



**GAINS**  
Special Edition

# Feeling Reflective: In Honor of Jaak Panksepp



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Studies, compiled and edited by Debra Pearce-McCall, 2018

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Published by the Global Association for Interpersonal Neurobiology Studies, 2018



# Note from the Editor: Debra Pearce-McCall



In 2017, GAINS Advisory Board member and pioneering neuroscientist Jaak Panksepp passed away in what seemed a sudden, and certainly premature loss, though he'd had serious health concerns for some time. The boards and community of the Global Association for Interpersonal Neurobiology Studies join with all his family, friends, colleagues, and students in celebrating his life and his legacy of ground-breaking thinking, research and writing. Dr. Panksepp's work helped create the field of affective neuroscience, bringing emotion into focus through the lens of scientific inquiry, and recognizing emotion as experientially core in humans and other creatures. Many of us in the interpersonal neurobiology community apply his ideas in relational professions, like therapy and education, deepening our understanding of emotions and wellbeing in daily life. The currents of the affective MindBrain circuits researched and identified by Dr. Panksepp have implications for how we raise our children at home and in schools, how we suffer and heal together, how to create lifestyles that honor our nervous systems, and more.

In the months since his death, I've worked to bring together these deep reflections and memories of Jaak Panksepp to share with the GAINS Community. Thank you to GAINS Advisory Board members Lou Cozolino, Dan Siegel, Pat Ogden, Steve Porges, and Bonnie Badenoch; to Jaak's life partner and writer Anesa Miller; to his long-time scientific colleagues Antonio Damasio, and Ken Davis; and to GAINS board member Kirke Olson. You made this tribute to Jaak Panksepp possible.

I was moved to create this document because Panksepp's research on the seven primary process emotions informs my work applying IPNB to leadership, therapy, ethics, and teaching. I regularly think about how the SEEKING, PLAY, and CARE systems are functioning in my clients and how to "turn up the energy" running through those invigorating neural circuits. I honor the creativity and 'lustful' energy of MATING, and consider with folks how they embody and express this, even without a mate. Knowing their primacy brings me to even deeper compassion for our mammalian natures and the importance of welcoming, witnessing, and expressing our FEARS, GRIEFS, and RAGEs, and learning ways to do that well, so that our emotional lived experiences heal and connect us to all aspects of self and our human lives, and to stronger bonds with trustable others.



My personal interactions with Jaak Panksepp included conversations at conferences, several email correspondences where he would generously share his latest work, and one memorable meal. I had the pleasure of eating brunch with Jaak, and his son Jules. Our conversation ranged from personal stories to research complexities and wonderings. We discussed animals, and how we each dealt with knowing they have emotions and decisions about eating them—prompted by observing local birds and their communicative behaviors through big windows overlooking the Columbia River. Jaak was warm, present, and witty. (His son is, too.)

GAINS will always be grateful for the time we had with Dr. Panksepp on our Advisory Board. His gracious generosity, and his sparkling and kind manner, allowed him to share his brilliance so easily. This collection is a small way to join with all who will always honor and grieve him, and find joy in the memories of this marvelous man and his ground-breaking scientific contributions.

Learn more about Jaak Panksepp's work by reading [his books](#) in the W.W. Norton Interpersonal Neurobiology series or watching his [TedX talk](#). His [extraordinary life](#) is briefly reviewed in this obituary from the Washington Post. In an earlier acknowledgement of his passing, GAINS made publicly available this delightful article demonstrating [Panksepp's work applied clinically, authored by Rich Armington](#).



[Debra Pearce-McCall, Ph.D.](#) weaves Panksepp's research into helping leaders, healers, educators, and others bring mindful relating and brain savvy change to their lives and their work.

