

Scientific References

All references in this volume are listed in alphabetical order and organized per chapter to ensure clarity and accessibility. Each chapter begins with a collection of peer-reviewed scientific studies supporting the concepts discussed, followed by a curated list of recommended literature and books that expand on the topic. The section concludes with related documentaries and media, offering visual and experiential insight into the chapter's themes. Together, these resources provide a well-rounded foundation bridging scientific research, practical application, and holistic understanding.

Chapter 1: The Ancient Stargate Within

Peer-Reviewed Scientific Studies (Alphabetical, APA Style)

Arendt, J. (2022). Physiology of the pineal gland and melatonin. Endotext (updated chapter). NCBI Bookshelf.

Baconnier, S., Lang, S. B., Polomska, M., Hilczer, B., Berkovic, G., & Meshulam, G. (2002). Calcite microcrystals in the pineal gland of the human brain: First physical and chemical studies. *Bio electromagnetics*, 23(7), 488–495.

Barker, S. A., Borjigin, J., Lomnicka, I., & Strassman, R. (2013). LC/MS/MS analysis of endogenous N, N-dimethyltryptamine (DMT) in the pineal gland microdialysate of rat. *Biomedical Chromatography*, 27(12), 1690–1698.

Belay, D. G., Yalew, A. Z., & Zeleke, T. A. (2023). Prevalence of pineal gland calcification: Systematic review and meta-analysis. *Brain and Behavior*, 13(3), e2928.

Chowdhury, I., Sengupta, A., & Maitra, S. K. (2008). Melatonin: Fifty years of scientific journey from discovery to therapy. *Indian Journal of Biochemistry & Biophysics*, 45(5), 289–304.

Dean, J. G., Liu, T., Huff, S., et al. (2019). Biosynthesis and extracellular concentrations of N,N-dimethyltryptamine (DMT) in mammalian brain; independence from the pineal. *Scientific Reports*, 9, 9333.

Gilder, S. A., Wack, M., Kaub, L., et al. (2018). Distribution of magnetic remanence carriers in the human brain. *Scientific Reports*, 8, 11363.

Goncharova, N. D., et al. (2005). Pineal peptide epitalon restores age-related endocrine disturbances in old monkeys. *Biogerontology*, 6(1), 75–86.

Kunz, D., et al. (1999). A new concept for melatonin deficit: On pineal calcification and melatonin secretion. *Journal of Pineal Research*, 27(3), 165–173.

Lerchl, A., Zachmann, A., & Simoni, A. (1991). Pineal 'magnetosensitivity' to static magnetic fields is due to induced eddy currents (not the static field itself). *Journal of Neural Transmission*, 86(2–3), 125–134.

Lerner, A. B., Case, J. D., Takahashi, Y., Lee, T. H., & Mori, W. (1958). Isolation of melatonin from the pineal gland. *Journal of the American Chemical Society*, 80(10), 2587.

Lewczuk, B., Redlarski, G., Zak, A., et al. (2014). Influence of electric, magnetic, and electromagnetic fields on the circadian system and melatonin, A review. *International Journal of Occupational Medicine and Environmental Health*, 27(1), 1–26.

Lewy, A. J., Wehr, T. A., Goodwin, F. K., Newsome, D. A., & Markey, S. P. (1980). Light suppresses melatonin secretion in humans. *Science*, 210(4475), 1267–1269.

Luke, J. (2001). Fluoride deposition in the aged human pineal gland. *Caries Research*, 35(2), 125–128.

Matsuoka, T., et al. (2020). Pineal volume reduction in patients with mild cognitive impairment predicts progression to Alzheimer's disease. *Psychiatry and Clinical Neurosciences*, 74(9), 470–476.

Moore, R. Y. (1996). Neural control of the pineal gland. *Journal of Biological Rhythms*, 11(2), 135–152.

Razavi, F., et al. (2021). A probabilistic atlas of the pineal gland (standard MNI space). *Frontiers in Neuroinformatics*, 15, 554229.

Reiter, R. J. (1991). Pineal melatonin: Cell biology of its synthesis and physiological interactions. *Endocrine Reviews*, 12(2), 151–180.

Reiter, R. J., Tan, D.-X., & Galano, A. (2010). Melatonin: A multitasking molecule. *Cellular and Molecular Life Sciences*, 67, 2897–2925.

Sarrazin, S., et al. (2011). MRI exploration of pineal volume in bipolar disorder. *Journal of Affective Disorders*, 132(3), 394–397.

Sigurdardottir, L. G., et al. (2016). Pineal parenchyma volume correlates with 6-sulfatoxymelatonin in humans. *Journal of Pineal Research*, 61(2), 220–226.

Song, J., et al. (2019). Pineal gland dysfunction in Alzheimer's disease. *Molecular Neurodegeneration*, 14, 28.

Tan, D.-X., et al. (2018). Pineal calcification, melatonin production, aging, and associated diseases: An integrative review. *Molecules*, 23(2), 301.

Warren, W. S., Champney, T. H., & Cassone, V. M. (1994). SCN control of sympathetic outflow and pineal rhythms. *Physiology & Behavior*, 55(5), 741–752.

Books (Alphabetical)

Arendt, J. (2014). *Melatonin and the Mammalian Pineal Gland*. Oxford University Press.

Pandi-Perumal, S. R., Cardinali, D. P., & Reiter, R. J. (Eds.). (2016). *Melatonin: Biological Basis of its Function in Health and Disease*. CRC Press.

Reiter, R. J., & Robinson, J. (1995). *Melatonin*. Bantam.

Reiter, R. J., & Tan, D.-X. (Eds.). (2016). *Melatonin in Health and Disease*. Nova/CRC Press.

Wehr, T. A., & Rosenthal, N. E. (1998). *Seasonal Affective Disorders and Phototherapy*. Guilford Press.

Related Documentaries & Media

DMT: The Spirit Molecule (2010). Directed by Mitch Schultz.

The Mystery of Sleep (PBS NOVA).

Secrets of the Brain (various episodes).

The Truth about Sleep (BBC Horizon).

Chapter 2: Dimmed by Design

Peer-Reviewed Scientific Studies (Alphabetical, APA Style)

A. Environmental Toxins & Neuro-Pineal Effects

Bhatnagar, A., et al. (2021). Environmental determinants of cardiovascular disease and neurodegeneration: Air pollution and particulate matter as central players. *Nature Reviews Cardiology*, 18(12), 781–797.

Choi, A. L., & Grandjean, P. (2012). Developmental fluoride neurotoxicity: A systematic review and meta-analysis. *Environmental Health Perspectives*, 120(10), 1362–1368.

Grandjean, P., & Landrigan, P. J. (2014). Neurobehavioural effects of developmental toxicity. *The Lancet Neurology*, 13(3), 330–338.

Hu, H., et al. (2021). Exposure to per- and polyfluoroalkyl substances and brain structure and function. *Environmental Research*, 202, 111727.

Luke, J. (2001). Fluoride deposition in the aged human pineal gland. *Caries Research*, 35(2), 125–128.

Mullenix, P. J., et al. (1995). Neurotoxicity of sodium fluoride in rats. *Neurotoxicology and Teratology*, 17(2), 169–177.

Vrijheid, M., et al. (2020). Prenatal exposure to endocrine-disrupting chemicals and child neurodevelopment. *Nature Reviews Endocrinology*, 16(6), 348–361.

Wang, Y., et al. (2019). Lead exposure and cognitive function in children: A meta-analysis. *International Journal of Environmental Research and Public Health*, 16(10), 1807.

B. EMFs, Radiation & Neuroendocrine Function

Bortkiewicz, A., Gadzicka, E., & Szymczak, W. (2017). Mobile phone use and risk for intracranial tumors: A review. *Bioelectromagnetics*, 38(5), 329–338.

Diem, E., Schwarz, C., Adlkofer, F., Jahn, O., & Rüdiger, H. (2005). Non-thermal DNA breakage by mobile-phone-emitted electromagnetic fields. *Mutation Research*, 583(2), 178–183.

Hardell, L., & Carlberg, M. (2020). Health risks from radiofrequency radiation, including 5G, should be assessed by experts with no conflicts of interest. *Oncology Letters*, 20(4), 15.

Kesari, K. K., Kumar, S., & Behari, J. (2011). Mobile phone usage and brain oxidative stress. *Electromagnetic Biology and Medicine*, 30(4), 219–225.

Pall, M. L. (2018). Wi-Fi is an important threat to human health. *Environmental Research*, 164, 405–416.

Sage, C., & Carpenter, D. O. (2012). BioInitiative Report: A rationale for biologically-based exposure standards for low-intensity electromagnetic fields. BioInitiative Working Group.

C. Dopamine, Reward, and Behavioral Addiction

Alter, A. (2017). *Irresistible: The Rise of Addictive Technology and the Business of Keeping Us Hooked*. Penguin Press.

Andreassen, C. S., et al. (2016). The relationship between addictive use of social media, narcissism, and self-esteem: Findings from a large national survey. *Addictive Behaviors*, 64, 287–293.

Firth, J., et al. (2020). Neurobiological effects of digital technology use: A systematic review. *World Psychiatry*, 19(2), 118–139.

Montag, C., & Reuter, M. (2017). *Internet Addiction: Neuroscientific Approaches and Therapeutical Interventions*. Springer.

Volkow, N. D., et al. (2011). Dopamine system dysregulation in addiction: Imaging findings and clinical implications. *Nature Reviews Neuroscience*, 12(11), 652–669.

Zubieta, J. K., & Volkow, N. D. (2019). Overlapping neural systems for dopamine and reward: Implications for social media and digital engagement. *Frontiers in Psychology*, 10, 2457.

D. Chronic Stress, Trauma, and Social Dysregulation

McEwen, B. S. (2008). Central effects of stress hormones on health and disease: Understanding the protective and damaging effects of stress. *European Journal of Pharmacology*, 583(2–3), 174–185.

Miller, G. E., & Chen, E. (2010). Harsh families, poor health: Early adversity and immune dysregulation. *Psychological Science*, 21(7), 940–947.

Porges, S. W. (2011). *The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment, Communication, and Self-Regulation*. Norton.

Sapolsky, R. M. (2004). *Why Zebras Don't Get Ulcers*. Holt.

Slavich, G. M., & Cole, S. W. (2013). The emerging field of human social genomics. *Clinical Psychological Science*, 1(3), 331–348.

Teicher, M. H., et al. (2016). The enduring neurobiological scars of childhood abuse. *American Journal of Psychiatry*, 173(6), 536–549.

E. Neuroregeneration and Reversal

Davidson, R. J., & McEwen, B. S. (2012). Social influences on neuroplasticity: Stress and interventions to promote well-being. *Nature Neuroscience*, 15(5), 689–695.

Hölzel, B. K., et al. (2011). Mindfulness practice leads to increases in regional brain gray matter density. *Psychiatry Research: Neuroimaging*, 191(1), 36–43.

Reiter, R. J., Tan, D.-X., & Galano, A. (2014). Melatonin as a potent antioxidant in human brain physiology. *Progress in Brain Research*, 181, 127–151.

Tang, Y. Y., et al. (2015). The neuroscience of mindfulness meditation. *Nature Reviews Neuroscience*, 16(4), 213–225.

Books (Alphabetical)

Alter, A. (2017). *Irresistible: The Rise of Addictive Technology and the Business of Keeping Us Hooked*. Penguin Press.

Hari, J. (2018). *Lost Connections: Why you're Depressed and How to Find Hope*. Bloomsbury.

Haidt, J., & Lukianoff, G. (2018). *The Coddling of the American Mind*. Penguin Press.

Sapolsky, R. M. (2017). *Behave: The Biology of Humans at Our Best and Worst*. Penguin Press.

Sejnowski, T. J. (2018). *The Deep Learning Revolution*. MIT Press.

Van der Kolk, B. (2014). *The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma*. Viking.

Related Documentaries & Media (Alphabetical)

The Social Dilemma (2020). Directed by Jeff Orlowski. Netflix.

Stink! (2015). Directed by Jon J. Whelan.

Minimalism: A Documentary about the Important Things (2016). Netflix.

Dark Nature: The Toxic Cost of Our Obsession (2022). BBC.

Heal (2017). Directed by Kelly Noonan Gores.

Chapter 3: You Are Light, Dancing in Geometry

Peer-Reviewed Scientific Studies (Alphabetical, APA Style)

A. Light in Biology: Biophotons, Biofield, and Electromagnetic Signatures

Cifra, M., & Pospíšil, P. (2014). Ultra-weak photon emission from biological samples: Definition, mechanisms, properties, detection and applications. *Journal of Photochemistry and Photobiology B: Biology*, 139, 2–10.

Cohen, D. (1967). Magnetocardiograms taken with a superconducting point-contact magnetometer. *Applied Physics Letters*, 10(2), 44–46.

Kobayashi, M., Kikuchi, D., & Okamura, H. (2009). Imaging of ultraweak spontaneous photon emission from human body displaying diurnal rhythm. *PLoS ONE*, 4(7), e6256.

Prasad, A., & Pospíšil, P. (2013). Two-dimensional imaging of spontaneous ultra-weak photon emission from the human skin: Role of reactive oxygen species. *Journal of Biophotonics*, 6(1), 103–109.

Rubik, B. (2002). The biofield hypothesis: Its biophysical basis and role in medicine. *The Journal of Alternative and Complementary Medicine*, 8(6), 703–717.

Van Wijk, E. P. A., & van Wijk, R. (2005). Multi-site recording and spectral analysis of spontaneous photon emission from human body. *Journal of Photochemistry and Photobiology B: Biology*, 79(2), 154–170.

B. Photobiomodulation (Red/NIR Light) and Brain/Mitochondria

Gonzalez-Lima, F., & Barrett, D. W. (2014). Augmentation of cognitive brain functions with transcranial lasers. *Frontiers in Systems Neuroscience*, 8, 36.

Hamblin, M. R. (2016). Shining light on the head: Photobiomodulation for brain disorders. *BBA - Clinical*, 6, 113–124.

Hamilton, C., et al. (2018). Near-infrared (810 nm) transcranial photobiomodulation enhances attention and working memory in humans. *Photomedicine and Laser Surgery*, 36(9), 445–453.

Rojas, J. C., & Gonzalez-Lima, F. (2013). Low-level light therapy of the eye and brain. *Eye and Brain*, 5, 49–67.

Salehpour, F., et al. (2018). Transcranial photobiomodulation therapy: A systematic review. *Photobiomodulation, Photomedicine, and Laser Surgery*, 36(5), 215–229.

Wang, X., et al. (2017). Photobiomodulation leads to cellular antioxidant protection via Nrf2 activation: Implications for neuroprotection. *Redox Biology*, 12, 682–693.

