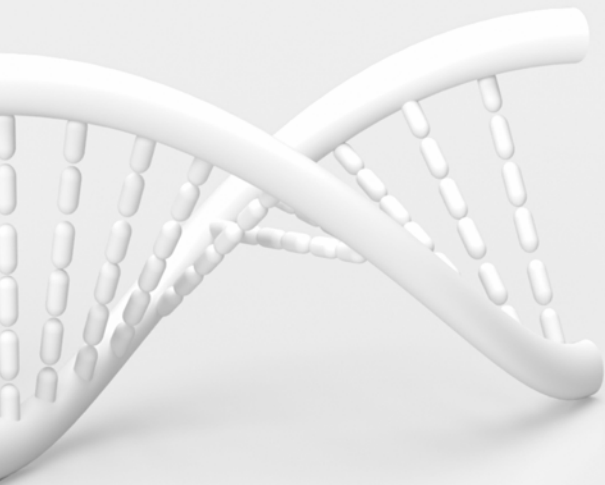


SPRING - FALL 2024

DNA EDUCATION & TRAINING FOR CLINICAL PRACTICE

FOUNDATIONS COURSE
CURRICULUM

HOSTED BY: AMANDA ARCHIBALD, RD





What, When and How

A live DNA education and translation course for clinicians seeking to engage with or grow their skills in DNA interpretation and implementation for clinical practice. Tuesday evenings 7 - 8:15 PM EST April - November 2024 with study breaks included to rest your brain. Sessions are online. The majority are live. Some sessions are pre-recorded to mix up the delivery of information. Sessions are always **recorded** and accessible within 24 hours. Session length: 60-75 minutes. Sessions covering more complex material: 90 minutes.

- 6 months of live instruction, learning, group mentoring and support
- Genomic Kitchen Interpretive Gene Roadmaps
- Pattern Recognition Interpretive Tools and additional Gene Pattern Insights that provide clues to navigating your client health issues
- Nutrition Roadmaps and Sample Ingredient Roadmaps (new 2024)
- Clinical Pearls
- Program includes additional Bonus Sessions /Masterclasses



DNA Reports

This course uses the 3X4 Genetics Test as our foundation test to navigate and learn from. This premium test features an excellent portfolio of scientifically valid and clinically relevant genes that are common to many DNA tests around the world. My goal is for you to learn DNA interpretation, gene pattern recognition, systems thinking and up and downstream biochemistry applications using a premium test for your foundation. This rigorous approach to learning allows you to work with any Nutrigenetic Test regardless of your geographical location.

- **Your personal 3 x 4 Genetics Test or the current sample report is required for this course (\$299 for initial 3X4 test).** If you are in a world area where 3X4 Genetics Tests are not available, please use the sample test.
- For practitioners who cannot currently use 3X4 Genetic tests in your world area, I will include a review of DNA Life's and Lifecodegx reports.



The Course and Curriculum

- Course duration April 9 - Nov 30, 2024
- April 9 is an introductory recorded session. **First LIVE session is April 16**
- Live Sessions: Tuesday 7-8:15 PM EST
- Six Office Hours/Report Review Sessions: Most office hours are on Saturday - see curriculum for dates
- Summary of sessions and dates are on the next page
- Detailed Curriculum: pages 5-21
- Total Active Learning Hours: 39
- Total Optional Office Hours with report reviews: 6
- Price \$1297 - Early: \$947 use **SAVE350** for discount
- Alumni: \$299

Curriculum Topics and Dates: At-A-Glance

MODULE ONE: Genes, Genomics, Definitions and Nomenclature. Basic Report Review

- Session One (60) and Two (75) - April 9: - Recorded
- *Module released for listening April 2, 2024*

MODULE TWO: Navigating Appetite and Satiety

- Session One (75) April 16
- Session Two (60) -April 23

MODULE THREE – Weight Balance and Weight Loss Resistance

- Session One (90 mins) – April 30
- Session Two (60 mins) – May 7

OFFICE HOURS – REPORT REVIEW/ AND Q & A – May 11 (Sat)

