MGI Practitioner Training

MODULE 3

MGI
Maternal Genomics Institute
DNA-BASED MATERNAL CARE

How to Use Maternal Genomics in Your Practice

MGI does not offer a gene report.

MGI offers a maternal physiology report informed by genomics.

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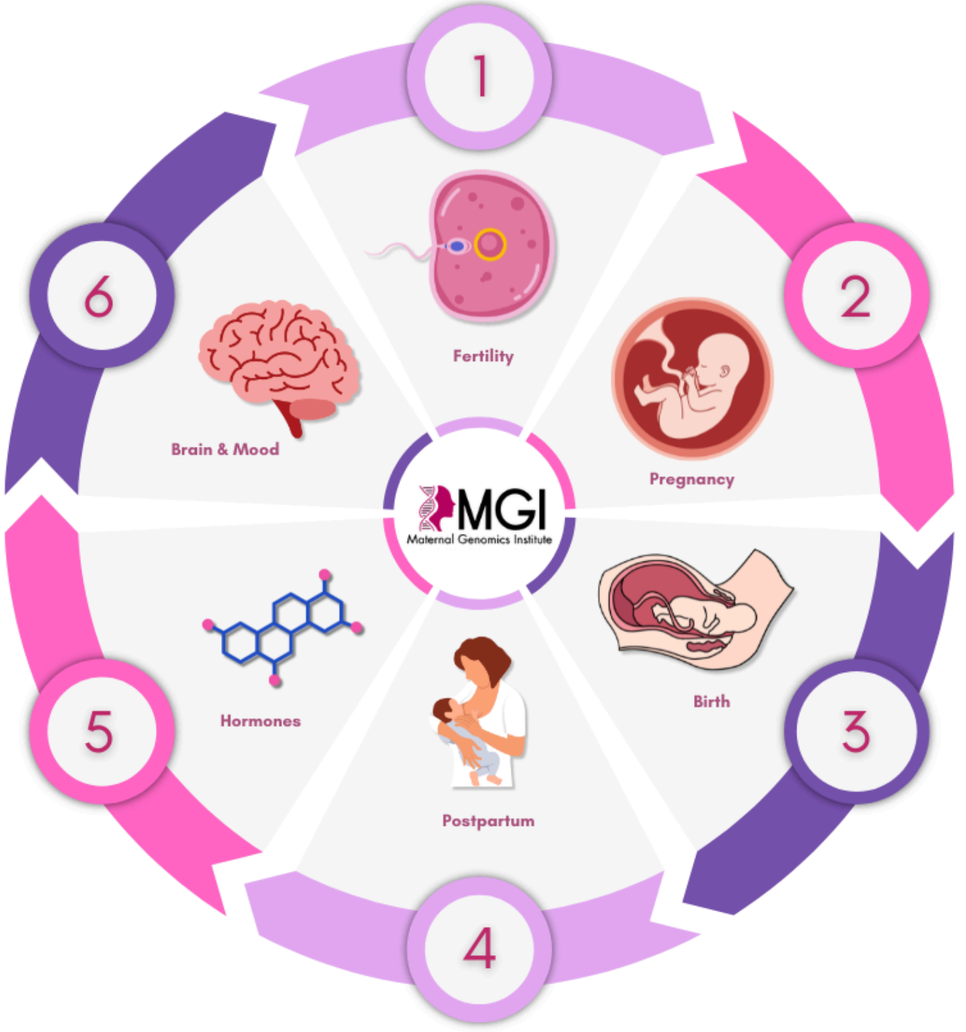
What You'll Learn:

After this module, you will be able to:

- Identify which genomic insights are most relevant to a mother's current needs
- Translate maternal themes into scope-appropriate support strategies
- Validate genomic findings using the mother's lived experience



THE 6 MGI PILLARS OVERVIEW

The MGI Pillars represent the six interconnected biological areas that shape the maternal journey—from fertility to postpartum recovery, and beyond.

