How we perceive our world shapes the way respond to our world and everything and everyone in it. A person's behavior is an outward expression of their neurological integrity. Understanding a person's neuro-expressive behavior will give you a window into the developmental status of their brain.

M. Buerger

Why developing MINDS?!

One in six children in the United States are said to have a neurodevelopmental disorder, one in five are said to have a mental health disorder and approximately one-third of children in the United States are said to have a chronic health disorder. In 2023, the CDC reported that approximately one in thirty-six children in the U.S. is diagnosed with an autism spectrum disorder (ASD), according to 2020 data.

Rather than having to intervene when a child is already struggling, the mission of this program is to prevent disease in the unborn child, promote optimal neurodevelopment in the newborn and create a life of optimal wellbeing for all! This begins prior to conception and should be supported throughout life. However, given the nature of the current health climate, developingMINDS will also address intervention strategies and care plans for the neurodevelopmentally challenged child.

As the result of the COVID-19 pandemic, the consequences of preconception/prenatal stress and infectious loads is altering the developmental trajectory of future generations. In fact, male offspring born to mothers with a positive SARS-CoV-2 polymerase chain reaction test result during pregnancy were more likely to receive a neurodevelopmental diagnosis in the first 12 months after delivery, even after accounting for preterm delivery (JAMA Netw Open. 2023; 6(3)). And, it's not just the infectious loads that are concerns, the global stress related to the pandemic is altering brain development.

The developingMINDS program is hands-down the most comprehensive program to help navigate your understanding, management, and ability to affect the health and well-being of generations to come!

What IS developing MINDS?!

developingMINDS is a program like none-other!

This INCREDIBLE program was born from hundreds of social media tags, e-mails, calls and other ways that doctors from all around the world have reached out to Dr. Buerger for help with various levels of pediatric cases. developingMINDS is a one-of-a-kind *mentoring* and *certification* program in *Childhood and Adolescent Neurodevelopment* that takes 32+ years of Dr. Buerger's clinical experience, research, and teaching and incorporates it into one INCREDIBLE program so that you can have the maximum impACT on future generations!

We **CONNECT** the pieces so you can lead the way for healthy generations! We:

Combine

Optimal

Neurology

Nutrition

Exercises and

Chiropractic

Together!

Pivots & Potholes: Mastering Movement and the MIND!

Movement

Initiating

Neurological

Development and

Social Behavior

After you build confidence in "fueling the tank" and "decompressing the nervous system" so you can deliver life changing chiropractic care by "adjusting into calm instead of chaos" and/or any other management strategies, we will teach you developmental movement patterns needed to integrate primitive reflexes, develop postural reflexes and proper sensory-motor integration, and optimize fine and gross motor development and function. You will also learn the potential health consequences (physical, mental, and emotional) that might present in the future should these movement patterns be "derailed" early in life.

You will have exclusive training and access to our signature "Brain Building and Bonding": Creating Healthy Brains Through Play TM program that focuses on fun movements and games for various age groups designed to optimize neurodevelopment in infants and toddlers- great for practice building! Specific movement directed activities focused on optimal neurodevelopment will be geared toward integration of primitive movement patterns (primitive reflexes).

You will also have exclusive training and access to our *Precision NeuroIntegrative Protocols*™ that focus on primitive reflex integration, postural reflexes development, and our "card catalog" of sensory-motor exercises. Our *MINDS* exercises (including primitive reflexes) are tailored by functional capacity so that you can better serve patients based on their individual functional abilities.

You cannot build a brain or drive the nervous system without fuel in the tank!

Without proper fuel, the brain cannot receive proper input from the body. Nor can it provide optimal physiological function to maintain homeostasis.

Just like trying to drive a car that has an empty gas tank, you won't get too far with a brain/nervous system that does not have the proper fuel to support its metabolic needs. In developing MINDS, we teach practitioners the ins and outs of "fueling the tank" for preconception, prenatal, post-natal and ongoing brain building and functional connectivity.

Decompress to Progress!