C. Geometry in Nature & Perception: Fractals, Symmetry, and Aesthetics

Hagerhall, C. M., Purcell, T., & Taylor, R. (2004). Fractal dimension of landscape silhouette outlines as a predictor of landscape preference. *Journal of Environmental Psychology*, 24(2), 247–255.

Spehar, B., Clifford, C. W. G., Newell, B. R., & Taylor, R. P. (2003). Universal aesthetic of fractals. *Computers & Graphics*, 27(5), 813–820.

Spehar, B., Walker, N., & Taylor, R. (2016). Taxonomy of individual variations in aesthetic preferences for fractal patterns. *Frontiers in Human Neuroscience*, 10, 350.

Wagemans, J. (1997). Characteristics and models of human symmetry detection. *Trends in Cognitive Sciences*, 1(9), 346–352.

Zaidel, D. W., Aarde, S. M., & Baig, K. (2005). Appearance of symmetry, beauty, and health in human faces. *Brain and Cognition*, 57(3), 261–263.

D. Heart–Brain Electromagnetism & Coherence

McCraty, R., & Shaffer, F. (2015). Heart rate variability: New perspectives on physiological mechanisms, assessment of self-regulatory capacity, and health risk. *Global Advances in Health and Medicine*, 4(1), 46–61.

Schäfer, C., Rosenblum, M. G., Kurths, J., & Abel, H.-H. (1999). Heartbeat synchronized with respiration. *Nature*, 392(6673), 239–240.

Stacey, W. C., & Litt, B. (2008). Technology insight: Neuroengineering and epilepsy, Designing devices for seizure control. *Nature Clinical Practice Neurology*, 4(4), 190–201.

Weitkunat, R., et al. (2019). Quantification of cardiac magnetic fields in humans: A review of magnetocardiography. *Annals of Noninvasive Electrocardiology*, 24(3), e12605.

E. Quantum/Information Perspectives (Cautious/Exploratory)

Hameroff, S., & Penrose, R. (2014). Consciousness in the universe: A review of the ‘Orch OR’ theory. *Physics of Life Reviews*, 11(1), 39–78.

Tuszynski, J. A., et al. (1995). Ferroelectric behavior in microtubule dipole lattices: Implications for information processing. *Nano biology*, 4(1), 39–49.

F. Vision, Light Perception & Human Consciousness

Baylor, D. A. (1996). How photons start vision. *Proceedings of the National Academy of Sciences*, 93(2), 560–565.

Berson, D. M., Dunn, F. A., & Takao, M. (2002). Phototransduction by retinal ganglion cells that set the circadian clock. *Science*, 295(5557), 1070–1073.

Dacey, D. M., et al. (2005). Melanopsin-expressing ganglion cells in primate retina signal color and irradiance. *Nature*, 433(7027), 749–754.

Engel, A. K., & Singer, W. (2001). Temporal binding and the neural correlates of sensory awareness. *Trends in Cognitive Sciences*, 5(1), 16–25.

Hering, E. (1920). Outlines of a Theory of the Light Sense. Harvard University Press.

Livingstone, M., & Hubel, D. (1988). Segregation of form, color, movement, and depth: Anatomy, physiology, and perception. *Science*, 240(4853), 740–749.

Purves, D., & Lotto, R. B. (2003). *Why We See What We Do: An Empirical Theory of Vision*. Sinauer Associates.

Zeki, S. (1993). *A Vision of the Brain*. Blackwell Scientific.

Zeki, S., & Bartels, A. (1999). Toward a theory of visual consciousness. *Consciousness and Cognition*, 8(2), 225–259.

Zeki, S., et al. (2014). Neural correlates of beauty. *Philosophical Transactions of the Royal Society B*, 369(1641), 20140204.

Books (Alphabetical)

Ball, P. (2009). *Nature's Patterns: Shapes, Flow, and Branches*. Oxford University Press.

Hamblin, M. R. (2019). *Photobiomodulation in the Brain: Low-Level Laser (Light) Therapy in Neurology and Neuroscience*. Elsevier.

Mandelbrot, B. B. (1982). *The Fractal Geometry of Nature*. W. H. Freeman.

Popp, F.-A., & Beloussov, L. V. (Eds.). (2003). *Integrative Biophysics: Biophotonics*. Springer.

Purves, D., & Lotto, R. B. (2003). *Why We See What We Do: An Empirical Theory of Vision*. Sinauer Associates.

Van Wijk, R. (2014). *Light in Shaping Life: Biophotons in Biology and Medicine*. Meluna Research.

Zeki, S. (1993). *A Vision of the Brain*. Blackwell Scientific.

Related Documentaries & Media (Alphabetical)

Fractals: Hunting the Hidden Dimension (2008). NOVA/PBS.

Light on Earth (2016). BBC/Attenborough, bioluminescence and light in living systems.

The Code (2011). BBC series, mathematics and patterns in nature.

The Secret Life of Chaos (2010). BBC, complexity and self-organization.

Particle Fever (2013). Mark Levinson, frontiers of physics (context for modern 'light'/quanta).

Through the Wormhole: The Universe of Light (2011). Discovery Channel, perception, photons, and consciousness.

Chapter 4: Your Inner Power Grid and the Subtle Body

Peer-Reviewed Scientific Studies (Alphabetical, APA Style)

A. Human Bioelectrical Communication

Becker, R. O., & Selden, G. (1985). *The Body Electric: Electromagnetism and the Foundation of Life*. HarperCollins.

Borgens, R. B. (1982). What is the role of naturally produced electric current in vertebrate regeneration and healing? *International Review of Cytology*, 76, 245–298.

Funk, R. H. W., Monsees, T., & Özkucur, N. (2009). Electromagnetic effects, from cell biology to medicine. *Progress in Histochemistry and Cytochemistry*, 43(4), 177–264.

Liboff, A. R. (2004). Toward an electromagnetic paradigm for biology and medicine. *Journal of Alternative and Complementary Medicine*, 10(1), 41–47.

McCaig, C. D., Rajnicek, A. M., Song, B., & Zhao, M. (2005). Controlling cell behavior electrically: Current views and future potential. *Physiological Reviews*, 85(3), 943–978.

B. The Biofield & Electromagnetic Signatures

McCraty, R., Atkinson, M., & Tomasino, D. (2001). *Science of the heart: Exploring the role of the heart in human performance*. HeartMath Research Center.

McCraty, R., & Childre, D. (2010). Coherence: Bridging personal, social, and global health. *Alternative Therapies in Health and Medicine*, 16(4), 10–24.

Rubik, B., Muehsam, D., Hammerschlag, R., & Jain, S. (2015). Biofield science and healing: History, terminology, and concepts. *Global Advances in Health and Medicine*, 4(Suppl), 8–14.

Tiller, W. A. (1993). What are subtle energies? *Journal of Scientific Exploration*, 7(3), 293–304.

C. Fascia, Piezoelectricity & Connective Tissue Signaling

Langevin, H. M., & Yandow, J. A. (2002). Relationship of acupuncture points and meridians to connective tissue planes. *Anatomical Record*, 269(6), 257–265.

Oschman, J. L. (2003). *Energy Medicine: The Scientific Basis*. Elsevier.

Oschman, J. L. (2015). *Energy Medicine: The Scientific Basis* (2nd ed.). Churchill Livingstone.

Schleip, R., Findley, T. W., Chaitow, L., & Huijing, P. (Eds.). (2012). *Fascia: The Tensional Network of the Human Body*. Elsevier.

Zhang, W. B., Tian, Y. L., Li, H., et al. (2008). Observation of infrared radiant tracks along acupuncture meridians in human body. *Chinese Science Bulletin*, 53(22), 3458–3462.

D. Grounding (Earthing) & Electric Connection to Earth

Chevalier, G., Sinatra, S. T., & Oschman, J. L. (2012). Earthing: Health implications of reconnecting the human body to the Earth's surface electrons. *Journal of Environmental and Public Health*, 2012, 291541.

Chevalier, G. (2010). The effect of grounding the human body on mood. *Psychological Reports*, 106(1), 101–108.

Chevalier, G., Sinatra, S. T., Oschman, J. L., & Sokal, K. (2013). Earthing (grounding) the human body reduces blood viscosity, a major factor in cardiovascular disease. *Journal of Alternative and Complementary Medicine*, 19(2), 102–110.

Menigoz, W., Latz, T. T., Ely, D., Kamei, C., Melvin, G., & Sinatra, S. T. (2019). Integrative and lifestyle medicine strategies should include earthing (grounding): Review of research evidence and clinical observations. *Explore*, 15(2), 152–160.

E. Water, Geometry, and Coherent Structure

Del Giudice, E., & Preparata, G. (1998). Coherent dynamics in water as a possible explanation of biological membranes' formation. *Journal of Biological Physics*, 20(1–4), 105–116.

Montagnier, L., Aïssa, J., Ferris, S., et al. (2011). Electromagnetic signals are produced by aqueous nanostructures derived from bacterial DNA sequences. *Interdisciplinary Sciences: Computational Life Sciences*, 3(1), 81–90.

Pollack, G. H. (2013). *The Fourth Phase of Water: Beyond Solid, Liquid, and Vapor*. Ebner and Sons Publishers.

Popp, F.-A., & Belousov, L. V. (Eds.). (2003). *Integrative Biophysics: Biophotonics*. Springer.

Sharma, R., & Singh, R. (2020). Water structuring and its role in biological processes. *Biophysical Reviews*, 12(3), 647–661.

F. Resonance, Coherence, and Conscious Regulation

McCraty, R., & Zayas, M. A. (2014). Cardiac coherence, self-regulation, autonomic stability, and psychosocial well-being. *Frontiers in Psychology*, 5, 1090.

Porges, S. W. (2011). *The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment, Communication, and Self-Regulation*. Norton.

Reiter, R. J., Tan, D.-X., & Galano, A. (2014). Melatonin as a potent antioxidant in human brain physiology. *Progress in Brain Research*, 181, 127–151.

Liboff, A. R. (2010). The electromagnetic nature of life: A symphony of oscillations. *Electromagnetic Biology and Medicine*, 29(3), 105–113.

Markov, M. S. (2007). Expanding use of pulsed electromagnetic field therapies. *Electromagnetic Biology and Medicine*, 26(3), 257–274.

Books (Alphabetical)

Becker, R. O. (1990). *Cross Currents: The Perils of Electropollution, the Promise of Electromedicine*. Tarcher.

Chevalier, G., Sinatra, S. T., Oschman, J. L., & Zucker, M. (2014). *Earthing: The Most Important Health Discovery Ever?* Basic Health Publications.

McCraty, R. (2020). *Heart Intelligence: Connecting with the Intuitive Guidance of the Heart*. Waterfront Press.

Oschman, J. L. (2015). *Energy Medicine: The Scientific Basis* (2nd ed.). Churchill Livingstone.

Pollack, G. H. (2013). *The Fourth Phase of Water: Beyond Solid, Liquid, and Vapor*. Ebner and Sons.

Popp, F.-A., & Belousov, L. V. (2003). *Integrative Biophysics: Biophotonics*. Springer.

Related Documentaries & Media (Alphabetical)

The Living Matrix (2009). Directed by Greg Becker – on biofield science and energy medicine.

The Earthing Movie (2019). Directed by Josh and Rebecca Tickell – on grounding research and health.

Water: The Great Mystery (2006). Directed by Anastaysia Popova – exploring water structure and consciousness.

Heal (2017). Directed by Kelly Noonan Gores – mind-body connection and self-healing science.

E-Motion (2014). Directed by Frazer Bailey – energy, emotion, and frequency in human biology.

Chapter 5: The Power of the Subconscious Mind

Peer-Reviewed Scientific Studies (Alphabetical, APA Style)

A. Conscious vs. Subconscious Processing

Baumeister, R. F., & Bargh, J. A. (2014). Conscious and unconscious: Toward an integrative understanding of human mental life and action. *Psychological Science in the Public Interest*, 15(3), 1–44.

Dehaene, S., & Changeux, J. P. (2011). Experimental and theoretical approaches to conscious processing. *Neuron*, 70(2), 200–227.

Kahneman, D. (2011). *Thinking, Fast and Slow*. Farrar, Straus and Giroux.

Kihlstrom, J. F. (1987). The cognitive unconscious. *Science*, 237(4821), 1445–1452.

Bargh, J. A., & Morsella, E. (2008). The unconscious mind. *Perspectives on Psychological Science*, 3(1), 73–79.

B. Memory, Emotion, and Conditioning

Hebb, D. O. (1949). *The Organization of Behavior: A Neuropsychological Theory*. Wiley.

LeDoux, J. (1996). *The Emotional Brain: The Mysterious Underpinnings of Emotional Life*. Simon & Schuster.

Nader, K., Schafe, G. E., & Le Doux, J. E. (2000). Fear memories require protein synthesis in the amygdala for reconsolidation after retrieval. *Nature*, 406(6797), 722–726.

Phelps, E. A., & LeDoux, J. E. (2005). Contributions of the amygdala to emotion processing: From animal models to human behavior. *Neuron*, 48(2), 175–187.

Schacter, D. L. (2012). Adaptive constructive processes and the future of memory. *American Psychologist*, 67(8), 603–613.

C. Neuroplasticity and Reprogramming

Davidson, R. J., & McEwen, B. S. (2012). Social influences on neuroplasticity: Stress and interventions to promote well-being. *Nature Neuroscience*, 15(5), 689–695.

Doidge, N. (2007). *The Brain That Changes Itself: Stories of Personal Triumph from the Frontiers of Brain Science*. Viking.

Lazar, S. W., Kerr, C. E., Wasserman, R. H., et al. (2005). Meditation experience is associated with increased cortical thickness. *NeuroReport*, 16(17), 1893–1897.

Tang, Y. Y., et al. (2015). The neuroscience of mindfulness meditation. *Nature Reviews Neuroscience*, 16(4), 213–225.

Lipton, B. H. (2005). *The Biology of Belief: Unleashing the Power of Consciousness, Matter, & Miracles*. Hay House.

D. Psychoneuroimmunology & Mind–Body Connection

Ader, R., Felten, D. L., & Cohen, N. (1991). *Psychoneuroimmunology* (2nd ed.). Academic Press.

Benson, H. (1975). *The Relaxation Response*. HarperCollins.

Pert, C. B. (1997). *Molecules of Emotion: The Science Behind Mind-Body Medicine*. Scribner.

Rossi, E. L. (2002). *The Psychobiology of Gene Expression: Neuroscience and Neurogenesis in Hypnosis and the Healing Arts*. Norton.

