

Transforming Stress into Calm and Confusion into Clarity by Embodying Key Embryological and Neural Pathways

A BODY-MIND CENTERING® APPROACH

with Bonnie Bainbridge Cohen

CLASS INDEX

The following is a list of material Bonnie explored in each class of [Transforming Stress into Calm and Confusion into Clarity by Embodying Key Embryological and Neural Pathways](#).

CLASS 1

- Two-layer embryonic disc: endoderm/frontbody (nourishment) and ectoderm/backbody (protection)
- Development of the mesoderm/middlebody
- Notochord (central organizing unit of the embryo) and its spatial relationship to the rest of the body in form and consciousness
- Form and consciousness of the embryonic disc developing into three dimensions
- Embodying the embryological central axis (notochord) as a place from which to orient to oneself, the rest of the body, and to that which is outside of oneself
- Cell to brain on the same side
- Exploration: Finding the place from which the body consciousness and structures are calibrated – cells on one side of the body inform the brain on the same side
- Exploring cell to brain on the same side through shifting of weight to right and left sides
- Working with cell to brain on the same side of the body in people who have had strokes
- Exploring the embodiment of embryological development as a remembering process
- Perceiving flow through tissues
- Cellular breathing

CLASS 2

- Exploring cell to brain on the same side through shifting of weight to right and left sides
- Development of the mesoderm/middlebody, primitive streak, and notochord (central axis)
- Development of the yolk sac and amniotic cavities (nourishment and protection)
- Development of the extraembryonic mesoderm (outer protection)
- Implantation of the embryonic disc into the uterine wall
- Early embryological development during week 4
- Folding of the embryo through the movement of the heart
- Ectoderm/backbody gives rise to the nervous system and outer layer of skin
- Role of the neural crest cells in the forming of the neural tube (nervous system)
- Development of the neural tube
- Cell to brain on the same side
- Grounding of each bodyhalf and registering midline
- Visualization, somatization, and embodiment
- Awakening cells and tissues to themselves

CLASS 3

- Role of the neural crest cells in the forming of the neural tube (central nervous system)
- Embodying the forming of the neural tube
- Finding the neural crest cells to release holding patterns
- Differentiation of the columns of the intraembryonic mesoderm
- Development of the vertebrae
- Relationship and differentiation of the notochord, neural tube, and vertebrae
- Feeling the weight of the sitz bones (ischial tuberosities) as a stable base for the spine
- Transferring weight through the pubic disk to free the spine
- Differentiating movement of the leg at the hip joint, pelvic bone, and sacrum
- Cell to brain on the same side: sensory and motor
- Brain to cell on the opposite side: sensory and motor
- Exploring midline orientation through shifting weight side to side
- Working cell to brain with people who have had strokes or other neurological issues
- Perineal body and pelvic diaphragm
- Coccygeal body
- Subtle hands-on approach to working with people with issues in the upper and lower limbs
- Location of the neural tube closing in the mature body

CLASS 4

- Letting go of the attachment to problems and difficulties
- Folding of the neural tube and invagination of the yolk sac
- Finding support through embodying the yolk sac and amniotic cavity
- Differentiating the gut tube, notochord, and neural tube through midline orientation
- Bones and movement function of the pelvis
- Pubic disk as the keystone between the pelvic bones to free the spine and legs
- Sacrum as the keystone between the spine and legs
- Exploration of the pubic disk as the keystone between the legs and the sacrum as the keystone between the legs and spine
- Central nervous system – inner organ of perception
- Spine and spinal nerves
- Spinal cord and meninges
- Filum terminale
- Integration of reflexes (innate patterns of movement): exploration of the central nervous system
- Perineal body (origin of the mesoderm) and pelvic diaphragm
- Coccygeal body
- Embryonic alar and basal plates of the spinal cord and brainstem (development of sensory and motor nerves)
- Sensory and motor nerves in the spinal cord and brainstem
- Receiving information through sensory nerves versus through the motor nerves
- Releasing versus collapsing
- Working with people who don't feel safe in their bodies