Pillar 1: Hormone Health

HOW THE BODY METABOLIZES, ACTIVATES, BALANCES, AND RESPONDS TO HORMONES.

Why it matters:

- Cycle health
- Ovulation
- Estrogen balance
- PMS symptoms
- Menstrual pain
- Postpartum hormone recalibration

Genomic themes:

Methylation · Detoxification · Estrogen pathways · Stress response

Pillar 2: Fertility

THE BIOLOGICAL ENVIRONMENT NEEDED FOR CONCEPTION.

Why it matters:

- Egg quality
- Implantation environment
- Progesterone support
- Cycle regularity
- Nutrient activation

Genomic themes:

Mitochondria · Inflammation · MTHFR-related pathways · Blood sugar

Pillar 3: Pregnancy

THE BIOLOGICAL PROCESSES SUPPORTING FETAL DEVELOPMENT AND MATERNAL WELLBEING.

Why it matters:

- Nausea + hyperemesis susceptibility
- Fatigue
- Metabolic shifts
- Immune modulation
- Placental support

Genomic themes:

Detox · Stress · Inflammation · Nutrient transport

Pillar 4: Birth

HOW THE BODY MANAGES LABOR, STRESS HORMONES, OXYTOCIN, AND UTERINE ACTIVITY.

Why it matters:

- Epidural response
- Pitocin sensitivity (scope-safe discussion)
- Cervical ripening
- Stress → labor interaction
- Pain response patterns

Genomic themes:

Stress regulation · Oxytocin signaling · Inflammation

Pillar 5: Postpartum

HOW THE BODY HEALS, RECALIBRATES, AND STABILIZES AFTER BIRTH.

Why it matters:

- Tissue healing
- Inflammation
- Blood sugar shifts
- Detox + hormonal clearance
- Energy levels

Genomic themes:

Inflammation · Detoxification · Mitochondria · Oxidative stress

Pillar 6: Maternal Mental Health

NEUROTRANSMITTER BALANCE, STRESS REGULATION, AND EMOTIONAL PROCESSING.

Why it matters:

- Mood changes
- Anxiety
- Postpartum mood disorders
- Stress resilience
- Bonding

Genomic themes:

Stress pathways · Inflammation · Methylation

The Maternal Timeline

HOW NEEDS SHIFT FROM PRECONCEPTION → POSTPARTUM.

A mother's biology:

- adapts
- reprioritizes
- shifts demands
- through every stage.

Genomics helps us understand what the body asks for along the way.

Preconception Focus

Support foundations for:

- Egg quality + hormone rhythm
- Cellular energy
- Detox + nutrient activation

Question to ask:

“How is your body preparing for the next phase?”

Pregnancy Focus

Support active changes:

- Nausea modulation
- Placental development
- Blood sugar shifts
- Stress buffering

Question to ask:

“How can we help this adaptation feel smoother?”

Birth Focus

Optimize:

- Oxytocin + stress regulation
- Nervous system safety
- Response to the birth environment

Question to ask:

“What helps your body feel safe during birth?”

Postpartum Focus

Protect:

- Recovery
- Tissue healing
- Sleep + feeding demands

Question to ask:

“What do you need to feel restored and supported?”

Maternal Mental Health Focus

A mother's emotional experiences — bonding, stress, mood, intuition, identity — are not just feelings.

They are biological processes driven by hormones, neurotransmitters, the nervous system, and genomic pathways.

Maternal Mental Health Focus

- **Bonding → oxytocin + dopamine**
- **Anxiety or overwhelm → cortisol + stress response systems**
- **Mood shifts → serotonin + inflammation + sleep pathways**
- **Feeling safe during birth → nervous system regulation**
- **Postpartum adjustment → hormonal recalibration**

Maternal Mental Health Focus

So when emotions change across pregnancy, birth, and postpartum…

…it isn't because she's "dramatic" or "hormonal."
It's because her physiology is adapting to motherhood.

Congrats!
You have completed
Module 3

Review your notes to prepare for the certification quiz.