Interview: **Juerg Roffler** Director of the U.S. Middendorf Breath Institute

With: Benjamin Glover M.D. Clinical Associate Professor of Surgery The Lovelace Medical Center University of New Mexico

April, 2003

Margot Biestman and Gerrie Glover, participants

Ben: My first experience thinking about breath was in high school and university, playing football and running track, when we ran to build up our stamina. We were told, "Breathe deeply into your chest," so I grew up thinking that's the way you do it, *force* the air in and out.

When I studied anatomy in medical school, I experienced opening the chest cavity and taking out the lungs—a closed space and system. In neuro-physiology the instructor talked about the respiratory center in the floor of the fourth ventricle, in the brain stem. It automatically ran inspiration and expiration— especially at night, when we were asleep.

Then when I was involved in surgery, patients who couldn't breathe well after surgery often required a tracheotomy. We put a tube into the trachea to help them breathe. In thoracic surgery and particularly treating TB, we collapsed the lung to give it a chance to rest. So any experience with *breath* was clinical and anatomical only.

Then came neuro-surgery. The most striking breath experience I had with breath occurred after I operated on a nine-year-old girl with a brain tumor in the cerebellum, (in the days before we had microscopes). I took out the tumor. I could see that she had some residual tumor on the floor of the fourth ventricle. I said to myself, "I think I can carefully remove those last cells without disturbing the respiratory center. Something said to me, "Don't touch that!" Then I said, "I can do it," and I carefully removed that last tissue. When this little girl woke up, she had what we call Ondine's Curse.

Juerg: What's that?

Ben: In Greek mythology, Ondine was cursed with forgetting how to breathe. She could only breathe if she remembered, so sleeping was a real problem.

So, when this little girl woke up, she had to be told to breathe because there was damage to her respiratory center. I'd barely skimmed the cells from it. I thought I hadn't disturbed it whatsoever, but either the blood supply or something else had been disturbed. When she woke up she couldn't remember to breathe unless she was told. When she went to sleep at night, she did not breathe properly. Nurses had to awaken her and encourage breathing. The nucleus of the vagus nerve is right next to the respiratory center. It innervates the diaphragm. It is triggered by the respiratory center, which is activated by the pH (acidity) of the blood. When it gets to a certain point, it triggers the diaphragm. Luckily the girl got better as far as her breathing went.

My whole background has been in the anatomy of the breathing—the physiology. So now, Gerrie (my wife) comes to study The Experience of Breath at the Middendorf Institute for Breathexperience and says to me, "Sense the breath moving in different parts of your body." In my mind breath goes purely to the

thoracic cage, which contains the lungs that expand and contract. I visualize the respiratory center. With my background, everything is there and nowhere else—certainly not *breath* into the legs or neck.

I came to San Francisco when Gerrie started the breath training program, and when we came back home to Albuquerque after the first month, my friend asked if I learned anything. I said, "Well, my wife learned how to breathe." He laughed. I could not explain it to him.

Juerg: I'm very glad you told that story about the nine-year-old girl with the respiratory center problem. There's something in the breath that is a mystery—even for medically trained people. They don't know why it works or why it doesn't, actually. So that is part of the mystery. This is where we come in with our work. We want to connect with people in a way that will help them learn to *allow their breath to come and go on its own* without manipulating it, without the concept of what is a "good" and what is a "bad" way of breathing. This is the way we connect with that place of mystery of where their breath comes from.

Ben: So, when Gerrie talks with me about breath, I say that it's somehow related to the autonomic nervous system, because at night you don't have to think about breathing but in the day you can override that. For instance, when I was working on the football field I could take a deep breath, I could do what they told me, or I could do what you're telling me—to *let it come and go on its own*, but I never learned to *let it go*.

Juerg: Exactly.

Ben: In fact, even when I'm working out at the gym, I work on the stair-stepper and someone tells me what to do. Of course my respiratory rate goes up, my blood pressure goes up, and I forget the rules—they're saying something like, "Two stairs for every breath," or "Count the number."

I was trying to do what I was told, but Gerrie said that wasn't what she was learning. She said, "Just sense the breath moving without telling it what to do."

One thing I learned a long time ago is that Gerrie has the ability to surround herself with really bright people—always interesting. So I say to myself, "If Gerrie is interested in this breathwork, there really must be something in it. Her specialty is modern dance. She insists that when you're on the stage and facing outwards, you can *sense* the position and movement of the dancers behind you. You can sense their *presence*. It turns out that's true. That was new to me. Before then I only knew about the clinical, physiological, or anatomical functions of respiration.