CLASS 5

- Folding of the neural tube and invagination of the yolk sac
- Development of the bones of the vertebral column
- Base of the occipital bone as the top of the spine – releasing tension in the neck
- Embryonic alar and basal plates of the spinal cord and brainstem (sensory and motor nerves)
- Embryological development of the spinal cord and nerves
- Receiving and processing information through sensory nerves versus motor nerves
- Migration of the mesoderm/middlebody through the primitive streak and creation of the cardiac crescent (primary heart field)
- Rotation of the heart, brain, and diaphragm during the folding of the embryo
- Cardiovascular circulation – approaching the heart and blood vessels as one continuous unit
- Mediastinum and the location of the heart within the thoracic cavity
- Lengthening and folding of the heart tube
- Bowing of the heart and brain
- Embryological connection of the heart and brain
- Hindbrain, midbrain, and forebrain
- Brainstem and the thalamus (sensory relay center)
- Embryological development of the brain
- Folding of the heart and midbrain
- Study showing relationship of profound depression and reversed pathways of the flow of impulses in the brain and how we can apply the material in this course to work with/embody the brain to help de-reverse the impulses
- Understanding how the body developed helps us to gain new information on how to go deeper to help others (and ourselves)
- 3-dimensional folding of the body

CLASS 6

- Development of the bones of the vertebral column, including the base of the occipital bone
- Relationship between the muscles of the tongue and development of the base of the occipital bone (vertebral column)
- Relationship of the tongue, neck, and head
- Rotation of the heart, brain and diaphragm during folding of the embryo (including the heart rotating around the mouth and notochord)
- Lengthening and folding of the heart tube
- Relationship of the folding of the aorta and folding of the brainstem
- Supporting the vessels on the front and back of the heart through the movement of the lungs
- Development and folding of the brain
- Exploring the heart-brain folding relationship with the central axis
- Development of the neural tube (spinal cord) in relation to the somites
- Exploration of the folding and zipping of the neural tube with support of the somites

- Thalamus (sensory relay center), hypothalamus (motor relay center), and epithalamus (pineal gland)
- Breathing into the diagonal of the pituitary gland, mammillary bodies, and pineal gland.
- Patterns of stress in the flow of impulses in the brain
- Embryonic alar and basal plates of the spinal cord and brainstem
- Embryonic alar and basal plates of the forebrain
- Integrating the small amount of basal plate cells with the large majority of alar plate cells in the forebrain to stimulate the pituitary
- Response to a question about the relationship of the midbrain and neurodivergence

CLASS 7

- Extension of the heart through the aorta (limb of the heart)
- Curva of the thoracic diaphragm
- Movement of the xiphoid process in relationship to breath and movement of the coccyx
- Ependymal glial cells primary role in the generation and regeneration of cerebral spinal fluid (CSF)
- Embryological development of the sensory and motor nerves (alar and basal plates)
- Relationship of the embryonic and mature spinal cord
- Exploration of receiving sensory information through the alar plate (sensory nerves)
- Exploration of cell-to-brain and brain-to-cell to feel the connection between the brain and the body on the same side and then brain and the body on the opposite side
- Implications and exploration of blockages of flow between the thalamus (sensory relay center) and hypothalamus (motor relay center)
- Major landmarks of the cerebral cortex
- Breathing into the fissures and sulci of the cerebral cortex
- Accessing the insular cortex through touch and embodiment
- Commissural fibers – bridges between identical structures in the brain
- Cingulate cortex – cortex of the limbic system (involved with emotional processing, memory, and learning)
- Exploration of the flow of information and processing in the cingulate cortex for receiving what is helpful and beneficial
- Development of the ventricles of the brain
- Ventricles of the brain

CLASS 8

- Ependymal glial cells and the development of the central nervous system
- Nerve reversal and stress: taking information in through motor nerves or/motoring out through sensory nerves
- Receiving information through sensory nerves, motoring out through motor nerves
- Major landmarks of the cerebral cortex
- Progression of information coming into the central nervous system, consciousness, and ease
- Commissural fibers and their connections
- Development of the ventricles of the brain

- Exploration of feeling the connection of brain structures in both hemispheres through tapping, weight, and connection to the same side of the body
- Septum pellucidum
- General organization and early development of the telencephalon/modern forebrain
- Following the subcortical nuclei and weight of structures in both hemispheres of the brain
- Rotation of the cerebral hemispheres – developing through movement, developing a strong base from which to respond and integrate
- Developmental movement, development of reflexes, developing intentionality, integration of body halves, and how these support physical, social, and emotional balance and behavior through illustrations of babies engaging in activities