INTERACTIVE WEBCAST
FRIDAY, JANUARY 5, 2018

Friday, January 5, 2018, 9 AM – 4 PM PST
You will need a computer with internet access and speakers to participate in the webinar.

ON-DEMAND WEBCAST
Wednesday, January 10, 2018 – Saturday, February 10, 2018
Participants interested in on-demand, self-study learning including continuing education credit may register to download the recording of the webinar from Wednesday, January 10, 2018 through Saturday, February 10, 2018. The program plus in-class exercises will be available in four convenient segments.

HOME STUDY RECORDINGS
Valid for CE until August 30, 2019
You may listen to or view the recorded lecture at your convenience and earn home study credit. Expiration date: August 30, 2019

UNDERSTANDING THE GUT BRAIN: STRESS, APPETITE, DIGESTION, AND MOOD

 PHYSICAL THERAPISTS: This program is approved by as a provider of the physical therapy continuing education by the Florida Board of Physical Therapy. Institute for Brain Potential is accredited as a provider of continuing education by the Florida Board of Physical Therapy. Institute for Brain Potential is designated as an Approved PACE Program Provider by the American College of Healthcare Professionals (Provider #0047). Program is approved for 6.0 contact hours (PDT). This program is approved for 6.0 contact hours (PDT). The assignment of PDC credits does not imply endorsement of specific course content, products, or clinical procedures by AOTA. This program provides 6 contact hours. Content Level: Intermediate. Focus:’s Stress, Appetite, Digestion, and Mood

PHARMACISTS & PHARMACY TECHNICIANS: Institute for Brain Potential is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education. The interactive webcast is a knowledge-based activity with UANs 092-000-D-0500-L1DF and 092-000-D-0500-L1DF. The on-demand webcast is a knowledge-based activity with UANs 092-000-D-0500-L1DF and 092-000-D-0500-L1DF. This program provides 6 CEUs. Tuition is in US dollars. Name (PLEASE PRINT)
Home Address
City/State/Zip
Phone Work Phone ( ) Home Phone ( ) Fax ( )
Profession (PLEASE PRINT EMAIL IF AVAILABLE)
Pre-Registration
$79 Individual Rate
$74 Group Rate (3 or more persons registering together)
$69 On-Site Registration (if space is available)

FOUR WAYS TO REGISTER
1. Internet: www.ibrpceu.com
2. Mail: PO Box 2338, Los Banos, CA 93635 (make check payable to IBP)
3. Fax: (677) 317-0222
4. Phone: (866) 652-7414 (open 24 hours a day, 7 days a week)

NURSES: Institute for Brain Potential (IBP) is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center’s Commission on Accreditation (ANCC). IBP is approved as a provider of continuing education by the California Board of Registered Nursing. Provider #CEP8986, and Florida Board of Nursing. This program provides 6 CE contact hours.

NSWTS: Institute for Brain Potential is approved by the American Psychological Association to sponsor continuing education for psychologists. Institute for Brain Potential maintains responsibility for this program and its content. This program provides 6 CE credits. Institute for Brain Potential is approved as a provider of continuing education by the Florida Board of Psychologists. This course provides 6 hours of CE credit.

COUNSELORS, SOCIAL WORKERS & MFTs: Institute for Brain Potential has been approved by NCARB as an Approved Continuing Education Provider, ACEP No. 5452. Programs that do not qualify for NCARB credit are clearly identified. Institute for Brain Potential is solely responsible for all aspects of the programs. This program provides 6 clock hours.

Institute for Brain Potential, provider 1160, is approved as a provider for continuing education by the Association of Social Work Boards (ASWB), 400 South Broadway, Suite B, Culver City, CA 90232. as well as through ACEP. Social workers should contact their regulatory board to determine course approval. Social workers will receive 6 continuing education clock hours for participation in this interactive webcast. This offered course is included in the knowledge-based component of the program. The interactive webcast is a knowledge-based activity with UANs 092-000-D-0500-L1DF and 092-000-D-0500-L1DF. The on-demand webcast is a knowledge-based activity with UANs 092-000-D-0500-L1DF and 092-000-D-0500-L1DF. This program provides 6 CEUs. The program plus in-class exercises will be available in four convenient segments.
The Gut Brain: The Mind-Body Connection

- **The Hidden Brain**: the enteric nervous system includes the esophagus, stomach, pancreas, and GI tract; how the gut brain communicates with the central nervous system.
- **Inflammation**: the link between chronic stress, cortisol and chronic GI inflammation.
- **Listening to the Gut**: the language of the gut brain includes sensations involving digestion, appetite, anxiety and mood.

**Stress, Appetite, and the Gut Brain**

- **“Starvation” Response**: the gut brain interprets caloric restriction or skipped meals as food scarcity and stress as impending famine.
- **Diet, Chronic Stress and Cortisol**: dieting increases cortisol and ghrelin, a key appetite-stimulating hormone.
- **Ghrelin**: Fulfilling but not Full: ghrelin, a stomach hormone, stimulates the dopamine reward center, enhances short-term memory, and stimulates opiate receptors in the stomach to make food more rewarding, more memorable, and less filling.
- **Leptin**: Full but not Fulfilling: a key appetite-suppressing stomach hormone; how it malfunctions in people with leptin resistance.
- **Pre-Diabetes and Diabetes**: the role of leptin and insulin resistance; abnormal bacterial strains in diabetics; bypassing the gut brain.
- **Foods that Inhibit Ghrelin and Suppress Appetite**: fiber (especially apples and pears), flax oil and omega-3s, eggs, seeds and nuts; outsmarting the ghrelin with small, low glycemic meals.