Beauregard, M., & O'Leary, D. (2007). *The Spiritual Brain: A Neuroscientist's Case for the Existence of the Soul*. HarperOne.

E. Beliefs, Identity, and Perception of Reality

Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*. Freeman.

Beck, A. T. (1976). *Cognitive Therapy and the Emotional Disorders*. Penguin.

Friston, K. (2010). The free-energy principle: A unified brain theory? *Nature Reviews Neuroscience*, 11(2), 127–138.

Varela, F. J., Thompson, E., & Rosch, E. (1991). *The Embodied Mind: Cognitive Science and Human Experience*. MIT Press.

Stapp, H. P. (2009). *Mindful Universe: Quantum Mechanics and the Participating Observer*. Springer.

F. Hypnosis, Visualization, and Placebo

Kirsch, I. (1999). Hypnosis and placebos: Response expectancy as a mediating variable. *Psychological Consciousness*, 1(2), 126–137.

Spiegel, D., & Spiegel, H. (2004). *Trance and Treatment: Clinical Uses of Hypnosis*. American Psychiatric Publishing.

Wager, T. D., & Atlas, L. Y. (2015). The neuroscience of placebo effects: Connecting context, learning, and health. *Nature Reviews Neuroscience*, 16(7), 403–418.

Dispenza, J. (2014). *You Are the Placebo: Making Your Mind Matter*. Hay House.

Price, D. D., Finniss, D. G., & Benedetti, F. (2008). A comprehensive review of the placebo effect: Recent advances and current thought. *Annual Review of Psychology*, 59, 565–590.

Books (Alphabetical)

Ader, R., Felten, D. L., & Cohen, N. (1991). *Psychoneuroimmunology* (2nd ed.). Academic Press.

Benson, H. (1975). *The Relaxation Response*. HarperCollins.

Doidge, N. (2007). *The Brain That Changes Itself*. Viking.

Dispenza, J. (2014). *You Are the Placebo: Making Your Mind Matter*. Hay House.

Kahneman, D. (2011). *Thinking, Fast and Slow*. Farrar, Straus and Giroux.

Lipton, B. H. (2005). *The Biology of Belief*. Hay House.

Rossi, E. L. (2002). *The Psychobiology of Gene Expression*. Norton.

Varela, F. J., Thompson, E., & Rosch, E. (1991). *The Embodied Mind*. MIT Press.

Related Documentaries & Media (Alphabetical)

Heal (2017). Directed by Kelly Noonan Gores – documentary on mind-body connection and self-healing.

E-Motion (2014). Directed by Frazer Bailey – how subconscious emotions shape health and behavior.

The Mind, Explained (2019). Netflix – series exploring memory, anxiety, and mindfulness.

Superhuman: The Invisible Made Visible (2020). Directed by Caroline Cory – exploring consciousness and perception.

What the Bleep Do We Know!? (2004). Directed by William Arntz – intersection of quantum theory and consciousness.

Chapter 6: Emotions – The Language of the Body

Peer-Reviewed Scientific Studies (Alphabetical, APA Style)

A. Neurobiology of Emotion

Damasio, A. R. (1994). *Descartes' Error: Emotion, Reason, and the Human Brain*. Putnam.

LeDoux, J. E. (1996). *The Emotional Brain: The Mysterious Underpinnings of Emotional Life*. Simon & Schuster.

Pessoa, L. (2008). On the relationship between emotion and cognition. *Nature Reviews Neuroscience*, 9(2), 148–158.

Phelps, E. A. (2006). Emotion and cognition: Insights from studies of the human amygdala. *Annual Review of Psychology*, 57, 27–53.

Craig, A. D. (2009). How do you feel, now? The anterior insula and human awareness. *Nature Reviews Neuroscience*, 10(1), 59–70.

B. Emotion and the Body

Damasio, A. R. (1999). *The Feeling of What Happens: Body and Emotion in the Making of Consciousness*. Harcourt Brace.

Porges, S. W. (2011). *The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment, Communication, and Self-Regulation*. Norton.

McCraty, R., & Childre, D. (2010). Coherence: Bridging personal, social, and global health. *Alternative Therapies in Health and Medicine*, 16(4), 10–24.

Ekman, P. (1992). Are there basic emotions? *Psychological Review*, 99(3), 550–553.

Critchley, H. D., & Harrison, N. A. (2013). Visceral influences on brain and behavior. *Neuron*, 77(4), 624–638.

C. Emotional Regulation & Resilience

Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, 2(3), 271–299.

Davidson, R. J., & McEwen, B. S. (2012). Social influences on neuroplasticity: Stress and interventions to promote well-being. *Nature Neuroscience*, 15(5), 689–695.

Hölzel, B. K., et al. (2011). Mindfulness practice leads to increases in regional brain gray matter density. *Psychiatry Research: Neuroimaging*, 191(1), 36–43.

Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice*, 10(2), 144–156.

Sahdra, B. K., et al. (2011). Enhanced response inhibition during intensive meditation training predicts improvements in self-control. *Emotion*, 11(2), 299–312.

D. Emotion, Energy, and Frequency

McCraty, R., Atkinson, M., & Tomasino, D. (2001). *Science of the heart: Exploring the role of the heart in human performance*. HeartMath Research Center.

Tiller, W. A. (1997). *Science and Human Transformation: Subtle Energies, Intentionality, and Consciousness*. Pavior Publishing.

Palatini, P., & Julius, S. (2009). Heart rate and the cardiovascular risk. *Journal of Hypertension*, 27(1), 3–10.

Porges, S. W., & Furman, S. A. (2011). The early development of the autonomic nervous system provides a neural platform for social behavior. *Developmental Psychobiology*, 53(5), 530–543.

McCraty, R., & Zayas, M. A. (2014). Cardiac coherence, self-regulation, autonomic stability, and psychosocial well-being. *Frontiers in Psychology*, 5, 1090.

E. Trauma, Suppression, and Healing

Van der Kolk, B. A. (2014). *The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma*. Viking.

Levine, P. A. (1997). *Waking the Tiger: Healing Trauma*. North Atlantic Books.

Ogden, P., Minton, K., & Pain, C. (2006). *Trauma and the Body: A Sensorimotor Approach to Psychotherapy*. Norton.

Shapiro, F. (2001). *Eye Movement Desensitization and Reprocessing (EMDR): Basic Principles, Protocols, and Procedures*. Guilford Press.

Yehuda, R., & McFarlane, A. C. (1995). Conflict between current knowledge about posttraumatic stress disorder and its original conceptual basis. *American Journal of Psychiatry*, 152(12), 1705–1713.

F. Emotional Intelligence & Conscious Evolution

Goleman, D. (1995). *Emotional Intelligence: Why It Can Matter More Than IQ*. Bantam Books.

Barrett, L. F. (2017). *How Emotions Are Made: The Secret Life of the Brain*. Houghton Mifflin Harcourt.

Siegel, D. J. (2007). *The Mindful Brain: Reflection and Attunement in the Cultivation of Well-Being*. Norton.

Decety, J., & Jackson, P. L. (2004). The functional architecture of human empathy. *Behavioral and Cognitive Neuroscience Reviews*, 3(2), 71–100.

Singer, T., & Klimecki, O. M. (2014). Empathy and compassion. *Current Biology*, 24(18), R875–R878.

Books (Alphabetical)

Barrett, L. F. (2017). *How Emotions Are Made: The Secret Life of the Brain*. Houghton Mifflin Harcourt.

Damasio, A. R. (1994). *Descartes' Error: Emotion, Reason, and the Human Brain*. Putnam.

Davidson, R. J. (2012). *The Emotional Life of Your Brain*. Hudson Street Press.

Goleman, D. (1995). *Emotional Intelligence*. Bantam Books.

Levine, P. A. (1997). *Waking the Tiger: Healing Trauma*. North Atlantic Books.

Porges, S. W. (2017). *The Pocket Guide to the Polyvagal Theory*. Norton.

Siegel, D. J. (2007). *The Mindful Brain*. Norton.

Van der Kolk, B. A. (2014). *The Body Keeps the Score*. Viking.

Related Documentaries & Media (Alphabetical)

The Wisdom of Trauma (2021). Directed by Zaya and Maurizio Benazzo – featuring Dr. Gabor Maté.

Emotion 2.0 (2016). Directed by Frazer Bailey – exploring emotional frequency and healing.

Heal (2017). Directed by Kelly Noonan Gores – documentary on emotion, belief, and healing.

E-Motion (2014). Directed by Frazer Bailey – emotion and energetic transformation.

The Power of Vulnerability (2013). Brené Brown – Netflix special on emotional courage and connection.

Chapter 7: Childhood Imprints

Peer-Reviewed Scientific Studies (Alphabetical, APA Style)

A. Early Brain States: Theta Dominance, Absorption & Learning

Benasich, A. A., & Gou, Z. (2008). Event-related potentials in the developing brain. *Developmental Neuropsychology*, 33(1), 1–12.

Marshall, P. J., Bar-Haim, Y., & Fox, N. A. (2002). Development of the EEG from 5 months to 4 years of age. *Clinical Neurophysiology*, 113(8), 1199–1208.

Orekhova, E. V., Stroganova, T. A., Posikera, I. N., & Elam, M. (2006). EEG theta rhythm in infants and preschool children. *Clinical Neurophysiology*, 117(5), 1047–1062.

Samaha, J., & Postle, B. R. (2015). The speed of alpha-band oscillations predicts the temporal resolution of visual perception. *Current Biology*, 25(22), 2985–2990. [Mechanistic link; developmental implications.]

Tierney, A. L., & Nelson, C. A. (2009). Brain development and the role of experience in the early years. *Zero to Three*, 30(2), 9–13.

B. Attachment, Facial Expressions, Affective Mirroring & Social Referencing

Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of Attachment: A Psychological Study of the Strange Situation*. Lawrence Erlbaum.

Feldman, R. (2007). Parent–infant synchrony and the construction of shared timing; physiological and social processes. *Journal of Child Psychology and Psychiatry*, 48(3–4), 329–354.

Hertenstein, M. J., & Campos, J. J. (2004). The retention effects of adult emotional signals on infant behavior. *Child Development*, 75(2), 595–613.

Meltzoff, A. N., & Moore, M. K. (1977). Imitation of facial and manual gestures by human neonates. *Science*, 198(4312), 75–78.

Tronick, E. Z., Als, H., Adamson, L., Wise, S., & Brazelton, T. B. (1978). The infant's response to entrapment between contradictory messages in face-to-face interaction. *Journal of the American Academy of Child Psychiatry*, 17(1), 1–13. [Still-face paradigm.]

C. Pattern Recognition, Predictive Coding & Implicit Belief Formation

Friston, K. (2010). The free-energy principle: A unified brain theory? *Nature Reviews Neuroscience*, 11(2), 127–138.

Emberson, L. L., Conway, C. M., & Christiansen, M. H. (2011). Statistical learning and language acquisition. *Wiley Interdisciplinary Reviews: Cognitive Science*, 2(6), 629–635.

Saffran, J. R., Aslin, R. N., & Newport, E. L. (1996). Statistical learning by 8-month-old infants. *Science*, 274(5294), 1926–1928.

Kuhl, P. K. (2004). Early language acquisition: Phonetic and word learning, neural substrates, and a new proposal. *Nature Reviews Neuroscience*, 5(11), 831–843.

Schore, A. N. (2001). Effects of a secure attachment relationship on right brain development, affect regulation, and infant mental health. *Infant Mental Health Journal*, 22(1–2), 7–66.

D. Stress Reactivity, Survival Loops & Epigenetic Imprinting

Felitti, V. J., et al. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine*, 14(4), 245–258.

Gunnar, M. R., & Quevedo, K. (2007). The neurobiology of stress and development. *Annual Review of Psychology*, 58, 145–173.

Meaney, M. J., & Szyf, M. (2005). Maternal care as a model for experiencedependent chromatin plasticity? *Trends in Neurosciences*, 28(9), 456–463.

Weaver, I. C. G., et al. (2004). Epigenetic programming by maternal behavior. *Nature Neuroscience*, 7(8), 847–854.

Teicher, M. H., Anderson, C. M., & Polcari, A. (2012). Childhood maltreatment is associated with reduced volume in the hippocampal subfields. *PNAS*, 109(9), E563–E572.

E. Interoception, Mirroring Systems & Emotional Contagion

Decety, J., & Jackson, P. L. (2004). The functional architecture of human empathy. *Behavioral and Cognitive Neuroscience Reviews*, 3(2), 71–100.

Feldman, R., Magori-Cohen, R., Galili, G., Singer, M., & Louzoun, Y. (2011). Mother–infant synchrony shapes infants' vagal tone and social competence across the first years of life. *Developmental Psychology*, 47(3), 611–625.

Gallese, V., Keysers, C., & Rizzolatti, G. (2004). A unifying view of the mirror neuron system. *Trends in Cognitive Sciences*, 8(9), 396–403.

Haxby, J. V., Hoffman, E. A., & Gobbini, M. I. (2000). The distributed human neural system for face perception. *Trends in Cognitive Sciences*, 4(6), 223–233.

Scherer, K. R. (2009). The dynamic architecture of emotion: Evidence for motoric–expressive, physiological and cognitive components. *Cognition & Emotion*, 23(7), 1307–1351.

F. Safety, Polyvagal Regulation & Social Engagement

Porges, S. W. (2011). *The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment, Communication, and Self-Regulation*. Norton.

Koenig, J., Kemp, A. H., Beauchaine, T. P., Thayer, J. F., & Kaess, M. (2016). Depression and resting state heart rate variability in children and adolescents, A meta-analysis. *Clinical Psychology Review*, 46, 136–150.

Smith, K. E., & Pollak, S. D. (2020). Early adversity and the development of emotion regulation: A neurobiology perspective. *Annual Review of Developmental Psychology*, 2, 381–405.

Tottenham, N. (2012). Risk and developmental heterogeneity in previously institutionalized children. *Journal of Adolescent Health*, 51(2), S29–S33.

van IJzendoorn, M. H., & Bakermans-Kranenburg, M. J. (2012). Differential susceptibility and the developmental dynamics of parenting. *Current Opinion in Psychology*, 15, 110–115.

Books (Alphabetical)

Bowlby, J. (1988). *A Secure Base: Parent-Child Attachment and Healthy Human Development*. Basic Books.

Fogel, A. (2013). *Body Sense: The Science and Practice of Embodied Self-Awareness*. W. W. Norton.

Gopnik, A., Meltzoff, A. N., & Kuhl, P. K. (1999). *The Scientist in the Crib*. William Morrow.

Hüther, G. (2006). *The Compassionate Brain*. Shambhala.

Perry, B. D., & Szalavitz, M. (2006). *The Boy Who Was Raised as a Dog*. Basic Books.