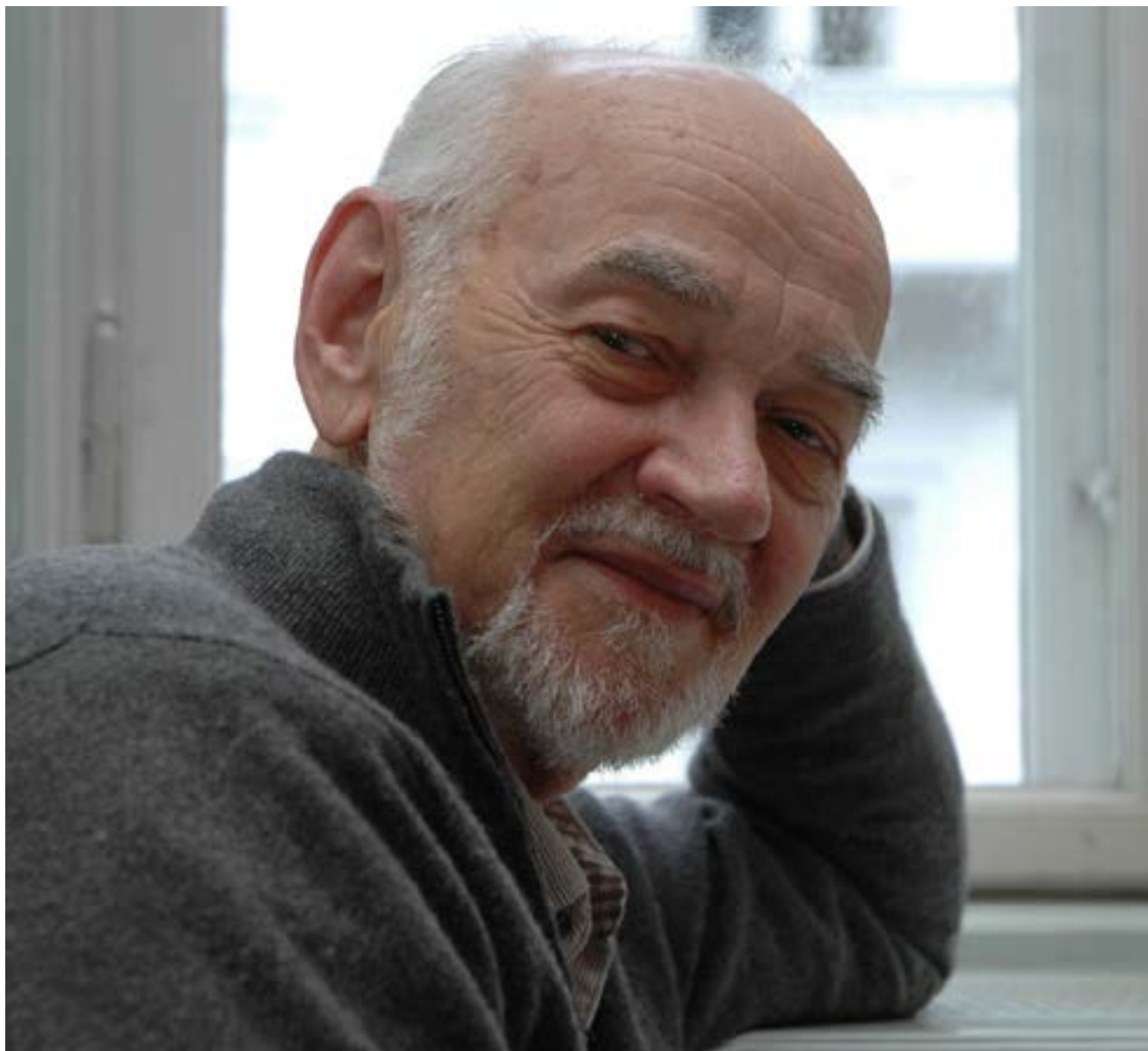


Photo Credit: Andres Gade. The Social Brain Conference in Denmark.  
October, 2014

To honor Jaak Panksepp, take time this week,  
and every week of your precious life, for some  
SEEKING, PLAY, and CARE.

# Remembering a visionary

## Lou Cozolino



Jaak Panksepp was a visionary. His vision involved peering into the deep history of evolution to discover the biological infrastructure of animal and human experience. By exploring the physiological continuities among us and our animal cousins, he searched for an understanding of how and why we experience our lives as we do, the ancient origins of our emotions, and the significance of our evolutionary history to the treatment of mental health. He was a true believer in understanding biology in light of evolution, following Darwin in seeing the importance of the similarities of the experience and expression of emotion in humans and other animals. Jaak opened our eyes to the bottom-up processes which influence our experiences in an overly top-down scientific world.

Jaak will be remembered for many things with his books and articles standing as a permanent testimony to his work. I've kept Jaak's book *Affective Neuroscience* within arm's reach since its publication in 1998. Decades ago, and within a behavioral wasteland, Jaak committed the scientific crime of attributing human emotions to other species, a crime for which he will always be appreciated. When I think of Jaak, I remember him playing with and tickling a rat while it squealed with delight. If you doubt that Jaak was right about this, check out the documentary "[Why Dogs Smile and Chimpanzees Laugh](#)" where a friendly rat followed his hand around an enclosure to keep getting tickled. Perhaps this is how Jaak might want us to remember him best, along with his advocacy for animal rights and their humane treatment.

