

**SEATTLE, WA**  
GRADUATE SEATTLE  
4507 Brooklyn Avenue NE, 98105  
(206) 634-2000  
Parking: \$20 Valet

Friday, February 22

**YAKIMA, WA**  
RED LION HOTEL YAKIMA CENTER  
607 E Yakima Ave, 98901  
(509) 248-5900

Wednesday, May 8

**KENNEWICK, WA**  
RED LION HOTEL COLUMBIA CENTER  
1101 N Columbia Center Blvd, 99336  
(509) 783-0611

Thursday, May 9

**SPOKANE, WA**  
THE CENTENNIAL HOTEL SPOKANE  
303 W North River Dr, 99201  
(509) 326-8000

Friday, May 10

NON-PROFIT  
U.S. POSTAGE  
**PAID**  
LOS ALTOS, CA  
PERMIT #131

## REMEMBERING, FORGETTING AND PROTECTING THE AGING BRAIN

LIVE SEMINAR (✓ONE)

- |   |  |
|---|--|
| <input type="checkbox"/> Seattle, Feb 22  | <input type="checkbox"/> Yakima, May 8   |
| <input type="checkbox"/> Kennewick, May 9 | <input type="checkbox"/> Spokane, May 10 |

UNABLE TO ATTEND?

PURCHASE RECORDINGS WITH HOME STUDY CE CREDIT (✓ONE)

- |                              |                               |                                 |
|------------------------------|-------------------------------|---------------------------------|
| <input type="checkbox"/> CDs | <input type="checkbox"/> DVDs | <input type="checkbox"/> Online |
|------------------------------|-------------------------------|---------------------------------|

Name (PLEASE PRINT) \_\_\_\_\_

Home Address \_\_\_\_\_

City/State \_\_\_\_\_ Zip \_\_\_\_\_

Work Phone (\_\_\_\_) \_\_\_\_\_ Home Phone (\_\_\_\_) \_\_\_\_\_

Email \_\_\_\_\_

Profession(s) \_\_\_\_\_

### TUITION

- \$79 Individual Rate
- \$74 Group Rate (3 or More Persons Registering Together)
- \$89 On-Site Registration (if space is available)
- \$29 \$20 *Training Your Brain To Adopt Healthful Habits* (2019) (280 pages) — a text that explains how the part of the brain that forms new habits can be trained to improve health-related habits. Preorder the book to receive it onsite at this discounted rate.

### FOUR WAYS TO REGISTER

- Internet: [www.ibpceu.com](http://www.ibpceu.com)
- Mail: PO Box 2238, Los Banos, CA 93635 (make check payable to IBP)
- Fax: (877) 517-5222
- Phone: (866) 652-7414 (open 24 hours a day, 7 days a week)

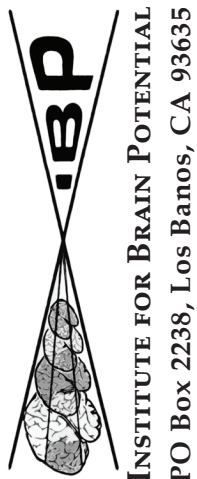
Purchase orders are accepted. IBP tax identification number: 77-0026830

All major credit cards are accepted:

Card # \_\_\_\_\_ Exp Date \_\_\_\_\_ / \_\_\_\_\_

Signature \_\_\_\_\_

PLEASE POST



## REMEMBERING, FORGETTING AND PROTECTING THE AGING BRAIN

SEATTLE: Friday, February 22

YAKIMA: Wednesday, May 8

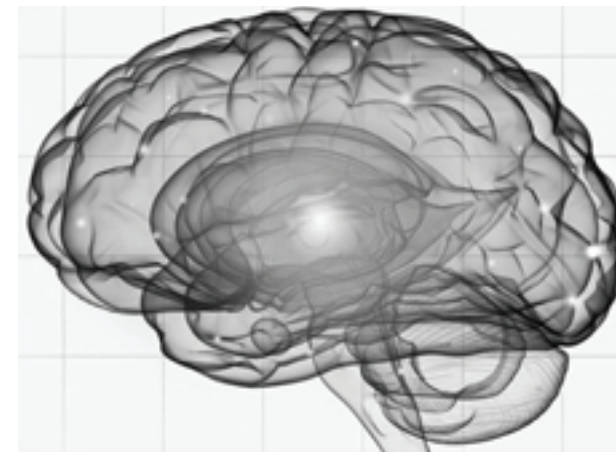
KENNEWICK: Thursday, May 9

SPOKANE: Friday, May 10

**Topics Include:**

- Short-Term Memory
- Working Memory
- Long-Term Memory

A New 6-Hour Program, Spring, 2019: \$79



## REMEMBERING, FORGETTING AND PROTECTING THE AGING BRAIN

A 6-Hour Program for Health Professionals

### LIVE SEMINARS

**Schedule:** Check-in: 8:15 – 9 AM, program starts: 9 AM, lunch (on own): 11:30 AM, Q & A and discussion with instructor: 12-12:30 PM, lecture resumes: 12:30 PM, adjournment: 4 PM. Some programs sell out. Please register early.

**Group Registration:** The discount is for three or more guests enrolling together prior to the seminar date. Please complete a separate registration form for each person.

**Transfers:** You or members of your group can attend on different dates if there is space.

**Parking:** Complimentary parking is available unless indicated in the brochure.

**Unable to Attend?** You have three options: 1) Transfer to an alternate location, space permitting, 2) Receive a full-value voucher for any live or recorded lecture for up to a year, or 3) Request a full refund minus a \$15 fee. Refund requests should be made in writing or by e-mail at [refund@ibpceu.com](mailto:refund@ibpceu.com).

**Rescheduling:** In the unlikely event (less than 1%) a seminar cannot be held (e.g., inclement weather), it will be rescheduled. No IBP seminar has ever been canceled as the result of low attendance!

**Certificates and Confirmations:** Certificates of completion are provided at the time of adjournment; successful completion includes full attendance and submission of the evaluation form. No partial credit is given. Confirmation notices are emailed or mailed.

### RECORDED PROGRAMS

**CDs and DVDs:** Delivered to you within 5-7 workdays.

**Online:** Play or download on all devices. Need help? Call (866) 652-7414.

**CE Credit:** National/state boards approved CE is available for most health professions including nursing, psychology, social work, counseling, MFT, dental, and pharmacy. View CE approvals and additional information for this home study program at: [http://www.ibpceu.com/info/remembering\\_forgetting\\_protecting\\_brain.pdf](http://www.ibpceu.com/info/remembering_forgetting_protecting_brain.pdf)

### DEDICATED 24/7 CUSTOMER SERVICE

Call (888) 202-2938 to inquire about course content or instructors, request disability accommodations, or submit a formal grievance. To register, call (866) 652-7414.

### THE IBP EXPERIENCE

Since 1984, our non-profit organization (tax ID 77-0026830) has presented informative and practical seminars. IBP is the leading provider of accredited programs concerning the brain and behavioral sciences.

# REMEMBERING, FORGETTING AND PROTECTING THE AGING BRAIN



**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**. This program provides 6 contact hours for nurses.



**PSYCHOLOGISTS:** 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 is 6 CE credits.



**COUNSELORS & MARRIAGE AND FAMILY THERAPISTS:** Institute for Brain Potential has been approved by NBCC as an Approved Continuing Education Provider, ACEP No. 6342. Programs that do not qualify for NBCC credit are clearly identified. Institute for Brain Potential is solely responsible for all aspects of the programs. This program provides 6 clock hours of CE credit.



**ACE SOCIAL WORKERS:** Institute for Brain Potential, provider #1160, is approved as a provider for social work continuing education by the Association of Social Work Boards (ASWB) www.aswb.org through the Approved Continuing Education (ACE) Program. Institute for Brain Potential maintains responsibility for the program. ASWB Approval Period: November 11, 2017 – November 11, 2020. Social workers should contact their regulatory board to determine course approval for continuing education credits. Social workers participating in this course will receive 6 clinical continuing education clock hours. Social Work Practice Level: Intermediate.



**CHEMICAL DEPENDENCY PROFESSIONALS:** Institute for Brain Potential is approved by the NAADAC Approved Education Provider Program, Provider #102949. This program provides 6 continuing education hours (CEHs).