Schore, A. N. (2019). *Right Brain Psychotherapy*. W. W. Norton.

Siegel, D. J., & Bryson, T. P. (2011). *The Whole-Brain Child*. Delacorte.

Tronick, E. (2007). *The Neurobehavioral and Social-Emotional Development of Infants and Children*. W. W. Norton.

Related Documentaries & Media (Alphabetical)

The Beginning of Life (2016). Netflix – early development, attachment, and environment.

Babies (2020). Netflix – developmental milestones and social–emotional learning.

Inside Out (2015). Pixar/Disney – creative depiction of childhood emotion and memory formation (useful for lay readers).

The Still Face Experiment – Dr. Edward Tronick (various clips/lectures).

The Secret Life of the Brain (2002). PBS – infant brain development and plasticity.

Chapter 8: The Echo in Your Cells

Peer-Reviewed Scientific Studies (Alphabetical, APA Style)

A. Epigenetics & Cellular 'Memory' (DNA methylation, histones, noncoding RNA)

Bhasin, M. K., et al. (2013). Relaxation response induces temporally ordered gene expression changes in practitioners and novices. *PLoS ONE*, 8(5), e62817.

Carey, N. (2012). *The Epigenetics Revolution*. Icon Books. [See Books section; included here for context.]

Fraga, M. F., et al. (2005). Epigenetic differences arise during the lifetime of monozygotic twins. *PNAS*, 102(30), 10604–10609.

Horvath, S. (2013). DNA methylation age of human tissues and cell types. *Genome Biology*, 14(10), R115.

Hannum, G., et al. (2013). Genome-wide methylation profiles reveal quantitative views of human aging rates. *Molecular Cell*, 49(2), 359–367.

Kaliman, P., et al. (2014). Rapid changes in histone deacetylase genes and inflammatory pathways after mindfulness practice. *Psychoneuroendocrinology*, 40, 96–107.

Nader, K., Schafe, G. E., & LeDoux, J. E. (2000). Fear memories require protein synthesis in the amygdala for reconsolidation. *Nature*, 406(6797), 722–726.

Weaver, I. C. G., et al. (2004). Epigenetic programming by maternal behavior. *Nature Neuroscience*, 7(8), 847–854.

B. Intergenerational & Transgenerational Effects

Dias, B. G., & Ressler, K. J. (2014). Parental olfactory experience influences behavior and neural structure in subsequent generations. *Nature Neuroscience*, 17(1), 89–96.

Klengel, T., et al. (2013). Allele-specific FKBP5 DNA demethylation mediates gene–childhood trauma interactions. *Nature Neuroscience*, 16(1), 33–41.

Meaney, M. J., & Szyf, M. (2005). Maternal care as a model for experience-dependent chromatin plasticity. *Trends in Neurosciences*, 28(9), 456–463.

Oberlander, T. F., et al. (2008). Prenatal maternal depression, neonatal NR3C1 methylation, and infant cortisol response. *PNAS*, 105(44), 17229–17234.

Yehuda, R., et al. (2016). Holocaust exposure induced intergenerational effects on FKBP5 methylation. *Biological Psychiatry*, 80(5), 372–380.

C. Psychosocial Stress → Cellular Pathways (Allostatic load, social genomics)

Cole, S. W. (2013). Social regulation of human gene expression. *Genome Biology*, 14(9), 120.

Epel, E. S., et al. (2004). Accelerated telomere shortening in response to life stress. *PNAS*, 101(49), 17312–17315.

McEwen, B. S. (1998). Protective and damaging effects of stress mediators. *New England Journal of Medicine*, 338(3), 171–179.

Slavich, G. M., & Cole, S. W. (2013). The emerging field of human social genomics. *Clinical Psychological Science*, 1(3), 331–348.

D. Mitochondria, Redox & Cellular Signaling

Chandel, N. S. (2015). Mitochondria as signaling organelles. *Nature Reviews Molecular Cell Biology*, 16(12), 738–742.

Naviaux, R. K. (2014). Metabolic features of the cell danger response. *Mitochondrion*, 16, 7–17.

Wallace, D. C. (2005). A mitochondrial paradigm of metabolic and degenerative diseases. *Gene*, 354, 169–180.

Yoshino, J., Baur, J. A., & Imai, S.-I. (2018). NAD⁺ metabolism in health and disease. *Cell Metabolism*, 27(3), 513–528.

E. Telomeres, Aging Clocks & Cellular Senescence

Blackburn, E. H., Epel, E. S., & Lin, J. (2015). Human telomere biology: A contributory and interactive factor in aging, disease risks, and protection. *Science*, 350(6265), 1193–1198.

Levine, M. E., et al. (2018). An epigenetic biomarker of aging for lifespan and healthspan (PhenoAge). *Aging*, 10(4), 573–591.

Puterman, E., et al. (2010). Chronic stress and cortisol are associated with shorter telomere length in women. *PLoS ONE*, 5(1), e8612.

Li, Y., et al. (2020). DNA methylation clocks and telomere length: Independent aging biomarkers. *Aging Cell*, 19(10), e13261.

F. Mechanotransduction: ECM/Fascia to Nucleus (the 'echo' of force)

Discher, D. E., Janmey, P., & Wang, Y.-L. (2005). Tissue cells feel and respond to stiffness and shape. *Science*, 310(5751), 1139–1143.

Ingber, D. E. (2006). Cellular mechanotransduction: Putting the pieces together again. *FASEB Journal*, 20(7), 811–827.

Jaalouk, D. E., & Lammerding, J. (2009). Mechanotransduction gone awry. *Nature Reviews Molecular Cell Biology*, 10(1), 63–73.

G. Hormesis, Exercise & Adaptive Renewal

Barres, R., et al. (2012). Acute exercise remodels promoter methylation in human skeletal muscle. *Cell Metabolism*, 15(3), 405–411.

Mattson, M. P. (2008). Hormesis defined. *Ageing Research Reviews*, 7(1), 1–7.

Radak, Z., et al. (2008). Exercise and hormesis: Oxidative stress-related adaptation. *Sports Medicine*, 38(7), 497–509.

H. Reversal & Reprogramming (from biology to behavior)

Ocampo, A., et al. (2016). In vivo amelioration of age-associated hallmarks by partial reprogramming. *Cell*, 167(7), 1719–1733.e12.

Sinclair, D. A., & LaPlante, M. D. (2019). *Lifespan: Why We Age, and Why We Don't Have To*. Atria Books. [See Books section.]

Tang, Y. Y., et al. (2015). The neuroscience of mindfulness meditation. *Nature Reviews Neuroscience*, 16(4), 213–225.

Books (Alphabetical)

Blackburn, E. H., & Epel, E. (2017). *The Telomere Effect*. Grand Central Publishing.

Carey, N. (2012). *The Epigenetics Revolution*. Icon Books.

Lane, N. (2005). *Power, Sex, Suicide: Mitochondria and the Meaning of Life*. Oxford University Press.

Mukherjee, S. (2016). *The Gene: An Intimate History*. Scribner.

Sinclair, D. A. (2019). *Lifespan: Why We Age, and Why We Don't Have To*. Atria Books.

Szyf, M. (2020). *Lamarck revisited: Epigenetic inheritance and evolution*. Academic Press.

Related Documentaries & Media (Alphabetical)

The Gene: An Intimate History (2020). PBS – history and science of genetics and epigenetics.

Stress: Portrait of a Killer (2008). National Geographic – stress biology and aging (Sapolsky).

In Utero (2015). Directed by Kathleen Man Gyllenhaal – prenatal environment and imprinting.

Nine Months That Made You (2016). PBS – developmental origins of health and disease.

Heal (2017). Directed by Kelly Noonan Gores – mind–body and self-healing.

Chapter 9: Raising Your Frequency / Expanding Consciousness

Peer-Reviewed Scientific Studies (Alphabetical, APA Style)

A. Brainwave Frequencies & States of Consciousness

Lutz, A., Greischar, L. L., Rawlings, N. B., Ricard, M., & Davidson, R. J. (2004). Long-term meditators self-induce high-amplitude gamma synchrony during mental practice. *PNAS*, 101(46), 16369–16373.

Newberg, A. B., & Iversen, J. (2003). The neural basis of the complex mental task of meditation: Neurotransmitter and neurochemical considerations. *Medical Hypotheses*, 61(2), 282–291.

Travis, F., & Wallace, R. K. (1999). Autonomic and EEG patterns distinguish transcending from other experiences during meditation. *Biological Psychology*, 49(1–2), 71–87.

Fell, J., Axmacher, N., & Haupt, S. (2010). From alpha to gamma: Electrophysiological correlates of meditation states. *Cognitive Processing*, 11(1), 13–25.

Cahn, B. R., & Polich, J. (2006). Meditation states and traits: EEG, ERP, and neuroimaging studies. *Psychological Bulletin*, 132(2), 180–211.

B. Coherence & Resonance in the Body

McCraty, R., & Zayas, M. A. (2014). Cardiac coherence, self-regulation, autonomic stability, and psychosocial well-being. *Frontiers in Psychology*, 5, 1090.

Porges, S. W. (2011). *The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment, Communication, and Self-Regulation*. Norton.

Singer, T., & Klimecki, O. M. (2014). Empathy and compassion. *Current Biology*, 24(18), R875–R878.

Muehsam, D., & Ventura, C. (2014). Life rhythm as a symphony of oscillatory patterns: Electromagnetic energy and sound vibration modulate gene expression. *Frontiers in Psychology*, 5, 784.

McCraty, R., Atkinson, M., & Tomasino, D. (2009). Coherent heart-brain interactions: A foundation of personal, social, and global coherence. *Integral Review*, 5(2), 10–115.

C. Quantum Biology & Biofield Coherence

Popp, F.-A., & Beloussov, L. V. (Eds.). (2003). *Integrative Biophysics: Biophotonics*. Springer.

Hameroff, S., & Penrose, R. (2014). Consciousness in the universe: A review of the ‘Orch OR’ theory. *Physics of Life Reviews*, 11(1), 39–78.

Tuszynski, J. A., et al. (1995). Ferroelectric behavior in microtubule dipole lattices: Implications for information processing. *Nanobiology*, 4(1), 39–49.

van Wijk, E. P. A., & van Wijk, R. (2005). Multi-site recording and spectral analysis of spontaneous photon emission from human body. *Journal of Photochemistry and Photobiology B: Biology*, 79(2), 154–170.

Rubik, B., Muehsam, D., Hammerschlag, R., & Jain, S. (2015). Biofield science and healing: History, terminology, and concepts. *Global Advances in Health and Medicine*, 4(Suppl), 8–14.

D. Consciousness Studies & Nonlocal Mind

Tiller, W. A. (1997). *Science and Human Transformation: Subtle Energies, Intentionality, and Consciousness*. Pavior Publishing.

Beauregard, M., & Paquette, V. (2006). Neural correlates of a mystical experience in Carmelite nuns. *Neuroscience Letters*, 405(3), 186–190.

Radin, D. (2006). *Entangled Minds: Extrasensory Experiences in a Quantum Reality*. Paraview Pocket Books.

Nelson, R. D. (2019). *Connected: The Emergence of Global Consciousness*. ICRL Press.

Newberg, A. B., d'Aquili, E. G., & Rause, V. (2001). *Why God Won't Go Away: Brain Science and the Biology of Belief*. Ballantine Books.

E. Meditation, Breathwork & Neuroplastic Transformation

Tang, Y. Y., Hölzel, B. K., & Posner, M. I. (2015). The neuroscience of mindfulness meditation. *Nature Reviews Neuroscience*, 16(4), 213–225.

Davidson, R. J., & McEwen, B. S. (2012). Social influences on neuroplasticity: Stress and interventions to promote well-being. *Nature Neuroscience*, 15(5), 689–695.

Lazar, S. W., Kerr, C. E., Wasserman, R. H., et al. (2005). Meditation experience is associated with increased cortical thickness. *NeuroReport*, 16(17), 1893–1897.

Jerath, R., Edry, J. W., Barnes, V. A., & Jerath, V. (2006). Physiology of long pranayamic breathing: Neural respiratory elements may provide a mechanism that explains how slow deep breathing shifts the autonomic nervous system. *Medical Hypotheses*, 67(3), 566–571.

Dispenza, J. (2017). *Becoming Supernatural: How Common People Are Doing the Uncommon*. Hay House.

F. Global Consciousness & Collective Resonance

Nelson, R. D., et al. (2002). Correlations of continuous random data with major world events. *Foundations of Physics Letters*, 15(6), 537–550.

Hagelin, J. S., et al. (1999). Effects of group practice of the Transcendental Meditation program on preventing violent crime in Washington, D.C. *Social Indicators Research*, 47(2), 153–201.

Radin, D., Michel, L., Galdamez, K., Wendland, P., Rickenbach, R., & Delorme, A. (2012). Consciousness and the double-slit interference pattern: Six experiments. *Physics Essays*, 25(2), 157–171.

McCraty, R., Deyhle, A., & Childre, D. (2012). The Global Coherence Initiative: Creating a coherent planetary standing wave. *Global Advances in Health and Medicine*, 1(1), 64–77.

Nelson, R. D. (2015). Global Consciousness Project: Correlations of continuous random data with major world events. *Explore*, 11(1), 65–73.

Books (Alphabetical)

Davidson, R. J. (2012). *The Emotional Life of Your Brain*. Hudson Street Press.

Dispenza, J. (2017). *Becoming Supernatural*. Hay House.

Hameroff, S., & Penrose, R. (2014). *Consciousness in the Universe*. Springer.

McTaggart, L. (2007). *The Intention Experiment*. HarperCollins.

Nelson, R. D. (2019). *Connected: The Emergence of Global Consciousness*. ICRL Press.

Newberg, A. B. (2018). *Neurotheology: How Science Can Enlighten Us About Spirituality*. Columbia University Press.

Radin, D. (2006). *Entangled Minds*. Paraview Pocket Books.

Tiller, W. A. (1997). *Science and Human Transformation*. Pavior Publishing.

Related Documentaries & Media (Alphabetical)

What the Bleep Do We Know!? (2004). Directed by William Arntz – exploring quantum consciousness.

The Connected Universe (2016). Directed by Malcom Carter – consciousness and unified field theory.

Heal (2017). Directed by Kelly Noonan Gores – consciousness, energy, and self-healing.

The Reality of Truth (2016). Directed by Laurent Levy – consciousness expansion and awakening.

Superhuman: The Invisible Made Visible (2020). Directed by Caroline Cory – human potential and frequency states.