MODULE FOUR: Genes that Impact Exercise and Activity

- Session One (60): May 14
- Session Two (60): May 21

MODULE FIVE: Mastering Cellular Systems and Cellular Health: Oxidative Stress

- One Session: (90) – June 4

MODULE SIX: Mastering Cellular Systems and Cellular Health: Detoxification

- Session 1 (90) – June 11
- Session 2: (90) – June 18

OFFICE HOURS – REPORT REVIEW/ AND Q & A - June 22 (Sat)

Course Break x 2 Weeks. Catch up. Relax. Review

MODULE SEVEN: Mastering Cellular Systems and Cellular Health: Methylation

- Session 1: (90 min) - July 9
- Session 2: (75 min) - July 16

Curriculum Topics and Dates: At-A-Glance

MODULE EIGHT: Mastering Cellular Systems and Cellular Health: Inflammation – Immune

- Session 1: (60): - July 30
- Session 2: (75): - Aug 6
- Session 3: (60 min) – Aug 13
- Session 4: (75 min) Recorded

Course Break x 3 weeks (catch up-review-relax)

MODULE NINE: Stress. Anxiety. Sleep. Mood. Behavior

- Session One: (90) - Sept 3
- Session Two: (60) - Sept 10
- Session Three: (45) - Recorded
- Session Four: (90) - Sept 17
- Session Five: (45) - Recorded

MODULE TEN: Brain and Memory: Decode Your Clients' Brain Health!

- Session One: (75) - Sept 24
- Session 2: (60) - Oct 1
- Session 3: (30) - Recorded

OFFICE HOURS: (90) REPORT REVIEW AND Q & A – Oct 5 (Sat)

MODULE ELEVEN: Cardiovascular: Focus on Vascular Health

- Session 1: (60) - Oct 15
- Session 2: (45 min) - Oct 22

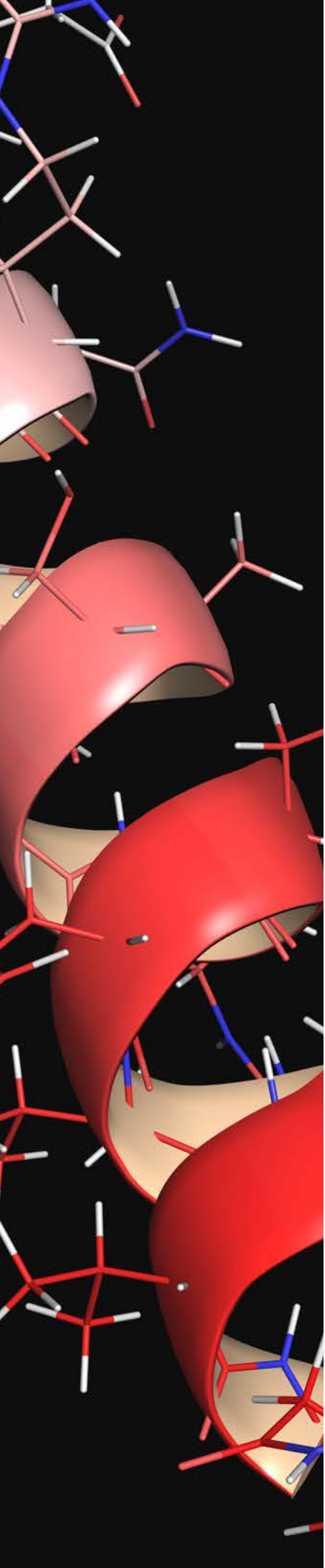
MODULE 12: Cardiometabolic Health: Focus on Metabolic Regulation

- Session 1: (60) - Oct 29
- Session 2: (90) - Nov 5
- Session 3: (90) - Nov 12
- Session 4: (30) - Recorded

OFFICE HOURS: REPORT REVIEW AND Q & A – Nov 16 (Sat)