Finally, Jaak will be remembered as a firm supporter of both Interpersonal Neurobiology and [GAINS](#), and a respected member of our small but ever-growing community. He was indeed a character among characters and never hesitated to speak his mind and share his beliefs. Jaak is also the first among us to pass away, a reminder that we must cherish each other while we are here, and prepare the next generation of scientists, clinicians, and theoreticians to carry on our work. Rest in Peace Jaak, we will remember you, and we will carry on.

[Louis Cozolino, Ph.D.](#), weaves complex science like Panksepp's work with teaching tales in his foundational books and ongoing contributions to the emergence and growth of the field of interpersonal neurobiology.



# Words of reflection for a colleague and friend

## Dan Siegel

A Man We Remember  
Throughout our bodies, for the  
Words  
Beneath the  
Cortex,  
His life and work,  
Studying our rodent cousins and  
Teaching us all that  
We  
All  
Have  
An  
Emotional life  
Jaak, the compassionate,  
Brilliant man,  
Rebelling against the  
Dogma of the day,  
A champion of respect,  
For humans and others, though  
Human uniqueness of emotions  
Refuted,  
Jaak  
Revealed mechanisms,  
Sub-cortical collaborations  
Body, brainstem, limbic regions all  
Together;  
The basic motivational systems  
We  
All have,



Photo of Jaak Panksepp originally appeared in Washington Post, shared with GAINS by his son, Jules Panksepp



Mammals our class, our family, our posse',  
*Seeking* in anticipation and desire  
*Rage* as frustration and anger  
*Fear* of pain and threat  
*Panic* and loss in separation distress, grief and loneliness  
*Play* in the joy of rough-and-tumble carefree play  
*Mating* to reproduce and recreate  
*Care* in nurturance of others,  
Jaak  
We feel them all in  
Your passing;  
*The Archeology of Mind*  
A clinician's friend in exploring  
*Affective Neuroscience*  
Pioneering a field  
Joining us in  
Mental health on  
This journey to  
Understand and  
Heal  
The mind  
We are forever  
In gratitude  
For the sparkle in your eyes,  
Jaak,  
The determination in your pursuits, the  
Brilliance of your intellect, the  
Love in your heart, and the  
Joy of your joining  
All of us to create more  
Compassion,  
Understanding and  
Care for



One another on  
This life's journey, step by step,  
I myself feel so grateful to have also been  
Sharing with  
You.



Through his widely influential books and international speaking, as one of the creators of the interdisciplinary framework of interpersonal neurobiology, [Daniel J. Siegel, MD](#), helps bring Jaak Panksepp's work into the minds of people across the planet.

# A life well-lived

## Ken Davis

Jaak Panksepp was a remarkable individual with an interesting and productive life. When he was less than a year old, his family decided to abandon their farm in Estonia and flee into Germany from the advancing Russian army. After the conclusion of WWII, the family spent several years in German displacement camps until they were able to immigrate to the United States where his parents worked on a farm in rural Delaware. There, Jaak began his formal education, spending the first grade and learning to read in a one-room school after which the family moved to New Jersey.

Jaak started college at the University of Pittsburgh as an engineering student, and his engineering talents were frequently manifested in his early experimental research laboratories. However, he soon switched into clinical psychology. To help finance his college education he worked as an orderly at a Pittsburgh mental hospital, where got to know patients and their psychological histories and first concluded that the key to understanding human behavior was understanding emotions.

In his graduate years at the University of Massachusetts, he eventually further shifted from clinical psychology into what we now call “neuroscience” and began exploring the subcortical emotional rat brain. For his dissertation, he mapped aggressive behaviors in the rat brain and demonstrated the distinction between affective attack (later considered part of his RAGE/Anger system) and quiet-biting attack (later included in his SEEKING system).

After several post-doc years he started his formal teaching career at Bowling Green State University about the time endogenous opioids were being discovered in the mammalian brain. While he and his students continued to pursue “energy balance” research, Jaak was also formulating his “opioid hypothesis” and began pursuing research linking opioids with separation distress, and mammalian social motivation.

It was during these early years at BGSU that I became acquainted with Jaak. However, this coincided with the Vietnamese War, and I was drafted into “alternative service” and forced to leave graduate school for a time. Upon returning, my main professor, Dr. John Paul Scott, best known for his work on the genetics of canine social behavior, decided to retire. Jaak took me on as his student, and given my experience at Scott’s BGSU dog lab, we ended up pursuing a dissertation project on the opioid modulation of canine social motivation.