Chapter 10: Heart Opening – Where Science Meets Soul

Peer-Reviewed Scientific Studies (Alphabetical, APA Style)

A. The Heart as an Electromagnetic and Neuroendocrine Organ

Armour, J. A. (1991). Anatomy and function of the intrathoracic neurons regulating the mammalian heart. *Heart and Vessels*, 7(Suppl 1), 1–7.

Armour, J. A. (2003). Neurocardiology: Anatomical and functional principles. *Heart Rhythm*, 1(1), 1–11.

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Newberg, A. B., d'Aquili, E. G., & Rause, V. (2001). *Why God Won't Go Away: Brain Science and the Biology of Belief*. Ballantine Books.

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Related Documentaries & Media (Alphabetical)

HeartMath Institute – Heart Coherence Research (various talks and short films).

The Power of the Heart (2014). Directed by Drew Heriot – the science and mystery of love and intuition.

Heal (2017). Directed by Kelly Noonan Gores – emotional healing and the heart-mind connection.

The Connected Universe (2016). Directed by Malcom Carter – field coherence and interconnectedness.

Love and the Brain (2016). NOVA/PBS – scientific exploration of love, bonding, and emotion.

Chapter 11: Centered – The Axis of Power

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A. The Science of Centering and Balance

Craig, A. D. (2002). How do you feel? Interoception: The sense of the physiological condition of the body. *Nature Reviews Neuroscience*, 3(8), 655–666.

Blanke, O., & Metzinger, T. (2009). Full-body illusions and minimal phenomenal selfhood. *Trends in Cognitive Sciences*, 13(1), 7–13.

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B. Nervous System Regulation & the Axis of Power

Porges, S. W. (2011). *The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment, Communication, and Self-Regulation*. Norton.

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Schulz, S. M. (2016). Paving the road to the future: Emotional self-regulation and resilience. *Frontiers in Psychology*, 7, 493.

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Oschman, J. L. (2015). *Energy Medicine: The Scientific Basis* (2nd ed.). Churchill Livingstone.

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Myers, T. (2014). *Anatomy Trains: Myofascial Meridians for Manual and Movement Therapists*. Elsevier.

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D. Emotional and Psychological Centering

Siegel, D. J. (2007). *The Mindful Brain: Reflection and Attunement in the Cultivation of Well-Being*. Norton.

Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice*, 10(2), 144–156.

Davidson, R. J., & McEwen, B. S. (2012). Social influences on neuroplasticity: Stress and interventions to promote well-being. *Nature Neuroscience*, 15(5), 689–695.

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Hunt, V. V. (1996). *Infinite Mind: Science of the Human Vibrations of Consciousness*. Malibu Publishing.

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Myers, T. (2014). *Anatomy Trains*. Elsevier.

Rubik, B. (2002). The Biofield Hypothesis. *Journal of Alternative and Complementary Medicine*.

Related Documentaries & Media (Alphabetical)

The Power of Flow (2016). Documentary on psychological and creative flow states.

Grounded (2013). Directed by Steve Kroschel – the healing science of grounding and balance.

Heal (2017). Directed by Kelly Noonan Gores – coherence, regulation, and holistic integration.

Inner Worlds, Outer Worlds (2012). Directed by Daniel Schmidt – the axis and toroidal symmetry of consciousness.

The Science of Mindfulness (2016). Great Courses series – mindfulness, centering, and neurobiology.

Chapter 12: Physical Illness as a Wake-Up Call

Peer-Reviewed Scientific Studies (Alphabetical, APA Style)

A. Biopsychosocial / Holistic Models & Illness Meaning

Engel, G. L. (1977). The need for a new medical model: A challenge for biomedicine. *Science*, 196(4286), 129–136.

Bolton, D. (2019). The Biopsychosocial Conditions of Health and Disease. In *Biopsychosocial Conditions of Health and Disease* (NCBI Books).

Roberts, A. (2023). The biopsychosocial model: Its use and abuse. *Medicine, Health Care and Philosophy*, 26, 367–384.

B. Psychosomatic, Suppression & Somatic Symptom Research

Settineri, S., et al. (2019). Emotional suppression and oneiric expression in illness: Link between defensive style and psychosomatic symptoms. *Frontiers in Psychology*, 10, 1897.

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Cleveland Clinic. (2021). Psychosomatic disorder. Retrieved from <https://my.clevelandclinic.org/health/diseases/21521-psychosomatic-disorder>

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McEwen, B. S. (1998). Protective and damaging effects of stress mediators. *New England Journal of Medicine*, 338(3), 171–179.

Epel, E. S., et al. (2004). Accelerated telomere shortening in response to life stress. *PNAS*, 101(49), 17312–17315.

Slavich, G. M., & Cole, S. W. (2013). The emerging field of human social genomics. *Clinical Psychological Science*, 1(3), 331–348.

Sapolsky, R. M. (2004). *Why Zebras Don't Get Ulcers*. Holt Paperbacks.

Lupien, S. J., McEwen, B. S., Gunnar, M. R., & Heim, C. (2009). Effects of stress throughout the lifespan on the brain, behavior and cognition. *Nature Reviews Neuroscience*, 10(6), 434–445.

D. Placebo, Meaning, Narrative & Inner Transformation in Healing

Wager, T. D., & Atlas, L. Y. (2015). The neuroscience of placebo effects: Connecting context, learning, and health. *Nature Reviews Neuroscience*, 16(7), 403–418.

Bhasin, M. K., et al. (2013). Relaxation response induces temporally ordered gene expression changes in practitioners and novices. *PLoS ONE*, 8(5), e62817.

Barrett, L. F. (2017). *How Emotions Are Made: The Secret Life of the Brain*. Houghton Mifflin Harcourt.

Benedetti, F. (2014). *Placebo Effects: Understanding the Mechanisms in Health and Disease*. Oxford University Press.

Dispenza, J. (2014). *You Are the Placebo: Making Your Mind Matter*. Hay House.

E. Integrative / Clinical & Narrative Works

Maté, G. (2021). *When the Body Says No: Exploring the Stress–Disease Connection*. Random House Canada.

Byock, I. (2012). *The Best Care Possible: How to Practice Compassionate, Patient-Centered Care*. Avery.

Sontag, S. (1978). *Illness as Metaphor*. Farrar, Straus & Giroux.

Lipton, B. H. (2005). *The Biology of Belief: Unleashing the Power of Consciousness, Matter & Miracles*. Hay House.

Dossey, L. (2013). One Mind: How Our Individual Mind Is Part of a Greater Consciousness. Hay House.

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Sapolsky, R. M. (2004). Why Zebras Don't Get Ulcers. Holt Paperbacks.

Sontag, S. (1978). Illness as Metaphor. Farrar, Straus & Giroux.

Related Documentaries & Media (Alphabetical)

Heal (2017). Directed by Kelly Noonan Gores – mind–body connection and transformative healing.

The Intention Experiment (2009). Directed by Lynne McTaggart – consciousness and health influence.

The Secret Life of the Body (2002). BBC / PBS – psychosomatic and emotional roots of illness.

E-Motion (2014). Directed by Frazer Bailey – emotional release and physical healing.

The Wisdom of Trauma (2021). Directed by Zaya and Maurizio Benazzo – featuring Dr. Gabor Maté.

Chapter 13: Brainwaves – The Symphony of Consciousness

Peer-Reviewed Scientific Studies (Alphabetical, APA Style)

A. Overview of Brainwave States

Niedermeyer, E., & da Silva, F. L. (2004). *Electroencephalography: Basic Principles, Clinical Applications, and Related Fields*. Lippincott Williams & Wilkins.

Başar, E. (1998). *Brain Function and Oscillations: Integrative Brain Function*. Springer.

Klimesch, W. (1999). EEG alpha and theta oscillations reflect cognitive and memory performance: A review and analysis. *Brain Research Reviews*, 29(2–3), 169–195.

Buzsáki, G. (2006). *Rhythms of the Brain*. Oxford University Press.

Laufs, H., et al. (2003). EEG-correlated fMRI of human alpha activity. *NeuroImage*, 19(4), 1463–1476.

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Fries, P. (2005). A mechanism for cognitive dynamics: Neuronal communication through neuronal coherence. *Trends in Cognitive Sciences*, 9(10), 474–480.

Singer, W. (1999). Neuronal synchrony: A versatile code for the definition of relations? *Neuron*, 24(1), 49–65.

Varela, F., Lachaux, J. P., Rodriguez, E., & Martinerie, J. (2001). The brainweb: Phase synchronization and large-scale integration. *Nature Reviews Neuroscience*, 2(4), 229–239.

Bastiaansen, M. C., & Hagoort, P. (2006). Oscillatory neuronal dynamics during language comprehension. *Progress in Brain Research*, 159, 179–196.

Llinás, R., & Ribary, U. (2001). Consciousness and the thalamocortical loop. *International Journal of Psychophysiology*, 42(2), 161–174.

C. Meditation, Breathwork, and Brainwave Modulation

Cahn, B. R., & Polich, J. (2006). Meditation states and traits: EEG, ERP, and neuroimaging studies. *Psychological Bulletin*, 132(2), 180–211.

Lutz, A., Greischar, L. L., Rawlings, N. B., Ricard, M., & Davidson, R. J. (2004). Long-term meditators self-induce high-amplitude gamma synchrony during mental practice. *PNAS*, 101(46), 16369–16373.

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Tang, Y. Y., Hölzel, B. K., & Posner, M. I. (2015). The neuroscience of mindfulness meditation. *Nature Reviews Neuroscience*, 16(4), 213–225.

Jerath, R., Edry, J. W., Barnes, V. A., & Jerath, V. (2006). Physiology of long pranayamic breathing. *Medical Hypotheses*, 67(3), 566–571.

D. Entrainment, Resonance, and Neurofeedback

Lopez-Calderon, J., et al. (2015). The effects of auditory beat stimulation on anxiety, mood, and cognition. *Frontiers in Psychiatry*, 6, 70.

Padmanabhan, R., Hildreth, A. J., & Laws, D. (2005). A prospective, randomized, controlled study examining binaural beat audio and preoperative anxiety. *Anesthesia & Analgesia*, 100(2), 440–444.

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Vernon, D. (2005). Can neurofeedback training enhance performance? An evaluation of the evidence with implications for future research. *Applied Psychophysiology and Biofeedback*, 30(4), 347–364.

Nozaradan, S. (2014). Exploring how musical rhythm entrains brain activity with electroencephalogram frequency-tagging. *Philosophical Transactions of the Royal Society B*, 369(1658), 20130393.

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Dietrich, A. (2004). Neurocognitive mechanisms underlying the experience of flow. *Consciousness and Cognition*, 13(4), 746–761.

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F. Quantum and Biophysical Aspects

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Frohlich, H. (1968). Long-range coherence and energy storage in biological systems. *International Journal of Quantum Chemistry*, 2(5), 641–649.

Popp, F.-A. (1992). Recent advances in biophoton research and its applications. World Scientific.

Van Wijk, R., & van Wijk, E. (2005). An introduction to human biophoton emission. *Forschende Komplementärmedizin*, 12(2), 77–83.

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Newberg, A. B., & Waldman, M. R. (2016). *How Enlightenment Changes Your Brain*. Avery.

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What the Bleep Do We Know!? (2004). Directed by William Arntz – exploring consciousness and quantum brain theory.

Superhuman: The Invisible Made Visible (2020). Directed by Caroline Cory – advanced perception and brain coherence.

Inner Worlds, Outer Worlds (2012). Directed by Daniel Schmidt – sacred geometry, vibration, and consciousness.

The Mind, Explained (2019). Netflix – neuroscience of brain activity, emotion, and focus.

Superpower (2022). Gaia Network – exploring human potential and brainwave entrainment.

Chapter 14: Your Thoughts Are Your Blueprint

Peer-Reviewed Scientific Studies (Alphabetical, APA Style)

A. The Neuroscience of Thought and Perception

Friston, K. (2010). The free-energy principle: A unified brain theory? *Nature Reviews Neuroscience*, 11(2), 127–138.

Barrett, L. F. (2017). *How emotions are made: The secret life of the brain*. Houghton Mifflin Harcourt.

Damasio, A. R. (1994). *Descartes' Error: Emotion, Reason, and the Human Brain*. Putnam.

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Clark, A. (2013). Whatever next? Predictive brains, situated agents, and the future of cognitive science. *Behavioral and Brain Sciences*, 36(3), 181–204.

B. The Psychophysiology of Belief

Benedetti, F. (2014). *Placebo Effects: Understanding the Mechanisms in Health and Disease*. Oxford University Press.

Wager, T. D., & Atlas, L. Y. (2015). The neuroscience of placebo effects: Connecting context, learning, and health. *Nature Reviews Neuroscience*, 16(7), 403–418.

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Dispenza, J. (2014). *You Are the Placebo: Making Your Mind Matter*. Hay House.

Bhasin, M. K., et al. (2013). Relaxation response induces temporally ordered gene expression changes in practitioners and novices. *PLoS ONE*, 8(5), e62817.

C. The Quantum Mind and Observer Effect

Hameroff, S., & Penrose, R. (2014). Consciousness in the universe: A review of the 'Orch OR' theory. *Physics of Life Reviews*, 11(1), 39–78.

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Chopra, D., & Kafatos, M. (2017). *You Are the Universe: Discovering Your Cosmic Self and Why It Matters*. Harmony Books.

D. Thought, Emotion, and DNA Expression

Kaliman, P., et al. (2014). Rapid changes in histone deacetylase genes and inflammatory pathways after mindfulness practice. *Psychoneuroendocrinology*, 40, 96–107.

Lipton, B. H. (2005). *The Biology of Belief: Unleashing the Power of Consciousness, Matter & Miracles*. Hay House.

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Cole, S. W. (2013). Social regulation of human gene expression. *Genome Biology*, 14(9), 120.

Garland, E. L., et al. (2015). Mindfulness training alters cortical representations of interoceptive attention. *Social Cognitive and Affective Neuroscience*, 10(1), 55–66.

E. Creating Your Reality: Neuroplasticity and Intention

Doidge, N. (2007). *The Brain That Changes Itself*. Penguin Books.

Lazar, S. W., et al. (2005). Meditation experience is associated with increased cortical thickness. *NeuroReport*, 16(17), 1893–1897.

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F. Integrative and Spiritual Perspectives

Braden, G. (2007). *The Divine Matrix: Bridging Time, Space, Miracles, and Belief*. Hay House.

Sheldrake, R. (2012). *Science Set Free: 10 Paths to New Discovery*. Deepak Chopra Books.

McTaggart, L. (2007). *The Intention Experiment: Using Your Thoughts to Change Your Life and the World*. HarperCollins.

Tiller, W. A. (2004). Towards a quantitative model of both the physical and subtle domains of reality. *Subtle Energies & Energy Medicine*, 15(3), 225–243.