Even the simplest input into the brain can blow the fuse of a dysregulated nervous system. Without properly "decompressing" the nervous system prior to adding stimulation such as, primitive reflex work, postural exercises, and sensory-motor exercises, you may jeopardize the development or healing trajectory of a person. In fact, you can cause neurological shut-down to occur! In developingMINDS, we teach critical steps to "first do no harm" and decompress the nervous system in order to progress neurologically. Using a *subluxation first* model, and then looking at the entire NeuroMatrix TM, we guide you through critical thinking skills to understand WHAT to look for, WHERE to start, and WHEN to add a "next step" or alter the course.

Connecting the Connectome!

If you want to foster healthy brain development and function, you must address the gut! It is well understood that the microbiome has direct influence on developmental neuroplasticity (brain development). The microbiome is associated with directing the immune cells of the brain for proper neural pruning of synaptic pathways. If this cross talk between the gut and the brain do not occur,

neurological circuits will be affected, this is so often the case in autism. In developingMINDS, we walk you through specific "gut rehab" protocols and considerations for all ages and stages and all levels of cases.

Tethers, Tension, and Torsion!

Vertebral subluxations, tethered oral tissues (such as tongue ties), and fascial restrictions will all affect proper motor movement patterns. If movement through space is limited, maladaptive in nature, or non-existent, then maturation of brain connections will be limited, maladaptive or non-existent. In developingMINDS, we teach practitioners how to look through the lens of movement to understand the potential neurological connections and how this may affect learning, attention, and behavior.

PANS/PANDAS/Autoimmune Encephalopathy!

Chronic infectious loads in mom can cross the placenta and lead to inflammation of the developing nervous system. These infectious loads are associated with developmental delays, autism, neuropsychiatric disorders and more. Likewise, infectious insults anytime in life can trigger neuropsychiatric syndromes to manifest. In developingMINDS, we mentor you through understanding the multi-dynamics of these cases and how to best manage and support the needs of this population group, including specific neurofunctional programs to help them overcome the insults of these infectious loads.

It's NOT all about MTHFR!

Rule #1, NEVER treat the gene! Rule #2, For EVERY action, there's a reaction! Rule #3, NEVER EVER treat the gene!

The MTHFR gene, and consequences of its mutation, made a splash about two decades ago. But MTHFR is NOT the only gene we have! We also know that genes can have altered expression regardless of a mutation. Any stressors on the system will have the potential to dysregulate gene expression. The "gold" comes into play when you can understand and help manage individual biochemistry and the specific neuronutritional needs of each person.

Every gene requires a "co-pilot" or "assistant" to work effectively, these are various nutritional substrates such as magnesium, iron, zinc, etc., if we have an altered microbiome, insufficient diet, stress, chronic subluxations, etc., our genes will not have the energy to work. In turn, the body will not have sufficient fuel for motor development/control or for sensory modulation- this can be the case in the "low tone" kiddo. In developingMINDS, we teach you how to break down important cycles within methylation so that you can provide the ultimate foundational care for your family, yourself, and your community!

Additional Benefits:

- Private Facebook forum for collaboration and case discussion
- Live interaction with Dr. Buerger during quarterly Grand Rounds and Clinical Case Exercises
- Dr. B at your fingertips to help you navigate difficult cases
- Chiropractic CE's with certain modules while learning this amazing cutting- edge information!

This program is open to: Doctors of Chiropractic, chiropractic students in their second year or higher, chiropractic assistants, Naturopaths, Osteopaths, Occupational Therapists, Developmental Therapists, Physical Therapists, and Nurse Practitioners. (CE's only granted for DC's)

To minimize travel costs and time away from your practice and family, the program is designed as a self-paced on-line curriculum. In addition, there will be quarterly live on-line Grand Rounds classes for applied learning that are invaluable, a private Facebook forum for clinical care conversations and questions and the added caveat of one live intensive module. The live "functional assessment" module is designed to help "pull all the pieces together" as well as ensure that students have a full grasp of the on-line content and have the practical skills to be successful. The live functional assessment class will

allow students to fine tune their skills learned from the on-line curriculum and is one of the most invaluable features about this program. Having the opportunity to learn the material on-line and start to implement it in a practical setting while also having a mentor to guide you through "pot holes" along the way and then meet with Dr. Buerger for an intensive gathering to hone your skills even more and work out any "kinks" is hands down the most optimal learning opportunity!