I took one formal class from Jaak on electrical stimulation of the brain, but Jaak didn’t promote his already extensive research and publications. So, I never really learned much about Jaak’s research other than what I was reading for my dissertation, and I had little hint of what Jaak would accomplish. I did gain a sense of how bright Jaak was when Bob Conner, one of Jaak’s good faculty friends who would later become head of the psychology department, remarked he didn’t know how Jaak could keep track of so much information.



My interpretation: other people who I considered very intelligent considered Jaak exceptionally gifted.

I taught at a nearby college for a while but ended up leaving academics. Jaak said I just disappeared for a while. I reconnected with him some years later, and it was only after he gave me one of the red and green pre-print copies of *Affective Neuroscience* that I fully realized what he had accomplished and what an exceptional scientific intellect he was. His grasp of the different research areas covered in that classic text was phenomenal and awe inspiring to mere mortals.

Jaak gave us a hint of how close he came to never finishing *Affective Neuroscience* in its Preface where he tells of his teenage daughter's death in 1991 along with three friends as their car was struck by a speeding drunk driver. Tiina's death demoralized Jaak such that he could not continue his work on the book, which lay dormant for many months.

While Jaak was a consummate scholar, he was much more. He was a kind, generous, CAREing man whose early vision of helping people by better understanding emotions was also expressed in his establishing the Memorial Foundation for Lost Children, whose logo was Tiina's silhouette profile, that touched many families with autistic children—with many of those children benefitting from the low-dose naltrexone therapy Jaak had proposed. I also witnessed Jaak's caring side around the deaths of his friend Bob Connor and Bowling Green mentor John Paul Scott. Jaak organized a Memorial Symposium honoring Dr. Scott and was instrumental in establishing the JP Scott Center for Neuroscience, Mind and Behavior.



Jaak also had a PLAYful side, which in his younger years was often expressed in his backyard barbeques. In later years, summertime visits to Jaak and Anesa's home in Bowling Green always included conversations on the front porch, which were frequently punctuated by a personal greeting to a passing neighbor, who Jaak always seemed to know by name.

Jaak enjoyed neuroscience conversations with colleagues, but he also tried to make time for anyone with questions. He was as patient with students or even those without any background in neuroscience as with an esteemed peer. He also attempted to reach out and find common ground with those who did not share his theoretical orientation as exemplified by the Panksepp, Lane, Solms, & Smith (2017) article searching for points of agreement between affective and cognitive neuroscience theoretical positions.

It is true that many of Jaak's ideas were controversial, even seen as "too hot to handle" by many journals and funding agencies. He tirelessly advocated, with supporting evidence, that animals had feelings and experienced emotions. Perhaps not surprisingly, his most enthusiastic audiences were found in the psychiatric, psychoanalyst, and psychotherapy communities plus veterinarians and veterinary scientists as evidenced by his position as Professor and Bailly Endowed Chair in Animal Well-Being Science at Washington State University during his last ten years.



Jaak always spent time in the lab, often as much as his students. He felt that if one wanted to understand what evolution had built into the brain, it was important during experiments in the lab to observe the animal's natural behaviors much like ethologists did in the wild. Over a lifetime, using such an approach to brain research, Jaak opened up a window into how the mammalian mind is organized. He documented seven primary emotions in the mammalian brain but would likely consider his focus on the PLAY system in the later years of his life to be the crowning brain research achievement.

We are deeply indebted to Jaak for advancing the importance of emotions in our lives. Yet, he will mostly be missed as a man, for the positive emotions he modeled in his interactions with others. His SEEKING system was unsurpassed in his creative approach to research. His CAREing system was easily observed in his kind and helpful nature. And, he was often PLAYful as was exemplified one day when he challenged students who had a more behaviorist than evolutionary orientation to teach a rat to run a maze butt first.



Kenneth L. Davis, Ph.D., can be contacted at [Pegasus International](#). The book he co-authored with Jaak Panksepp, [The Emotional Foundations of Personality](#), will be published by W.W. Norton in March of 2018.

# OUR SQUAD OF SAVIORS

Anesa Miller

On the eve of your  
64th birthday, you hit the floor,  
and the flower of American manhood  
burst into our house.


Don't call,  
you insisted at first,  
but your eyes threatened  
to flutter out of focus  
forever, and I disobeyed.