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What the Bleep Do We Know!? (2004). Directed by William Arntz – exploring quantum consciousness and thought-creation reality.

The Living Matrix (2009). Directed by Greg Becker – mind, energy, and the field connection.

Heal (2017). Directed by Kelly Noonan Gores – mind–body coherence and belief-based healing.

E-Motion (2014). Directed by Frazer Bailey – emotional frequency and subconscious transformation.

The Power of the Heart (2014). Directed by Drew Heriot – intention, emotion, and creative energy.

Chapter 15: Nervous System Regulation – The Master Key to Healing and Expansion

Peer-Reviewed Scientific Studies (Alphabetical, APA Style)

A. Foundations of Autonomic Regulation

Berntson, G. G., Cacioppo, J. T., & Quigley, K. S. (1993). Respiratory sinus arrhythmia: Autonomic origins, physiological mechanisms, and psychophysiological implications. *Psychophysiology*, 30(2), 183–196.

Goldberger, A. L., Peng, C.-K., & Lipsitz, L. A. (2002). What is physiologic complexity and how does it change with aging and disease? *Neurobiology of Aging*, 23(1), 23–26.

McEwen, B. S. (1998). Protective and damaging effects of stress mediators. *New England Journal of Medicine*, 338(3), 171–179.

Sterling, P. (2012). Allostasis: A model of predictive regulation. *Physiology & Behavior*, 106(1), 5–15.

Thayer, J. F., & Lane, R. D. (2000). A model of neurovisceral integration in emotion regulation and dysregulation. *Journal of Affective Disorders*, 61(3), 201–216.

B. Polyvagal Theory and Social Engagement

Porges, S. W. (2011). *The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment, Communication, and Self-Regulation*. Norton.

Porges, S. W. (2007). The polyvagal perspective. *Biological Psychology*, 74(2), 116–143.

Kemp, A. H., & Quintana, D. S. (2013). The relationship between mental and physical health: Insights from the study of heart rate variability. *International Journal of Psychophysiology*, 89(3), 288–296.

Feldman, R. (2012). Parent–infant synchrony: A bio-behavioral model. *Current Directions in Psychological Science*, 21(3), 160–165.

Smith, K. E., & Pollak, S. D. (2020). Early adversity and the development of emotion regulation: A neurobiology perspective. *Annual Review of Developmental Psychology*, 2, 381–405.

C. Breathwork, HRV, and Self-Regulation

Lehrer, P. M., & Gevirtz, R. (2014). Heart rate variability biofeedback: How and why does it work? *Frontiers in Psychology*, 5, 756.

Brown, R. P., & Gerbarg, P. L. (2005). Sudarshan Kriya yogic breathing in the treatment of stress, anxiety, and depression. *Journal of Alternative and Complementary Medicine*, 11(1), 189–201.

Jerath, R., Edry, J. W., Barnes, V. A., & Jerath, V. (2006). Physiology of long pranayamic breathing: Neural respiratory elements and autonomic shift. *Medical Hypotheses*, 67(3), 566–571.

Laborde, S., Mosley, E., & Thayer, J. F. (2017). Heart rate variability and cardiac vagal tone in psychophysiological research. *Frontiers in Psychology*, 8, 213.

Zaccaro, A., et al. (2018). How breath-control can change your life: A systematic review on psychophysiological mechanisms of slow breathing. *Frontiers in Human Neuroscience*, 12, 353.

D. Trauma, Resilience, and Somatic Healing

Van der Kolk, B. A. (2014). *The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma*. Viking.

Levine, P. A. (1997). *Waking the Tiger: Healing Trauma*. North Atlantic Books.

Ogden, P., Minton, K., & Pain, C. (2006). *Trauma and the Body: A Sensorimotor Approach to Psychotherapy*. Norton.

Shapiro, F. (2001). *Eye Movement Desensitization and Reprocessing (EMDR): Basic Principles, Protocols, and Procedures*. Guilford Press.

Payne, P., Levine, P. A., & Crane-Godreau, M. A. (2015). Somatic experiencing: Using interoception and proprioception as core elements of trauma therapy. *Frontiers in Psychology*, 6, 93.

E. Stress, Inflammation, and Mind–Body Pathways

Slavich, G. M., & Irwin, M. R. (2014). From stress to inflammation and major depressive disorder: A social signal transduction theory of depression. *Psychological Bulletin*, 140(3), 774–815.

Epel, E. S., et al. (2004). Accelerated telomere shortening in response to life stress. *PNAS*, 101(49), 17312–17315.

Black, D. S., & Slavich, G. M. (2016). Mindfulness meditation and the immune system: A systematic review of randomized controlled trials. *Annals of the New York Academy of Sciences*, 1373(1), 13–24.

Kiecolt-Glaser, J. K., et al. (2010). Chronic stress and age-related increases in interleukin-6. *PNAS*, 107(33), 13850–13854.

Cole, S. W. (2013). Social regulation of human gene expression. *Genome Biology*, 14(9), 120.

F. Integration: Regulation, Consciousness, and Flow

Csikszentmihalyi, M. (1990). *Flow: The Psychology of Optimal Experience*. Harper & Row.

Tang, Y. Y., Hölzel, B. K., & Posner, M. I. (2015). The neuroscience of mindfulness meditation. *Nature Reviews Neuroscience*, 16(4), 213–225.

McCraty, R., & Zayas, M. A. (2014). Cardiac coherence, self-regulation, autonomic stability, and psychosocial well-being. *Frontiers in Psychology*, 5, 1090.

Siegel, D. J. (2007). *The Mindful Brain: Reflection and Attunement in the Cultivation of Well-Being*. Norton.

Dispenza, J. (2017). *Becoming Supernatural: How Common People Are Doing the Uncommon*. Hay House.

Books (Alphabetical)

Brown, R. P., & Gerbarg, P. L. (2012). *The Healing Power of the Breath*. Shambhala.

Dispenza, J. (2017). *Becoming Supernatural*. Hay House.

Kabat-Zinn, J. (1994). *Wherever You Go, There You Are*. Hyperion.

McEwen, B. S. (2002). *The End of Stress as We Know It*. Joseph Henry Press.

Nestor, J. (2020). *Breath: The New Science of a Lost Art*. Riverhead Books.

Porges, S. W. (2017). *The Pocket Guide to the Polyvagal Theory*. Norton.

Siegel, D. J. (2012). *The Developing Mind* (2nd ed.). Guilford Press.

Van der Kolk, B. A. (2014). *The Body Keeps the Score*. Viking.

Related Documentaries & Media (Alphabetical)

Resilience: The Biology of Stress & the Science of Hope (2016). KPJR Films – ACEs and stress biology.

Heal (2017). Directed by Kelly Noonan Gores – mind–body, coherence, and self-healing.

The Mind, Explained – Anxiety & Mindfulness (2019). Netflix – autonomic regulation and attention.

Stutz (2022). Netflix – practical emotional regulation tools and behavior change.

The Wisdom of Trauma (2021). Science and story of trauma and healing - featuring Gabor Maté.

Chapter 16: Breath Is Your Power

Peer-Reviewed Scientific Studies (Alphabetical, APA Style)

A. The Physiology of Breath

Jerath, R., Edry, J. W., Barnes, V. A., & Jerath, V. (2006). Physiology of long pranayamic breathing: Neural respiratory elements may provide a mechanism that explains how slow deep breathing shifts the autonomic nervous system. *Medical Hypotheses*, 67(3), 566–571.

Courtney, R. (2009). The functions of breathing and its dysfunctions and their relationship to breathing therapy. *International Journal of Osteopathic Medicine*, 12(3), 78–85.

Nestor, J. (2020). *Breath: The New Science of a Lost Art*. Riverhead Books.

Gilbert, C. (2003). Clinical applications of breathing regulation. *Behavior Modification*, 27(5), 692–709.

Russo, M. A., Santarelli, D. M., & O'Rourke, D. (2017). The physiological effects of slow breathing in the healthy human. *Breathe*, 13(4), 298–309.

B. Breath and the Nervous System

Lehrer, P. M., & Gevirtz, R. (2014). Heart rate variability biofeedback: How and why does it work? *Frontiers in Psychology*, 5, 756.

Zaccaro, A., et al. (2018). How breath-control can change your life: A systematic review on psychophysiological correlates of slow breathing. *Frontiers in Human Neuroscience*, 12, 353.

Brown, R. P., & Gerbarg, P. L. (2005). Sudarshan Kriya yogic breathing in the treatment of stress, anxiety, and depression. *Journal of Alternative and Complementary Medicine*, 11(1), 189–201.

Streeter, C. C., Gerbarg, P. L., Saper, R. B., Ciraulo, D. A., & Brown, R. P. (2012). Effects of yoga on the autonomic nervous system, gamma-aminobutyric-acid, and allostasis in epilepsy, depression, and post-traumatic stress disorder. *Medical Hypotheses*, 78(5), 571–579.

Jerath, R., Beveridge, C., & Barnes, V. A. (2019). Self-regulation of breathing as an adjunctive treatment of insomnia. *Frontiers in Psychiatry*, 10, 541.

C. Breathwork and States of Consciousness

Grof, S., & Grof, C. (2010). *Holotropic Breathwork: A New Approach to Self-Exploration and Therapy*. SUNY Press.

Telles, S., & Singh, N. (2013). Science of the mind–body connection: Exploring yoga and pranayama. *International Journal of Yoga*, 6(1), 4–10.

Zaccaro, A., Piarulli, A., Laurino, M., Garbella, E., Menicucci, D., Neri, B., & Gemignani, A. (2018). How breath-control can change your life: A systematic review on psychophysiological correlates of slow breathing. *Frontiers in Human Neuroscience*, 12, 353.

Grof, S. (2008). *The Ultimate Journey: Consciousness and the Mystery of Death*. MAPS.

Streeter, C. C., Whitfield, T. H., Owen, L., Rein, T., Karri, S. K., Yakhkind, A., & Jensen, J. E. (2010). Effects of yoga versus walking on mood, anxiety, and brain GABA levels. *Journal of Alternative and Complementary Medicine*, 16(11), 1145–1152.

D. Stress, Health, and Longevity

Epel, E. S., et al. (2009). Can meditation slow rate of cellular aging? Cognitive stress, mindfulness, and telomeres. *Annals of the New York Academy of Sciences*, 1172(1), 34–53.

McEwen, B. S. (2007). Physiology and neurobiology of stress and adaptation: Central role of the brain. *Physiological Reviews*, 87(3), 873–904.

Black, D. S., & Slavich, G. M. (2016). Mindfulness meditation and the immune system: A systematic review. *Annals of the New York Academy of Sciences*, 1373(1), 13–24.

Paul, G., Elam, B., & Verhulst, S. J. (2007). A longitudinal study of yoga, self-regulation, and well-being in a health professions school. *BMC Complementary and Alternative Medicine*, 7(1), 37.

Brown, R. P., & Gerbarg, P. L. (2012). *The Healing Power of the Breath*. Shambhala.

E. Energetics and Frequency of Breath

McCraty, R., Atkinson, M., & Tomasino, D. (2009). Coherent heart–brain interactions: A foundation of personal, social, and global coherence. *Integral Review*, 5(2), 10–115.

Tiller, W. A. (1997). *Science and Human Transformation: Subtle Energies, Intentionality, and Consciousness*. Pavior Publishing.

Rubik, B. (2002). The biofield hypothesis: Its biophysical basis and role in medicine. *Journal of Alternative and Complementary Medicine*, 8(6), 703–717.

Muehsam, D., & Ventura, C. (2014). Life rhythm as a symphony of oscillatory patterns: Electromagnetic energy and sound vibration modulate gene expression. *Frontiers in Psychology*, 5, 784.

McCraty, R., & Zayas, M. A. (2014). Cardiac coherence, self-regulation, autonomic stability, and psychosocial well-being. *Frontiers in Psychology*, 5, 1090.

F. Spiritual and Integrative Perspectives

Taimni, I. K. (1961). *The Science of Yoga*. The Theosophical Publishing House.

Sivananda, S. (2001). *The Science of Pranayama*. Divine Life Society.

Chopra, D. (1994). *Quantum Healing: Exploring the Frontiers of Mind/Body Medicine*. Bantam.

Dispenza, J. (2017). *Becoming Supernatural*. Hay House.

Braden, G. (2007). *The Divine Matrix*. Hay House.

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Brown, R. P., & Gerbarg, P. L. (2012). *The Healing Power of the Breath*. Shambhala.

Chopra, D. (1994). *Quantum Healing*. Bantam.

Dispenza, J. (2017). *Becoming Supernatural*. Hay House.

Grof, S., & Grof, C. (2010). *Holotropic Breathwork*. SUNY Press.

Nestor, J. (2020). *Breath: The New Science of a Lost Art*. Riverhead Books.

Porges, S. W. (2017). *The Pocket Guide to the Polyvagal Theory*. Norton.

Sivananda, S. (2001). *The Science of Pranayama*. Divine Life Society.

Taimni, I. K. (1961). *The Science of Yoga*. The Theosophical Publishing House.

Related Documentaries & Media (Alphabetical)

Heal (2017). Directed by Kelly Noonan Gores – the power of breath, mind, and emotion in healing.

The Breath of Life (2015). Documentary on breathwork, physiology, and consciousness.

DMT: The Spirit Molecule (2010). Directed by Mitch Schultz – altered states and inner awareness.

Superhuman: The Invisible Made Visible (2020). Directed by Caroline Cory – frequency, coherence, and consciousness.

Inner Worlds, Outer Worlds (2012). Directed by Daniel Schmidt – breath, vibration, and the universal field.

Chapter 17: All About Breathwork – The Art and Science of Transformation.

Peer-Reviewed Scientific Studies (Alphabetical, APA Style)

A. Foundations of Breathwork

Jerath, R., Edry, J. W., Barnes, V. A., & Jerath, V. (2006). Physiology of long pranayamic breathing: Neural respiratory elements and autonomic shift. *Medical Hypotheses*, 67(3), 566–571.

Telles, S., & Singh, N. (2013). Science of the mind–body connection: Exploring yoga and pranayama. *International Journal of Yoga*, 6(1), 4–10.

Brown, R. P., & Gerbarg, P. L. (2005). Sudarshan Kriya yogic breathing in the treatment of stress, anxiety, and depression. *Journal of Alternative and Complementary Medicine*, 11(1), 189–201.

Courtney, R. (2009). The functions of breathing and its dysfunctions and their relationship to breathing therapy. *International Journal of Osteopathic Medicine*, 12(3), 78–85.