Juerg: Of course, your professional knowledge is an important part. You have to know where the respiratory center, lungs, etc. are and their functions, but there's more to it than that. When you talked about the kind of breath that is governed by the autonomic nervous system at night, it is basically the same breath that we're connecting with, but through *awareness* — and the key is the *sensation of the movement of breath*.

Every breath—*inhalation, exhalation,* and *pause*—creates movement in your body. You have seen newborn babies—when they breathe—everything breathes. The movement goes through the whole body.

That's something that we can experience in ourselves, as well, as we continue to become adults through life. We just restrict our breath because we have been trained in school and athletics that there are certain ways about how to breathe. Not only that, the whole philosophy of our culture is that there's *right* and *wrong*. So we think there's also a *right* and a *wrong* way to breathe, which is totally not what we're looking for. I look for the way the breath moves me at this very moment. It's totally different from the way your breath moves you, because you are — and you have — your own being — your Self and your personality. Gerrie is very different with her own personality, and so is her breath rhythm. Breath reflects each little

detail of your personality and your being in this world all the time. When you're scared about something your breath responds, or when you're happy about something your breath responds.

Ben: That's so interesting. I want to know how that happens. But first can you tell me, in German is the word for breath *Atem* or is it *Odem* ?

Juerg: Odem and Atem, these are two different meanings. Odem is Latin, and the poetic, the more mystical of breath's meaning. The other is Atem — which is simply breath. Odem is the more spiritual definition of what Atem (breath) can be.

Ben: Hmm. I never knew that. I'm thinking what I mean is Atem .

Now back to what we were talking about. How to find out about how the breath responds or moves—how it works. I've been talking about oxygen and nitrogen. I'm getting to a place where I can maybe sense breath in areas other than my thoracic cage—low abdomen, and even to the pelvis, occasionally to the neck and hips, (but so far not into legs, arms, head).

Juerg: The more open your body, the moving up and down of the diaphragm with the breath, has a rippling effect through the body. If you're locked in your pelvis or maybe in your abdomen, the breath movement cannot go through. So it's actually the diaphragm that initiates a particular movement—very simply said—that can process through the whole body, together with what you just described—the oxygen exchange does what the body needs, too.

Ben: Well, is it through the blood too?

Juerg: Yes, exactly.

Ben: Because it's the blood that carries the oxygen.

Juerg: Yes, that's what I mean, and you can sense that too. That's why it's so important when people come to see us, in the beginning, there's a lot of training in sensory awareness. You get that information through the sensation in your body and particularly through the *sensation* of the *movement of breath*. Wherever there is movement in your body, the sensation becomes easier. So where breath moves you it's easier for you to sense. Where there's no movement it's harder to sense. So if this were the case with you, for instance, we would begin working with you on increasing sensory awareness of breath movement.

The other focus we would work with is *presence* —what you mentioned before. When Gerrie told you she could sense presence, you realized, "Yes," you could acknowledge that it's true. We can actually define where presence of Self is and where it is not. We can extend our presence in areas where there's no sensation of breath movement. Let's say you bring your presence down to your leg and you wait there as you continue to *let the breath come and go on its own*. If you do this, after a while—if you really let the breath come and go on its own. If you gensation stay in your legs, then you start to sense something developing—breath movement, manifesting in a streaming sensation perhaps, or a change of tonus. That's how it can start.

Ben: So, when I'm talking with my friends, I could say, "You sense breath."

Juerg: I suggest that you say "Sense *breath movement*," instead of "breath," which can help them to understand the connection better. They can relate to the movement in the body that is created through breath.

If a person has restricted breath movement, so that breath moves just a little bit of the chest, that person may get sick more often than the person who has the breath throughout their whole body. This is

something your friends already know. That could be why they tell people to go and do yoga or tell them to breathe deeper.

Ben: That's interesting. A yoga person can affect the autonomic nervous system.

Juerg: We do that too, in our work.

Ben: Is that right? And you can lower blood pressure and lower heart rate?

Juerg: Yes, absolutely.

Ben: Because breath accesses the autonomic nervous system.

Juerg: Actually breath is the only tool that can access the autonomic nervous system as far as I understand — and can have an effect on it—other than medication.

