Inspired by the human potential movement, especially Carl Rogers, Abraham Maslow, Fritz Perls, George Leonard, Huston Smith, Rupert Sheldrake, Karl Pribram, Peter Russell. I’ve been fascinated by these 3 questions since I was a teenager:

- What are the limits (if any) of human potential?
- What obstacles prevent us from reaching our full potential?
- How would society, the Earth, and the Universe be different if we were all expressing that potential?

The theory of genetic determinism placed significant limitations on human potential.

"It's all in your genes."

Discovery of the double helix structure of the DNA molecule in 1953 profoundly affected both science and society.

Frances Crick and James Watson.

Let to the “Central Dogma of Molecular Biology” paper published in Nature in 1972.

Central Dogma states that all the processes of life, structure and function (anatomy and physiology) originate within the DNA.

DNA > RNA > Protein
Genetic Determinism

- Genes for physical characteristics.
- Theory of genetic determinism was extended to behavior, e.g., genes for musical ability, dyslexia, autism, and so on.
- But is it “all in our genes”?

Identical Genes. Identical Lives?

- If Central Dogma of Molecular Biology (Genetic Determinism) were correct, and all info resides in the DNA, then identical twins, who share the same DNA at birth, would have identical health outcomes and life spans.
Identical twins die, on average, more than ten years apart. They often suffer from different diseases and may have very different health outcomes. This conflicts with the Central Dogma of Molecular Biology. It demonstrates the falsity of the theory of genetic determinism.

While their genes are identical, epigenetic influences drive the genome of identical twins apart.
When a gene is turned on, it’s “expressed.” When a gene is turned off, it’s suppressed or “silenced.”

Epigenetics: Triggering gene expression or silencing from outside the DNA molecule.

The environment provides epigenetic triggers to our cells. The word “environment” encompasses everything from a molecular trigger within a cell to an outside event like a stressor.

Your body uses messenger molecules to translate outer events like an auto accident into inner events like the production of stress hormones.

Photo taken at 6 years old. Olivia Murphy developed leukemia at the age of 2. Identical twin Isabella does not have the disease. After ruling out all other factors, attributed by her doctors to the stress of a tonsillectomy while a toddler.

Telomeres are regarded as the most reliable method of determining aging.

A pair of telomerase molecules drops off every time a cell divides.

We have about 15,000 pairs/cell at conception, 10K at birth, 5K (Hayflick limit) at death. They decline on average 1% a year.

Telomere assays of peripheral blood lymphocytes & granulocytes allow labs to determine the biological age of an individual.

If Genetic Determinism were true, the telomeres of identical twins should be the same length.
Epigenetic Influences

- Sue & Sheila Wright, Kent, UK. Identical twins, but telomeres show that biologically, Sue is ten years older. Stress of caring for disabled husband.

By Age 30, Epigenetics Changes Gene Expression


Yellow is Common – Results at 3 & 50 years old

By 50 Stress Dramatically Affects Biological Markers

Your body converts stress signals from the external environment into internal environmental signals. Messenger molecules. See tiger in grass > make cortisol and adrenaline. But it does the same thing with internal stress signals. It has no way of knowing that it’s in our head. Paper tiger in mind > make cortisol and adrenaline.

Chronic Cortisol Elevation
Contributes To:
- High blood pressure
- Reduced memory & learning
- High blood sugar
- Heart disease
- Diminished cell repair
- Accelerated aging
- Slow wound healing

- Reduced bone repair
- Decreased circulating immune cells
- Diminished immune antibodies
- Death of brain cells
- Reduced muscle mass
- Decreased skin cell repair
- Increased fat deposits around waist/hips
- Osteoporosis

Kaiser’s massive ACE study (Adverse Childhood Experiences, 17,400 subjects) showed that 50 years later, people not nurtured as children had a higher incidence of

- Hypertension
- Heart Disease
- Cancer
- Bone Fractures
- Smoking
- Diabetes
- Suicide
- Drug Use
1/22/14

Solutions?

- That's the problem. What are the solutions? Evidence-based methods I use are neurofeedback, HeartMath, mindfulness, meditation, Gestalt therapy, EFT tapping.
- All easily learned, all effective.

Cortisol Drops After EFT


Integrative Medicine Journal


- Pre-post assessment of 216 psychotherapists, doctors, nurses, chiropractors, alternative medicine practitioners
- Day-long EFT intervention at 5 professional conferences
- Significant reductions in psychological symptoms such as anxiety, and depression
- Very large reductions in pain, craving, and the intensity of traumatic memories

Doctors, Nurses, Chiropractors

Psychological and Physiological Symptoms Drop Together
Significant improvements were found on all distress subscales and ratings of pain, emotional distress, and cravings at posttest (all p<.001). Gains were maintained at follow-up for most SA-45 scales. The severity of psychological symptoms was reduced (-45%, p<.001) as well as the breadth (-40%, p<.001), with significant gains maintained at follow-up. Greater subsequent EFT use correlated with a greater decrease in symptom severity at follow-up (p<.034, r=.199).