Russo, M. A., Santarelli, D. M., & O'Rourke, D. (2017). The physiological effects of slow breathing in the healthy human. *Breathe*, 13(4), 298–309.

B. Breathwork Modalities and Mechanisms

Grof, S., & Grof, C. (2010). *Holotropic Breathwork: A New Approach to Self-Exploration and Therapy*. SUNY Press.

Streeter, C. C., Gerbarg, P. L., Saper, R. B., Ciraulo, D. A., & Brown, R. P. (2012). Effects of yoga on the autonomic nervous system, GABA, and allostasis in depression and PTSD. *Medical Hypotheses*, 78(5), 571–579.

Zaccaro, A., et al. (2018). How breath-control can change your life: A systematic review on psychophysiological mechanisms of slow breathing. *Frontiers in Human Neuroscience*, 12, 353.

Philippot, P., Chapelle, G., & Blairy, S. (2002). Respiratory feedback in the generation of emotion. *Cognition and Emotion*, 16(5), 605–627.

Bourne, E. J. (2011). *The Anxiety and Phobia Workbook* (5th ed.). New Harbinger Publications.

C. Neurophysiology and Brain States

Cahn, B. R., & Polich, J. (2006). Meditation states and traits: EEG, ERP, and neuroimaging studies. *Psychological Bulletin*, 132(2), 180–211.

Lutz, A., Greischar, L. L., Rawlings, N. B., Ricard, M., & Davidson, R. J. (2004). Long-term meditators self-induce high-amplitude gamma synchrony during mental practice. *PNAS*, 101(46), 16369–16373.

Jerath, R., Beveridge, C., & Barnes, V. A. (2019). Self-regulation of breathing as an adjunctive treatment of insomnia. *Frontiers in Psychiatry*, 10, 541.

Tang, Y. Y., Hölzel, B. K., & Posner, M. I. (2015). The neuroscience of mindfulness meditation. *Nature Reviews Neuroscience*, 16(4), 213–225.

Nestor, J. (2020). *Breath: The New Science of a Lost Art*. Riverhead Books.

D. Breathwork and Trauma Release

Van der Kolk, B. A. (2014). *The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma*. Viking.

Levine, P. A. (1997). *Waking the Tiger: Healing Trauma*. North Atlantic Books.

Ogden, P., Minton, K., & Pain, C. (2006). *Trauma and the Body: A Sensorimotor Approach to Psychotherapy*. Norton.

Payne, P., Levine, P. A., & Crane-Godreau, M. A. (2015). Somatic experiencing: Using interoception and proprioception as core elements of trauma therapy. *Frontiers in Psychology*, 6, 93.

Porges, S. W. (2011). *The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment, Communication, and Self-Regulation*. Norton.

E. Breathwork, Energy, and Consciousness

Grof, S. (2008). *The Ultimate Journey: Consciousness and the Mystery of Death*. MAPS.

Tiller, W. A. (1997). *Science and Human Transformation: Subtle Energies, Intentionality, and Consciousness*. Pavior Publishing.

Rubik, B. (2002). The biofield hypothesis: Its biophysical basis and role in medicine. *Journal of Alternative and Complementary Medicine*, 8(6), 703–717.

McCraty, R., Atkinson, M., & Tomasino, D. (2009). Coherent heart–brain interactions: A foundation of personal, social, and global coherence. *Integral Review*, 5(2), 10–115.

Dispenza, J. (2017). *Becoming Supernatural*. Hay House.

F. Clinical Applications and Health Benefits

Lehrer, P. M., & Gevirtz, R. (2014). Heart rate variability biofeedback: How and why does it work? *Frontiers in Psychology*, 5, 756.

Paul, G., Elam, B., & Verhulst, S. J. (2007). A longitudinal study of yoga, self-regulation, and well-being in a health professions school. *BMC Complementary and Alternative Medicine*, 7, 37.

Epel, E. S., et al. (2009). Can meditation slow rate of cellular aging? *Annals of the New York Academy of Sciences*, 1172(1), 34–53.

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Black, D. S., & Slavich, G. M. (2016). Mindfulness meditation and the immune system: A systematic review. *Annals of the New York Academy of Sciences*, 1373(1), 13–24.

Books (Alphabetical)

Brown, R. P., & Gerbarg, P. L. (2012). *The Healing Power of the Breath*. Shambhala.

Dispenza, J. (2017). *Becoming Supernatural*. Hay House.

Grof, S., & Grof, C. (2010). *Holotropic Breathwork*. SUNY Press.

Levine, P. A. (1997). *Waking the Tiger*. North Atlantic Books.

Nestor, J. (2020). *Breath*. Riverhead Books.

Ogden, P., Minton, K., & Pain, C. (2006). *Trauma and the Body*. Norton.

Porges, S. W. (2017). *The Pocket Guide to the Polyvagal Theory*. Norton.

Tiller, W. A. (1997). *Science and Human Transformation*. Pavior Publishing.

Related Documentaries & Media (Alphabetical)

Heal (2017). Directed by Kelly Noonan Gores – the connection between breath, mind, and self-healing.

The Breath of Life (2015). Documentary on breathwork, physiology, and energy transformation.

DMT: The Spirit Molecule (2010). Directed by Mitch Schultz – consciousness, breath, and inner exploration.

Superhuman: The Invisible Made Visible (2020). Directed by Caroline Cory – breath, energy, and consciousness coherence.

Inner Worlds, Outer Worlds (2012). Directed by Daniel Schmidt – breath, vibration, and universal consciousness.

Chapter 18: Limitless Toolbox

Peer-Reviewed Scientific Studies & Literature (By Tool)

A. Breathwork (slow/diaphragmatic, resonance breathing)

Jerath, R., Edry, J. W., Barnes, V. A., & Jerath, V. (2006). Physiology of long pranayamic breathing. *Medical Hypotheses*, 67(3), 566–571.

Lehrer, P. M., & Gevirtz, R. (2014). Heart rate variability biofeedback. *Frontiers in Psychology*, 5, 756.

Zaccaro, A., et al. (2018). Psychophysiological correlates of slow breathing. *Frontiers in Human Neuroscience*, 12, 353.

B. Meditation & Mindfulness

Tang, Y. Y., Hölzel, B. K., & Posner, M. I. (2015). The neuroscience of mindfulness meditation. *Nature Reviews Neuroscience*, 16(4), 213–225.

Hölzel, B. K., et al. (2011). Mindfulness practice and gray matter. *Psychiatry Research: Neuroimaging*, 191(1), 36–43.

Lazar, S. W., et al. (2005). Meditation and cortical thickness. *NeuroReport*, 16(17), 1893–1897.

C. HRV Biofeedback

Lehrer, P. M., et al. (2003). HRV biofeedback increases baroreflex gain and reduces blood pressure. *Psychosomatic Medicine*, 65(5), 796–805.

Lehrer, P. M., & Gevirtz, R. (2014). HRV biofeedback: How and why. *Frontiers in Psychology*, 5, 756.

Laborde, S., Mosley, E., & Thayer, J. F. (2017). HRV and cardiac vagal tone. *Frontiers in Psychology*, 8, 213.

D. Cold Exposure (cold showers, cryo, cold water immersion)

Huttunen, P., Rintamäki, H., & Hirvonen, J. (2004). Effect of regular winter swimming on the thyroid, stress tolerance, and mood. *International Journal of Circumpolar Health*, 63(2), 140–144.

Kox, M., et al. (2014). Voluntary activation of the sympathetic nervous system and attenuation of the innate immune response in humans. *PNAS*, 111(20), 7379–7384.

Tipton, M. J., Collier, N., Massey, H., Corbett, J., & Harper, M. (2017). Cold water immersion: Kill or cure? *Experimental Physiology*, 102(11), 1335–1355.

E. Heat Therapy / Sauna

Laukkanen, T., et al. (2015). Association between sauna bathing and fatal cardiovascular disease. *JAMA Internal Medicine*, 175(4), 542–548.

Laukkanen, J. A., & Laukkanen, T. (2018). Sauna bathing and systemic health. *Mayo Clinic Proceedings*, 93(8), 1111–1121.

Hussain, J. N., Greaves, R. F., & Cohen, M. M. (2019). A hot topic: Health benefits of sauna. *Evidence-Based Complementary and Alternative Medicine*, 2019, 1–30.

F. Photobiomodulation / Sunlight

Hamblin, M. R. (2016). Shining light on the head: Photobiomodulation for brain disorders. *BBA Clinical*, 6, 113–124.

Salehpour, F., et al. (2018). Transcranial photobiomodulation: A systematic review. *Photobiomodulation, Photomedicine, and Laser Surgery*, 36(5), 215–229.

Rojas, J. C., & Gonzalez-Lima, F. (2013). Low-level light therapy of the eye and brain. *Eye and Brain*, 5, 49–67.

G. Grounding / Earthing

Chevalier, G., Sinatra, S. T., & Oschman, J. L. (2012). Earthing: Health implications of reconnecting to Earth's electrons. *Journal of Environmental and Public Health*, 2012, 291541.

Chevalier, G., et al. (2013). Grounding reduces blood viscosity. *Journal of Alternative and Complementary Medicine*, 19(2), 102–110.

Menigoz, W., et al. (2019). Include earthing in lifestyle medicine. *Explore*, 15(2), 152–160.

H. Nature Exposure / Forest Bathing

Park, B. J., et al. (2010). Physiological effects of forest environments. *Environmental Health and Preventive Medicine*, 15, 18–26.

Song, C., et al. (2016). Physiological and psychological effects of forest and urban environments: A meta-analysis. *International Journal of Environmental Research and Public Health*, 13(7), 731.

Bratman, G. N., et al. (2015). Nature experience reduces rumination. *PNAS*, 112(28), 8567–8572.

I. Exercise (aerobic/HIIT/resistance)

Erickson, K. I., et al. (2011). Exercise training increases hippocampal size and memory. *PNAS*, 108(7), 3017–3022.

Hillman, C. H., Erickson, K. I., & Kramer, A. F. (2008). Be smart, exercise your heart. *Nature Reviews Neuroscience*, 9(1), 58–65.

Gillen, J. B., & Gibala, M. J. (2014). Is high-intensity interval training a time-efficient exercise strategy? *Current Sports Medicine Reports*, 13(6), 419–425.

J. Yoga (movement + breath + attention)

Pascoe, M. C., et al. (2017). Yoga, stress, and mood: A meta-analysis. *PLoS ONE*, 12(4), e0173869.

Streeter, C. C., et al. (2010). Yoga increases GABA levels vs. walking. *Journal of Alternative and Complementary Medicine*, 16(11), 1145–1152.

Cramer, H., et al. (2013). Yoga for anxiety: A meta-analysis. *Depression and Anxiety*, 30(11), 1068–1080.

K. Qigong / Tai Chi

Jahnke, R., Larkey, L., Rogers, C., Etnier, J., & Lin, F. (2010). A comprehensive review of Qigong and Tai Chi health outcomes. *American Journal of Health Promotion*, 24(6), e1–e25.

Wang, C., et al. (2010). Tai Chi on psychological well-being: Systematic review and meta-analysis. *BMC Complementary and Alternative Medicine*, 10, 23.

Liu, X., et al. (2019). Tai Chi for chronic disease management. *Medicine*, 98(3), e14154.

L. Sleep Optimization

Walker, M. P. (2017). *Why We Sleep*. Scribner.

Krause, A. J., et al. (2017). The sleep-deprived human brain. *Nature Reviews Neuroscience*, 18(7), 404–418.

Spiegel, K., et al. (2002). Sleep deprivation and immune function. *JAMA*, 288(12), 1471–1472.

M. Intermittent Fasting / Time-Restricted Eating

de Cabo, R., & Mattson, M. P. (2019). Intermittent fasting and health. *New England Journal of Medicine*, 381(26), 2541–2551.

Sutton, E. F., et al. (2018). Early time-restricted feeding improves insulin sensitivity. *Cell Metabolism*, 27(6), 1212–1221.e3.

Longo, V. D., & Mattson, M. P. (2014). Fasting: Molecular mechanisms and clinical applications. *Cell Metabolism*, 19(2), 181–192.

N. Anti-inflammatory / Mediterranean-style Nutrition

Estruch, R., et al. (2013). Primary prevention of CVD with a Mediterranean diet (PREDIMED). *NEJM*, 368(14), 1279–1290.

Calder, P. C. (2018). Very long-chain omega-3 fatty acids and inflammation. *Prostaglandins, Leukotrienes and Essential Fatty Acids*, 138, 1–13.

Jacka, F. N., et al. (2017). Dietary improvement and depression: The SMILES trial. *BMC Medicine*, 15, 23.

O. Gratitude Journaling / Positive Psychology Interventions

Emmons, R. A., & McCullough, M. E. (2003). Counting blessings vs burdens. *Journal of Personality and Social Psychology*, 84(2), 377–389.

Dickens, L. R. (2017). Using gratitude to build resilience: Meta-analysis. *Journal of Positive Psychology*, 12(6), 601–612.

Seligman, M. E. P., et al. (2005). Positive psychology interventions: Initial results. *American Psychologist*, 60(5), 410–421.

P. Visualization / Mental Rehearsal

Driskell, J. E., Copper, C., & Moran, A. (1994). Does mental practice enhance performance? *Journal of Applied Psychology*, 79(4), 481–492.

Moran, A. (2016). *The Psychology of Concentration in Sport Performers* (2nd ed.). Routledge.

Lebon, F., et al. (2010). Motor imagery and corticospinal excitability: A meta-analysis. *Brain Research*, 1317, 18–29.

Q. Clinical Hypnosis

Kirsch, I., Montgomery, G., & Sapirstein, G. (1995). Hypnosis as an adjunct to CBT: A meta-analysis. *Journal of Consulting and Clinical Psychology*, 63(2), 214–220.

Montgomery, G. H., et al. (2000). Hypnosis for surgical pain. *Anesthesiology*, 92(4), 1131–1135.

Elkins, G., Barabasz, A., Council, J. R., & Spiegel, D. (2015). Advancing research and practice in hypnosis. *American Psychologist*, 70(7), 632–648.

R. EMDR (Eye Movement Desensitization & Reprocessing)

Chen, Y. R., Hung, K. W., Tsai, J. C., et al. (2014). EMDR for adult PTSD: Meta-analysis. *PLoS ONE*, 9(8), e103676.

Shapiro, F. (2014). The role of EMDR therapy in medicine. *Permanente Journal*, 18(1), 71–77.

Maxfield, L. (2019). Mechanisms in EMDR: A guide. *Journal of EMDR Practice and Research*, 13(1), 1–22.

