### FOUR-HOUR LIVE WEBINAR

Wed., May 28, 2025

(REGISTRATION FORM)

## **GUT-BRAIN INTERACTION:**

A BIOPSYCHOSOCIAL & DIETARY APPROACH TO **GUT & BRAIN DISORDERS** 

### LIVE WEBINAR:

Wed., May 28, 2025, 5:30 PM - 10:00 PM, (Eastern Time)

or 4:30 PM - 9:00 PM, (Central Time) or 2:30 PM - 7:00 PM, (Pacific Time)



\$74 - Pre-Registration Rate: Live Webinar with 4 hours of CE credit.

Registrants will need a computer with a good Internet connection and audio speakers	i
or headphones) to participate in the live Webinar.	i

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### There are four ways to register:

- 11) Internet: www.INRseminars.com
- 2) Mail: INR, P.O. Box 5757, Concord, CA 94524-0757
  - (Make check payable to INR.)
- Fax: (925) 363-7798
- Phone: 1-800-937-6878

Inquiries for Customer Service: 1-877-246-6336 or (925) 609-2820 Purchase orders are accepted. Tax Identification No. 94-2948967

### **ACCREDITATION**

To obtain the 4 contact hours associated with this course, the health care professional will need to sign in, attend the course, and complete program evaluation forms. At the end of the program, the health care professional successfully completing the course will receive a statement of credit. This is an intermediate-level

### NURSES (RNs. NPs. & LPNs)

Institute for Natural Resources (INR) is accredited as a provider of nursing continuing professional development by the American Nurses Credentialing Center's Commission on Accreditation.

This program provides 4 contact hours for nurses, including 4 Rx contact hours of pharmacology CE.

INR has been accredited as a continuing education provider by the Florida Board of Nursing (#50-3026) and the Iowa Board of Nursing (#288) for 4 contact hours, and the California Board of Registered Nursing (CEP #06136) and the Kansas Board of Nursing (#LT0140-0927) for 4.8 contact hours. **DENTAL PROFESSIONALS** 

INR is an ADA CERP Recognized Provider. ADA CERP is a service of the American Dental Association to assist dental professionals in identifying quality providers of continuing dental education. ADA CERP does not approve or endorse individual courses or instructors, nor does it imply acceptance of credit hours by boards of dentistry. INR designates this activity for 4 hours of continuing education credits.

Institute for Natural Resources is accredited by the Accreditation Council for Pharmacy Education (ACPE) as a provider of continuing pharmacy education. The ACPE universal activity number (UAN) for this course is 0751-0000-24-009-L04-P. This is a knowledge-based



### **REGISTERED DIETITIANS & DTRs**

Under Provider Code: IN001, this program awards 4 CPEUs in accordance with the Commission on Dietetic Registration's CPEU Prior Approval Program. It has Prior Approval Number 187248 and Performance Indicators: 9.1.1, 9.1.2, and 9.1.4 at CPE Level: II.

PSYCHOLOGISTS, MENTAL HEALTH COUNSELORS, & ADDICTION COUNSELORS
The Institute for Natural Resources (INR) is approved by the CPA OPD to sponsor continuing professional education for psychologists. INR maintains responsibility for this program and its content. Psychologists must attend the seminar in its entirety and complete the course evaluation in order to receive credit. Under License #PSY000214, the Pennsylvania Board of Psychology has approved INR as a sponsor/provider of CE programs. Under Sponsor #268.000096, the Illinois Dept of Prof Regulation for Psychologist Licensing and Disciplinary Board has approved INR as a CE sponsor. Institute for Natural Resources (INR) is recognized by the NY SED State Board for Psychology as an approved provider of continuing education for licensed psychologists #PSY-0042. Under Sponsor #00088989 and Approval #60007980517, CRCC has approved this course for four contact hours. Institute for Natural Resources (INR) is recognized by the NY SED State Board for Mental Health Practitioners as an approved provider of continuing education for licensed mental health counselors, #MHC-0089. Under Sponsor #197-000240, the Illinois Dept of Prof Regulation has approved INR as a CE sponsor for professional/clinical counselors. INR is approved by the NAADAC Approved Education Provider Program, Provider #182846.