MODULE 13: Nutrients. Bone Metabolism

- Session 1: (60) - Nov 26
- Session 2: (75) Bone Masterclass - Nov 30 Sat



Module One

Basics of Genomics and Genes. Definitions. Understanding Report Structure – RECORDED

Session 1: The Basics of Genomics and Genes (75 mins)

- Gene nomenclature
- How to read genes and genetic nomenclature
- Explaining genes and how they work to clients
- Review of structure of 3 X 4Genetics report (out teaching report)

Session 2: Definitions and Overview of DNA Core Report (60 mins)

- Definitions: Nutrigenomics, Nutrigenetics, Epigenetics
- Review of DNA Life Core Report



Module Two

Navigating Appetite and Satiety

We begin learning about the impact of genes and their variants through their impact on Appetite and Satiety.

Session 1 (75 mins)

- How genes and their variants influence appetite and satiety
- The biochemistry of how these genes “behave”
- Insights and Reference Roadmaps for Clinical Practice

Session 2 (60 mins)

- Gene Patterns and Clinical Pearls you can use in practice
- Report Review

Module Three: Weight Balance and Weight Loss Resistance

Building on appetite and satiety, in this module we look at a cross-section of genes that provide insights into weight balance and weight loss resistance. Here you will start to employ systems thinking and the idea of upstream biochemistry

Session 1 (90 mins)

- Connecting the dots between inflammation, adipose tissue inflammation, immune activation and weight loss resistance
- Genes that drive or interfere the process
- The role of glucose and insulin associated genes

Session 2 (60 mins)

- Insights and Reference Roadmaps for Clinical Practice
- Gene Patterns and Clinical Pearls

OFFICE HOURS – REPORT REVIEW AND Q & A (90 mins)

Module Four: Exercise and Activity

Learn to interpret and use exercise associated genetic information to inform your clients about exercise structure that harmonizes with their genes. Once again, you will learn to use systems thinking to interpret this genetic information in conjunction with client health and fitness goals.

Session 1 (60 mins)

- VO2 Max
- Optimal form (s) of exercise
- Exercise responsiveness for weight balance
- Injury –impact of genes on repetitive injury potential and tissue remodeling
- Recovery

Session 2 (60 mins): Using genetic testing with athletes: Sarah Amidon, MS RD

- Making the business case for genetic testing to athletes
- Key observations from working with athletes
- Genes and patterns that emerge over and over
- Essential nutrients you may not be thinking about



Module Five

Mastering Cellular Systems and Cellular Health - Oxidative Stress (90 mins)

Module Overview

Oxidative stress lurks as a constant threat to cellular well-being. This module equips you to understand its mechanisms, identify genetic influences, and craft personalized strategies to empower your clients.

Learning Objectives:

- Describe the fundamental mechanisms driving oxidative stress in the body.
- Differentiate between enzymatic and non-enzymatic antioxidant defense systems.
- Harness the power of nutrigenomics to identify clients at risk and guide interventions.
- Uncover valuable clinical pearls to translate genetic insights into actionable plans.

Session 1

- **Oxidative Stress:** Getting clear on the mechanisms that drive oxidative stress and undermine cellular health.
- **Antioxidant Allies:** Enzymatic & Non-Enzymatic Antioxidant Systems: The two key antioxidant systems and their roles in mitigating damage
- **Using Nutrigenomics to Combat Oxidative Stress:** Use genetic data to identify vulnerabilities and craft targeted dietary and lifestyle strategies.
- **Clinical Pearls:** Gems for Personalized Practice: Gaining invaluable insights to translate knowledge into impactful interventions for your clients.



Module Six

Mastering Cellular Systems and Cellular Health: **Detoxification (90 min)**

Module Overview

This module explores the interplay between genes, detoxification pathways, and cellular well-being. Learn how to identify and interpret genetic variations affecting detoxification efficiency. Craft personalized strategies to optimize your clients' detoxification efficiency.

