

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

5<sup>th</sup> Global Symposium on  
**KETOGENIC THERAPIES**

*Treating Epilepsy, Brain Cancer, Autism & Cognitive Disorders*



[www.ketoconnect.org](http://www.ketoconnect.org)



**ORGANIZING COMMITTEE**

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

**STAFF & CONSULTANTS**

Rose Tobias – University of Calgary  
 Joe Martin – BDI Events  
 Julie Slinn – University of Calgary  
 George Hornik – Grupo Creativo  
 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 30, 2016:

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

**STANDARD**

April 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. There will be ample time for attendee engagement and group discussions. 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**

University of Calgary is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians, pharmacists and nurses. 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](http://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](http://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](http://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, your registration fee, less a \$75 U.S. administrative fee, on or before September 30th. 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](http://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	<b>Welcome and Introductions</b> • Jong Rho & Charlie Abrahams
8:45 – 9:00 AM	<b>Epilepsy Testimonial</b> (local patient/parent)
8:00 AM – 8:00 PM	Posters Available for Viewing (Cascade Ballroom): Poster Session One
9:00 – 9:30 AM	<b>Modern History of the Ketogenic Diet, Its Variants and Future Uses</b> • James Wheless, MD (University of Tennessee)
Plenary Session One:	<b>Metabolism and Epigenetics</b> Session Moderators • T. Sutula, MD, PhD (University of Wisconsin, Madison) and M. Patel, PhD (University of Colorado, Denver)
9:30 – 10:10 AM	<b>Special Lecture: What is Epigenetics and its Relation to Metabolism?</b> • Mark F. Mehler, MD (Albert Einstein College of Medicine)
10:10 – 10:35 AM	<b>Metabolism, Cognition and Behaviour: Beyond the Genes</b> • Dost Öngür, MD, PhD (McLean Hospital, Harvard Medical School)
10:35 – 10:55 AM	Break
10:55 – 11:20 AM	<b>DNA Methylation, Histone Modifications and Epileptogenesis</b> • Detlev Boison, PhD (Legacy Research Institute)
11:20 – 11:45 AM	<b>Epigenetic Regulation of Tumorigenesis</b> • Nada Jabado, MD, PhD (McGill University)
11:45 – 12:00 PM	<b>Panel Discussion/Q&amp;A</b> • Drs. Mehler, Öngür, Boison, and Jabado Moderators: T. Sutula, MD, PhD and M. Patel, PhD
12:00 – 1:30 PM	Group Lunch