S. Somatic Experiencing / Body-Based Trauma Work

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X. Mirroring, Mimicry & Interpersonal Synchrony

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Y. Neuro-Linguistic Programming (NLP) & Language-Based Reframing

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Gray, R. M. (2011). NLP Comprehensive: Clinical applications and case studies. Current evidence and critique. [overview]

Z. Sound Frequencies & Vibroacoustic Therapy

Wigram, T. (1996). The effects of vibroacoustic therapy on clinical and non-clinical populations. *Journal of the British Music Therapy*, 10(2), 77–85.

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BB. Camino

Solnit, R. (2000). *Wanderlust: A History of Walking*. Penguin Books.

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CC. Integrative Research and Multimodal Approaches

Khoury, B., Sharma, M., Rush, S. E., & Fournier, C. (2015). Mindfulness-based stress reduction for healthy individuals: A meta-analysis. *Journal of Psychosomatic Research*, 78(6), 519–528.

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Brown, R. P., & Gerbarg, P. L. (2012). *The Healing Power of Breath*. Shambhala.

Buzsáki, G. (2006). *Rhythms of the Brain*. Oxford University Press.

Doidge, N. (2007). *The Brain That Changes Itself*. Penguin.

Grof, S., & Grof, C. (2010). *Holotropic Breathwork*. SUNY Press.

Hamblin, M. R. (2019). *Photobiomodulation in the Brain*. Elsevier.

Laukkanen, J. (2018). *The Sauna Effect*. (Clinical/epidemiological overviews).

Nestor, J. (2020). *Breath*. Riverhead Books.

Sapolsky, R. M. (2004). *Why Zebras Don't Get Ulcers*. Holt.

Siegel, D. J. (2012). *The Developing Mind* (2nd ed.). Guilford Press.

Related Documentaries & Media (Alphabetical)

Heal (2017) – mind–body healing and coherence.

The Breath of Life (2015) – breathwork and physiology.

Stutz (2022) – tools for regulation and change.

Down to Earth with Zac Efron (2020–) – nature, sauna/cold, grounding.

The Mind, Explained (2019) – meditation, mindfulness, and stress.

Chapter 19: Psychedelics, Unlocking the Inner Pharmacy

Peer-Reviewed Scientific Studies & Literature

A. Neurobiology and Mechanisms of Action, Mapping the brain's entropic and integrative states under psychedelics

Carhart-Harris, R. L., & Friston, K. J. (2019). REBUS and the anarchic brain: Toward a unified model of the brain action of psychedelics. *Pharmacological Reviews*, 71(3), 316–344.

Nichols, D. E. (2016). Psychedelics. *Pharmacological Reviews*, 68(2), 264–355.

Vollenweider, F. X., & Kometer, M. (2010). The neurobiology of psychedelic drugs: Implications for the treatment of mood disorders. *Nature Reviews Neuroscience*, 11(9), 642–651.

Carhart-Harris, R. L., et al. (2016). Neural correlates of the LSD experience revealed by multimodal neuroimaging. *Proceedings of the National Academy of Sciences*, 113(17), 4853–4858.

Preller, K. H., & Vollenweider, F. X. (2018). Phenomenology, structure, and dynamic of psychedelic states: Evidence from neuroimaging studies. *Current Topics in Behavioral Neurosciences*, 36, 221–256.

Ly, C., et al. (2018). Psychedelics promote structural and functional neural plasticity. *Cell Reports*, 23(11), 3170–3182.

Doss, M. K., et al. (2023). Psilocybin therapy increases cognitive and neural flexibility in major depressive disorder. *Nature Medicine*, 29(1), 93–102.

B. Psychedelic-Assisted Therapy for Mental Health, Restoring emotional balance through guided neuroplasticity

Carhart-Harris, R. L., et al. (2016). Psilocybin with psychological support for treatment-resistant depression: An open-label feasibility study. *The Lancet Psychiatry*, 3(7), 619–627.

Davis, A. K., et al. (2021). Effects of psilocybin-assisted therapy on major depressive disorder: A randomized clinical trial. *JAMA Psychiatry*, 78(5), 481–489.

Goodwin, G. M., et al. (2022). Single-dose psilocybin for a treatment-resistant episode of major depression. *The New England Journal of Medicine*, 387(18), 1637–1648.

Mitchell, J. M., et al. (2021). MDMA-assisted therapy for severe PTSD: A randomized, double-blind, placebo-controlled Phase 3 study. *Nature Medicine*, 27(6), 1025–1033.

Gukasyan, N., et al. (2022). Efficacy and safety of psilocybin-assisted treatment for major depressive disorder: 12-month follow-up. *Journal of Psychopharmacology*, 36(2), 151–158.

Krupitsky, E. M., & Grinenko, A. Y. (1997). Ketamine psychedelic therapy (KPT): A review of the results of ten years of research. *Journal of Psychoactive Drugs*, 29(2), 165–183.

Mash, D. C., et al. (2018). Ibogaine in the treatment of drug dependence: Clinical perspectives. *Progress in Brain Research*, 242, 197–213.

C. Trauma, Addiction, and End-of-Life Anxiety, Healing the roots of suffering through expanded states of awareness

Mithoefer, M. C., et al. (2011). The safety and efficacy of $\pm$ 3,4-methylenedioxymethamphetamine-assisted psychotherapy in subjects with chronic, treatment-resistant posttraumatic stress disorder. *Journal of Psychopharmacology*, 25(4), 439–452.

Johnson, M. W., Garcia-Romeu, A., & Griffiths, R. R. (2014). Long-term follow-up of psilocybin-facilitated smoking cessation. *The American Journal of Drug and Alcohol Abuse*, 40(5), 269–276.

Bogenschutz, M. P., et al. (2015). Psilocybin-assisted treatment for alcohol dependence: A proof-of-concept study. *Journal of Psychopharmacology*, 29(3), 289–299.

Griffiths, R. R., et al. (2016). Psilocybin produces substantial and sustained decreases in depression and anxiety in patients with life-threatening cancer. *Journal of Psychopharmacology*, 30(12), 1181–1197.

Ross, S., et al. (2016). Rapid and sustained symptom reduction following psilocybin treatment for anxiety and depression in patients with life-threatening cancer: A randomized controlled trial. *Journal of Psychopharmacology*, 30(12), 1165–1180.

Palhano-Fontes, F., et al. (2019). Rapid antidepressant effects of the psychedelic ayahuasca in treatment-resistant depression: A randomized placebo-controlled trial. *Psychological Medicine*, 49(4), 655–663.

D. Spirituality, Mystical Experience, and Consciousness, Exploring transcendence and ego dissolution

Griffiths, R. R., Richards, W. A., McCann, U., & Jesse, R. (2006). Psilocybin can occasion mystical-type experiences having substantial and sustained personal meaning and spiritual significance. *Psychopharmacology*, 187(3), 268–283.

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Timmermann, C., et al. (2019). Neural correlates of the DMT experience assessed with multivariate EEG. *Scientific Reports*, 9(1), 16324.

E. Risks, Ethics, and Integration, Ensuring safety, integrity, and post-experience integration

Johnson, M. W., Richards, W. A., & Griffiths, R. R. (2008). Human hallucinogen research: Guidelines for safety. *Journal of Psychopharmacology*, 22(6), 603–620.

Carbonaro, T. M., et al. (2016). Survey study of challenging experiences after ingesting psilocybin mushrooms: Acute and enduring positive and negative consequences. *Journal of Psychopharmacology*, 30(12), 1268–1278.

Nutt, D., King, L. A., & Phillips, L. D. (2010). Drug harms in the UK: A multicriteria decision analysis. *The Lancet*, 376(9752), 1558–1565.

Forsyth, A. L., & Lewis, S. E. (2021). Psychedelic-assisted psychotherapy: Ethical issues and practical guidance. *BJPsych Advances*, 27(6), 362–372.

Phelps, J. (2017). Developing guidelines and competencies for the training of psychedelic therapists. *Journal of Humanistic Psychology*, 57(5), 450–487.

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Grof, S. (2008). *LSD Psychotherapy* (rev. ed.). MAPS.

Hofmann, A. (1980). *LSD: My Problem Child*. McGraw-Hill.

Huxley, A. (1954). *The Doors of Perception*. Harper & Brothers.

McKenna, T. (1992). *Food of the Gods*. Bantam.

Nichols, D. E. (2016). Psychedelics. (Comprehensive review; see *Pharmacological Reviews*).

Pollan, M. (2018). *How to Change Your Mind*. Penguin Press.

Strassman, R. (2001). *DMT: The Spirit Molecule*. Park Street Press.

Metzner, R. (2015). *Allies for Awakening: Guidelines for productive and safe experiences with entheogens*. Regent Press.

Nutt, D., & Carhart-Harris, R. (2021). *Psychedelics as medicine*. Penguin Life.

Walsh, R., & Grob, C. S. (2005). *Higher Wisdom: Eminent Elders Explore the Continuing Impact of Psychedelics*. SUNY Press.

Related Documentaries & Media (Alphabetical)

DMT: The Spirit Molecule (2010). Dir. Mitch Schultz.

Fantastic Fungi (2019). Dir. Louie Schwartzberg.

Have a Good Trip: Adventures in Psychedelics (2020). Netflix.

How to Change Your Mind (2022). Netflix docuseries based on Michael Pollan's book.

Magic Medicine (2018). Dir. Monty Wates – psilocybin for depression trials (Imperial College).

Neurons to Nirvana (2013). Dir. Oliver Hockenhull.

The Way of the Psychonaut (2020). Dir. Susan Hess Logeais – the life and work of Stanislov Grof.

From Shock to Awe (2018). Dir. Luc Côté – veterans healing PTSD with psychedelics.

Chapter 20: The Journey Home

Peer-Reviewed Scientific Studies & Literature

A. Self-Realization and Consciousness Studies, Exploring the return to authentic awareness

Davidson, R. J., & Dahl, C. J. (2018). Outstanding challenges in scientific research on consciousness. *Frontiers in Psychology*, 9, 693.

Tart, C. T. (2009). *States of Consciousness Revisited*. iUniverse.

Newberg, A. B., & Waldman, M. R. (2009). *How God Changes Your Brain*. Ballantine Books.

Beauregard, M. (2011). The spiritual brain: Science and religious experience. *Journal of Consciousness Studies*, 18(9–10), 196–217.

Varela, F. J., Thompson, E., & Rosch, E. (1991). *The Embodied Mind: Cognitive Science and Human Experience*. MIT Press.

Koch, C. (2018). *The Feeling of Life Itself: Why Consciousness Is Widespread but Can't Be Computed*. MIT Press.

B. Mindfulness, Meditation, and Emotional Integration, Reconnecting body, mind, and spirit

Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice*, 10(2), 144–156.

Tang, Y. Y., Hölzel, B. K., & Posner, M. I. (2015). The neuroscience of mindfulness meditation. *Nature Reviews Neuroscience*, 16(4), 213–225.

Goleman, D., & Davidson, R. J. (2017). *Altered Traits: Science Reveals How Meditation Changes Your Mind, Brain, and Body*. Avery.

Lutz, A., Slagter, H. A., Dunne, J. D., & Davidson, R. J. (2008). Attention regulation and monitoring in meditation. *Trends in Cognitive Sciences*, 12(4), 163–169.

Brewer, J. A., et al. (2011). Meditation experience is associated with differences in default mode network activity. *Proceedings of the National Academy of Sciences*, 108(50), 20254–20259.

C. Heart-Brain Coherence and Emotional Regulation, Returning to inner alignment

McCraty, R., & Zayas, M. A. (2014). Cardiac coherence, self-regulation, autonomic stability, and psychosocial well-being. *Frontiers in Psychology*, 5, 1090.

Bradley, R. T., et al. (2010). Emotion self-regulation, psychophysiological coherence, and test anxiety: Results from an experiment using electrophysiological measures. *Applied Psychophysiology and Biofeedback*, 35(4), 261–283.

Tiller, W. A., McCraty, R., & Atkinson, M. (1996). Cardiac coherence: A new, noninvasive measure of autonomic nervous system order. *Alternative Therapies in Health and Medicine*, 2(1), 52–65.

Childre, D., & Martin, H. (1999). *The HeartMath Solution*. HarperCollins.

D. Compassion, Purpose, and Interconnectedness, Expanding from self to collective awakening

Singer, T., & Klimecki, O. M. (2014). Empathy and compassion. *Current Biology*, 24(18), R875–R878.

Gilbert, P. (2019). Explorations into the nature and function of compassion. *Current Opinion in Psychology*, 28, 108–114.

Ricard, M. (2015). *Altruism: The Power of Compassion to Change Yourself and the World*. Little, Brown and Company.

Doty, J. R. (2016). *Into the Magic Shop: A Neurosurgeon's Quest to Discover the Mysteries of the Brain and the Secrets of the Heart*. Avery.

Neff, K. D., & Germer, C. K. (2013). A pilot study and randomized controlled trial of the mindful self-compassion program. *Journal of Clinical Psychology*, 69(1), 28–44.

E. Integration and Wholeness, Embodying the journey of returning home

Jung, C. G. (1959). *The Archetypes and the Collective Unconscious*. Princeton University Press.

Wilber, K. (2000). *Integral Psychology: Consciousness, Spirit, Psychology, Therapy*. Shambhala.

Schwartz, R. C., & Sweezy, M. (2019). Internal Family Systems Therapy (2nd ed.). Guilford Press.

Frankl, V. E. (1959). Man's Search for Meaning. Beacon Press.

Dyer, W. W. (2009). Excuses Begone!: How to Change Lifelong, Self-Defeating Thinking Habits. Hay House.

Books (Alphabetical)

Dispenza, J. (2019). Becoming Supernatural: How Common People Are Doing the Uncommon. Hay House.

Tolle, E. (1999). The Power of Now: A Guide to Spiritual Enlightenment. New World Library.

Wilber, K. (2000). Integral Psychology: Consciousness, Spirit, Psychology, Therapy. Shambhala.

Jung, C. G. (1959). The Archetypes and the Collective Unconscious. Princeton University Press.

Davidson, R. J., & Begley, S. (2012). The Emotional Life of Your Brain. Hudson Street Press.

Neff, K. (2011). Self-Compassion: The Proven Power of Being Kind to Yourself. HarperCollins.

Ricard, M. (2015). Altruism: The Power of Compassion to Change Yourself and the World. Little, Brown and Company.

Related Documentaries & Media (Alphabetical)

The Power of the Heart (2014). Dir. Drew Heriot.

Inner Worlds, Outer Worlds (2012). Dir. Daniel Schmidt.

Heal (2017). Dir. Kelly Noonan Gores.

The Mind, Explained (2019). Netflix.

My Octopus Teacher (2020). Netflix.

Fantastic Fungi (2019). Dir. Louie Schwartzberg.