A final exam will also be required to obtain certification in *Childhood and Adolescent Neurodevelopment*.

Grand Rounds (Applied Learning Class)

Quarterly Grand Rounds classes will be held on the first Tuesday of February, May, August, and November from 11:00 AM – 12:30 PM MT in a "live webinar" classroom setting. There will be one to two "clinal case exercise assignments" that will be given throughout the year that will be discussed during Grand Rounds. These cases are invaluable to help you implement the information in a successful manner. Grand Rounds will also be used to discuss cases, answer questions and/or present any new material or information that may be appropriate. Please note that occasional changes may occur depending on Dr. Buerger's travel and teaching schedule.

Classes will be recorded and available on your personal dashboard for continued listening and learning during your active membership!

*NOTE: Beginning in 2024, Grand Rounds classes will be held on the SECOND Tuesday of the quarterly month (February, May, August, and November) at 9 AM MT.

Program Curriculum

Painting the BIG Picture: Taking a "Red Flag" History and understanding the "Little-Big Things"

Chapter 1: Pediatric Preconception, Prenatal and Birth History

Chapter 2: Pediatric Postnatal History

Chapter 3: Pediatric Infant & Toddler History
Chapter 4: Pediatric Older Child History
Chapter 5: Sensory and Academic Profile
Chapter 6: Preconception/Adult History

Instructor: Dr. Monika Buerger

Module 1: Derailed: The Hijacking of our Children's Neurodevelopment (Part 1)

*NOTE: After completion of both Part 1 & Part 2 (Module 9) of Derailed, 8 hours of CEs are available. A \$75 CE fee does apply.

Chapter 1: Introduction to the Developing Brain

- Developmental Neuroplasticity
- Subluxations Matter & Motor Development
- Brain Building
- What signs/symptoms the Doctor of Chiropractic should be aware of in a clinical setting.

Chapter 2: Behavioral Neuroscience: How mother's stress resilience capacity affects neurodevelopment

- The role maternal stressors play in neurodevelopment and the role chiropractic care can play in minimizing prenatal stress.
- Epigenetic Inheritance: How emotional toxins affect DNA of the offspring
- The neurobiology of disease and the potential physical and mental health consequences that can occur later in life.

Chapter 3: Turning the Tide: Early Intervention Strategies

- Fundamental preconception considerations including diet, lifestyle, environment, mindfulness and chiropractic care.
- Fundamental prenatal considerations including diet, lifestyle, environment, mindfulness and chiropractic care.
- Fundamental chiropractic considerations to help optimize the health and neurodevelopment of the newborn during the first year of life.
- Pediatric "Red flags" to consider in the clinical setting.

Instructor: Dr. Monika Buerger

*Includes associated workshop, "Derailed: The Hijacking of Our Children's Health"

Module 2: Preconception Prep A to Z

Chapter 1: Neuronutrition, Methylation and Interoception

- The Folate Cycle
- The Methionine Cycle
- The Biopterin Cycle
- The Arganine Pathway and Pre-Eclampsia

Chapter 2: Neuronutrition, Mitochondrial Function and Interoception

Chapter 3: Metabolism, Endocrine Function and Interocpetion

- Functional nutrition
- Functional lab testing
- HPA axis
- The "Four Rooms": Gut, Sleep, Blood Sugar/Adrenal & Oxygen

Chapter 4: MOM: Microbiome of Mother and Developmental Neuroplasticity

- Psychosocial considerations
- Nutritional considerations
- Developmental effects of offspring