Key Learning Objectives

- Describe the impact of genes and gene variants on detoxification.
- Use gene patterns and SNP information to identify potential detoxification impairments.
- Development of personalized dietary and lifestyle recommendations based on genetic variants.

Session 1: Interpreting Detoxification (90 minutes)

- Defining Detoxification: Understand the core concepts and goals of detoxification in the body.
- Oxidative Stress Management: Explore the crucial role of managing oxidative stress for efficient detoxification.
- Methylation & Detoxification: Unravel the intricate link between methylation pathways and detoxification processes.
- Interpretive Tools & Clinical Pearls: Discover practical tools and key insights to translate genetic information into actionable strategies. Caffeine detoxification is included in this module.

Session 2: Hormone Detoxification Deep Dive (90 minutes)

- Sex Hormone Detoxification Genetics: Delve deeper into genes related to sex hormone detoxification.
- Nutrigenomics & Food Strategies: Combine nutrigenomics and food principles to support hormonal detoxification.
- Unlocking Sex Hormone Gene Insights: Additional clinical insights into sex hormone gene patterns that help you understand and explain client symptoms and health challenges

OFFICE HOURS – Q & A for Oxidative Stress and Detoxification (90 mins)



Module Seven

Mastering Cellular Systems and Cellular Health: Methylation

Three Sessions

Deep **dive** into the fascinating world of methylation, unlocking its intricate pathways and genetic influences. Learn to identify potential imbalances, craft evidence-based interventions, and confidently guide your clients toward optimal cellular health.

- **Key Learning Objectives**

- Gain a clear understanding of methylation and its impact on cellular health and systems health.
- Identify potential methylation imbalances using genes and gene patterns and where to intervene to restore methylation and biochemical balance
- Develop dietary, lifestyle, and potential supplementation strategies.

- **Session 1: Demystifying Methylation (90 min)**

- **Unwrap the Essentials:** Understand what methylation does, the molecules it impacts, and key pathways involved.
- **Biochemistry Breakdown:** Follow the journey from folate absorption to homocysteine transformation, gaining clarity on the methylation cycle.
- **Genetics & Interpretation:** Explore the genes influencing methylation and learn to translate their impact on your clients.
- **Navigating MTHFR:** How to discuss this common variant and its implications with clients or the public/media

- **Session 2: Supporting Methylation: Strategies & Nuances (75 min)**

- **Beyond Folate:** Uncover alternative methyl production pathways involving choline and betaine. Understand how a MTHFD1 SNP can drive this alternative (detour) pathway
- **Plate Power:** Learn how to optimize methylation through a food first approach. Which food(s) how and why
- **Homocysteine:** understand its impact and biochemical reach
- **Supplement Support:** Get clarity on if, what and when to use supplements to support the methylation process
- **Gene Insights & Clinical Pearls**



Module Seven

Mastering Cellular Systems and Cellular Health: Methylation (Cont)

Session 3: Methylation, the Transsulfuration Pathway and Beyond (75 min)

- **Connecting the Dots:** Explore the intimate link between homocysteine, the Transsulfuration Pathway, and the vital molecules it produces
- **Nutrigenomics-Driven Strategies:** how to support the Transsulfuration Pathway using Nutrigenomics
- **The Impact of Methylation** in other biochemical pathways and systems (brief look)
- **Navigating Sulfur Complexities:** Decode "sulfur intolerance," clarify its origin, and make informed clinical decisions based on gene variants, gut health, and other factors.

OFFICE HOURS: REPORT REVIEW AND Q & A for Methylation (90 mins)



Module Eight

Mastering Cellular Systems and Cellular Health :Inflammation & Immune

This comprehensive module dives deep into the complex interplay between genes, inflammation, and immune function. Equip yourself to identify genetic influences, personalize interventions, and empower your clients to achieve optimal health. For ease of navigating the genes and information presented in this module, the genes are divided into direct-acting and influencing/contributing to the inflammation-immune activation interface. Genes can fit into either place – but are organized and presented this way for easier digestion and application of information.