SOCIAL WORKERS & MARRIAGE & FAMILY THERAPISTS

Institute for Natural Resources, 1356, is approved as an ACE provider to offer social work continuing education by the Association of Social Work Boards (ASWB) Approved Continuing Education (ACE) program. Regulatory boards are the final authority on courses accepted for continuing education credit. ACE provider approval period: 02/28/2025-02/28/2028. Social workers completing this course receive four (4) clinical continuing education credits. Institute for Natural Resources (INR), SW CPE is recognized by the NY SED State Board for Social Work as an approved provider of continuing education for licensed social workers #0195. Under Sponsor #159-000260, the Illinois Dept of Prof Regulation has approved INR as a sponsor of continuing social work education. The California Board of Behavioral Sciences will accept courses approved by ASWB. Institute for Natural Resources (INR) is recognized by the NY SED State Board for Mental Health Practitioners as an approved provider of continuing education for licensed marriage and family therapists. #MFT-0055. Under Sponsor #168.000243, the Illinois Dept of Prof Regulation has approved INR as a CE sponsor for marriage and family therapists. Under CE approval #NVCEP2021, the Nevada Board of Examiners for MFT and CPC has approved INR as a sponsor. **OCCUPATIONAL THERAPISTS & OTAs** 

INR is an AOTA Approved Provider of continuing education. Provider #5347. INR has assigned 0.4 AOTA CEUs for this course. The category of this course is Foundational Knowledge. The assignment of AOTA CEUs does not imply endorsement of specific course content, products, or clinical procedures

The Florida Physical Therapy Association has approved this course for 4 contact hours (Approval #CE25-1165752). Accreditation of this course does not necessarily imply the FPTA supports the views #CE25-1105762). Accreditation of this course does not necessarily imply the FPTA supports the views of the presenter or the sponsors. INR is recognized as an approval agency to approve providers offering continuing competency courses by the Physical Therapy Board of California. This course has been approved by the Institute for Natural Resources (INR) for 4 continuing competency units. The NY SED has approved INR as a sponsor of continuing physical therapy education. Under Sponsor #216-000264, the Illinois Dept of Prof Regulation has approved INR as a sponsor for continuing physical therapy education. INR has New Jersey State Board of Physical Therapy Examiners Approval #2403-10.

### **CASÉ MANAGERS**

This program has been pre-approved by The Commission for Case Manager Certification to provide continuing education credit to Certified Case Managers (CCMs). **NURSING HOME ADMINISTRATORS (Distance Learning)** 

This program has been submitted for Continuing Education through NAB/NCERS for 4 total participant hours from NAB/NCERS. Please visit https://www.nabweb.org/continuing-education and choose "NAB Approved CE Database" for the most current approved courses. MASSAGE THERAPISTS

MASSAGE THERAPISTS
Institute for Natural Resources is approved by the National Certification Board for
Therapeutic Massage & Bodywork (NCBTMB) as a continuing education Approved
In The Open Company of the O Provider, Provider #299936-00.

### OTHER HEALTH PROFESSIONALS

Participants successfully completing this course will receive course completion certificates. For rules governing continuing education credit, participants should contact their respective regulatory boards.

# **GUT-BRAIN INTERACTION:**

## A BIOPSYCHOSOCIAL & DIETARY APPROACH TO **GUT & BRAIN DISORDERS**

### (A 4-HOUR INTERACTIVE LIVE WEBINAR)

### SCHEDULE

Please see the Registration Form for the seminar schedule.

Please register early. Space is limited. Registrations are subject to cancellation after the scheduled start time. A transfer can be made from one Webinar to another if space is available. Registrants cancelling up to 72 hours before a Webinar will receive a tuition refund less a \$25.00 administrative fee or, if requested, a full-value voucher, good for one year, for a future Webinar. Cancellation or voucher requests must be made in writing. If a Webinar cannot be held for reasons beyond the control of the sponsor (e.g., acts of God), the registrant will receive free admission to a rescheduled Webinar or a full-value voucher, good for one year, for a future Webinar. A \$25.00 service charge applies to each returned check. Nonpayment of full tuition may, at the sponsor's option, result in cancellation of CE credits issued. The syllabus is not available for separate purchase. Fees subject to change without notice.

### **SPONSOR**

INR (Institute for Natural Resources) is a non-profit scientific organization dedicated to research and education in the fields of science and medicine. INR is the nation's largest provider of live continuing education programs, offering over 600 live programs yearly.

INR has no ties to any ineligible organizations and sells no products of any kind, except educational materials. Neither INR nor any instructor has a material or other financial relationship with any health care-related business that may be mentioned in an educational program. If INR were ever to use an instructor who had a material or other financial relationship with an entity mentioned in an educational program, that relationship would be disclosed at the beginning of the program. INR takes all steps to ensure that all relevant program decisions are made free of the control of a commercial interest as defined in applicable regulatory policies, standards, and guidelines. INR does not solicit or receive gifts or grants from any source, has no connection with any religious or political entities, and is totally supported by its course tuition.