**PHARMACISTS AND PHARMACY TECHNICIANS:** Institute for Brain Potential is accredited by the **Accreditation Council for Pharmacy Education** as a provider of continuing pharmacy education. This knowledge-based activity provides 6 contact hours (.6 CEUs). UANs: 0492-0000-18-003-L04-P and 0492-0000-18-003-L04-T



**DENTAL PROFESSIONALS:** Institute for Brain Potential is designated as an Approved PACE Program Provider by the Academy of General Dentistry (AGD). The formal continuing dental education programs of this provider are accepted by the AGD for Fellowship/Mastership and membership maintenance credit. Approval does not imply acceptance by a state or provincial board of dentistry or AGD endorsement. The current term of approval extends from 12/01/18 – 11/30/24. Provider ID# 312413. Subject Code: 557. This program is 6 CE hours.



**APPROVED PROVIDER of CONTINUING EDUCATION by The American Occupational Therapy Association, Inc.** **OCCUPATIONAL THERAPISTS:** Institute for Brain Potential is an American Occupational Therapy Association (AOTA) Approved Provider, #6050. The assignment of AOTA CEUs does not imply endorsement of specific course content, products, or clinical procedures by AOTA. This program provides 0.6 AOTA CEUs or 6 contact hours. Content Level: Intermediate. Content Focus: Domain of OT (Performance Skills) and Occupational Therapy Process (Evaluation).

**NURSING HOME ADMINISTRATORS:** Institute for Brain Potential is a *Certified Sponsor* of professional continuing education with the NAB and has approved this program for 6 clock hours under its sponsor agreement with NAB/NCERS. State licensure boards, however, have final authority on the acceptance of individual courses.

**PHYSICAL THERAPISTS:** This program is designed to be relevant to physical therapists. Participants will receive a certificate of completion for participating in this 6-hour program.

**SPEECH-LANGUAGE PATHOLOGISTS:** This program is designed to meet the needs of speech-language pathologists in WA. Participants will receive a certificate for completing this 6-hour program.

**MASSAGE THERAPISTS:** Institute for Brain Potential is approved by NCBTMB as a CE Approved Provider, #450939-09. This course provides NCBTMB-approved 6 CE hours of Advanced Science credit. Visit <http://goo.gl/85iSwY> to learn about Advanced Science credit.

**CASE MANAGERS:** This program has been submitted to the **Commission for Case Manager Certification** for approval to provide board certified case managers with 6 CE contact hours.

**PHYSICIAN ASSISTANTS:** This educational activity provides 6 hours of Category 2 CME credits.

**DIETITIANS:** IBP 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 CPEUs for completion of this program. Continuing Professional Education Provider Accreditation does not constitute endorsement by CDR of a provider, program, or materials. Provider Number: BP001. CPE Level: I. Suggested Learning Codes: 5100, 5300, 5370, and 6010.

**EDUCATORS:** This program is designed to meet the needs of educators. Participants will receive a certificate of completion for 6 hours.

*This new 6-hour program presents advances in identifying who develops memory loss and advances in protecting the aging brain decades before the onset of cognitive decline.*

*Participants completing this program should be able to identify:*

- 1. Distinguish between impairment of short-term, working, and long-term memory.*
- 2. Outline an evidence-based strategy to protect short-term, working, or long-term memory.*
- 3. Describe how the habit brain plays a role in either major depression, addictive disorders, obsessive-compulsive disorders or posttraumatic stress disorder.*
- 4. Characteristic cognitive impairments in Alzheimer's disease.*
- 5. List several advances in protecting the aging brain.*

## **Short-Term Memory:** *remembering what happened recently*

- **Brains At Risk:** alcohol blackout, seizure, concussion, benign cognitive impairment, Alzheimer's disease.
- **Protecting Short-Term Memory:** recoding, rehearsal, neurogenesis of hippocampal neurons through lifestyle, e.g., exercise.

