



SEPTEMBER 20 - 24, 2016
FAIRMONT BANFF SPRINGS HOTEL, BANFF, ALBERTA, CANADA

5th Global Symposium on **KETOGENIC THERAPIES**

Treating Epilepsy, Brain Cancer, Autism & Cognitive Disorders



**UNIVERSITY OF
CALGARY**

www.ketoconnect.org



ORGANIZING COMMITTEE

Jong M. Rho, MD – Chair
 Jim Abrahams – Executive Director, The Charlie Foundation
 Ronald Anderson, MD, FRCPC
 Heung Dong Kim, MD, PhD
 Megan Leigh Lewis, MSc
 Susan Masino, PhD
 Elizabeth Neal, RD, PhD
 Adrienne C. Scheck, PhD
 Beth Zupiec-Kania, RDN

STAFF & CONSULTANTS

Rose Tobias – University of Calgary
 Joe Martin – BDI Events
 Julie Slinn – University of Calgary
 Nancy Abrahams – The Charlie Foundation

SYMPOSIUM REGISTRATION INFORMATION**GROUP 1:**

Physicians and PhD Scientists

GROUP 2:

Dietitians, nurses, social workers, therapists, allied health, research associates, students of these profession, and scientists and physicians in training.

EARLY BIRD PRICING

Now thru
 December 31, 2015

Group 1: \$395 USD
 Group 2: \$295 USD

SPRING EARLY BIRD

January 1 thru
 May 31, 2016:

Group 1: \$495 USD
 Group 2: \$395 USD

STANDARD

June 1 thru
 September 24, 2016

Group 1: \$595 USD
 Group 2: \$495 USD

COURSE DESCRIPTION

Historically, dietary and metabolic therapies have been used in a wide variety of neurological conditions. The impetus for using various diets to treat — or at least ameliorate symptoms of these disorders stems from both a lack of effectiveness of standard pharmacological agents, and also the intrinsic appeal of implementing a more natural and readily available treatment. The most notable example in this regard is the high-fat, low-carbohydrate ketogenic diet (KD) used successfully in patients with medically intractable epilepsy. Recently, there has been intensely growing interest in metabolism-based treatments for many neurological diseases other than epilepsy. Indeed, the field of ketogenic therapies for neurological disorders has now truly come of age.

For this Fifth Global Symposium on Ketogenic Therapies, the focus will be on recent clinical and research innovations impacting the ketogenic diet and its variations, viewed from the perspective of translational science and direct patient care. A strong emphasis will be placed on the emerging links between metabolism (at cellular, organ and whole animal/body levels) and epigenetics (i.e., genetic control by factors other than those determined by an individual's specific DNA sequence). In addition to cutting-edge keynote and topical presentations, the symposium will include both practical workshops, diet demonstrations and also rapid-fire research reviews by leading scientists. In addition to group discussions, there will be dedicated time for Q&A after each speaker. The faculty and moderators are all internationally recognized experts in their fields, and the program will delve into the many advances made in the areas of epilepsy, brain cancer, autism spectrum disorder, cognitive disorders such as Alzheimer's disease, and much more. This biennial symposium is unquestionably the definitive global venue for metabolism-based therapies for neurological disorders.

LEARNING OBJECTIVES

Upon conclusion of this program, participants should be able to:

- Identify the conditions or diseases for which ketogenic diet therapies may be beneficial.
- Recognize the clinical specialties involved in managing ketogenic diet therapies.
- Integrate scientific knowledge of bioenergetics and metabolism with knowledge transfer to clinical practice.
- Describe the emerging links between energy metabolism and epigenetics.

INTENDED AUDIENCE

This course is intended for dietitians, nurses, social workers, therapists, allied health professionals, research associates, postdoctoral fellows, graduate students and physicians in training.