Key Learning Objectives

- Enhance your understanding of the gene-inflammation-immune connection.
- Ability to identify clients with potential genetic risk for inflammation and immune imbalances.
- Develop personalized dietary, lifestyle, and potential supplementation strategies.
- Increase your confidence in applying nutrigenomics to manage inflammation and boost immune function in your practice.

Session 1: Unveiling the Inflammation-Immune Axis (60 min)

- **Direct Action vs. Influence:** Differentiate genes directly triggering inflammation from those contributing to the broader landscape.
- **Understanding Direct Actors:** Explore their biochemical impact, key nutrient support, and relevant interventions for the following genes
 - MNSOD, HO-1, eNOS
 - DAO, HNMT (methylation connection)
 - FADS1 (systemic impact)
- **Gene Patterns & Clinical Pearls:** Uncover valuable insights into the influence and impact of MMPs, TIMP4, and VEGF on inflammation and immune (dys)regulation



Module Eight Continued

Mastering Cellular Systems and Cellular Health :Inflammation & Immune

Session 2: Deep Dive into Direct Actors (60 min)

- **Continued Gene Exploration:** Delve deeper into the impact of the following genes
 - CRP
 - TNF-alpha-Nf-kB connection
 - IL-1, IL-6, IL-6R
 - PAI
- **Clinical Pearls**

Session 3: Influential Players in the Immune Modulation Space (75 min)

- **Influential/Contributing Genes:** Analyze how these genes influence and shape the inflammation-immune interface, including:
 - HLA
 - FUT2
 - APOE
 - SIRT1-FOXO3 connection
 - CYP1A1, CYP1B1
 - PPARs (brief overview)

Session 4: Gut-Immune Connection & Nutrigenomic Solutions (75 min)

- **The HIF1A-FUT2-PPARG Interface:** Uncover how these gene variants impact gut homeostasis and explore clinical interventions.
- **Gut Ecology & Metabolic Modulation:** An introduction to the basics of this program and process for restoring gut balance using nutrigenomics, upstream biochemistry, and food-centric approaches.
- **Clinical Pearl:** CYP7A1: Its role and potential implications.



Module Nine

Stress. Anxiety. Sleep. Mood. Behavior

Five Sessions

Explore the fascinating world of neurochemistry, where genes and nutrients work synergistically (or not) to influence mood, sleep, behavior, and stress response. Learn to interpret genetic variants and craft evidence-based nutrient-driven and lifestyle interventions. Empower your clients to achieve optimal mental well-being. This is probably the most popular and requested module, therefore expanded to allow you dive deep, learn and apply.

Key Learning Objectives

- Deepen your understanding of neurotransmitter pathways and the genes and nutrients that support them.
- Through case studies and clinical insights, identify how patterns in gene SNPs, nutrient imbalances and lifestyle choices may be driving potential neurotransmitter imbalances.
- Develop personalized food, lifestyle, and as needed supplement strategies for individualized intervention.
- Develop your confidence in applying nutrigenetic, nutrigenomic and nutritional biochemistry knowledge to optimize mental health and well-being for your clients.

Session 1: Neurotransmitter Metabolism: The Catecholamines (90 min)

- Defining and differentiating neurotransmitters
- Deep Dive: Catecholamine metabolism (dopamine, epi-norepinephrine)
- Getting clear on the biochemistry and how folate and NrF2 are involved
- Nutrient demands and support for a functioning pathway
- The impact of gene SNPs from the DRDs to MAOA and beyond
- The role of methylation in dopamine metabolism and the impact of stress on methyl demand
- How the catecholamines influence mood, anxiety and sleep
- Gene Pattern Recognition and clinical pearls



Module Nine - continued

Stress. Anxiety. Sleep. Mood. Behavior

Session 2: Serotonin Metabolism. (60 min)