Ben: We have a patient whose diaphragm is paralyzed and needs to be stimulated. The only way you can do that is with an electrical stimulator that will automatically stimulate the vagus nerve so that the diaphragm moves.

So, I hadn't thought that breath *can* affect the autonomic nervous system. Meditation is what they do in yoga.

Juerg: Well, it's not necessarily what I would call meditation. Yoga teachers have exercises—the poses—which they connect with breath. Some of them count the breath, others let the breath come and go on its own, but not explicitly. They go into particular stretch positions and wait there and let the breath do what it does. In this case they're using one of the basic breath principles that we're also using: Wherever you stretch, the breath movement goes there.

Ben: So that's a way to explain it to a person who understands physiology. It's the breath that affects the autonomic nervous system.

Juerg: Yes, that's something that interests an M.D. immediately. There's research that proves that breath has some effect on the autonomic nervous system. This is a way that the *movement of breath* and its principles come to work.

The most important breath principle is to *let the breath come and go on its own*, to not interfere with it's natural rhythm, to *be* with your breath as you *sense it moving in your body*. That creates a situation where you connect with a knowledge that is different from what you have in your mind. The knowledge is in your breath and your body.

Ben: That's very interesting, because I realize now that I start controlling my breath when I try to visualize the bellows that are moving inside my chest.

Juerg: Switching from visualizing your breath moving within yourself to literally, very simply, *sensing* it—it's the sensation that is important. If you try to not think about your breath, and just *sense* more in your body, you realize that there's movement in it. It's the same thing as at night, exactly—the breath is free to move through you because you're not interfering, you're not controlling it. So, you are trying to create a situation similar to the night, so that the breath movement can develop.

Gerrie: It's important that I participate consciously in this process.

Juerg: Yes, very much. That's where the breath starts to heal—with my participation in it, as it develops.

Gerrie: Otherwise I sleep at night and it's an unconscious healing.

Juerg: Yes, you could say, "Why aren't we healthy because we sleep?" Some of that is true because sleep is always good. To sense breath consciously and be present in it —that's something we have to relearn. When we were educated, our parents or our teachers didn't tell us that there's healing and balancing potential in breath movement. We had to learn what is *right* and what is *wrong* and never really learned to listen to what actually *is* in ourselves and how the breath moves, if we let it.

Margot: Juerg, can you talk about what Ben mentioned about doing physical exercise and being told to do hold the breath for several counts or when to inhale and when to exhale? Can you say something about how the breath can fulfill any plan asked of it? For example when we're told to take a deep breath into our chest, and to not hyperventilate, the breath can do it, but how directing breath doesn't have the healing effect on the autonomic nervous system that the natural breath has, that comes and goes on its own.

Juerg: Well, if you've been told to breathe a certain way, it's actually disturbing. It disconnects you from the access to the real power of yourself. To some extent, that's what the athletes of our time do. They just extend their tolerance, and if you look at them when they're aging, they're simply totally worn out. No athlete actually ages gracefully that I know of, other than when they realize they have their true rhythms and their true potential that they are living from. It's like what you had said to me at another time—about the Navajos, who wait until the time is right. If you tell that to an athlete that would actually be good, and then they would deliver the performance that they are truly capable of and stay in balance.

Gerrie: It's like in baseball, there's a quality that I like. It's like an endless game, it can go forever, and they have a lot of time they need to throw the ball.

Juerg: Yes. They have time to focus and find their rhythms back.

Gerrie: They find their rhythm and it's a major factor.

Ben: Pulmonary physiology and respiration therapy are big fields. After surgery—especially abdominal or thoracic—there is a lot of pain and the patients don't breathe deeply. If they don't breathe they'll get pneumonia. So the respiratory therapist is there to inflate the lungs and assist the patient to "breathe deeply." So the question would be how to come back to the *breath*? The respiratory therapist has to make sure the alveoli in the lungs are filled.

Juerg: You can trust that if people are trained before surgery—if they practice letting the breath come and go on its own—and have the breath open and going through the whole body, they have it much easier after surgery. They find places where they can breath if the chest is under stress or cannot move well. They find that breath movement in the legs or in the back helps. And even if the ribs may not move that much, the lungs are still filling because the diaphragm can compensate for the other spaces.

Ben: When we operate on the spine, especially L2-3, we have to open, cut the diaphragm, and sew it back together. The patient has a lot of pain, and has a shallow breath.

