

# The Science of Connection

**Lela C. Carney, LAc, MA, SEP**—Acupuncture, Natural Medicine, and Somatic Experiencing healing trauma and stress-related illness [lelaccarney.com](http://lelaccarney.com)

Annelise and I met at the Natural Deathcare Initiative (NDI) organizing group in Santa Cruz, California in 2017. NDI is dedicated to creating authentic healing and nurturing environments that can sustain us when we are facing the end of life—both when we are the ones who are dying, and when we are supporting, caring for, holding, and letting go of the ones we love.

At our meetings, people were singing praises for *The Art and Science of Caregiving*, which was still in manuscript form. I was fortunate to read one of the drafts and offered to share what I have learned as an acupuncturist and Somatic Experiencing trauma work practitioner about how our nervous systems respond to life-threatening situations—either in terror and despair, or in trust and openness. We, any of us, can shift from fight/flight/freeze/shut down to rest/reconnect/restore—even in the midst of dying. We can learn to help each other do so.

Annelise's commitment is to share her wisdom so that a greater number of us can offer a deeper level of care to each other as we face the inevitable changes life brings us all. In *The Art and Science of Caregiving*, Annelise shows that it is possible to be with a dying person who is angry or 'frozen' with fear and help them return to a sense of feeling safer, even in the midst of their dying process. She offers the possibility that dying doesn't have to be experienced as life-threatening; it can be life-affirming. Even at the end-stage of life, "post-traumatic" growth can take place. Perhaps especially here, on this powerful threshold. It is clear in her book that Annelise creates heart to heart, body to body, and mind to mind attuned connection that can bring her clients into a greater sense of safety and ease.

My commitment in writing this is to offer, in terms of the scientific language of our time and place, a top-down cognitive understanding, and also a bottom-up felt sense, a "gut understanding," of the transformations Annelise facilitates for those in her care. I hope this will help guide readers to derive more from Annelise's experiences.

Many of the most distressing experiences and symptoms around the dying process are mediated through the vagus nerve's influence on our pulse rate, respiration, gut motility, immune system reactivity, endocrine interactions, and our capacity to connect with each other. When overwhelming experience exceeds our threshold of tolerance, we may shut down and disconnect both from ourselves and from others.

In my own experience, my mother was not able to fully grieve the death of my infant brother. This made her dying much harder. After her death, I began to face that complex grief which my family had set aside to 'keep on keeping on'. This was part of what led me to the Somatic Experiencing (SE) training, then to Dynamic Attachment Repair experience (DARE) and then to the NeuroAffective Relational Model (NARM) approach to working with developmental trauma. Peter Levine, founder of the Somatic Experiencing approach to trauma resolution, has collaborated for many years with Stephen Porges. Dr. Porges' research led him to describe the polyvagal theory of nervous system regulation and dysregulation.

Part of my vocation has been to teach nervous system regulation skills. Besides offering this to patients in my private practice, I have given presentations on Dr. Porges' Polyvagal theory. I deeply appreciate his commitment to help others understand what it is to cultivate and offer a healing presence. Bessel van der Kolk, MD and professor of psychiatry, states that the Polyvagal theory explains "why a kind face or a soothing tone of voice can dramatically alter the way we feel."

The following link is to one of the most accessible descriptions of Dr. Porges' work:  
*Wearing Your Heart on Your Face: The polyvagal circuit in the consulting room: "research-based insights into how therapists can more effectively convey safety to clients"*

<http://www.psychotherapynetworker.org/magazine/recentissues/2013-sep/oct/item/2250-point-of-view>

For more resources, see:

<https://m.youtube.com/watch?v=8tz146HQotY> DharmaCafe interview with Dr. Porges

<http://lelaccarney.com/polyvagal-theory-applied/>

The research of Ted Kaptchuck, MD, provides science-based support for understanding the difference an attuned and attentive care provider can make. Dr. Kaptchuck heads Harvard Medical School's The Program in Placebo Studies and the Therapeutic Encounter (PiPS). His research has also studied the healing qualities of attuned and attentive interaction.

<http://tedkaptchuk.com/pips>

<http://programinplacebostudies.org/tag/ted-kaptchuk/page/2/>

on WBUR: <http://www.wbur.org/radioboston/2011/12/14/demystifying-the-power-of-the-placebo-effect>

TedMed talk: <https://www.youtube.com/watch?v=bbu6DolnUfM>

<https://www.tedmed.com/speakers/show?id=309804> )

Frank Ostaseski of San Francisco's Zen Hospice has also cultivated the capacity for compassion and non-judgmental acceptance.

<https://www.mettainstitute.org/index.html>

I also recommend the work of Kristin Neff, self-compassion researcher at the University of Texas, Austin. <https://self-compassion.org>

*Why Caregivers Need Self-Compassion* [https://www.huffpost.com/entry/caregivers\\_b\\_1503545](https://www.huffpost.com/entry/caregivers_b_1503545)

The article cites a study conducted by neuroscientist Tania Singer showing that pain centers in the brain are triggered by awareness of another person's suffering. However, if the suffering is viewed with equanimity and a compassionate heart, neural networks associated with love and positive emotions are also activated. Although the term 'compassion fatigue' is well-known, some psychologists are starting to argue that the term should be changed to 'empathy fatigue.'

I can't think of better guides on this journey than Annelise Schinzinger, Frank Ostaseski, Stephen Porges, Kristin Neff and Ted Kaptchuck. Each brings a unique perspective on how we can cultivate and advocate for healing and reconnective presence. Each speaks the same truth in a different language. Together, their understandings weave a web of support with which we can meet the dying process, whether at home, in a care facility, or hopefully, if need be, in the ICU.