Chapter 5: Putting it into Play

Considerations & Implementation Strategies for Chapters 1-4

Instructor: Dr. Monika Buerger

Module 3: Conceived

Chapter 1: Prenatal considerations for optimal neurodevelopment

- Neuronutritional considerations
- Psychosocial considerations
- Functional lab testing
- The COVID Generation: How prenatal stress affects the unborn child and HOW we can TURN THE TIDE (special edition course)

Instructor: Dr. Monika Buerger

Chapter 2: Postnatal considerations for optimal neurodevelopment

- Post-partum depression and nutritional considerations and how they affect the neurodevelopment of offspring
- The importance of bonding

Instructor: Dr. Monika Buerger

Module 4: "Parental Presence: Promoting Healthy Development and Attachment Through Mindfulness and Self-Compassion"

Chapter 1: The "WHY" and "HOW" of Mindfulness and Self-Compassion for Parents

- Learn concrete skills for managing stress via mindfulness to thoughts, sensations, and emotions
- Learn self-compassion practices, which are proven to increase adherence to healthy behaviors and lifestyle choices to optimize healthy neurodevelopment in the offspring

Chapter 2: The Role of Parental Mindfulness and Self-Compassion in Facilitating Healthy Development and Attachment

- Create a parenting plan to optimize the well-being of the parent and child
- Bonding and relationship building with baby
- Skills for parents to learn how to optimize developmental attachment and healthy emotional regulation in their children

Chapter 3: Parent Workshop: Mindfulness and Self-Compassion for Parents

Instructor: Bonnie Horsburgh, Licensed Clinical Social Worker and Mindfulness Expert

Module 5: Special Considerations

Chapter 1: The truth about TOT's: Tethered Oral Restrictions

- Potential contributing factors
- Overview of tongue, lip and buccal ties and their implications on neurodevelopment

Chapter 2: Neuronutritional considerations for picky eaters

- The potential WHY behind the picky eater
- Successful family strategies to change eating

Chapter 3: Pre/Post immunization considerations

- Immune support protocols
- Detoxification considerations

Chapter 4: PANDAS/PANS/AE

- Signs, symptoms and the sensory connection
- Potential pathogens
- Management Considerations

Instructor: Dr. Monika Buerger

Module 6: MOB: Microbiome of Baby Chapter 1: Blueprints of the Biome Brain

- Intestinal Development and Neuroimmune Homeostasis
- Neurology of Gut-Brain-Immune Axis

Chapter 2: The Chiropractic-Gut-Immune-Sensory Axis

• Understanding and Communicating the BIG Picture

^{*}Includes a parent/community workshop

Chapter 3: Biome Busters and Builders

- Nutritional Considerations
- Psychosocial Factors and Healthy Vagal Tone
- Antibiotics, the Annihilator
- Considerations for Colic

Chapter 4: Balancing the Biome

- Taking a "Mystery History"
- Specific "gut building" protocols and strains of probiotics for specific brain regions

Instructor: Dr. Monika Buerger

Mid-term Review & Clinical Cases (Modules 1-6)

Dr. Buerger will take you through short (15 min) review segments of Modules 1-6 and help tie pieces together for better understanding, certainty and application!

One clinical case per review module will be given to enhance critical thinking skills.

Module 7: Mastering Vagal Tone and Heart Rate Variability (Formally Module 8)

Chapter 1: Adapt or Die: HRV and its Unique Possibility for Chiropractic

Chapter 2: Hitting the Gas: Using HRV in Practice

Chapter 3: HRV Research in Chiropractic & Developing an HRV Program for YOUR office

Chapter 4: Heart Rate Variability & Neurodevelopment

Instructors: Dr. Amy Haas (Chapters 1-3) & Dr. Monika Buerger (Chapter 4)

Module 8: Neuroscience for the Chiropractor Made Easy

(12 hours on-line CE's available; \$75 CE fee applies)