**Stress and Digestive Disorders**

- **Stress and the GI Tract**: chronic stress increases the diversity and number of harmful bacteria in the GI tract.
- **Inflamed Gut—Inflamed Brain**: how inflammatory cytokines in the blood reach the prefrontal cortex and hippocampus; role in generalized anxiety and low grade dysthymic depression.
- **Irritable Bowel Syndrome**: chronic stress inhibits the upper intestine and stimulates the lower intestine; role of bacterial overgrowth, inflammation and autoimmunity.
- **Food Allergies**: gut histamine and allergic reactions to proteins in egg, milk, peanut, tree nuts, shellfish and wheat; celiac disease and sensitivity, the role of gluten; a fact check on “wheat belly.” Is there a link between autism and gluten?
- **GERD**: reflux plays a role in dental erosion, obesity, sleep apnea and COPD; foods that trigger reflux and heartburn; side effects of protein pump inhibitors; benefits of complementary medicines, e.g., licorice.
- **Inflammatory Bowel Disorders**: Crohn’s disease and Ulcerative Colitis: symptoms and treatments; how stress affects relapse.
- **Nutritional Approaches**: Resveratrol and Quercetin in grapes; Curcumin in curry; Capsaicin in chili; Gingerol in ginger; nutrients that inhibit cortisol and reduce stress.

**Mood and Anxiety Disorders**

- **Inflammatory Effects of White Adipose Cells**: cytokines trigger the release of stress-related cortisol by targeting the prefrontal cortex and hippocampus; role in anxiety and depression; benefits of brown fat.
- **Antidepressants and the GI Tract**: beneficial and detrimental effects; do selected antiinflammatory drugs act as antidepressants?
- **Anti-inflammatory Foods**: marine sources of omega-3s are linked to lower rates of depression in fish-eating countries; omega-3s can inhibit inflammatory cytokines and elevate mood.
- **Anxiety**: people with acute and chronic anxiety tend to have specific bacterial strains; indications for probiotics.

**Understanding and Using Probiotics**

- **Probiotics**: composed of live organisms, they help the growth of healthful bacterial strains when administered in adequate amounts.
- **Immune Disorders**: probiotic bacterial strains that reduce inflammation and allergy-specific antibodies.
- **GI Tract Disorders**: Lactobacillus acidophilus, Bifidobacteria and others are selectively indicated for IBS as well as irregularity and diarrhea, celiac disease, and inflammatory bowel disorders.
- **Stress-Related Disorders**: chronic stress, cortisol and the growth of harmful bacterial strains linked to anxiety and depression; strains linked to MI and to stroke; probiotics that can reduce cortisol, e.g., Lactobacillus.
- **Oral Health**: benefits of probiotics for oral and sinus health; probiotic lozenges that reduce levels of three pathogens involved in periodontics, e.g., L. Reuteri inhibits plaque formation and gum bleeding.
- **Prebiotics**: strains of bacteria that support the GI tract; foods rich in prebiotics are fermented by the gut microbiota.

**Evidence-Based Guidelines**: selecting foods that are rich in probiotics; guidelines for purchasing high quality prebiotics and probiotics.

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**FREQUENTLY ASKED QUESTIONS**

**Q**: Is there a way to enjoy this seminar without being at my computer for 6 hours? What if I am not free on January 5, the date of the broadcast?

Yes! First, register for the program. You will receive a link to view the program starting January 10 until February 10. The program will be divided into four segments of approximately 75 minutes for user-friendly viewing.

**Q**: What if I have technical issues getting and staying connected, difficulty seeing the slides, or hearing the speaker?

We have an expert videographer to capture the sound and slides. We will make copies of the outline available to the participants. Further, in the unlikely event that you have connection problems, IBP will provide registrants with a free set of 4 CDs or DVDs of the entire program.

**Q**: I’d like to view the program and receive credit but without watching the live program or downloading it and still receive continuing education credit. Can I do this?

Yes! The cost of the DVD or CD set will be the same as the cost of the live program. Register now, let the operator know you will want the CD or DVD set (specify which), and make sure your profession is included in our online brochure.

**Q**: Can I attend this program live?

Yes, but only if you live in a city where IBP is currently presenting this seminar.

**Q**: My profession is not included on the brochure. Can I receive continuing education credit?

Maybe. Please contact our customer service at (888) 202-2938.

**Q**: How long does it usually take to receive a certificate of completion?

Typically, within 3 or 4 business days.

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**The enteric nervous system, the gut brain, plays a pivotal role in regulating inflammation, stress, metabolism, appetite, and mood.**

This unique evidence-based program is designed for health professionals working in medical, dental and behavioral settings and allied health professions.

Participants completing this program should be able to:

1. Describe key functions of the gut brain.
2. List several ways the gut brain regulates appetite.
3. Identify how stress contributes to digestive disorders.
4. Describe how inflammation of the gut can affect mood and anxiety.
5. List several disorders that can be effectively treated with probiotics.

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**ABOUT THE INSTRUCTOR**

Dr. Merrill Kuhn received a doctoral degree in Physiology followed by doctorates in Naturopathic Medicine and Holistic Medicine. She has taught graduate programs in pharmacology and complementary medicine and has been affiliated with SUNY at Buffalo. As a practicing Naturopathic Physician, Dr. Kuhn treats the full range of GI disorders presented in this program.

Dr. Kuhn has developed and presented educational programs for health professionals throughout the USA and is one of the nation’s most popular lecturers in continuing education. An outstanding, knowledgeable and humorous speaker, she presents key discoveries from medicine and complementary medicine in clear and practical terms.

In addition to Q & A sessions in class, Dr. Kuhn will answer your questions during the second half of the lunch break and by email after the program concludes.