

Conversations in Nutrigenomic Medicine



Series 1	\$199 (6 x CPE Points)
Series 2	\$199 (12 x CPE Points)
Series 1 & 2 BUNDLE	\$299 (18 x CPE Points)

Prices are in Australian Dollars and include GST.

18 x CPE
POINTS
FOR BOTH
SERIES

The Medicine of the 21st Century

Welcome to *Conversations in Nutrigenomic Medicine*, a novel format presenting the key principles that underpin the foundations of this emerging science, systematically taking the practice of Clinical Nutrition to a new level. Although there are many available options for learning about *Nutrigenetic* testing, there are few opportunities for clinicians to gain a deeper understanding of its companion science, *Nutrigenomics*.

Conversations fills that gap as a niche programme in graduate clinical education. The Institute has been founded to provide programmes that superimpose an overlay of Applied Nutrigenomics onto a clinician's formal training.

The *Institute for Nutrigenomic Medicine* highlights the relationship between our genes, their polymorphisms and the food-derived molecules that can influence their expression. *Nutrigenomic Medicine* focuses on *Nature-compatible* clinical interventions that aim to closely mimic endogenous cellular mechanisms.

The *Conversations* series presents a clinical approach which begins with a more nuanced view of cellular function, interwoven with the core principles of Nutrigenomics as it gradually unfolds the scientific rationale for implementing appropriate food-derived interventions.



To enrol visit nutrigenomicmedicine.com



Series One:

6 x CPE points

Foundations in Nutrigenomics

encompassing 3 bytes is somewhat academic in content but delivered in a light conversational manner supported by online teaching materials for a more rounded, enjoyable and effective learning experience.

Each of the 3 bytes delivers the key foundation principles, together with a guided research paper or series of Abstracts to support the concepts covered. A short assessment completes the byte. (1 CPE point per hour)

What to Expect

Conversations in Nutrigenomic Medicine

is presented as multiple series delivered over time, each delivering 18 Continuing Professional Education (CPE) points in all.

Each **Conversation** is formatted as a discussion between one of our Faculty members and Faculty Head Dr Christine Houghton who holds a PhD in *Clinical Nutrigenomics*, together with degrees in *Biochemistry* and *Nutrition Science*.

Series One covers the foundation principles of Nutrigenomics in three modules we call *bytes*. The series that follow are built around three to six bytes, each topic with a specific clinical focus.

Series Two:

12 x CPE points

Applications of Nutrigenomics

offers 6 bytes, each focused on a topic of clinical relevance based on and utilising the **Series One** foundation principles.

As with Series One, Series Two and each subsequent *Conversation* will include a guided supporting research paper or series of Abstracts, with a short assessment to complete the byte. (1 CPE point per hour)

Series One: Foundations in Nutrigenomics

6 x CPE points

Byte #1 Hosted by Matt Lim

BSc(Biochem), BHSc(Nut&Diet)

Unravelling Nutrigenomic Science

- Food as Information – how it talks to our genes
- Implementing Nutrigenomics without having a patient's Nutri-genetic Report
- Food molecules – what does what? Types of molecules with nutrigenomic activity
- Micronutrients as enzyme "Spark Plugs"
- Signalling molecules – how we can activate Nutrigenomic mechanisms
- Hormesis



Byte #2 Hosted by Robert Thomas

ND

Switches and Signals that lead to Homeostasis

- How to harness cellular defence pathways to establish homeostasis
- The primary cellular processes responsive to nutrigenomics
- Methylation as one cog in a larger wheel
- How human cells view the concept of antioxidants
- Cellular "switches" to multiple pathways
- Defining the 3 mechanisms of Nutrigenomic activation and how you can implement them
- How Nature activates 'switches'
- Potency and Bioavailability – overlooked concepts

Byte #3 Hosted by Margeaux Kruger

AdvDipNat, AdvDipNut, BBus(Mktg)

Nutrigenomics – linking the Gut Ecosystem

- The Gut as an Ecosystem
- How to harness the 'antennae' and signals for gut homeostasis
- Cross-talk between the gut and underlying immune cells
- What do we test in a dysfunctional gut?
- How Nutrigenomics benefits dysbiosis
- A Gut-Immune-Metabolic Case Study



Series Two: Applications of Nutrigenomics

12 x CPE points

Byte #1 Hosted by Margeaux Kruger

AdvDipNat, AdvDipNut, BBus(Mktg)

Tight Junction Dynamics

What REALLY governs the 'Leaky Gut'? Endogenous and Exogenous Factors.