Chapter 1: Neurobiology of the neuron Chapter 2: Neurobiology of Glial Cells

Chapter 3: Nerve cell membranes and the membrane potential

Chapter 4: The action potential

Chapter 5: The Synapse and Synaptic transmission

Chapter 6: Cortical Anatomy and Intro to Functional systems

Chapter 7: The sensory nervous system, Interoception, Exteroception and the Inner body schema

Chapter 8: Learning, memory and Neural Plasticity

Chapter 9: Pain - The danger warning system

Chapter 10: The Prefrontal Cortex - the conductor of the brain

Chapter 11: The limbic system - the threat detector and seat of our emotions

Chapter 12: The Neurobiology of Stress and Trauma

Instructor: Dr. Heidi Haavik, Neuroscientist, Chiropractor

Module 9: Derailed: The Hijacking of our Children's Neurodevelopment (Part 2)
NOTE: After completing this portion of Derailed (along with Part 1), you are eligible for 8 hrs on-line CE's.

Chapter 1: The Developing Brain

(Chapter 1, Parts 2-5 continued from Module 1)

- An overview of brain development and functional regions of the brain and the potential role chiropractic care can play in proper brain development.
- Brain regions associated with neurodevelopmental disorders and, if affected, how this might be expressed in children.
- What signs/symptoms the Doctor of Chiropractic should be aware of in a clinical setting. Instructor: Dr. Monika Buerger

Module 9a: Neuroeducation, Back to Square One! Note: 4 hours of CEs available in most states. A \$75 CE fee applies.

Chapter 1: It's all Connected!

• This chapter will cover basic neurology and how emotions, behavior and learning are all interconnected. It will give the chiropractor a solid understanding of how to help parents and teachers understand what is necessary and important to foster an optimal learning environment. This hour will also cover how aberrant sensory input from the spine will play a role in information processing necessary for emotional regulation, attention and learning- giving the chiropractor a clear understanding of subluxation neurology.

Chapter 2: What's Important for Learning?!

This chapter will focus on the connection between the cerebellum and prefrontal cortex and the
need for a healthy executive functioning system for optimal academic, social and emotional
learning. It will also cover the most current chiropractic neuroscience and the role that
chiropractic adjustments can play in executive functioning by affecting processing in the
cerebellum and the prefrontal cortex.

Chapter 3: How Emotions Effect Learning

 This chapter will focus on the connection between the limbic system and how emotions effect learning and attention. It will also cover classroom signs and concerns and tools for parents and teachers.

Chpater 4: The Curriculum of the Cerebellum

• This chapter will cover the function of the cerebellum and its critical role in learning and attention. It will also cover practical information on how to affectively learn using the cerebellum and the role that chiropractors can play via the spinal adjustment, specific exercises and nutritional modifications.

Module 10: Perception-Response Disorders ™: Foundational Principles, Sensory-Motor Assessment, Development, Function and Chiropractic Connections

Chapter 1: The Foundations of Perception-Response Mechanism and the Neurobiology of Dis-Ease Chapter 2: The Vestibular System: Evaluation & Precision NeuroIntegration Protocols [™] across all age and stages

Chapter 3: The Proprioceptive System: Evaluation & Precision NeuroIntegration Protocols [™] across all age and stages

Chapter 4: The Visual System: Evaluation & Precision NeuroIntegration Protocols [™] across all age and stages

Chapter 5: The Auditory System: Evaluation & Precision NeuroIntegration Protocols [™] across all age and stages

Chapter 6: The Tactile and Olfactory systems: Evaluation & Precision NeuroIntegration Protocols ™

across all age and stages

Chapter 7: The Neurovisceral System Chapter 8: Brain Circuit Training ™

Chapter 9: Connecting with the Sensory Defensive Child

Instructor: Dr. Monika Buerger

Module 11: Developmental Origins of Health and Disease: The Neurodevelopmental Bases of Psychopathology

Chapter 1: Developmental Windows of Opportunity

- Critical and sensitive periods of affective development
- Neurodevelopment and Fear-extinction: The amygdala and prefrontal connection
- Chiropractic connections

