### **BIODYNAMIC CARDIOVASCULAR THERAPY** AN ADVANCED TRAINING SERIES 2018-2020

#### WITH MICHAEL J. SHEA, PHD

Biodynamic Cardiovascular Therapy (BCVT) is the application of the Long Tide Model of biodynamic craniosacral therapy to the heart and cardiovascular system. This exploration was begun by the founder of Osteopathy, Andrew Taylor Still in the 19<sup>th</sup> century when he said that "the rule of the artery is supreme." Primary Respiration is the defining perceptual process in the whole training. It is a broad category of *generative and creative movement phenomena in and around the body*. The perception of Primary Respiration and dynamic stillness in their various forms awaken the instinct for healing and becoming embodied.

The intention in this training is for the therapist and client to embody the wholeness and compassion of Primary Respiration and dynamic stillness. This will be explored through conscious perception of the heart and vascular system. The focus is on exploring these qualities first in the therapist and then offering them to the client through the therapeutic presence, gentleness and kindness being expressed through his or her hands and being. Primary Respiration represents the health already present in the body flowing through the cardiovascular system and radiating from the heart. In the BCVT approach, students learn how to positively influence the heart-blood-endothelium complex.

Students will learn, understand and gradually sense the cellular metabolism of the client via the cardiovascular system and its relationship with what is called the Fluid Body. Water makes up more than 70% of the blood and the body as a whole. New research indicates that the Fluid Body and its water moves the blood. This involves learning new information on the crucial role of the vascular endothelium (the inner lining of the arteries and veins) in regulating body homeostasis. This includes a new approach to the human body in which the gut is the central regulator of the metabolism. The intention is to provide an antidote to the pandemic of metabolic syndromes on the planet.

The following courses are designed for craniosacral therapists who have graduated from a biodynamic foundation training, studied with other teachers or have a clinical practice in craniosacral therapy. Students *without* prior training in craniosacral therapy but who are licensed manual therapists are welcome and need to be interviewed prior to acceptance in the training.

The purpose of the whole training is:

1. To become embodied by learning new palpation skills and protocols in each class that bridge between the craniosacral system, the Fluid Body and the cardiovascular system. The intention is to help stabilize and improve the cellular metabolism of the contemporary client via Primary Respiration. The gut is the source of metabolic challenges.

- 2. To sense the embryonic forces still at work in the body. Students will learn important new aspects of prenatal development as it relates to the cellular metabolism of the cardiovascular system. This will inform the palpation skills being taught.
- 3. To embody compassion by maintaining awareness of the movement of the heart. Numerous skills will be taught to experience this state especially Primary Respiration as it moves within the heart field to generate safety, healing and embodied compassion. This sensory awareness can be applied in all life situations.

In these classes, students will learn how and when to blend current and previous learning in all forms of craniosacral therapy and manual therapy in general for the most effective treatment for the client. Each year the curriculum of all courses is updated with new research information on the Fluid Body, gut, cardiovascular and nervous systems and its application in clinical practice. Course descriptions are subject to change when taught. Students will be awarded a 300 hour advanced training diploma upon successful completion of the program and homework.

### **CVS 1: HEAD-FACE-HEART IGNITION** July 11-14, 2018

This first course will focus on new research in the embryonic development of the heart and its implications for biodynamic practice. The heart grows around a profound stillness located in its inner tissues. The heart is ignited by growth factors from the face and the movement of the Fluid Body. As the face and brain grow up, the heart grows down within the trunk cavity of the embryo. This links the heart, brain, face and gut together as one unit of function. The following arteries will be taught and palpated biodynamically: *radial, anterior tibial, subclavian, and facial.* In addition, *a new palpation skill called the Heart Fulcrum* will be taught.

Of special interest in this course will be the four types of circulatory systems present in the embryo, fetus and infant. The relationship of the therapist and client is considered an interconnected circulatory system in biodynamic practice. Meditations and cardiovascular explorations will also be taught to bring conscious awareness of the movement of the heart and blood in the therapist's body and then in the client. Research shows that this changes the brain and develops empathy and compassion for the client. Finally, students will learn the basic perceptual process in biodynamic practice called the *cycle of attunement*.

- Introduction to bridging from craniosacral therapy to cardiovascular therapy
- Embody the skills of balancing the head, neck and heart with Primary Respiration
- Explore the fluid fields of cranium
- Deepen an understanding of biodynamic practice being a two-person circulatory system

#### **CVS 2: THE FLUID BODY AND PERIPHERAL ARTERIES** December 5-8, 2018

This second course continues to build the framework of Biodynamic Cardiovascular Therapy. We will continue to focus on exploring the arteries with Primary Respiration and stillness. This allows for deeper stabilization of the autonomic nervous system especially raising vagal tone to heal the heart.