CREDITS

An application has been made for study credits from the Office of Continuing Medical Education and Professional Development, University of Calgary. Continuing Medical Education and Professional Development, University of Calgary, is fully accredited by the Committee on Accreditation of Canadian Medical Schools (CACMS). The Canadian Dietetic Association and American Academy of Nutrition and Dietetics have approved this program for Continuing Education for dietitians.

EDUCATION GRANTS

This course is supported by The Charlie Foundation for Ketogenic Therapies and, in part, by educational grants from multiple industry sponsors in accordance with ACCME Standards. A complete listing of commercial supporters will be acknowledged on our KetoConnect website (www.ketoconnect.org) as they are received.

LODGING ACCOMMODATIONS

THE FAIRMONT BANFF SPRINGS HOTEL

405 SPRAY AVE, BANFF, ALBERTA T1L 1J4, CANADA

PHONE: +1 403-762-2211

WWW.FAIRMONT.COM/BANFF-SPRINGS

The world famous historic hotel is nestled in the heart of Banff National Park and the Canadian Rockies. The landmark stands above the picturesque alpine town of Banff and is known as the “Castle in the Rockies.” Once you arrive at the hotel, you never have to leave! The hotel will host all of the conference programs and offer all the amenities and activities you need to fully experience Banff!

Calgary International Airport (YYC) is located 1.5 hours from the Fairmont. Transportation shuttles have been reserved for this conference and will require advance reservations which can be made 3 months prior to the conference via our web-site (ketoconnect.org). Although we recommend taking a shuttle from the airport to the hotel, parking at the resort is available. Day guest parking is complimentary, overnight parking is based on a daily rate.

CANCELLATION POLICY

If you cancel your participation in this course on or before September 1st your registration fee will be refunded, less a \$75 U.S. administrative fee. No refunds will be made after September 1, 2016. Canceled registrations are non-transferable.

Book your stay early at the conference host hotel for a special reduced conference rate of \$279/night (Canadian dollar – approximately \$210 U.S. dollar) through August 20, 2016.

Book your stay by clicking here: ketoconnect.org

You can also make your reservation by calling 1-403-762-6866 or 1-800-441-1414. Mention you are part of the Global Symposium for Ketogenic Therapies. There is a limited amount of rooms at the discounted rate, so be sure to book your room early!



COURSE SYLLABUS

TUESDAY, SEPTEMBER 20

12:00 – 8:00 PM	Registration
5:00 – 8:00 PM	Welcome Reception • Hors d'oeuvres and cocktails (cash bar) River View Lounge

WEDNESDAY, SEPTEMBER 21

Morning Session

7:30 – 8:30 AM	Breakfast and Registration
8:30 – 8:45 AM	Welcome and Introductions • Jim Abrahams (The Charlie Foundation), Jong Rho, MD (University of Calgary) & Jon Meddings, MD (Dean, Cumming School of Medicine, University of Calgary)
8:45 – 9:00 AM	Epilepsy Testimonial (local patient/parent)
8:00 AM – 8:00 PM	Posters Available for Viewing (Cascade Ballroom): Poster Session One
9:00 – 9:30 AM	Modern History of the Ketogenic Diet, Its Variants and Future Uses • James Wheless, MD (University of Tennessee)
Plenary Session One:	Metabolism and Epigenetics Session Moderators • Thomas Sutula, MD, PhD (University of Wisconsin, Madison) and Manisha Patel, PhD (University of Colorado, Denver)
9:30 – 10:10 AM	Special Lecture: What is Epigenetics and its Relation to Metabolism? • Mark F. Mehler, MD (Albert Einstein College of Medicine)
10:10 – 10:35 AM	Metabolism, Cognition and Behaviour: Beyond the Genes • Dost Öngür, MD, PhD (McLean Hospital, Harvard Medical School)
10:35 – 10:55 AM	Break
10:55 – 11:20 AM	DNA Methylation, Histone Modifications and Epileptogenesis • Detlev Boison, PhD (Legacy Research Institute)
11:20 – 11:45 AM	Epigenetic Regulation of Tumorigenesis • Nada Jabado, MD, PhD (McGill University, Montreal)
11:45 – 12:00 PM	Panel Discussion/Q&A • Drs. Mehler, Öngür, Boison, and Jabado Moderators: Tom Sutula, MD, PhD (University of Wisconsin) and Manisha Patel, PhD (University of Colorado Denver)
12:00 – 1:30 PM	Group Lunch