Not three, not four—  
a procession of seven firefighters  
passed through our door.  
Two checked your vitals.  
One gauged your wits  
with questions:  
“One hundred and three—  
how many degrees  
of fever is that?”  
One jotted down your prescriptions.  
And three stood by,  
packed into our dining nook,  
ready to wrestle you  
onto the gurney.



I imagined they magically  
knew they'd come to save the stubborn  
genius of Pioneer Hill:  
the man who discovered  
opiates deep in love's brain;  
the first eavesdropper  
ever to listen to rats,  
laughing amongst themselves.  
Had these men intuited  
you were a national treasure?  
Not just mine.  
But no doubt they speak soft  
and thoughtful for everyone,  
and on a slow night,  
who would want  
to stay behind  
at the tedious firehouse?

Determined to overcome your I'm fine's,  
the boyish one with dimpled cheeks  
saw that tomorrow  
would be your birthday  
and joked, "You gotta come to the ER, man  
—the docs there throw the best parties."  
"We can't force you to go," said another,  
as if in lament. "But if you don't,  
we'll worry about you  
all night."



Like herding dogs mindful  
of dignity, they let you walk  
down the steps, scarcely nipping  
your heels.  
And I thought, Thank God  
they are here—knowing, alone,  
what a fight I'd have  
making you go.  
Our cat scrambled  
to hide from those heavy feet,  
bursting in without warning.  
Over-hearty male voices.  
But, What a mercy, I thought,  
that they're here. And  
that you would turn 64  
in the morning.

*\* GAINS is honored to share this with you. Anesa Miller, a published author and poet, was married to Jaak Panksepp. Their deep bond was tested and strengthened by adventures and challenges, including the earlier health crisis she recalls in this poem, one of her newest creations. Deepest appreciation to Anesa for this gift.*

Anesa Miller is a scholar, nature lover, and author of novels, poetry, and short stories. Information about Anesa and her writing can be found at her [site](#).



# In Honor of Jaak Stephen Porges



For those of us, who have known, loved, and interacted with Jaak, his passing saddened us. My relationship with Jaak spans almost 40 years. During this period, our paths frequently crossed. As we matured as scientists we found ourselves as welcomed translators of the neurobiology of social behavior and emotional regulation to clinical and applied areas. We were on dozens of programs together, often as the only neuroscientists. On a personal level, his death triggered in me the neurobiological ripples that we learn to associate with the passing of those who are closest to us.

Pat Ogden informed me of Jaak's passing and noted that he was the "first of us to go." Pat's comment framed and personalized the experience. As we mature we see an expansive future in which our work will have application. Many of us, including Pat and Bessel van der Kolk, frequently have been on the same program with Jaak. Both Jaak and I were invited into the trauma world through Bessel's annual Boston trauma meetings and Marion Solomon's Lifespan Learning Institute meeting on attachment and trauma.

I met Jaak about 40 years ago at a workshop organized by Peter Levine and Jim Prescott at Esalen entitled The Biology of the Affectionate Bond. To put this in perspective, both Jaak and I, as enthusiastic young professors, were dropped into the world of the human potential movement. At Big Sur, in contrast to our familiar academic settings we were exposed to the beautiful views from the lithium baths and the wonderful discussions at this meeting. Rather than laboratory research and seminars, we were sitting on large pillows listening to John Lilly talk about his experiences with Dolphins, sensory deprivation, and ketamine (or as he called it vitamin K). This went on for a week that included hearing John Money discuss gender assignment and gender changing surgeries and Peter Levine demonstrating the effects of inhaling CO<sub>2</sub> as a therapeutic aid.

The meeting at Esalen provided a true bonding moment and served as an opportunity to expand and bridge our interests from the laboratory to the clinic and from psychological constructs to a greater understanding of the wisdom and intelligence of the body.



When we started our research careers, emotion was not considered a valid research area. This meant the study of emotion did not necessarily lead to publication in prestigious journals and grant funding; without publications and funding, promotion and tenure would not occur. Although Jaak's view of emotion had continuity with Darwin, it challenged his colleagues. Jaak's research explored neural circuits that explained many of features that phenomenologically define various emotions.

Over the years, Jaak heroically contributed to the establishment of affective neuroscience, which became a core scientific discipline in the exploration of emotions and feelings. It was through his commitment, insight, intelligence, and persistence that the neurobiological study of affective processes has been welcomed in clinical training, where it will continue to have significant impacts on the health and well-being of clients. It is with admiration for his contributions and passion to improve the quality of life, especially among those plagued by emotional disorders, that I feel honored to have known Jaak.



“When we have secure attachments to loving others,  
we are granted a lifelong gift.”