**WEDNESDAY, SEPTEMBER 21 CONTINUED**

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

**THURSDAY, SEPTEMBER 22**

<b>Morning Session</b>	
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	<b>Special Lecture: Fats as Fuel for Fitness</b> • Jeffrey S. Volek, PhD, RD (The Ohio State University)
9:10 - 9:20 AM	<b>Introduction</b> • Adrienne C. Scheck, PhD
9:20 - 9:30 AM	<b>Brain Cancer Patient Testimonial</b> • Adam Sorenson
Plenary Session Two:	<b>Brain Cancer</b>
	Session Moderators: T. Seyfried, PhD (Boston College) and D. D'Agostino, PhD (University of Florida Gainesville)
9:30 - 9:55 AM	<b>What is the Evidence That Ketogenic Diets Can Treat Brain Cancer?</b> • Brent Reynolds, PhD (University of Florida, Gainesville)
9:55 - 10:20 AM	<b>Dietary Therapies for Brain Cancer: A Clinical Trials Update</b> • Adrienne C. Scheck, PhD (Barrow Neurological Institute, Phoenix)
10:20 - 10:40 AM	Break
10:40 - 11:05 AM	<b>Should Dietary Protocols Be Modified When Treating Brain Cancer?</b> • Leonora Renda, RD (Barrow Neurological Institute, Phoenix)
11:05 - 11:30 AM	<b>Metabolism at the Crossroads of Canonical Cell Signaling and Autophagy</b> • Stephen Mack, PhD (University of Toronto)
11:45 - 12:00 PM	<b>Panel Discussion/Q&amp;A</b> • Drs. Reynolds, Scheck, Mack, and Ms. Renda Moderators: T. Seyfried, PhD and D. D'Agostino
11:45 - 1:00 PM	Box Lunches
<b>1:00 - 2:30 PM</b>	
Workshop A	<b>Initiating and Monitoring Ketogenic Therapies</b>
	Moderators: B. Zupiec-Kania, RDN and C. Liu, RD - Alberta Room
Workshop B	<b>Basic Research Highlights</b> (Six presentations - 15 minutes each)
	Moderators: A. Hartman, MD and S. Auvin, MD, PhD - Alhambra Room
Ongoing throughout the day	<b>Practical Tools and Resources for Ketogenic Diets</b> • 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	<b>Introduction</b> • Susan Masino, PhD
8:40 – 8:50 AM	<b>Autism Patient Testimonial</b> • Christine Williams-dyjur, RD
Plenary Session Three:	<b>Cognition and Behavior</b> Session Moderators • J. Klepper, MD, PhD (Aschaffenburg Children's Hospital) and T. Hallböök, MD, PhD (Sahlgrenska University Hospital, Sweden)
8:50 – 9:30 AM	<b>Special Lecture: The Bioenergetics of Higher Cortical Function</b> • Mark Mattson, MD, PhD (NIH)
9:30 – 9:55 AM	<b>Metabolic Shifts in the Aging Brain: Implications for Alzheimer's Risk &amp; Therapeutic Interventions</b> Roberta D. Brinton, PhD (University of Southern California)
9:55 – 10:20 AM	<b>The Neurometabolic Ménage-à-Trois: Epilepsy, Cognition and Autism</b> Jeffrey R. Buchhalter, MD, PhD (University of Calgary)
10:20 – 10:40 AM	Break
10:40 – 11:05 AM	<b>Diet as Precipitants and Treatments for Autism Spectrum Disorder</b> • Susan A. Masino, PhD (Trinity College)
11:05 – 11:30 AM	<b>Metabolic Neuroimaging and Higher Level Brain Functions</b> • Stephen Cunnane, PhD (University of Sherbrooke)
11:30 – 11:50 PM	<b>Panel Discussion/Q&amp;A</b> • Drs. Mattson, Brinton, Buchhalter, Masino, and Cunnane Moderators: J. Klepper, MD, PhD and T. Hallböök, MD, PhD
11:50 – 1:10 PM	Group Lunch
1:00 – 1:40 PM	<b>Special Lecture: "Challenging Conventional "Wisdom" That a High Fat Diet is Hazardous to Health"</b> • David Diamond, PhD (University of South Florida)
1:45 – 3:15 PM	<b>Concurrent Workshops</b>
Workshop A	<b>Laboratory Model Systems for the Study of Ketogenic Therapies</b> (Six presentations – 15 mins each) Moderators: C. E. Stafstrom, MD, PhD and T. Simeone, PhD – Alberta Room
Workshop B	<b>Clinical Research Highlights</b> • (Six presentations – 15 mins each) Moderators: C. Bergqvist, MD and E. Thiele, MD, PhD – Alhambra Room
Ongoing	<b>Practical Tools and Resources for Ketogenic Diets</b> • Strathcona, Angus, Oak and Petrak Rooms
3:15 – 3:35 PM	Break