WEDNESDAY, SEPTEMBER 21 CONTINUED

Afternoon Session	
	Epilepsy Session Moderators: Elizabeth Thiele, MD, PhD (Harvard Medical School) and Heung Dong Kim, MD, PhD (Severance University Seoul)
1:30 - 1:55 PM	Dietary Treatments for Epilepsy: A Clinical Trials Update • J. Helen Cross, MD, PhD (University College London)
1:55 - 2:20 PM	How Do Diets Render Seizure Control? • Carl Stafstrom, MD, PhD (Johns Hopkins University)
2:20 - 2:45 PM	Implementing Diets for Epilepsy: Have Protocols Improved? • Elizabeth Neal, RD, PhD (Matthew's Friends Clinics, UK)
2:45 - 3:10 PM	Anaplerosis as a Paradigm for Treating Glucose Transporter Deficiency • Juan Pascual, MD, PhD (University of Texas Southwestern)
3:10 - 3:30 PM	Break
3:30 - 4:15 PM	Clinical Approaches: Which Dietary Variation Should I Choose? (15 min each) Classic Ketogenic Diet: Eric Kossoff, MD (Johns Hopkins) Modified Keto/Atkins Diet: Elaine Wirrell, MD (Mayo Clinic, Rochester) Low-Glycemic Index Treatment: Elizabeth Thiele, MD, PhD (Harvard)
4:15 - 5:00 PM	Laboratory Insights: Which Pathways Are Relevant to KD Action? (15 min each) Ketones: Gary Yellen, PhD (Harvard) Fatty Acids: Robin Williams, PhD (University College London) Glucose Restriction: Thomas Sutula, MD, PhD (University of Wisconsin)
5:00 - 5:30 PM	Panel Discussion • Drs. Cross, Stafstrom, Neal, Pascual, Kossoff, Wirrell, Thiele, Yellen, Williams and Sutula • Moderators: Elizabeth Thiele, MD, PhD and Heung Dong Kim, MD, PhD
5:30 PM	Summary and Adjournment
5:30 - 7:30 PM	Reception (Hors d'oeuvres and cocktails - cash bar) Poster Session One (Authors to Present)
7:30	Dinner on own

THURSDAY, SEPTEMBER 22

Morning Session	
7:30 - 8:30 AM	Breakfast and Registration
8:00 AM - 8:00 PM	Posters Available for Viewing (Cascade Ballroom): Poster Session Two
8:30 - 9:10 AM	Special Lecture: Fats as Fuel for Fitness • Jeffrey S. Volek, PhD, RD (The Ohio State University)
9:10 - 9:20 AM	Introduction • Adrienne C. Scheck, PhD (Barrow Neurological Institute, Phoenix)
9:20 - 9:30 AM	Brain Cancer Patient Testimonial • Adam Sorenson
Plenary Session Two:	Brain Cancer Session Moderators: David Fortin, MD (Sherbrooke University) and D. D'Agostino, PhD (University of South Florida, Tampa)
9:30 - 9:55 AM	What is the Evidence That Ketogenic Diets Can Treat Brain Cancer? • Brent Reynolds, PhD (University of Florida, Gainesville)
9:55 - 10:20 AM	Dietary Therapies for Brain Cancer: A Clinical Trials Update • Adrienne C. Scheck, PhD (Barrow Neurological Institute, Phoenix)
10:20 - 10:40 AM	Break
10:40 - 11:05 AM	Should Dietary Protocols Be Modified When Treating Brain Cancer? • Leonora Renda, RD (Barrow Neurological Institute, Phoenix)
11:05 - 11:30 AM	Metabolism at the Crossroads of Canonical Cell Signaling and Autophagy • Sameer Agnihotri, PhD (University of Toronto)
11:45 - 12:00 PM	Panel Discussion/Q&A • Drs. Reynolds, Scheck, Mack, Agnihotri, and Ms. Renda Moderators: David Fortin, MD and Dominic D'Agostino, PhD
11:45 - 1:00 PM	Box Lunches
1:00 - 2:30 PM	
Concurrent Workshops	
Workshop A	Initiating and Monitoring Ketogenic Therapies Beth Zupiec-Kania, RDN (Ketogenic Therapies and The Charlie Foundation and Cristiana Liu, RD (Sick Kids Hospital, Toronto) - Alberta Room
Workshop B	Basic Research Highlights (Six presentations - 15 minutes each) Moderators: Kristina Simeone, PhD (Creighton University, Omaha) and Stephane Auvin, MD, PhD (Université Denis Diderot, Paris) - Alhambra Room
Ongoing throughout the day	Practical Tools and Resources for Ketogenic Diets • Strathcona, Angus, Oak and Petrak Rooms
2:30 PM	Afternoon Free
5:30 - 7:30 PM	Poster Session Two (Hors d'oeuvres and cocktails - cash bar) • Authors to Present
7:30	Dinner on own