(Panksepp & Biven, 2012)

Like Jaak Panksepp and his research on seven major mammalian affective systems, [Stephen Porges, PhD.](#), and his research pioneering Polyvagal Theory has also changed our understandings of our interpersonal neurobiologies in everyday living, especially in counseling, education, development, and understanding health and well-being.

# A Remembrance of Jaak Panksepp

## Antonio Damasio

The contributions of Jaak Panksepp to modern studies of mind and brain are easy to recognize. Few did as much to reverse the neglect of affective science in the worlds of psychology, neuroscience, and philosophy. Trained in animal experimentation, few did as much to connect animal life to human life. Jaak's firm rejection of behaviorism in favor of the acceptance of a robust animal mind was well argued, coldly received, but ultimately triumphant. The same can be (almost) said about his battle against "cortico-centrism" and defense of the role of subcortical structures in affective processes. It should not be surprising that he consistently defended Freud at a time — our time — in which destructive criticism of the man and his work became the norm.

In my first encounters with Jaak I was taken by the intensity with which he could both love and detest my own work but I got used to it. I respected the vehemence and the tenacity of both his criticisms and praise. I never got him to agree that William James was not wrong but I did move him in his direction, on some issues. I will miss our discussions enormously. Science has lost a remarkable thinker and many of us have lost a unique colleague.



[Antonio Damasio, M.D., Ph.D.](#), is University Professor; Dornsife Professor of Neuroscience, Psychology & Philosophy; and Director, Brain and Creativity Institute; at University of Southern California, Los Angeles. He and Jaak Panksepp, through different approaches, were foundational in addressing affect in neuroscience, and bridging the lab and the consulting room. Both were authors in the very first issue of the journal *Neuropsychanalysis*, almost 20 years ago.

# Farewell to Jaak Panksepp

## Pat Ogden

I don't remember when I first met Jaak—it seems that he was always a part of my professional family. What I do remember clearly is my first impression of this exceptional man—his warmth, receptivity, generosity and of course his brilliant mind. Over the last couple of decades, I have been inspired by Jaak's intellect and research, which have been a strong influence on how I conceptualize my own work in Sensorimotor Psychotherapy. Jaak was big on novelty—when he once led an inspiring study group in Cancun, I wanted to return to the same location for the next time, but he said, no, we have to explore someplace new. Novelty is good for the brain! Indeed, the last talk I heard him give at a NYC event was fresh and very different from all the previous talks – and Jaak was easily the darling of that conference.

Jaak and I both had a great interest in the healing power of play, and when we watched tapes of sessions of my clients, Jaak was delighted to hear the laughter that emerged spontaneously after they'd processed the trauma. He said laughter "spritzed" the brain with chemicals that help reconsolidate traumatic memory. One of the brightest moments of my career was at the UCLA/Lifespan Learning Institute conference in 2011, when Jaak and I presented collaboratively on his emotional operating systems, emphasizing PLAY.

But more than all that, it was Jaak's personhood that stirred my heart and soul. Not one to hide his authenticity, his devotion to and pride in his wife Anesa shown in his eyes and his smile whenever he spoke of her. And his abiding love and grief for the tragic loss of his daughter Tiina many years ago was often palpable. As his curious mind was unfailingly open to ideas and questions, his heart was unfailingly receptive to those he encountered.

I was fortunate to call Jaak my friend and, informally, a mentor. We found many connecting points: commiserating about our respective health challenges, sorting out legal clauses in contracts, looking at videos of my consultation sessions from an affective neuroscience perspective, co-presenting together at various conferences, brainstorming in think tanks, sharing meals, walks and inspiration in places like Hawaii, Cancun, New York, Boston, and LA. Over the years, Jaak often sent me his latest research and freely shared his perspective on my own work. In spite of his incredibly busy schedule he always found the time to respond with kindness, care, and sound advice any time I asked.

Jaak's emails were a treat, and just seeing one in my inbox would bring a happy smile of anticipation. He always wrote so poetically, with wisdom, tenderness, compassion and humor. Once I asked if he could make sense of a weirdly worded publishing contract that we each had to sign, and in the end, Jaak wrote something which has stuck with me: *For peace of mind, I just tend to disregard all that I cannot digest . . . and trust that such neglect will not lead to getting bit in the butt.* This was one of many little lessons from him that had meaning for me—let the little things go and focus on what's really important, trusting it will work out in the end.



