recovery, because they didn't see that there was anything valuable about the process other than they were still alive to tell their story. So, I did that, and then I've been really interested in alternative medicine ...the biofield, subtle energy area, Qigong, Reiki, and how do you bring a scientific perspective to these kinds of claims? How do you design protocols for people's experiences that don't fall kind of within the main stream? (Which) certainly aren't fitted within conventional clinical protocols? So, I have been involved in that field quite a bit and was senior advisor when the Office of Alternative Medicine and the National Center for Complimentary and Alternative Medicine sprang up at the National Institutes of Health, and I had the privilege of watching the paradigm wars that have taken place around that field and also some of the growth and development. I published a book, some time ago now, called *Consciousness and Healing*: Integral Approaches to Mind Body Medicine. And the idea was to kind of create a road map for the future of healthcare, and how we could bring a more integral lens that accepts the body, the mind, and the spirit. What we're finding today is that this idea of spirituality in healthcare is on the rise and there's a greater degree of acceptance. In fact, I'm just finishing a little article that's going in today to a journal called Spirituality and Clinical Care and it's an APA approved journal, and it's all about how clinicians can bring spirituality into their practice. So that's, in my case, this article in particular, is around death and how we can heal our relationship to death and, you know, live better lives as a result of that.

Dr. Dave: How fascinating and how fascinating that there would be an APA approved journal with spirituality in the title.

Marilyn: Yeah, it's just launching, actually

Dr. Dave: This is not your father's APA.

Marilyn: My father was a tool and die maker, so it wasn't his APA at all.

Dr. Dave: Right, right. Now, you also, it kind of fits into what you've been speaking about here, you've studied the role of intentionality, and I remember, I saw something about research about healing mice ...you know, where the mouse's conception of what's going on presumably has no impact.

Marilyn: Yeah, my first study in healing was probably in 1980 and I worked with mice, and it was very similar to the experimental protocol. This wasn't intentional, its just kind of interesting how life works, but we took mice, randomized them, anesthetized them, and put them on these photo cells with video cameras over the photo cells and the mice, and randomly one of the cameras would light up, and a person in another room would attempt to increase the

resuscitation rate of the anesthetized mouse compared to the control mouse. Again, we found that the best results actually came from the experimenters. So, I think there's something about people really appreciating the protocol and getting the meaning of what you're doing there. But, we worked with healers, we worked with nurses and physicians, and found some of the nurses did very well in that protocol. But I decided I really didn't want to work with animals anymore, and I decided to shift over to a population that you could get informed consent, and started working with humans, and that's been my focus since.

Dr. Dave: Ok, now I read on your website again, that you are the principle investigator ... I don't know how current your website it, whether this is already over or not, but that you are, or were, the principle investigator on a National Institute of Health sponsored trial to explore the role of expectancy of distant healing in the recovery of wound healing in a clinical surgery-based study. Maybe you can tell us about that study, and do you have the data yet, or have seen enough of the data to have some idea of how it turned out.

Marilyn: Yeah, that's finished and published, and the published article should be there. So my website, just for people, MarilynSchlitz.com, has a lot of my journal articles and different publications and so on. That project was designed with women who were going through reconstructive surgery, so it was a clinical trial, and I have the privilege of being on the ...I'm a senior scientist an California Pacific Medical Center ... and so we were able to do the project there, working with a surgeon who had this patient population, and we randomly assigned the women into one of three groups. They received distant healing or they didn't, and they were blinded to which group they were in, or they received distant healing after their surgery and were called every day to be told that the healers were working for them. The outcome variable we were looking at was collagen deposition, so it's and aspect of would healing, and we had these little polyurethane tubes that had been developed in a wound healing laboratory at UCSF. So it's a very objective outcome. There's either more collagen deposition or there isn't. I think that's why NIH funded that project, is because it had such a really strong scientific model that we were looking at. And, what we found in that study...it was underpowered, and by that there just weren't ... we had a really hard time recruiting subjects for that experiment, as is the case for many clinical trials. It's really hard to get big enough sample sizes to have what they call "statistical power." But in that study, we didn't find significant differences between the three groups. We did find an interesting kind of counter-intuitive finding, which is in the group of patients who knew that the healer was working for them, the stronger the healer felt that they were successful, the poorer the clinical outcome. And, this is obviously very confusing and challenging, as you're trying to apply any of this work. We did find, if you break up the subjects into people who were having the plastic surgery, reconstructive surgery, after mastectomy ... in other words, these are cancer patients, as compared to people who were just having elective surgery, there was a very noticeable difference with the cancer patients actually having a significant positive outcome in the study, whereas we didn't see anything in the elective surgery patients. So, it tells us that more research has to be done, and personally, I am moving

away from clinical trials. It's very, very challenging and time consuming, and I'm really...my own career is shifting now. I just completed a feature film and I am creating educational programs for health and healing practitioners around a healing relationship to death, and that's where my focus is now.