5TH GLOBAL SYMPOSIUM ON KETOGENIC THERAPIES

FRIDAY, SEPTEMBER 23

Morning Session

7:30 – 8:30 AM	Breakfast and Registration
8:30 – 8:40 AM	Introduction • Susan A. Masino, PhD (Trinity College, CT)
8:40 – 8:50 AM	Autism Patient Testimonial • Christine Williams-dyjur, RD
Plenary Session Three:	Cognition and Behavior Session Moderators • Joerg Klepper, MD, PhD (Aschaffenburg Children's Hospital) and Tove Hallböök, MD, PhD (Sahlgrenska University Hospital, Sweden)
8:50 – 9:30 AM	Special Lecture: The Bioenergetics of Higher Cortical Function • Mark Mattson, MD, PhD (NIH)
9:30 – 9:55 AM	The Case for Bioenergetic Manipulation for the Treatment of Alzheimer's Disease • Russell H. Swerdlow, MD (University of Kansas)
9:55 – 10:20 AM	The Neurometabolic Ménage-à-Trois: Epilepsy, Cognition and Autism Jeffrey R. Buchhalter, MD, PhD (University of Calgary)
10:20 – 10:40 AM	Break
10:40 – 11:05 AM	Diet as Precipitants and Treatments for Autism Spectrum Disorder • Susan A. Masino, PhD (Trinity College)
11:05 – 11:30 AM	Metabolic Neuroimaging and Higher Level Brain Functions • Stephen Cunnane, PhD (University of Sherbrooke)
11:30 – 11:50 PM	Panel Discussion/Q&A • Drs. Mattson, Swerdlow, Buchhalter, Masino, and Cunnane Moderators: Joerg Klepper, MD, PhD and Tove Hallböök, MD, PhD
11:50 – 1:10 PM	Group Lunch
1:00 – 1:40 PM	Special Lecture: "Challenging Conventional "Wisdom" That a High Fat Diet is Hazardous to Health" • David Diamond, PhD (University of South Florida)
1:45 – 3:15 PM	Concurrent Workshops
Workshop A	Laboratory Model Systems for the Study of Ketogenic Therapies (Six presentations – 15 mins each) Moderators: Carl E. Stafstrom, MD, PhD (Johns Hopkins University) and Timothy Simeone, PhD (Creighton University, Omaha) – Alberta Room
Workshop B	Clinical Research Highlights • (Six presentations – 15 mins each) Moderators: Christina Bergqvist, MD (Children's Hospital of Philadelphia) and Elizabeth Thiele, MD, PhD (Harvard) – Alhambra Room
Ongoing	Practical Tools and Resources for Ketogenic Diets • Strathcona, Angus, Oak and Petrak Rooms
3:15 – 3:35 PM	Break