- Deep Dive: Serotonin metabolism
- Getting clear on the biochemistry
- Nutrient demands and support for a functioning pathway
- The gut -serotonin - Vagus Nerve connection + acetylcholine
- Tools you can use.
- Test don't guess to support neurotransmitter efficacy. Insights from clinical practice

Session 3: Insights into Behavioral SNPs (recorded) (45 min)

- Review of Behavioral SNPs from 3X4 report and how to interpret them.
- Introduction to Behavior SNP interpretive Tool
- Insights from Clinical Practice

Session 4: Neurotransmitter Work Session (90 min)

- Revisit the biochemistry of the different neurotransmitter pathways.
- Consider up and downstream SNPs and supporting nutrients.
- **Review 2 case studies** connecting SNPs with health histories to care plan development.
- Homework assignment

Session 5: Review of DNA Life's Resilience Report (recorded with Well-being Expert and coach – Celynn Morin, MS RD) -(45 mins)

- Report Overview
- How to use the Resilience Report in Clinical and Well-being Practice



Module Ten

Brain. Mind. Memory: Decode Your Clients' Brain Health!

Module Overview

Dive deep into the genetic underpinnings of cognitive function and memory. Learn to interpret key gene variants that can interfere with cognitive function and memory. Craft evidence-based interventions, and guide your clients to optimal brain health, thought clarity and extended memory. In this module we will consider insights from 3X4 Genetics, DNA Life and Lifecodegx reports.

Key Learning Objectives

- Increase your understanding of how genes and gene variants influence cognitive function and memory.
- Identify clients with potential risks for cognitive decline as presented via their Gene Blueprint
- Develop personalized dietary, lifestyle, and potential supplement intervention strategies to optimize brain health.
- Increase your confidence in applying nutrigenomics to support cognitive function and memory in your practice.

Session 1: Mastering the Heavy Hitters (75 min)

- **APOE Decoded:** Unravel the many faces of APOE, understanding its functions and how specific forms can potentially disrupt systemic health.
- **Deeper Evaluation:** Explore how to interpret APOE along with other genes that influence inflammation, methylation, glucose control, and detoxification, gaining a comprehensive view.
- **DHA & EPA Connection:** Get clear on how the 4 allele of APOE can disrupt transport of DHA into the brain and how to address this.
- **BDNF + ANK3+ AKT1 Insights:** Learn how Brain-Derived Neurotrophic Factor (BDNF) influences cognitive function and its potential genetic link.
- **Clinical Pearls:** Gain valuable insights for translating gene SNP insights into actionable brain health strategies.

Module Ten - continued

Brain. Mind. Memory: Decode Your Clients' Brain Health!

Session 2: Beyond the Basics: Decoding Genes that influence Memory & Thought Clarity (60 min)

- Brain Fog Busters: Identify genes associated with brain fog and explore targeted interventions.
- Sleep & Cognition Connection: Explore genes that interfere with sleep quality and subsequently memory.
- Explore More: Explore additional genes included in the 3X4 (and other) reports, understanding their significance and how to interpret them.

Session 3: A Peek at DNA Life's Mind Report + Lifecodegx Nervous System Report (Recorded - 45 min):

- **Mind Your Mind:** Get a sneak peek into the genes analyzed in DNA Life "Mind" report and Lifecodegx Nervous System Report
- **Clinical Integration:** Learn how to integrate these reports into your practice and personalize client care.

Live Office Hours and & and A: Brain and Memory (90 mins)



Module Eleven

Cardiovascular: Vascular Health Focus - Two Sessions

Module Overview

Dive deep into the genetic underpinnings of vascular health, exploring key genes, their interactions, and potential interventions. Learn to interpret genetic variations, craft evidence-based strategies, and empower your clients to optimize their cardiovascular well-being.

Key Learning Objectives

- Increase your understanding of gene variants associated with vascular health and disease.
- Identify potential genetic susceptibilities to cardiovascular risks.
- Develop personalized dietary, lifestyle, and potential supplementation strategies to optimize vascular function.
- Increased confidence in applying nutrigenomics to promote heart health and well-being in your practice.