As a general principle of BCVT, exploration of the cardiovascular system is always preceded by biodynamic exploration with the Fluid Body. Students will cultivate the perceptual-touch necessary for sensing the relationship of the Fluid Body to the cardiovascular system. A basic understanding of metabolic syndromes will be presented in relationship to the endothelium of the artery. Palpation will include new research on the critical importance of the endothelium of the artery as it relates to metabolic syndromes.

The following arteries will be taught and palpated biodynamically: *The abdominal aorta, superior thyroid, iliac, femoral, and common carotid arteries.* The principle of practice with the cardiovascular system is to explore the peripheral arteries first before contact with the gut at the center. A specific protocol will be taught to integrate into the practitioner's clinical practice.

- Learn the five markers of metabolic syndromes
- Differentiate baroreceptors of the cardiovascular system
- Learn the importance of vagal tone for heart health
- Refine orientation with the cycle of attunement

# CVS 3: THE MIDLINE OF THE HEART - BRAIN

March 20-23, 2019

This third course will explore the deep development of the central structures of the cardiovascular system especially the midline of the heart-brain connection. Students will learn a new *cerebrovascular circulation protocol*. The cerebrovascular protocol is based on research showing decreased blood flow to the brain following a mild traumatic brain injury which the majority of people have experienced in their life. *Sensing Primary Respiration in the myocardium of the heart will be explored*. These skills are vital in the experience of embodied wholeness as it relates to the metabolism of the central, autonomic and cardiovascular systems.

*The vertebral, transverse facial, and maxillary arteries* will be explored by sensing the developmental anatomy of *the occiput and temporal bones*. The vertebral artery supplies 20% of blood to the brain and the internal carotid arteries supply the remaining 80% of blood to the brain. These arteries are implicated in many types of challenges from headaches to Post Traumatic Stress Disorder (PTSD). Attention on the cardiovascular system and Fluid Body changes brain function especially the way deep emotions are processed.

- Learn to balance the heart-brain connection
- Contact Primary Respiration in the myocardium of the heart
- Practice a new cerebrovascular circulation protocol
- Learn a new protocol for the A-O Joint that includes the vertebral artery

#### **CVS 4: OPHTHALMIC AND INTERNAL CAROTID ARTERIES** July 17-20, 2019

This fourth course will give students new cardiovascular skills for exploration of the deeper arteries of the face and cranium. A new functional approach to balancing the cardiovascular system of the face will be taught differentiating the derivatives of the internal and external carotid arteries. The eyes are of special importance in this course because of their overuse in contemporary society. Specific explorations around the derivatives of *the ophthalmic artery, the supraorbital and supratrochlear arteries will be taught in order to influence the Circle of Willis* and balance cerebrovascular circulation in general. *The internal carotid arteries located in the temporal bones* will be detailed.

The embryology of facial development will be taught. Skills will include exploration of the deeper arterial system in the face and around the cranial base of the temporal bones in order to stabilize and transform the autonomic nervous system, brain and heart connections. Students will deepen their knowledge of the cardiovascular system in the brain specifically the Circle of Willis and how to influence it. Included in this class will be information on the Social Nervous System. Heart Rate Variability will be taught with a specific breathing practice called *coherent breathing*. This stabilizes the autonomic nervous system above and below the diaphragm.

- New exploration for balancing the Circle of Willis
- Learn to blend biodynamic exploration of the temporal bones and internal carotid arteries
- Differentiate the derivatives of the internal and external carotid arteries
- The fluid fields of the face will be integrated with each hand position on the cranium

## **CVS 5: THE GUT MICROBIOME AND UPPER MESENTERIC ARTERIES** December 4-7, 2019

This course will deepen practitioner's cardiovascular skills related to the abdominal arteries. Students will increase their understanding of metabolic syndromes and how they originate in the gut. Distinctions will be made between the heart-brain-gut metabolic pathways through the cardiovascular, immune and endocrine systems. Students will learn important skills to balance this connection via the endothelium of the artery. Included in this class will be contact with *the liver, coeliac trunk, superior mesenteric artery and right colic arteries to balance the intestines*. The embryonic development of the gut tube will be taught. This includes a *specific palpation of the umbilicus*. New research on *the mesentery* as its own organ system will be presented.

This course will introduce students to the gut microbiome and its importance in physical and psychological well-being. The gut microbiome co-regulates many functions in the heart and brain, the metabolic system in general and the immune system in particular. The basic challenges in metabolic syndromes (obesity, dementia, heart disease, auto-immune disorders, diabetes and cancer) are disruptions in the gut microbiome leading to inflammatory conditions in the cardiovascular system. Students will learn how to positively influence the gut microbiome. The work of Robert Lustig MD and the Real Food Movement will be discussed.

