

## SIX-HOUR LIVE WEBINAR

Sun., Nov. 7, 2021

(REGISTRATION FORM)

# TRAUMATIC BRAIN INJURY (TBI) & CONCUSSION

(A NEW 6-HOUR INTERACTIVE LIVE WEBINAR)

**LIVE WEBINAR:** Sun., Nov. 7, 2021, 9:30 AM – 4:40 PM, (Eastern Time)  
or 8:30 AM – 3:40 PM, (Central Time)  
or 6:30 AM – 1:40 PM, (Pacific Time)

\$83 – Pre-Registration Rate: Live Webinar with 6 hours of CE credit.

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

Please note special discounts for homestudy purchase are available for students who are registered for webinars. Please email INR at [info@biocorp.com](mailto:info@biocorp.com) for more information.

Name (please print) \_\_\_\_\_  
Home Address \_\_\_\_\_  
City/State \_\_\_\_\_ Zip \_\_\_\_\_  
Work Phone \_\_\_\_\_ Home Phone \_\_\_\_\_  
Fax \_\_\_\_\_  
Email \_\_\_\_\_  
Profession \_\_\_\_\_ License No. \_\_\_\_\_  
Pharmacists only: NABP # \_\_\_\_\_ Date of Birth mm / dd / yy

### Payment by (please check one):

\_\_\_ Check for \$ \_\_\_\_\_ (Please make check payable to INR)

Charge the amount of \$ \_\_\_\_\_  
to my \_\_\_ Visa \_\_\_ MasterCard \_\_\_ American Express® \_\_\_ Discover®  
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Signature \_\_\_\_\_

### There are four ways to register:

- 1) **Internet:** [www.INRseminars.com](http://www.INRseminars.com)
- 2) **Mail:** INR, P.O. Box 5757, Concord, CA 94524-0757  
(Make check payable to INR.)
- 3) **Fax:** (925) 687-0860
- 4) **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 6 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 course.

### 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 6 contact hours for nurses, including one Rx contact hour of pharmacology CE. INR has been accredited as a continuing education provider by the Florida Board of Nursing (#50-3026-1) and the Iowa Board of Nursing (#288) for 6 contact hours, and the California Board of Registered Nursing (CEP #06136) and the Kansas Board of Nursing (#LT0140-0927) for 7.2 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 6 hours of continuing education credits.

### PHARMACISTS

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 0751-0000-21-054-L01-P. This is a knowledge-based CPE activity.



### REGISTERED DIETITIANS & DTRs

INR, under Provider Number IN001, is a Continuing Professional Education (CPE) Accredited Provider with the Commission on Dietetic Registration (CDR). Registered dietitians (RDs) and dietetic technicians, registered (DTRs) will receive 6 hours worth of continuing professional education units (CPEUs) for completion of this program/materials. Continuing Professional Education Provider Accreditation does not constitute endorsement by CDR of a provider, program, or materials. CDR is the credentialing agency for the Academy of Nutrition and Dietetics. This course has Activity Number 166519 and Performance Indicators: 9.1.2, 9.1.3, 12.2.1, and 12.3.6. CPE Level: I.



### PSYCHOLOGISTS

Under CE Broker # 50-3026, INR is an approved provider by the Florida Board of Psychology. 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 PA Board of Psychology has approved INR as a sponsor/provider of CE programs. Under Sponsor #268.000096, the Illinois 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.

### MENTAL HEALTH COUNSELORS & ADDICTION COUNSELORS

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 to offer social work continuing education by the Association of Social Work Boards (ASWB) Approved Continuing Education (ACE) program. Organizations, not individual courses, are approved as ACE providers. State and provincial regulatory boards have the final authority to determine whether an individual course may be accepted for continuing education credit. Institute for Natural Resources maintains responsibility for this course. ACE provider approval period: 02/28/201–02/28/2022. Social workers completing this course receive 6 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. The California Board of Behavioral Sciences will accept courses approved by ASWB. Under Sponsor #159-000260, the Illinois Dept of Prof Regulation has approved INR as a sponsor of continuing social work education. 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 0.6 AOTA CEUs for this course. The category of this course is OT Service Delivery. The assignment of AOTA CEUs does not imply endorsement of specific course content, products, or clinical procedures by AOTA.

### PHYSICAL THERAPISTS & PTAs

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 6 continuing competency units. Under Sponsor #216-000264, the Illinois Dept of Prof Regulation has approved INR as a sponsor for continuing physical therapy education.

### MASSAGE THERAPISTS

Institute for Natural Resources is approved by the National Certification Board for Therapeutic Massage and Bodywork (NCBTMB) as a continuing education Approved Provider.



### 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.

# TRAUMATIC BRAIN INJURY (TBI) & CONCUSSION

(A NEW 6-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. A \$15.00 fee will be charged for the issuance of a duplicate certificate. 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 seminars yearly.

INR has no ties to any commercial 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, standard, 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  
Fax: (925) 687-0860  
E-Mail: [info@inrseminars.com](mailto:info@inrseminars.com); website, [www.INRseminars.com](http://www.INRseminars.com)  
Tax Identification Number 94-2948967.

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](mailto: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.

# TRAUMATIC BRAIN INJURY (TBI) & CONCUSSION

## Frequently Asked Questions

### Q: How can I take this Webinar?

This Webinar can be taken as a live Webinar.

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

To obtain the 6 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 long does it take to receive a Seminar/Webinar Completion Certificate?

At a live seminar, certificates are given out at the end of the seminar. With all other presentations (e.g., electronic), receipt of the certificate typically takes 3 to 5 days after all materials are submitted.