Chapter 2: Frontal Lobe and Executive Functioning

- Understanding the signs/symptoms of Executive Functioning Disorders
- Neuroenhancement of Executive Functioning
- Chiropractic connections
- Specific exercises across all ages and stages

Inst<mark>ructor: Dr. Monika Bue</mark>rger

Module 12: The Developing Years

Chapter 1: The First 1,000 Days

- Critical Windows of Neurodevelopment
- Potholes in development
 - Understanding and identifying typical vs atypical neurodevelopment:
 Cognitive, social, emotional & sensory-motor
 - Chiropractic connections
- Developmental concerns
- Quick screening protocols for developmental milestones
 - o Cognitive, social, emotional & sensory-motor
- Fostering Optimal Neurodevelopment via our CONNECT!
 [™] protocols: Combining Optimal Neurology, Nutrition, Exercise and Chiropractic Together!
- Primitive Reflexes
 - Evaluation and promoting integration in the first year of life

Instructor: Dr. Monika Buerger

Chapter 2: Years 3-5

- Potholes in development
- Motor milestones associated with language development
 - Understanding and identifying typical vs atypical neurodevelopment: Cognitive, social, emotional & sensory-motor
 - Chiropractic connections
- Developmental concerns

- Quick screening protocols for developmental milestones:
 - **o** Cognitive, social, emotional & sensory-motor
- Fostering Optimal Neurodevelopment via our CONNECT! [™] protocols: Combining Optimal Neurology, Nutrition, Exercise and Chiropractic Together!

Instructor: Dr. Monika Buerger

Module 13: Taming the Primitive Brain

Chapter 1: Primitive Reflexes in the Older Child

- Significance of primitive reflexes in the older child
- Evaluation of primitive reflexes in the older child & adult
- Chiropractic connections
- Integration protocols for the older child/adult
- Adaptive protocols for the difficult child and the special needs population

Chapter 2: Postural Reflexes

- Significance and evaluation of postural reflexes
- Chiropractic connections
- Neuroenhancement protocols across all ages and stages

Instructor: Dr. Monika Buerger

Module 14: Technology and the Developing Brain

Chapter 1: The effects of technology on the developing brain

Chapter 2: The effects of EMF's on the developing brain and special populations such as autism and ADHD

Inst<mark>ructor: Dr. Monika Buer</mark>ger

Module 15: Trauma and the Developing Brain

Chapter 1: Whiplash, Concussion and Mild Traumatic Brain Injury

- Associated neuroendocrine disorders
- Associated psychiatric disorders
- Associated learning, attention & mood disorders/Secondary ADHD
- Management and Care Plans

Instructor: Dr. Monika Buerger

Mid-term Review for Modules 10-15

Dr. Buerger will take you through short (15 min) review segments of Modules 10-15 and help tie pieces together for better understanding, certainty and application!

Bonus Modules: (These will be sprinkled throughout the program)

Bonus #1: Communicating NeuroFocused Care and Building a Waiting List Practice

Bonus #2: The impACT Report: Giving a solid Report of Findings that leads to action!

Bonus #3: Implementation strategies for individual office paradigms

Bonus #4: Waiting room and sensory room recommendations

Bonus #5: Developing successful individualized exercise plans for home or in-office

Live Intensive & Functional Assessment (24 hours)

This class will be held approximately every two years. Location and dates TBD.

Putting it all together! Fueling the Tank & Decompressing the System will be intertwined with the Functional Neurological Assessment and NeuroIntegration Exercises:

- Foundations of Neurodevelopment
- Hands-on assessment, integration and implementation of primitive & postural reflexes learned through the on-line curriculum
- Hand on assessment of sensory-motor evaluations
- o Hands-on Precision NeuroIntegration Protocols ™
- Hands-on Brain Circuit Training TM
- Open forum

Instructor: Dr. Monika Buerger

Tuition Investment for Live Intensive: developing MINDS students: \$649 General attendees: 849 Chiropractic CE's: 75

*developingMINDS program structure, curriculum, and pricing subject to change at any given time based on best learning and success practices