- Learn the signaling system of the ANS between the gut and brain
- Learn new bridging skills between the gut body and vascular system
- Learn the importance of the gut microbiome in metabolic syndromes
- Begin to heal the intestines through balance of vascular system

## **CVS 6: SUBDIAPHRAGMATIC VAGUS, LOWER MESENTERIC AND PELVIC ARTERIES** March 25-28, 2020

This class is about the deep vascular structures of the lower abdomen and pelvis. We will further explore the consequences of metabolic syndromes that are now pandemic on our entire planet. Students will learn specific explorations to contact *the inferior mesenteric and left colic arteries, the common, external and, internal iliac arteries, and the femoral artery.* This helps deeper stabilization of the cardiovascular and subdiaphragmatic vagal system in the pelvic viscera.

This class will look at the entire continuity of the subdiaphragmatic Vagus between the viscera, intestines, ovaries and prostate. New research on the autonomic nervous system in the pelvis will be presented. This will include the connection of the Vagus to the sacral outflow of the autonomic nervous system and its palpation. It is called Cannon's Point in the Large Intestine and is important in regulating the autonomic nervous system. A new model of the polyvagal system will be presented in which the gut is the Master Gardner. This will combine:

- 1. Safety: The social nervous system of the face,
- 2. Vulnerability: Heart rate variability (HRV) and vagal tone in the heart,
- 3. Gardening: vagal relationships with the gut microbiome, liver and hepatic portal vein in the gut,
- 4. Pleasure: The vagus in the ovaries and prostate gland.

In this module, learners will:

- Learn the subdiaphragmatic vagal system as a metabolic regulator
- Bridge between the gut body and heart body
- Learn to balance the Fluid Body with the gut cardiovascular system
- Learn to increase blood circulation in the pelvic viscera

## CVS 7: THE METABOLISM OF PREGNANCY: A COMPASSION BASED MODEL June 17-20, 2020

A compassion-based model of pregnancy will be presented in this course. The blood volume in a mother's body almost doubles during pregnancy and will be a focus of sensing Primary Respiration to enhance her well-being and that of her child. This compassion base includes one set of palpation skills that focus on how to support both the hearts of the mother and her baby for birth and long-term positive health outcomes. Students will learn how the fetal heart develops and synchronizes with the mother's heart for optimal health. Sensing Primary Respiration and dynamic stillness within the blood itself during pregnancy and life will be taught as a compassion practice. In addition new information on the metabolism of pregnancy will be presented from the new field of behavioral perinatology.

This course will offer new research regarding prenatal Heart Rate Variability (HRV) and its use as a long term therapeutic marker during pregnancy for the mother, infant and also for the general adult population. HRV is a measure of the flexibility of the autonomic nervous system of the heart. More flexibility means healthier hearts especially during pregnancy. HRV will be taught through a skill called coherent breathing and embodied heart meditations. These explorations will be integrated with Primary Respiration to balance the autonomic nervous system the heart, lungs and brain of moms and their babies during pregnancy.

- Learn to breathe with the fundamental quiescent rhythm of coherent breathing
- Learn a new compassion based model of pregnancy
- Learn new approaches to palpation of vascular tree with Primary Respiration
- New cardiovascular and breathing protocols for pregnant moms

## CVS 8: The Metabolic Heart of a Newborn, Clinical Approaches for Babies in Biodynamic Practice

September 16-19, 2020

This is an advanced seminar on Primary Respiration and stillness. It is the embodiment of Health. The foundation of the therapeutic and healing process will be the Long Tide Model of biodynamic practice as applied to the cardiovascular system. This training will focus on the metabolic changes taking place in a newborn baby's heart and vascular system. The heart of a newborn baby goes through extensive remodeling starting moments after birth. The neonatal time is the most active metabolic period in a human life.

New palpation skills to stabilize the entire cardiovascular system in newborn babies and young children will be taught. This new neonatal-metabolic protocol includes learning the importance of the *valves of the heart, abdominal aorta, the brachial, renal, tibial and femoral arteries*. This protocol is based on balancing the microcirculation of blood in the gut-lungs-brain and the sympathetic nervous system regulating blood perfusion.

Birth from the point of view of new research on the immune system and the infantmaternal microbiome will be discussed. If time permits, specific biodynamic skills will also be taught to help the mother rebalance her body after birth.

- Learn deeper skills to support infants and caregivers with Primary Respiration and stillness.
- Develop a specific metabolic protocol for newborn babies that can be applied to a client of any age.
- Advance your understanding of how the infant gut- heart-brain develops metabolically.
- Learn the importance of the immune system initiating birth and the infantmaternal microbiome in health.