Afternoon Session

A Potpourri of Important Issues and Ideas (15 min each)

Session Moderators • Jeffrey Buchhalter, MD, PhD and Elizabeth Neal, RD, PhD

3:35 – 3:40 PM	Introduction • Elizabeth Neal, RD, PhD
3:40 – 4:00 PM	Traumatic Brain and Spinal Cord Injury: Is This An Emerging Area? • Wolff Tetzlaff, PhD (University of British Columbia)
4:00 – 4:20 PM	Mitochondria and Oxidative Stress in Epilepsy, Brain Cancer and Autism • Manisha Patel, PhD (University of Colorado Denver)
4:20 – 4:40 PM	Ketogenic Diets for Adolescents and Adults: Has Anything Changed? • Pavel Klein, MD (Mid-Atlantic Epilepsy Center)
4:40 – 5:00 PM	Global Use of Ketogenic Diets: Continuing Challenges • Eric Kossoff, MD (Johns Hopkins)
5:00 – 5:20 PM	Panel Discussion/Q&A: Drs. Tetzlaff, Patel, Klein, & Kossoff • Moderators: Jeffrey Buchhalter, MD, PhD and Elizabeth Neal, PhD, RD
5:20 PM	Dinner on own for attendees
7:00 – 10:00 PM	CLOSING GALA EVENT with Special Guest: Ticket required • Alhambra Room

SATURDAY, SEPTEMBER 24

Morning Session

8:00 – 9:00 AM	Breakfast and Registration
9:00 – 9:10 AM	Introduction • Heung Dong Kim, MD, PhD (Severance University, Seoul)
9:10 – 9:40 AM	Special Presentation: Ketogenic Food Demonstration • Dawn Martenz (Keto Mom and Cookbook author)
9:40 – 10:00 AM	Medically Intractable Epilepsy: The Parents' Perspective • Emma Williams (Matthew's Friends)
10:00 – 10:20 AM	Malignant Brain Cancer: Bucking the System • Brad Sorenson (Keto Dad)
10:20 – 10:40 AM	Autism Spectrum Disorder: A Plea to Stem the Tide • Lonnie Zwaigenbaum, MD (University of Alberta)
10:40 – 11:00 AM	Break
11:00 – 11:20 AM	The Charlie Foundation Re-invented • Jim Abrahams (The Charlie Foundation)
11:20 – 11:40 PM	A Quarter Century in "Keto" – Land: Lessons Learned • Beth Zupec-Kania, RDN (Ketogenic Therapies, The Charlie Foundation)
11:40 – 12:00 PM	Ketogenic Therapies for Neurological Disorders: The Next Generation • Jong Rho, MD (University of Calgary)
12:00 – 12:15 PM	Concluding Remarks and Symposium Adjournment • Jong Rho Sixth Global Symposium on Ketogenic Therapies – 2018 • Heung Dong Kim, MD, PhD (Severance University, Seoul)
12:15 PM	Symposium Adjournment

JOIN US SEPTEMBER 20 – 24, 2016 BANFF, ALBERTA, CANADA

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You can register online at www.ketoconnect.org or fill out the Registration Form below and mail.

REGISTRANT INFORMATION (Please type or print legibly using one form per person)

FIRST/GIVEN NAME _____ LAST NAME _____ CREDENTIALS _____

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BDI EVENTS - Joe Martin 4605 Lankershim Blvd, Suite 710 • Los Angeles, CA 91602

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SPRING EARLY BIRD January 1 thru May 31, 2016

Group 1: \$495 USD • Group 2: \$395 USD

STANDARD June 1 thru September 24, 2016

Group 1: \$595 USD • Group 2: \$495 USD

Registration _____ \$USD

I authorize my credit card to be charged _____ \$USD

Tickets to our closing Gala Event will be available on ketoconnect.org by January, 2016.



Supported in part by a grant from the National Institutes of Health



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