Dr. Dave: Now, that's a whole other shift. Your career has taken quantum leaps, speaking of quantum, and that seems like a big shift. So tell us about the film that you finished. Is that the film that, I think, you were working on with Deepak Chopra?

Marilyn: It is, and we're just done with that. So, in terms that we're kind of doing a life review here, my research began in looking at parapsychology and consciousness, and some of the furthest reaches of consciousness. That then led me into healing and looking both at the clinical and laboratory based studies, but also as an anthropologist, going out and talking to people. I interviewed healers for my Ph.D., I worked in the West Indies, and we really looked at what are the ways in which we relate to healthcare? And so that was of great interest, in wanting to understand how we could shift the practice of healthcare and western medicine in particular, to be more about curing, I mean, less about curing and more about healing, and really about bringing caring back into the equation. I then started looking at transformations in consciousness. How do people change their perspective, because that would be important for understanding how we shift the paradigm. It's kind of one person at a time, or one leader at a time. So that led us into a ten year project, looking at transformations in worldview. And we interviewed masters from different world traditions, did surveys with thousands of people, and we're really looking at what are the catalysts of worldview transformation, what are the qualities that help people to sustain transformation, because we know that changing our behaviors is very hard, and the what are the consequences of that. So we did that work, we published a book called Living Deeply: The Art and Science of Transformation in Everyday Life. And that was a really great experience, learned a lot, developed a change model out of that, which I can talk about...

Dr. Dave: Yeah, I would love to hear you talk about that.

Marilyn: Well, let me finish my riff, and then we can go back to that. So, that then led me to be interested in kids, and how is it that you can begin the transformation process earlier, because all the work we had done was really with adults. So, we adapted out of the research a curriculum, it's called Worldview Explorations, and its 22 lessons now, it's been tested in some classrooms, maybe not as much as we'd like. I just came back from Taiwan where I was teaching it to about 120 students through translators and into Chinese ... fascinating, fascinating experience. And then out of that then, came this idea that transformation involves many different catalysts, and one of them is our relationship to death. And that, then, really led me into trying to understand a little better how people view death, what they think is going to happen after death, and does that effect how they are going to live their lives. So, that's where I am today.

Dr. Dave: Well, what a fascinating journey. So, tell us about what you're learned about how to catalyze transformation .

Marilyn: Well, the change model ... and I worked on this Cassie Vieten and Tina Amorock, and Cassie is now the current CEO and president of The Institute of Noetic Sciences, and so, we worked together for many years, and in particular this change model. It starts with going back to what I said about the skeptic-proponent debate, it starts with a first person experience, so ,what we call "noetic experiences." Noetic is from the Greek word "nous," meaning "direct knowing." So, it's juxtaposed with rational, intellectual knowing. It's the intuitive, gut feelings people have. Those experiences can be triggered by many things. Almost always, they come out of some kind of painful experience that rocks us out of our steady state. So, it could be the loss of a job, the death of a loved one, diagnosis of some life threatening illness. It could be something ... a near death experience, out of body experience, some kind of psychic experience. It can also come out of a pleasurable experience, something like an epiphany. Those are less common in our data set, but still, they're there. So you have this kind of something that catalyzes you to think about your world in a different way, and maybe begin to see that what you valued before wasn't complete, or what your really want to be living into.

Dr. Dave: I need to just insert, what about psychedelic experience?