INR's address and other contact information follows:

P.O. Box 5757, Concord, CA 94524-0757

Customer service: 1-877-246-6336 or (925) 609-2820

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Education expenses (including enrollment fees, books, tapes, travel costs) may be deductible if they improve or maintain professional skills. Treas. Reg. Sec. 1.162-5. Recording of the seminar, or any portion, by any means is strictly prohibited. INR's liability to any registrant for any reason shall not exceed the amount of tuition paid by such registrant.

For American Disability Act (ADA) accommodations or for addressing a grievance, please send the request by email to info@inrseminars.com or by fax to (925) 363-7798. For ADA matters (including sign-language interpreters), INR would appreciate advance notice so as to ensure our ability to provide the appropriate accommodation.

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## **GUT-BRAIN INTERACTION:**

# A BIOPSYCHOSOCIAL & DIETARY APPROACH TO GUT & BRAIN DISORDERS

### **Frequently Asked Questions**

### Q: What do I have to do to complete the live Webinar successfully?

To obtain the contact hours associated with this course, the health professional will need to sign-in (by typing in the chat-box), attend the course online, and complete the program evaluation form and post-test electronically. At the end of the program, after all the evaluation and post-tests are accounted for, the health professional successfully completing the program will receive a statement of credit. This will take approximately 3 to 5 business days. This is an intermediate-level course.

- Q: How will I know that my profession qualifies for continuing education credit? Please see the section marked Accreditation. All professions for which INR (Institute for Natural Resources) has approval are listed in the Accreditation section.
- Q: What happens if I have technical difficulties watching or hearing a Webinar? You can transfer the tuition paid to another Webinar within two years or request a recording within 3 to 5 days to complete the webinar ASAP for live credit.
- Q: My profession is not listed on the brochure. Is it possible to obtain continuing-education credit? Possibly. Please contact INR's customer-service office at 1-877 246-6336 or by email at info@biocorp.com. The customer-service office can tell you if INR has approval for your profession.

### **COURSE SUMMARY**

According to a recent American Gastroenterological Association survey, ~40% of Americans' daily lives are disrupted by gastrointestinal (GI) conditions that can take a significant toll on their physical and mental health, as well as on our health care system. Today, many of these gut conditions are being attributed to dysregulation of the gut-brain axis - a collective term for all the channels of communication now known to exist between the gut (or GI tract) and the brain. The gut-brain axis provides a pathway for the gut to affect the brain and, conversely, for the brain (i.e., thoughts and feelings) to influence the operations of the gut. While, at one point, several GI conditions (e.g., irritable bowel syndrome and dyspepsia) were viewed as "functional" or "psychosomatic" disorders, they have since been renamed: "disorders of gut-brain interaction (or DGBIs)."

This course will address gut and brain issues using a biopsychosocial perspective, viewing illness as the product of biological, psychological, and social subsystems, combining and interacting at multiple levels. Using this perspective, we can examine the "big picture' – the wide range of factors that can contribute to the development and maintenance of DGBIs, including: genetics, epigenetics, stressful and traumatic early life events, psychosocial conditions, altered gut microbiota, adverse food reactions, pharmaceuticals, poor lifestyle factors, aging, and, even, COVID (SARS-CoV-2). Importantly, this course will address a range of interventions for a gut that is "off track" including: brain-gut behavior therapies, eating for gut health, microbiota-based therapies, physical activity, sleep, and reducing environmental toxins.

Disclaimer: These live interactive INR presentations provide continuing education for health care and mental health professionals with the understanding that each participant is responsible to utilize the information gained in an appropriate manner congruent with his/her/their scope of licenses.

### PROGRAM/LECTURE

### First Hour

- The Amazing Gut: Anatomy and Physiology of the Gastrointestinal Tract.
- Intro to the Gut-Brain Connection. How Our "Microbes" Communicate with the Body and the Brain.
- The Roles of the Vagus nerve, Gut nervous system (the "Second Brain"), the Gut Immune System, and the Gut Endocrine System.
- What is a "Leaky Gut" or Altered Intestinal Barrier Function? What are the Consequences?
- · Amplified Pain Processing: Roles of the Gut and the Brain.