## **Working Memory:** *remembering what to do next*

- **Brains At Risk:** normal aging after age 49, frontal lobe pathology, neurodegenerative disorders including Alzheimer's disease.
- **Protecting Working Memory:** activities that improve concentration and reduce distraction, e.g., mindfulness training, task reminders; how to improve cognitive reserve by activating new areas of prefrontal cortex.

## **Long-Term Memory:** *the memories of our lives*

- **Brains At Risk:** damage to association cortex due to brain injury, stroke, or dementia (Alzheimer's disease, multi-infarct and frontotemporal dementia).
- **Protecting Long-Term Memory**
  - **Caffeine and Glucose:** caffeine can aid retrieval but go light on sugar due to adverse effects on brain glucose.
  - **Physical Activity:** moderately intense physical activity protects the brain's vascular system, improves glucose regulation, and stimulates nerve growth factors.
  - **Restorative Sleep:** a key function of slow wave sleep is the removal of toxins such as amyloid; REM sleep aids long-term memory.
  - **Neurocognitive Activities:** most brain-training activities are of no benefit, but a few are beneficial.

## **Habit-Based Memories:** *habits are critical for brain health*

- **Brains At Risk:** adverse childhood experiences, depression, post-traumatic stress, obsessive compulsive spectrum disorders, and addictive disorders create maladaptive habits involving the habit brain, the basal ganglia.
- **Reprogramming the Habit Brain:**
  - **Major Depression:** automatic habitual thoughts trigger mood changes; how cognitive behavioral therapy retrains cortical and subcortical habit circuits.

- **Addictive Habits:** reducing the need for immediate gratification for food and substances via prefrontal cortex control over the dopamine striatum.
- **Obsessive-Compulsive Habits:** desensitization training can modify the habit brain by extinguishing and retraining a subcortical circuit.
- **Posttraumatic Habits:** activities that inhibit the fear-based amygdala through the slower, proactive prefrontal cortex.

## **Advances In Prevention:** *most dementias take decades to develop*

- **Cognitive Domains:** memory impairment must also accompany impairment in reasoning, spatial ability, abstraction, language, or impulse control to diagnose dementia.
- **Understanding Alzheimer's Disease:** in most cases, onset occurs decades before disabling symptoms arise, thus risk reduction strategies are critical; the risk factors are the same for most dementias.
- **Early Detection:** the 5-minute neuropsychological test that is 93% accurate in predicting who will develop Alzheimer's disease.
- **Reducing Inflammation and Protecting the Aging Brain:** extracellular amyloid and intracellular tangles are inflammatory and endanger the aging brain; an anti-inflammatory lifestyle is attainable and sustainable.
  - **Neuroprotective Nutrients:** curcumin (curcuminoids), cocoa (epicatechin) and resveratrol (stilbenoids), long-chain omega 3 fatty acids, low glycemic starches and fibers, vitamins A, B12, C, D3, and E, copper, iron and zinc; the Dietary Inflammatory Index.
  - **Neuroprotective Exercise:** a review of 35 studies regarding intensity, type, and frequency of exercise.
  - **Neuroprotective Sleep:** a review of 52 trials linking cognitive impairment to sleep duration; too little can impair amyloid clearance; too much sleep increases risk of metabolic disorders.
  - **Neuroprotective Mental Activities:** the neural network is enhanced by the mental activity identified with a person's social network; what cognitive challenges are most beneficial?

## **ABOUT THE INSTRUCTOR**

*Elizabeth A. Buffalo, Ph.D., is Associate Professor in the Department of Neurology, Emory University School of Medicine. Dr. Buffalo has received awards from the National Institutes of Health and the National Academy of Sciences for her research concerning how new memories are formed, the early detection of mild cognitive impairment, and the study of Parkinson's and Alzheimer's disease. Dr. Buffalo's recent research includes the development of behavioral tests that can predict with high accuracy which individuals will develop cognitive impairment associated with Alzheimer's disease.*

*An excellent and dedicated instructor, Dr. Buffalo teaches a fascinating series of programs at Emory University that help translate fundamental neuroscience discoveries to meet the practical needs of health professionals. Audiences commend her ability to present key discoveries with clarity, enthusiasm and warmth. In addition to Q & A sessions in class, Dr. Buffalo will answer your questions during the second half of the lunch break and by email after the program concludes.*