We commiserated about the moral dilemma each of us felt about eating meat, and how animals were so often misunderstood and mistreated. This kindhearted man told me once that when it came time to sacrifice the rats in his lab, he couldn't do it himself—he would have to ask someone else to perform the deed (Update, for accuracy: Anesa wrote today that only in his later years did Jaak pass off this task to others; in the early years, he managed to face up to it himself). Jaak's courage in standing up for what he knew to be true, even against academic scorn, is legendary ... and he paid the price. He wrote only last summer about the armor he had developed and the fight that persisted: *My colleagues have given me a protective scar, since I still have to wage the battle over the scientific evidence that all us mammals have the same basic emotional systems (with variations, of course), which does give them "rights", moral and otherwise, that bumble-headed scientists can't take away.* Amen to that.

One of the last articles Jaak sent to me was, as he wrote, "a sweet story about parrot sentience" – you can find it [here](#).

The story is beautiful, and the fact that Jaak loved it and thought to send it to me, is one of the many reasons I loved him.

I could go on, but these are the highlights from a personal perspective. I had wanted to write something back in April when Jaak died, but it's taken me a few months to put pen to paper - mostly, I think, because it's quite heart-wrenching to bring closure to this chapter and say goodbye to this exceptional man. Jaak's unique capacity to think brilliantly and to experience deeply, and convey both his conceptual genius and depth of feeling, has left an indelible mark on all who knew him and on the world. Farewell to a dazzling mind with a heart to match.



[Pat Ogden, Ph.D.](#), brings neuroscience work, including Panksepp's, into her widely respected Sensorimotor Psychotherapy®, a somatic psychotherapy for all ages, taught and practiced around the planet.

# Jaak Panksepp & the Deep Roots of Connection

## Bonnie Badenoch

I never had the privilege of meeting Jaak, but he still feels like a close and beloved friend. This is how I first got to know him. A man in a white lab coat gently picks up a white rat and strokes him, then rolls him over and begins to tickle him. At first, the rat makes hardly any sounds and the man speculates that this rat hasn't been handled for a while — which others in the lab confirm. So, he continues to cuddle the little guy while talking to the interviewer about how the circuits of emotion are buried deep in the midbrains of all mammals. When he puts him down, the eager rat tries to climb out of his box to get back in Jaak's arms. On another day, with a rat who is handled regularly and is familiar with his surroundings, the little one easily and joyously laughs as soon as he is put on his back and tickled — high chirping sounds and kicking feet. This rat tickler is Jaak Panksepp, who studied the roots of emotion for decades.

Digging into his work, we began to discover that *he was adding another foundational strand to our conviction that relationship is everything.* As we studied his seven emotional-motivational systems, we could hear that in us humans these midbrain circuits prioritize connection over every other kind of SEEKING. GRIEF (with its instinct to cling), FEAR, and RAGE become active, often sequentially, when our sense of connection breaks down. In our culture where clinging, fear, and rage are often viewed as bad behavior, we began to hear them as cries for help instead. As we were able to hear what



Jaak was saying, we might help parents find the strength to buck the tide of society and hear these signals welling up from deep within the brains of their children as pleas for connection. They might welcome their clinging and respond with holding their young ones until the emotional storm subsides. They might even welcome their rage. As we taught in this new way, the parents who came to us began to report that as the release completed and connection was reestablished, the other systems of CARE and PLAY that lead to cooperation came online naturally.

One of Jaak's clearest insights drawn from his research was that we have inherent emotional systems that are not dependent on higher cortical functions. We may need our cortex to name them, but we don't need it to experience and be conscious of emotion and share in vivid, emotion-based relationships. It began to occur to us that this might speak to how we relate with people who suffer severe cognitive decline. We are so used to valuing ourselves and one another according to our cognitive capacities that when those slip away, we feel we have lost the person. It turns out that what we've lost is really a small slice of what makes us human — and not the most significant capacity, which is finding meaning through connection. I hope if the day comes that I no longer remember my daughter's name, she will feel how much I recognize and am comforted by her touch, her eyes, the sound of her voice.

Jaak points us toward a kinder world for all of us at every stage of life. For me, this is his legacy and I am profoundly grateful for the depth of his wisdom, his tenacity in speaking for the deep roots of emotion, and his laughter as he tickles those playful rats.



“How would we mammals survive if we did not have brain systems to nurture each other?”

(Jaak Panksepp, 2006)

[Bonnie Badenoch, Ph.D.](#), references Panksepp in her teaching and writing, training and speaking, applying interpersonal neurobiology to nurturing and growing ourselves and our clients, and addressing trauma and healing on all levels, from the personal to the global.