### Afternoon Session

	<b>A Potpourri of Important Issues and Ideas</b> (15 min each) Session Moderators • J. Buchhalter, MD, PhD and E. Neal, RD, PhD
3:35 – 3:40 PM	<b>Introduction</b> • Elizabeth Neal, RD, PhD
3:40 – 4:00 PM	<b>Traumatic Brain and Spinal Cord Injury: Is This An Emerging Area?</b> • Wolff Tetzlaff, PhD (University of British Columbia)
4:00 – 4:20 PM	<b>Mitochondria and Oxidative Stress in Epilepsy, Brain Cancer and Autism</b> • Manisha Patel, PhD (University of Colorado Denver)
4:20 – 4:40 PM	<b>Ketogenic Diets for Adolescents and Adults: Has Anything Changed?</b> • Pavel Klein, MD (Mid-Atlantic Epilepsy Center)
4:40 – 5:00 PM	<b>Global Use of Ketogenic Diets: Continuing Challenges</b> • Eric Kossoff, MD (Johns Hopkins)
5:00 – 5:20 PM	<b>Panel Discussion/Q&amp;A:</b> Drs. Tetzlaff, Patel, Klein, & Kossoff • Moderators: J. Buchhalter & E. Neal
5:20 PM	Dinner on own for attendees
7:00 – 10:00 PM	<b>CLOSING GALA EVENT</b> 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	<b>Introduction</b> • Heung Dong Kim
9:10 – 9:40 AM	<b>Special Presentation: Ketogenic Food Demonstration</b> • Dawn Martenz
9:40 – 10:00 AM	<b>Medically Intractable Epilepsy: The Parents' Perspective</b> • Emma Williams (Matthew's Friends)
10:00 – 10:20 AM	<b>Malignant Brain Cancer: Bucking the System</b> • Brad Sorenson
10:20 – 10:40 AM	<b>Autism Spectrum Disorder: A Plea to Stem the Tide</b> • Lonnie Zwaigenbaum, MD (University of Alberta)
10:40 – 11:00 AM	Break
11:00 – 11:20 AM	<b>The Charlie Foundation Re-invented</b> • Jim Abrahams (The Charlie Foundation)
11:20 – 11:40 PM	<b>A Quarter Century in "Keto"-Land: Lessons Learned</b> • Beth Zupec-Kania, RDN (Ketogenic Diet Seminars, Charlie Foundation)
11:40 – 12:00 PM	<b>Ketogenic Therapies for Neurological Disorders: The Next Generation</b> • Jong Rho, MD (University of Calgary)
12:00 – 12:15 PM	<b>Concluding Remarks and Symposium Adjournment</b> • Jong Rho & Jim Abrahams
12:15 PM	<b>Sixth Global Symposium on Ketogenic Therapies – 2018</b> • Heung Dong Kim
12:15 PM	Symposium Adjournment

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

## 5<sup>th</sup> GLOBAL SYMPOSIUM ON **KETOGENIC THERAPIES**

You can register online at [www.ketoconnect.org](http://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

BADGE NAME (as you would like it to appear on your name badge)

INSTITUTION/HOSPITAL/OFFICE/COMPANY

MAILING ADDRESS CITY STATE ZIP COUNTRY

TELEPHONE (If international, please include country code) FAX EMAIL

### CREDIT CARD AUTHORIZATION

- VISA       DISCOVER       MASTERCARD  
 \$295       \$395       \$495       \$595

CREDIT CARD NUMBER EXPIRATION DATE (Month/Year)

NAME OF CARDHOLDER (Please print)

BILLING ADDRESS (If different than registrant)

SIGNATURE

### MAIL REGISTRATION TO:

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

### EARLY BIRD PRICING

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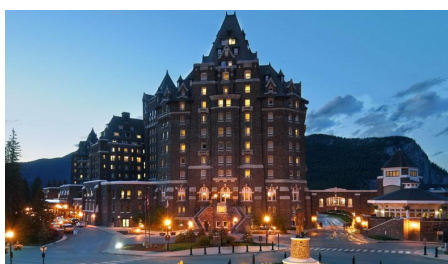
Registration \_\_\_\_\_ \$USD

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

Tickets to our closing Gala Event will be available on [ketoconnect.org](http://ketoconnect.org) by January, 2016.



515 Ocean Ave., #602N  
Santa Monica, CA 90402



Join us at the Fairmont Banff Springs Hotel located in the heart of Banff National Park.