Also, people have had those experiences of using some kind of plant medicine, Marilyn: something that certainly during the 60's a lot of people described that as important for them. And then, what do they do with that? So, you can have a little opening, but it may not be enough to really transform you. Often times people have a number of little primers that would lead them ultimately to say "you know, I want to live my live differently. I want it to be more rich and juicy. And so, that would start a process of exploration, trying to discover, like what I described with Edgar Mitchell. He came back to planet Earth and wanted to understand, "What just happened to me?" And, "Have other people had this kind of experiences?" And so that leads people to seek information and sometimes that can get shut down, or they can get caught up in seeking and not really bring it home to understanding and changing their own lives and behaviors. So the first piece is this noetic opening, the second is this exploration process, and then we found that practice becomes essential for people as they seek to ground whatever openings they've had into their lives. And you know we interviewed people from many, many different kinds of practice, whether it was, you know, some ancient Buddhist, Hindu, Christian, Muslim, Judaism kind of practice that had been calibrated over centuries, or these kind of emergent Northern California types, where you know, it's the labyrinth or the shamanic breath work or things that are co-transpersonal, projects that help do breath work, holotropic breath work, Stan Grof's work for example. So we were looking then for common elements across this wide variety of different types of practice. And we identified five elements that constituted to transformative practice. One is intention. I set intention to transform in a positive way. But we know that the road to hell is paved with good intentions, that that alone is not enough,

and so how do we really ground it? The second piece is attention. We know that these different transformative practices invite us to pay attention to our world in a different way, to our experience in a different way. So, shifting our awareness becomes really fundamental to a lot of these. The third piece is repetition. So building new habits. We know that if you go to the gym and work on a particular muscle group, that you start to build and you start to grow. And the same is true for these transformative experiences. So, how do I build my capacities? How do I change my hardwiring in my brains, the neural pathways? How do I invite neuroplasticity in so that I can begin to shift those routine patterns that habitually guide me? The fourth piece is guidance, because if you go to a gym and you work out, you may be working the wrong muscle group to achieve the results you want, and so we found that finding a trusted leader or a guide can be extremely helpful. It's also important to begin to calibrate our inner guidance. Rather than thinking that the sources of the inside are going to come from an external authority, it's really beginning to pay attention to those noetic insights within us. So those are the four qualities that I like to think about as wrapped in the arms of surrender. And its really not so much surrender as it is acceptance, that transformation is really more about how we shift our reactiveness to the world? How we shift our responses to the circumstances that life presents us? How do we bring a kind of resilience in the face of difficulties? So, those are the qualities of transformative practice that I think ultimately we can really sink our teeth into. And then, what are the consequences? How do we begin to live this? People describe the need to shift from a 'me' to a 'we'. How do I become a more active participant in collaborating in the world? It becomes living deeply, and where I see this issue of death is now really looking at how we bring our awareness to the fears around death, into something that is healing that, so that we're not living with this kind of subconscious, unconscious terror, and, in that, growing and becoming a more resilient person. And then ultimately, I think, this change model that I'm describing has the potential to effect change at a whole system's level. So, we can begin to think about effecting education, healthcare, business, community, religion ... all of the institutions that guide our practices begin to have the potential to morph, based on this idea of transformational process. So, we published that in the *Living Deeply* book, and have used that as the basis of both what we designed as the educational program and then the book I'm writing right now, that I'm just finishing, is a companion to the film called *Death Makes Life Possible*, and I've use the Transformation Model as the basis for organizing the chapters for that book.

Dr. Dave: Wow. Well, that's a mouthful. I really love the model that you've just laid out for us. It speaks to so many of the issues that we've all struggled with, I think, and it certainly touches base to with lots of things that I've thought about but never systematized in the way that you have. Before I let you go, you've been very generous with your time, and before I let you go, I see that you're going to be a presenter at the upcoming Synchronicity Symposium which will be in Joshua Tree, California on September 12, 13 and 14. What can you tell us about that Symposium?

Marilyn: Well, I think that people should come and be in an environment where there is a

supportive community to explore things that often times we don't have the time or opportunity to question and play with. My favorite philosophy is to treat our ideas and our dogmas very lightly and be prepared to have them shift, but I think there's going to be a really interesting group of both presenters and participants at that conference, and I'm looking forward to it and I hope other people with join me.

Dr. Dave: Well, what will you be presenting on there?

Marilyn: I'm presenting the film *Death Makes Life Possible* and then doing a couple of workshops around cultivation of death awareness as a tool of liberation.

Dr. Dave: Well, that sounds excellent. Well, Dr. Marilyn Schlitz, I really want to thank you for being my guest today on Shrink Rap Radio.

Marilyn: Well, thank you. This was a great, fun conversation, I appreciate it, and I look forward to the next adventure.