# A teacher wields invisible forces

## Kirke Olson

One day as I walked down the hall of the high school, I was drawn to the happy noise coming from a classroom. Students, who others have given up on, were enthusiastically and noisily engaged in a calculus class. An animated discussion on limits and derivatives was underway with pictures of flowing graphs scattered on the desk and drawn on the white board. How can this be possible? Is this the same calculus that I stumbled through only to have it end in befuddlement and an F? Memories remain of the intimidating formally dressed professor, chalk in hand, beginning in the upper left and filling the room-wide blackboard with calculations as he worked his way silently across the board. Ending by saying: “so obviously, class” as he wrote an incomprehensible answer in the bottom right corner of the chalk filled board. The class in front of me was wildly different. The teacher and the kids were laughing as she illustrated the area under the arc of a graph by throwing a marker across the room. When she caught me peaking in, she enfolded me into the class, prodding me to tell my calculus story. The kids listened as I, feeling felt and curious, asked naïve calculus questions and learned more about the subject in those few comfortable minutes than my intimidating professor taught me in a year.



I had no explanation for what I experienced until I read Jaak Panksepp's book *The Archaeology of Mind: Neuroevolutionary Origins of Human Emotions*, a book that is part of W.W. Norton's Interpersonal Neurobiology Series, the largest and best-selling mental health series in the world.

*The Archaeology of Mind* made visible the teacher's invisible skill of using the primal emotional circuits of SEEKING and PLAY supported by the CARE system to teach calculus. The book helped me understand my year of calculus hell with the cold intimidating professor who probably turned on my FEAR and PANIC/GRIEF circuits. His book also helped me immeasurably with my own book and its focus on the invisible forces within a classroom: *The Invisible Classroom: Relationships, Neuroscience, and Mindfulness in School*, part of W.W. Norton's IPNB in Education series.

I still can remember him speaking at the 2011 IPNB conference at UCLA in his quiet manner, admonishing those who did not believe animals had emotions and straight faced while describing how to tickle a rat to make it laugh.

Although I did not know him personally, I am forever in debt to him, his ideas, and his exhaustive research. He is missed.

[Kirke Olson, Ph.D.](#), brings the IPNB framework, including Panksepp's research, into education, writing, consulting, therapy, and training.



# Lifesnaps of Panksepp's Seven

Debra Pearce-McCall



# Book Announcement

Jaak Panksepp has left us another book, co-authored with Ken Davis, coming out in March 2018. Available now for pre-ordering, this takes us further in the applications of affective neuroscience.

The description on the W.W. Norton site reads:

A novel approach to understanding personality, based on evidence that we share more than we realize with other mammals.

This book presents the wealth of scientific evidence that our personality emerges from evolved primary emotions shared by all mammals. Yes, your dog feels love—and many other things too. These subcortically generated emotions bias our actions, alter our perceptions, guide our learning, provide the basis for our thoughts and memories, and become regulated over the course of our lives.

Understanding personality development from the perspective of mammals is a groundbreaking approach, and one that sheds new light on the ways in which we as humans respond to life events, both good and bad.

Jaak Panksepp, famous for discovering laughter in rats and for creating the field of affective neuroscience, died in April 2017. This book forms part of his lasting legacy and impact on a wide range of scientific and humanistic disciplines. It will be essential reading for anyone trying to understand how we act in the world, and the world's impact on us.

Also from the Norton site, this review from Dan Siegel:

“In this comprehensive and insightful exploration, Davis and Panksepp take us through an overview of modern psychology’s description of the Big Five factors and the nature of personality and explore what an affective neuroscience view of this topic offers to deepen and broaden our perspectives. We are all born with a temperament, an innate proclivity of the nervous system to shape our inner and outer responses, propensities that interact with our experiences to shape our personality as we grow. This important integration of Jaak Panksepp’s foundational contributions to understanding the sub-cortical processes involved in emotion and behavior with research on personality helps move the fields of development, psychology, psychiatry, and psychotherapy forward by anchoring our work with biologically based, evolutionarily informed insights into the factors that shape our minds.” — Daniel J. Siegel, M.D., Mindsight Institute, Clinical Professor, UCLA School of Medicine, author, *Mind: A Journey to the Heart of Being Human*.

Thanks to W. W. Norton for adding this book, [The Emotional Foundations of Personality](#), which will live with Panksepp and Biven’s *The Archeology of Mind*, as summarizing and sharing some of Panksepp’s pivotal contributions to the field of interpersonal neurobiology.