Juerg: If they already have had the experience of the movement of breath, they realize they had a full breath movement throughout their whole body before surgery. They have discovered how the diaphragm not only moves up and down, it also moves out and in. There's the horizontal component to the movement of breath, as well. So then they would actually focus more on a horizontal expansion.

I have never had a possibility to work on someone who had immediately come out of surgery, so I don't have the experience there, but I am sure that patients have more potential and possibilities for more

breath movement and less pain, if they have learned to sense and connect with the movement of breath before they go into surgery. So when they come out of surgery, the breath movement can go to places where it can compensate when the diaphragm has been opened up, is restricted, and needs healing.

Gerrie: That's coming at it from a different place, that's not so intrusive.

Juerg: There's one important other thing. If the person has learned to let the breath come and go on its own, without interference, the diaphragm moves as much as it can, and maybe the rhythm becomes faster, so that the oxygen exchange maintains a level that feeds the whole body. This is opposed to when you start to move the diaphragm by an act of will, the diaphragm realizes, "Someone is trying to manipulate me. I don't want that," and then the pain comes.

Ben: In thinking about the idea of *breath*, is there a breath experience that's not mystical, but another sense that we're talking about besides the autonomic system?

Juerg: Can you say more of what you mean?

Ben: I'm trying to think of an example—which I gave earlier with the nine-year-old girl with the tumor. When I was operating, I got the sensation I should stop. Now part of this is important to know—when to quit—because there are certain things you can't do. I had a very strong feeling I *should* stop. "But if I take this out, I thought, "I may be able to cure her," so I was weighing that. Oftentimes I get a feeling sense, something tells me what's right.

Juerg: Intuition, which is basically the complement to sensation. They work together. The sensation is the reality—the simple, plain reality. You have a sensation and it is clearly there. The intuition is the other end, where there's something you can receive through your intuition, but it's not visible or touchable. Sensation and intuition work together. If you feel that you'd like to support your intuition, you can actually work on your level of sensation—e.g. your physical sensation of breath moving in your body. If your level of sensation is strong, the level of intuition also becomes much stronger. So, in a situation like, "Should I do that or not?"—if the intuition is not strong enough offer yourself a reference to physical sensation, you'll get an answer. You'll become clearer about an intuition that was not quite clear before.

Ben: And that's part of the breath and its movement.

Juerg: Yes. Breath brings the sensation and intuition together. Actually, breath is a link. It brings everything together. Nothing happens without breath. Without breath there's nothing at all. Without breath we die.

I don't know what happens then. It may continue, but in life the breath movement connects me with my Self and makes the organs work, makes everything within myself work. It also makes my relationships work, it makes me talk, it makes me move and more. Without breath there are no words, without breath there are no feelings.

Ben: It's fascinating. And it's hard to explain.

Juerg: In our work we're using unfamiliar words. Our culture is not yet open to receive these words.

Ben: As I say, it's all really interesting, coming from *experience*. There's something besides neurophysiology, something higher?

Juerg: Yes, there *is* something higher that makes us breathe. We can experience this force. We can say that it's possible to open up to a spiritual state. Some people call it God—there are many names for it. In all the mythologies, breath has always played an important part—as a link between the body and the spirit.

Ben: Yes, I'm thinking again of that myth, Ondine's Curse, when I operated on that girl—that if she didn't breathe she would die and she had to be told to breathe. The nurses said, "Breathe, breathe, breathe," or she'd stop.

Juerg: And she actually survived?

Ben: Yes, and she recovered that part.

Juerg: It's amazing. Besides the respiratory center, there's the diaphragm moving and there is also the experience that you can have, that each individual cell is actually moving simultaneously, together with the diaphragm. There is knowledge in each individual cell. That's what I believe. It is possible to experience that a cell knows, and is getting ready to receive the breath.

Ben: I know that nourishment goes in and out of the cells. They do move. You say that breath goes there? I can't see oxygen and nitrogen, but I know that goes through the blood supply.

Juerg: Again, think of the movement of breath.

Margot: That's the key.

Juerg: And we can have that experience on a cellular level. It's a readiness of my cells. The moment I breathe, my cells are ready to move. It's not a causalistic process where one thing causes another—there is that as well—but there's also, at the same time, instantly, when the impulse comes to breathe, everything is ready.