### Break: 10 Minutes

### Second Hour

- Psychosocial Factors: Stress, Emotions, and the Gut. Impact of Stress on the Gut Environment. Gut Microbes and Gut Barrier.
- · Disorders of Gut-Brain Interaction:
- History, Philosophy, and Scientific Basis for Disorders of Gut-Brain Interaction.
- Irritable Bowel Syndrome (IBS). Do Probiotics Help? Does the Low FODMAP Diet Help? Complementary Therapies for IBS: Herbal Remedies, Cannabinoids, Yoga, Meditation, and Others.
- Functional Dyspepsia. Chronic Indigestion Heartburn and Acid Reflux. Antidepressants. Diet and Lifestyle Interventions. Cognitive Behavioral Therapy. Herbal and Alternative Remedies.
- Clinical Assessment and Management of Disorders of Gut-Brain Interaction
- Gut-Brain-Microbiota Axis in Depression. From Motility to Mood. From Pathogenesis to Treatment.
- Pharmacomicrobiomics: Bidirectional Microbes-Drug Interactions. Psychobiotics for Depression.

### **Break: 10 Minutes**

### Third Hour

- Adverse Food Reactions. Allergies, Intolerance, and Sensitivity. Commercial Food Sensitivity Tests: Do They Work?
- Lactose, Fructose, Lectins, and Gluten: Who Should Avoid Them? Celiac disease vs. Non-celiac Gluten (Wheat) Sensitivity: What Do We Know? When Can Dietary Restriction Lead to Disordered Eating Behavior?
- Aging and the Gut. Changes in Gut Function with Age. Aging and Gut Microbiota: Infection Risk. Aging, Gut Health, and the Brain Neurodegenerative Diseases.
- Covid and the Gut. Gut Health in Long Covid. Gastrointestinal Manifestations and Consequences.

## Break: 10 Minutes Fourth Hour

- . What To Do When Your Gut is "Off Tract"? How to Guard Your Gut.
- Brain-Gut Behavior Therapies. Mind-Body Approaches to Calm an Irritated Gut. Cognitive Behavioral Therapy and Gut-Directed Hypnotherapy. Mindful Eating for Gut Symptoms. Activating your Parasympathetic Nervous system: The Rest-Digest-Healing-Eating Mode.

### PROGRAM (cont.)

- Role of Diet: Ultra-Processed Food and Poor Gut Health. Plant-Based Diet.
   Soluble (Fermentable) vs. Insoluble Fiber. Common Gas Offenders.
- Managing Gut Microbes. Pro- and Prebiotics. Fermented Foods. Should We "Cleanse" Our Colons?
- Exercise and Gut Health. Role of Physical Exercise. Physical Therapy to Improve Health/Function of Abdominal Muscles. Pelvic Floor Dysfunction and Disorders of Gut-Brain Interaction.
- Sleep and Gut Health. Sleep Disorders, Circadian Rhythms, Misalignment, and Gut Dysbiosis.
- Environmental Chemicals and Gut Health: What Do We Know and What Can We Do?

Questions/Answers, Course Quiz Review, & Evaluation

### LEARNING OBJECTIVES

Participants completing this program will be able to:

- 1) identify two components of the gut-brain axis and how they interact with the brain.
- 2) outline the bidirectional relationship between stress, the gut, and the brain.
- explain how the microbiome-gut-brain axis can influence the development of two neuropsychiatric disorders.
- 4) explain the difference between two types of adverse food reactions.
- identify one pharmacological and one lifestyle therapy that addresses disorders of gut-brain interaction.
- 6) list two gut-brain behavioral therapies that could improve gut-brain interactions.
- 7) describe, based on the material presented in this course, the implications for nursing, pharmacy, nutrition, mental health, dentistry, massage, occupational and physical therapy.

### INSTRUCTOR

**Dr. Gina Willett (Ph.D., R.D.)** Dr. Willett is a nationally known speaker in the areas of health and wellness. Dr. Willett has a doctoral degree in nutritional science and a master's degree in epidemiology and preventive medicine from the University of Wisconsin, Madison. She also has a master's degree in health education from the University of Oklahoma, Oklahoma City. Dr. Willett is a registered dietitian who has worked as both a clinical dietitian and as a health promotion coordinator. She served her country as an officer in the United States Air Force. In addition, Dr Willett has served as an assistant professor at the University of Richmond in Virginia. For the past twenty years, she has developed and presented continuing education programs to over 100,000 healthcare providers across the country.

INR reserves the right to change instructors without prior notice. Every instructor is either a compensated employee or independent contractor of INR.

FINANCIAL: Dr. Gina Willett is compensated by INR as an instructor.

NONFINANCIAL: Dr. Gina Willett has no non-financial relationships to disclose.

### SYSTEM REQUIREMENTS

For system requirements to participate in INR's live webinars, please visit Zoom's website at <a href="https://support.zoom.us/hc/en-us/articles/201362023-Zoom-system-requirements-Windows-macOS-Linux">https://support.zoom.us/hc/en-us/articles/201362023-Zoom-system-requirements-Windows-macOS-Linux</a>.