Byte #2 Hosted by Matt Lim

BSc(Biochem), BHSc(Nut&Diet)

Comparing Polyphenols

Abundant phytochemicals with surprising clinical effects in the gut and epithelial cells.



Byte #3 Hosted by Robert Thomas

ND

The Clinical Nuts & Bolts of Glutathione

Should a clinician prescribe a supplement, the precursors – or mimic Nature nutrigenomically?

Byte #4 Hosted by Matt Lim

BSc(Biochem), BHSc(Nut&Diet)

The Sulfur Conundrum

Sulfur is an essential dietary molecule but its occasional adverse effects lead to its exclusion from diet. How does Nutrigenomics interpret this anomaly and resolve the patient's issues?

Byte #5 Hosted by Robert Thomas

ND

What Nutrigenomic Medicine teaches us about Natural Immunity

How does the Immune System detect a microbial threat? And how does it respond? Using Nutrigenomics to Harness Innate Immune Defences. Beyond antibodies.

Byte #6 Hosted by Margeaux Kruger

AdvDipNat, AdvDipNut, BBus(Mktg)

Quinone reductase

The multi-tasking Phase 2 Detox enzyme – estrogen detoxification, protective against DNA mutation.



Our Mission

The *Institute for Nutrigenomic Medicine* was founded in response to an urgent need for graduate education programmes on the practical application of the principles of nutrigenomics within a clinical environment.

The Institute's programmes focus on the most essential elements of what is otherwise a complex sub-specialty of Nutrition Science, simplified by utilising a streamlined approach to learning.

The Rationale

In an era where technological innovation highlights the successes of modern medicine, the model has arguably failed to resolve society's most prevalent and distressing diseases. A plethora of pharmaceuticals targets the symptoms of disease but seldom does it target the resolution of disease at the fundamental cellular level.

When a clinician views disease as aberrations of cellular biochemistry underpinned by the individual's unique genetics, the therapy must include the various lifestyle factors that influence the expression of those genes that promote repair and recovery.

The Institute's educational programmes are underpinned by a philosophy that embraces the principles on which Nature has sustained human life for many thousands of years.



Christine Houghton *PhD, BSc, GradDipHumNutr, RNutr*
Faculty Head and Senior Scientist

An experienced clinician in Nutritional Medicine, Christine's subsequent research has led to her acknowledged claim as a global leader in the field of Nutrigenomics.

Her doctoral research on the biochemical and clinical effects of bioactive food molecules has led her to explore the roles of phytochemicals as potent signalling molecules that influence the expression of key protective genes.

An accomplished clinician, author, speaker and educator, she brings to the Institute decades of diverse and invaluable experience.



Robert Thomas
**Naturopath &
Nutrigenomics Clinician**
ND

Following more than 20 years in Naturopathic clinical practice, Robert undertook graduate studies in *Advanced Translational Nutrigenomics*, a course with a strong focus on the biochemical pathways that underpin the expression of human genes.

The practical application of this knowledge makes Robert a valued member of the Institute's Faculty.

As a regular speaker at conferences and seminars, Robert's relaxed but thorough teaching style is greatly appreciated by clinicians of all disciplines.



Margeaux Kruger
Nutritionist & Naturopath
*AdvDipNat, AdvDipNut,
BBus(Mktg)*

A valued Faculty member who is both a Clinician and an Educator, Margeaux is fascinated by the endogenous mechanisms the human body uses to maintain its homeostasis.

She holds a deep interest in the impact of the gut-immune interface on systemic health, a core focus of Nutrigenomic Medicine.

Implementing these principles with her own patients, Margeaux's systematic approach and case study analyses provide a blueprint for other clinicians incorporating Nutrigenomic Medicine into clinical practice.



Matthew Lim
Integrative Dietitian
*BSc (Biochem)
BHSc (Nut&Diet)*

Matt's academic background in Human Biochemistry underpins his ability to translate complex science into clinical solutions; his expertise is reflected in the areas of sports nutrition, weight management and metabolic disorders.