59 veterans. Random assignment to EFT or TAU wait list.
Six EFT coaching concurrent with regular care.
Mean PCL-M score before Tx: 64
After: 37
3 month and 6 month follow-up: 36. (p < .0001)

86% no longer met criteria for PTSD after 6 sessions.
86% still sub-clinical after 3 months.
80% still sub-clinical after 6 months.
218 veterans and spouses.
Attending one of 5 week-long retreats.
Group EFT for PTSD.
CAM treatments for resilience: Equine therapy (1/2 day), Reiki, massage, yoga, guided imagery, art therapy, and acupuncture.


Mean PCL-M before: 65. After: 44. Follow-up: 42 (p < .001).

Gene expression study being completed this year.
If cortisol is being suppressed, then the genes that code for cortisol are being silenced.
Randomized controlled trial with veterans with PTSD. Receiving 10 EFT sessions in addition to Treatment as Usual.
Looking for changes in genes involved with longevity, immunity, inflammation, cancer.
Shows that EFT is an epigenetic intervention.

Researchers involved are with Institute of Noetic Sciences, California Pacific Medical Center, and National Institute for Integrative Healthcare.

Doing these studies had a profound effect on me. My life plan was to retire in my early fifties, meditate 4 hr/day. When research results began coming back, I realized I had to get to work to apply these discoveries to pressing social problems like PTSD. Started the National Institute for Integrative Healthcare. Three primary programs:

- 2. EFT Global. Humanitarian work. Haiti, Mexico

Web site connecting veterans with volunteer coaches and psychotherapists. Treated over 5,000 veterans free of charge thusfar. Virtual EFT therapist online at Battle Tap. Testified in Congress, attempting to get EFT approved by VA.

On-Demand Interactive Personalized Online Virtual EFT Sessions at StressProject.org
FEATURES:

- Custom Projects
- Video Sessions
- Assessments
- Progress Trackers
- Free of charge

We tap on acupoints unconsciously every day.

EFT simply organizes common tapping points into a routine that clients can easily remember.
Think of a recent experience that bothered you. An event that occurred in the previous few weeks that made you upset.

1. Determine Subjective Units of Distress (SUDS): 10 9 8 7 6 5 4 3 2 1 0
2. Repeat setup statement 3x (while tapping karate chop point):
   “Even though I have ____________ (problem), I deeply and completely accept myself.”
3. Tap each point ± 7 x
4. Determine SUDS: 10 9 8 7 6 5 4 3 2 1 0
5. Repeat till SUDS is low

467,000 Vietnam veterans w PTSD.
Of the 2.4 million OEF/OIF veterans, over 500,000 are estimated to have PTSD.

The estimated lifetime cost of treating EACH veteran with PTSD is $1,400,000.
Multiply that by the number of veterans with PTSD and the total cost exceeds $1 trillion.
What would we do if a million people arrived on our shores with a disease that was going to cost us a trillion dollars to treat?
We would mobilize on a national scale.
When public health officials got serious about diseases like typhoid, cholera and polio, they were eradicated within a generation.

Mary Mallon.

Wiped out typhoid (her father died of it).

Faced determined opposition and indifference.

Congressional hearings. Brooklyn doctors petitioning Mayor.

Became a model for public health worldwide.

Imagine a world in which we refer to PTSD the same way we now think about polio, smallpox, and typhoid.

Once this emotional suffering is reduced or eliminated, we no longer are burdened by it.

Reclaiming our full human potential.

Mary Mallon.

MD 1889. Medical Inspector for NYC Dept of Public Health 1901.

In WWI, shocked society by stating that soldiers on the front line had a lower mortality rate than US newborns.

Set standards of clean milk, vaccination doses, and infant hygiene.

Wiped out typhoid (her father died of it).

Faced determined opposition and indifference. Congressional hearings. Brooklyn doctors petitioning Mayor.

Became a model for public health worldwide.

Thought experiment. Your time line splits today.

One version of you goes along the stress and aging path you’re on today.

The second version uses meditation, EFT tapping, mindfulness every day to reduce stress and live in the state I call “High Mind.”

This version of you enters into a collaborative relationship with non-local consciousness and your Higher Power. Not my goals, my vision, but the highest possible version of me that exists in the consciousness of my Higher Power. Living your full potential.

How much time each day to you spend cultivating a relationship with that Higher Power?

Bonus: This influences your gene expression to promote a long health span.
For the first time, the consciousness of a species is interacting with the process of evolution. Using consciousness as an epigenetic intervention to change gene expression. Epigenetic engineering of the environment.

As our individual consciousness changes, as we act and think from High Mind, as co-creative partners with our Higher Power, one with non-local universal Mind, we live very different lives.

Expressing incredible potential, in alignment with every other person and group that is also in alignment with High Mind.

As well as our own health and wellbeing, we affect the planet by the choices we make.

Will produce a completely different trajectory and future for the human species.

We cannot know where this trajectory will take us; we cannot even imagine it, but it will look nothing like our past.

An evolutionary leap, with radical and discontinuous change.

Once our field of awareness is no longer hypnotized by suffering, we as a species will bring the capacity of our global brain to bear on problems like global warming, poverty, malnutrition, conflict, and war.

It all starts with consciousness, yours and mine, now and in every moment. Take 100% responsibility for what’s in yours.

We are the people. Now is the time. Accept nothing less than your full potential every moment. Every day, enter High Mind, align with your Higher Power, and live powerfully and joyfully from that place.