### 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 (in effect a live broadcast of a seminar)?

You will receive a voucher equal to the tuition paid. This voucher will be good for a future seminar or Webinar. The voucher is good for one year.

### 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 <info@inrseminars.com> or at 1-877-246-6336. The customer-service office can tell you if INR has approval for your profession.

**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. Furthermore, the contents of these presentations are relevant to graduate level counselors; The presenter teaching the program has an advanced degree in the mental health field.**

## PROGRAM/LECTURE

7:45 AM to 8:30 AM – Registration

8:30 AM to 10:00 AM – First Session

### BRAIN STRUCTURE AND FUNCTION: VULNERABILITIES TO HEAD TRAUMA

- **The Five Major Brain Functions:** Critical Abilities in the Frontal Lobes.
- **Major Brain Structures and Neuron Pathways Vulnerable to Traumatic Brain Injury (TBI).**
- **Neurons, Neurotransmitters, and Glial Cells:** The Fragile Targets of TBI.

### THE PATHOPHYSIOLOGY OF TRAUMATIC BRAIN INJURY (TBI)

- **Rotational Forces:** The Major Mechanism of Brain Damage from TBIs.
- **Blunt Force Injuries of TBI:** Traumatic Axonal Shearing, Contusion, Increased Intracranial Pressure, and Cerebrovascular Events.
- **Penetrating TBI:** From Phineas Gage to Gabrielle Giffords.
- **Blast TBIs:** Lessons from Iraq and Afghanistan.
- **Delayed Secondary Injuries:** Deadly Aftereffects.

10:00 AM to 10:10 AM – Break

10:10 AM to 11:30 AM – Second Session

### TBI: THE “SILENT EPIDEMIC”

- **The History of TBI:** From 4,500 Years Ago in Egypt to Present Day.
- **Classifications of TBI:** TBI vs. Concussion.
- **Who's at Risk for Injury and Why:** Age, Sex/Gender, Falls, Motor Vehicle Accidents, Assaults, and Sports.
- **Avoiding Trauma:** Strategies for the Primary Prevention of TBIs.

### TBI: RISKS, DIAGNOSIS, AND PROGNOSIS

- **TBI:** Recognizing Vulnerable Groups.
- **Mild, Moderate, and Severe TBI:** Clinical Presentations and Outcomes.
- **Early Predictors of Functional Outcome:** Depth and Duration of Coma, Post-Traumatic Amnesia, and Persistent Vegetative State.

11:30 AM to 12:20 PM – Lunch

12:20 PM to 2:00 PM – Third Session

### MODERATE TO SEVERE TBI: PRESENTATION, TREATMENT, & PROGNOSIS

- **Factors Affecting Recovery:** Pre-Injury Status, Specifics of Injury, and Post-Injury Course.
- **Post-Injury Sequelae in Children & Adults:** Physical, Cognitive, Emotional, and Behavioral Impairments.
- **Diverse and Complicated Outcomes from Moderate-to-Severe TBI.**
- **Frontal Lobe Syndrome:** Long-Term Consequences.
- **From the ICU to the Rehabilitation Hospital:** Treatment Approaches.
- **Long-Term Considerations:** Challenges in Outpatient Rehabilitation and Supported Living.

## PROGRAM (cont.)

2:00 PM to 2:10 PM – Break

2:10 PM to 3:40 PM – Fourth Session

### MILD TBI AND CONCUSSION

- **What Is a Concussion?** Mild TBI Diagnostic Criteria and Epidemiology.
- **After a Concussion:** Patterns of Recovery. The “Second Impact Syndrome.”
- **“Post-Concussion Syndrome”:** Confusion and Debate.
- **Contact Sports and Concussions:** Football, Helmets, Policies, and Practices.

### MULTIPLE MILD TBIs & DEMENTIA: CHRONIC TRAUMATIC ENCEPHALOPATHY (CTE)

- **History of an Illness:** From Dementia Pugilistica (Punchdrunk Dementia) to Chronic Traumatic Encephalopathy.
- **Multiple Subclinical Concussions:** A Path to Delayed Dementia.
- **Does CTE Begin with Youth Football?** The Clinical Course of CTE.
- **TBI in Young People:** The Potential Risk for Alzheimer's Disease.

Questions Answers, Course Quiz Review, & Evaluation

## LEARNING OBJECTIVES

Participants completing this course will be able to:

- 1) list the brain structures that are most vulnerable to traumatic injury.
- 2) outline the major mechanisms of action causing brain damage after TBI.
- 3) describe the major risk factors for TBI and key preventive strategies.
- 4) outline the assessment and management strategies for athletes who sustain concussions.
- 5) list the main etiology, symptoms, and stages of chronic traumatic encephalopathy.
- 6) discuss the common clinical problems seen in patients with TBI, from ICU care to outpatient rehabilitation.
- 7) discuss how the information from this course can be utilized by nurses, mental health professionals, dentists, pharmacists, physical therapists, occupational therapists, dietitians, and other health professionals to improve patient care outcomes.

## INSTRUCTOR

**Dr. Michael E. Howard (Ph.D.)** is a full-time psychologist-lecturer for INR. Dr. Howard is a board-certified clinical neuro-psychologist and health psychologist who is an internationally-recognized authority on brain-behavior relationships, traumatic brain injury, dementia, stroke, psychiatric disorders, aging, forensic neuro-psychology, and rehabilitation.

During his 30-year career, Dr. Howard has been on the faculty of three medical schools, headed three neuro-psychology departments, and directed treatment programs for individuals with brain injury, dementia, addiction, chronic pain, psychiatric disorders, and other disabilities.

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