Session 1: Nitric Oxide & Beyond: Unlocking Vascular Vitality (75 min)

- **eNOS & Nitric Oxide:** the critical role of eNOS in nitric oxide production and nitric oxide's role in vascular and systems health.
- **VEGF Deep Dive:** Delve into the multifaceted role of VEGF in angiogenesis and its implications for vascular function.
- **Methylation & Homocysteine:** Explore the intricate link between methylation, homocysteine, and cardiovascular risk, revisiting relevant genes and pathways.
- **MMPs & Clinical Pearls:** Gain valuable insights into how MMPs influence vascular health, clinical scenarios and practical considerations.

Session 2: Blood Pressure & Beyond: Optimizing Cardiovascular Function (45 min)

- **Blood Pressure Genes:** Navigate the genes influencing blood pressure regulation and potential vascular implications.
- **PAI, F2, & F5:** Decipher the roles of these genes in vascular health. Learn about specific considerations for women's health.
- **Blood Pressure Gene SNP Tool:** Master this tool to personalize blood pressure management based on genetic insights.



Module Twelve

Cardiometabolic Health: Focus on Metabolic Regulation

This module dives deep into how genes and their variants influence nutrient sensing, blood sugar regulation, and fat & cholesterol metabolism. Learn to interpret key gene variants, craft evidence-based interventions, and empower your clients to achieve optimal (cardio)metabolic well-being.

Key Learning Objectives

- Describe the role of nutrient sensors and how they influence metabolism and homeostasis
- Identify potential metabolic imbalances (fat, cholesterol, glucose, insulin, energy) based on gene variants and the individualized gene blueprint
- Develop personalized dietary, lifestyle, exercise and potential (as/if needed) supplementation strategies to optimize cardiometabolic health
- Attend live Q&A for further clarification and practical guidance

Session 1: Nutrient Sensor Powerhouse: Decoding The Master Nutrient Sensor Genes (75 min)

- **Nutrient Sensors:** Identify and understand the functions of key nutrient sensor genes like ADIPOQ, AMPK, SIRT, FOXOs, and PPARGC1A.
- **Optimizing Sensor Function:** Leverage clinical and nutrigenomic strategies to support optimal nutrient sensing and metabolic regulation.
- **Getting Clear on the AMPK-mTOR Axis:** Learn the checks and balances of this pivotal axis and how to manage and manipulate it for metabolic health.
- **Review the PPARGC1A Clinical Mindmap**

Session 2: Blood Sugar Clarity: Decoding Genetic Insights (90 min)

- **PPAR Family Insights:** Explore the roles of PPAR genes and interpret their variants for personalized strategies.
- **Unlocking Blood Sugar Regulation:** Analyze key genes: TCF7L2, IRS1 and their influence on GLUT Transporters. SLC2A2
- **FABP2, and ADRB2:** understand their impact and potential disruptions.
- **Stress & Weight Loss:** Connect gene variants to stress-induced weight loss resistance and develop targeted interventions.
- **Keto vs. Carbs: Who can tolerate what?** Gain insights into gene-based metabolic preferences for personalized dietary guidance.
- **Review** the Glucose and Insulin SNP Navigation Tool for Clinicians



Module Twelve - continued

Session 3: Fat & Cholesterol Decoded: From Genes to Strategies (90 min)

- **Fat & Cholesterol Metabolism:** Gain a clear understanding of key genetic variants that influence these pathways.
- **Gene Variants & Lab Interpretation:** Learn how genetic variations impact cholesterol/lipid profiles and lab values and translate this knowledge into actionable strategies.
- **Gene-Tailored Nutrition & Interventions:** Develop personalized approaches to optimize fat and cholesterol metabolism based on genetic insights.
- **Review** the Cardiovascular Gene SNP Navigation Tool and Clinical Intervention Tool
- **Clinical Pearls & Case Studies:** Gain valuable insights from practical experience and real-world scenarios.