As an Integrative Dietitian with a strong interest in both the culinary and therapeutic aspects of food, Matt's background and experience bring a broad skillset to the Institute's Faculty.

**TO ENROL IN
CONVERSATIONS IN NUTRIGENOMIC MEDICINE
VISIT
nutrigenomicmedicine.com**

Series 1 & 2 separately \$199 EACH

Series 1 & 2 bundle \$299 (SAVE \$99)

Prices are in Australian Dollars and include GST.

**18 x CPE
POINTS
FOR BOTH
SERIES**

Institute for Nutrigenomic Medicine Pty Ltd
ACN 613 288 565
Ross Court Central, 132-140 Ross Court, Cleveland, Qld 4163, AUSTRALIA.
Tel: +61 7 3041 4091

nutrigenomicmedicine.com



Series 1 and 2 Conversations in Nutrigenomics also available

Series Three: Clinical Applications in Common Conditions

9 x CPE points
EACH BYTE IS 3X CPE POINTS

Byte #1 Hosted by Robert Thomas

ND

Unravelling Iron Science for Better Outcomes

For decades, iron deficiency anaemia has been managed by administering iron in either dietary or supplemental forms, even though such an approach is very often ineffective. Such failure may lead to the patient periodically receiving very high doses of iron as an infusion. The mechanisms that explain why even high doses of iron fail to correct the anaemia have been known for decades but yet seem not to have found their way into currently employed treatments. By delving into the underlying mechanisms, it becomes clear that Nature, by design, inhibits iron absorption as a defensive process against uncontrolled cellular damage. Continuing to dose with iron supplements or infusions further stresses these protective mechanisms.

Byte #1 details how disordered iron metabolism can be corrected in the context of nutrigenomic principles, thereby providing readily applied long-lasting clinical benefit.

Byte #2 Hosted by Matt Lim

BSc(Biochem), BHSc(Nut&Diet)

The Nuances of Thyroid Dysfunction

Thyroid disease is becoming increasingly prevalent, especially the autoimmune forms such as Hashimoto's Disease which are more frequent in women. Why is this occurring and what are the mechanisms underpinning this concerning trend? Through a peculiar quirk of thyroid biochemistry, the potentially-damaging radical species, hydrogen peroxide (H_2O_2) is essential for the synthesis of the thyroid hormones. In an individual in which uncontrolled inflammation and oxidative stress dominate, thyroid function sits precariously in the balance.

In Byte #2, we examine these processes and the mechanisms contributing to various thyroid abnormalities, highlighting nutrigenomic pathways that can be readily implemented to restore normal thyroid function, regardless of the specific nature of the abnormality.

Byte #3 Hosted by Margeaux Higgins

AdvDipNat, AdvDipNut, BBus(Mktg)

Upstream Influences on Fertility

Fertility in both males and females is diminishing globally at an alarming rate and not all of the causes are well-understood; genetic, lifestyle and environmental factors all appear to be contributors. Advances in reproductive technology are not entirely successful, leading to numerous failed attempts by couples who may or may not succeed in giving birth to a healthy baby. The core biochemical pathways that maintain normal function in both ovaries and testes can compromise both natural fertility and the fertilisation and implantation processes used in assisted reproductive technology (ART).

Byte #3 discusses the relevant mechanisms and then examines the modifiable factors a clinician can employ to fine-tune the cellular pathways impacting fertility in both the male and the female. Importantly, the nature of common preconception and pregnancy supplements is highlighted to illustrate the flaws evident in common options.



TO ENROL IN SERIES 3 OF
CONVERSATIONS IN NUTRIGENOMIC MEDICINE
VISIT
nutrigenomicmedicine.com

Series 3
(ALL 3 BYTES)

\$225
(SAVE \$55.50)

Each Byte \$93.50

9 x CPE
POINTS

Prices are in Australian Dollars and include GST. Each individual Byte is 3 x CPE Points.

Institute for Nutrigenomic Medicine Pty Ltd
ACN 613 288 565
Ross Court Central, 132-140 Ross Court, Cleveland, Qld 4163, Australia.
Tel: +61 7 3488 0385

nutrigenomicmedicine.com