Margot: For me, it has to do with how much am I willing to allow the breath to move me? If I contemplate or receive "M," on inhalation, without pushing or pulling on my breath, and if I then let the sound out over my breath on exhalation, I can sense what is happening inside. Just as I receive my inhale, I can sense on a cellular level, my cells are welcoming a gift coming, and I can sense as my exhale goes that my cells get all enlivened by the movement of breath.

Juerg: It's all about sensation—sensation that informs you, together with your brain cells. It's knowledge that combines the brain and the spine with each individual part of your body. Including the body, you access a more encompassing knowledge. It's like each cell has a brain, each part of the body is intelligent. And through a simple connection—the sensation of movement of breath—you can have access to this knowledge. It's like your whole body starts to "think," but it's not thinking in the usual way. It's another way of receiving information. You receive information on various levels. You can have the whole spectrum—it can come in through thinking. It comes in from all levels of being rather than just from thinking.

Ben: And the five senses.

Juerg: Right.

Ben: A Nobel Prize winner in neuro-physiology said that there's something besides the sodium, the potassium, oxygen, etc. that goes into cells of the brain that makes them *alive*. There's something else that activates them. He said, "We don't know what that is. Religious people call this the soul. But there's something besides just the sodium and the potassium and the oxygen, etc. making up these cells, and giving them *life*."

Juerg: Yes, I think it has to do with the mystery of breath. There is the breath cycle—the inhalation, exhale, and pause. In the beginning of each inhalation, there is something like an impulse. It comes in on its own—but if I'm pulling and pushing on it, I override it. When I really let it come and go on its own—

inhalation comes in with an impulse. It's like the strike of a gong, and then breath unfolds and it flows through me on exhalation. Then I have the end of exhalation, then a bit of a pause—short or long—before the next inhalation comes back on its own.

Ben: O.K. So how long would you say it takes a person to get to where you're talking about?

Juerg: Well, you're already there. Everybody has it within themselves.

Ben: I mean that when you see students come into the class, and they're sitting in a circle and you start.

Juerg: The basics.

Ben: So how long then to get to where you are right now?

Juerg: As long as it takes—when they start to trust that there's something that they can get from the breath in this way—then they're in it. Everybody has it, and the most difficult part is to get people to a place where they trust that they can learn something from their breath in this way—letting the breath come and go on its own—sensing—and be present with it.

Ben: It's interesting. When Gerrie had her workshop in Albuquerque, there were 12 or 13 people there. I could look around the group, and see some of them were "turned on to *breath*." Others were just like me, in the beginning. But some, one a dancer, and one who is a biochemist, were "really getting it." And I was saying to myself, "They're getting it, but not the others to the same extent."

Juerg: It's a matter of trust, and it's also a matter of how you have learned so far, what your principles of learning were. If your principles of learning were more following a causalistic principle, then you might have more difficulty than someone who has access to sensation and to their body, or who understands principles of life—more from, let's say a holistic way of understanding it, rather than from a causalistic way. If you can integrate both principles—the masculine (doing or directing) and the feminine (listening or being), you are ready to receive.

Gerrie: I've had all kinds of students – a lawyer, dancers who have been trained in physiology and anatomy.

Juerg: I like that. It's always wonderful to have a mixed group of people. For example, people who have little structure can learn from others who have more structure.

Gerrie: I think what Ben was saying, and these two women, a lawyer, and the other a biochemist, their eyes just lit up. And I kept looking over there and thinking, "This can't be!" It looked like they were given something.

Juerg: They were ready to receive it. It has a lot to do with being receptive for something.

Ben: So I guess I can say, "It's the "movement of breath" when I describe this work to my friends.

Juerg: Yes, it's the *EXPERIENCE of the movement of breath*. If you can tell someone to just go sense right away and not talk about the breath, you are building a bridge to the immediacy of sensation. The moment you put your hand on your breath, without pulling or pushing on it, you sense your true breath movement. Try it now.

Ben: Actually yes, I can sense something moving when I place my hand on my belly. It seems like it could be breath movement.

Juerg: Is that your experience?

Ben: Yes, that is my experience—as long as I don't think about it.

Juerg: That's why you're here. We're helping people learn to not think about their breath—to really, truly sense how it moves, and ask, "How is my breath when I do not interfere?" I'm not thinking about it, not visualizing. "How is it really?" You have the movement of breath in your sensing and this is when you connect with your own truth!

Edited by Margot Biestman, Juerg Roffler, and Ben Glover