Session 4: Review of DNA Life Core Report: Metabolic Focus (30 min) *Recorded*

Session 5: Review of Lifecodegx Metabolics Report (30 mins) - *Recorded*

Office Hours Live Q&A: Cardiovascular and Cardiometabolic Focus (90 mins)



Module Thirteen

Nutrients and Bone Metabolism

2 Sessions

This module dives deep into essential nutrients like B vitamins, vitamin C, choline, vitamin D, calcium, and their genetic influences. Discover advanced strategies for bone health optimization and early detection of potential risks.

Key Learning Objectives

- Describe how genetic variants can impact nutrient availability or nutrient demand.
- Use insights from clinical practice-derived gene patterns (supported by scientific literature) to identify clients with potential bone health risks.
- Develop personalized dietary, lifestyle, and potential supplementation strategies curated from gene blueprints and lab validation to optimize bone health.
- Increase your confidence in applying genomic information and nutrigenomics to support nutrient optimization and prevent bone disease in your clinical practice.

Session 1: The Strategic B's, Vitamin C & Choline Powerhouse (75 min)

- **Unlocking B Vitamin Potential:** Differentiate between genes impacting B vitamin availability and genes that require higher intake to support metabolic processes.
- **Vitamin C and the Antioxidant Cascade:** Revisit the crucial role of vitamin C its interplay with other antioxidants.
- **Choline:** Beyond the Basics: Revisit its diverse functions. Identify gene variants indicating increased needs. Explore strategies to increase choline intake. Identify when you can use alternatives to choline to support key cellular processes.
 - **Symptoms & Interventions:** Learn to recognize signs of potential choline deficiency and develop targeted dietary and supportive interventions to correct the deficiency and ease symptoms.



Module Fourteen

Nutrients and Bone Metabolism

Session 2: Vitamin A, D, Calcium & Beyond: Bone Masterclass (75 min)

- **Genetic Insights:** Briefly review genes influencing vitamin A, D, and calcium metabolism/availability and their clinical implications.
- **Discuss** interventions to correct potential SNP driven deficiencies.
- **Bone Disease Early Risk Detection using Gene Patterns:** Learn to use gene patterns to identify potential bone disease risks before they manifest.
- **Clinical Pearls for Bone Health:** Master strategies for optimizing bone health, managing osteopenia, and supporting bone restoration after osteoporosis diagnosis.



About Amanda Archibald, RD

Amanda Archibald is a prominent figure in the realm of translational genomics, bridging the gap between genomic science and everyday health. Her global leadership in the field of genomic nutrition has earned her recognition as a trailblazer. Amanda's unwavering commitment to the convergence of genomics, nutrition, and health continues to shape the landscape of modern wellness.

In 2021, Amanda embarked on a collaborative venture with partners Celynn Morin (London) and Darryl Frerk (Cape Town) to produce C-Suite, a pioneering DNA-led holistic wellness approach tailored to support CEOs and leaders of innovative companies. The same partners released an online FUNdamental Fitness program (Jan 2024) to promote fundamental movement as THE foundation to lifelong physical fitness, flexibility and stability. Amanda's work in the ever-evolving genomics space extends to institutional and corporate consulting for a diverse array of international innovators. Her expertise has left an indelible mark on companies such as Sodexo (France-USA) and Hawkins Watts (NZ) as well as cutting-edge startups operating at the intersection of genomics and technology. Together with Sodexo at Sharp Healthcare (San Diego, CA), Amanda launched the first nutrigenomically-inspired menu in the world.

Committed to expanding the field of nutritional genomics, Amanda teaches and mentors clinicians worldwide, to foster a deeper understanding and application of nutrigenetics and nutrigenomics. Amanda also maintains a private practice, guiding individuals grappling with complex health issues on a transformative journey towards wellness, with genomics as the guiding blueprint.

Hailing from the United Kingdom, Amanda currently calls the landscapes of the western high desert and mountains of Colorado her home.