Thursday, July 30, 2020, 9 AM – 4 PM PDT

You will need a computer with internet access and speakers to participate in the webinar.

On-Demand Webcast

Tuesday, August 4, 2020 – Friday, September 4, 2020

Participants interested in on-demand, self-study learning including continuing education credit may register to download the recording of the program from Tuesday, August 4, 2020 through Friday, September 4, 2020. The program's in-class exercises will be available in four convenient segments.

Home Study Recordings

Valid for CE until January 1, 2023

- You may listen to or view the recorded lecture at your convenience and earn home study credit. Expiration date: January 1, 2023

Understanding Brain Development: How Brain Circuits and Maturation Explain Behavior

✓ one:

- Interactive Webcast with CE Credit: Thursday, July 30, 2020
- On-Demand Webcast with CE Credit: August 4, 2020 – September 4, 2020

- Purchase of Recordings with Home Study CE Credit:
  - 4 Audio CDs
  - 4 Audio-Visual DVDs

- Purchase of Recordings without CE Credit:
  - 4 Audio CDs, $50
  - 4 Audio-Visual DVDs, $75

- Tuition is in US dollars.
- Name (please print)
- Home Address
  - City/State
  - Zip
- Work Phone (____) __________ Home Phone (____)
- Fax (____) __________ (please print email if available)
- Email
- Profession(s)

Pre-Registration

✓ $79 Individual Rate
✓ $74 Group Rate (for more registering together)
✓ $89 Registration on the Day of the Program

Four Ways To Register

1. Internet: www.ibpceu.com
2. Mail: PO Box 2258, Los Banos, CA 93635 (make check payable to IBP)
3. Fax: (775) 517-5222
4. Phone: (866) 652-7414 (open 24 hours a day, 7 days a week)

Purchase orders are accepted. IBP tax identification number: 77-0026830
Type of Credit Card:  □ Visa  □ MasterCard  □ AmEx  □ Discover
Card #  ________ Exp Date  ________
Signature

UNDERTANDING BRAIN DEVELOPMENT: HOW BRAIN CIRCUITS AND MATURATION EXPLAIN BEHAVIOR

A 6-Hour Program for Health Professionals

Interactive Webcast Schedule: The date of the interactive webcast is Thursday, July 30, 2020, 9 AM, Pacific Daylight Time. Sign-in: 8:30 – 9 AM, program starts at 9 AM, lunch break: 11:30 AM, online Q & A: 12 – 12:30 PM, lecture resumes: 12:30 PM, adjournment: 4 PM. Please register early and sign in 30 minutes before the time of the webcast.

On-Demand Webcast Schedule: You may view the program in segments at your convenience from Tuesday, August 4, 2020 until Friday, September 4, 2020. Registrants who sign up for the live webcast may elect to take the on-demand webcast.

Home Study Schedule: You may listen to or view the recorded lecture at your convenience until the expiration date: January 1, 2023. Self-study credit is available for all California-licensed health professions listed on the brochure except dietitians and massage therapists.

Group Registrations: Rates apply for three or more pre-registered guests enrolling together. Please complete a separate registration form for each person. Members of a group can watch interactive or on-demand webcast, or order home study recordings on different dates.

Confirmation Notices and Certificates of Completion: We will confirm your registration by email or by letter. Please attend even if you do not receive a confirmation. Successful completion includes full attendance, submission of the evaluation form, and earning of credit. No make-up tests will be given. Participation in the webcast is mandatory to receive this program's CE credit. On-demand, home study webcast participants must complete the program within the expiration period. Partial credit is available for this program. Certificates of completion for the live seminar are provided at the time of adjournment, and for the interactive webcast, live webcast and on-demand webcast are provided by email upon receipt of the evaluation form and the post-test. Transfers and Cancellations: Registrants can transfer to another live seminar or change their seminar location if space is available. Registrants canceling up to 48 hours before a seminar or webcast can request a full refund less than a $15 processing fee or an audio CD or DVD recording of the program with the instructional outline for home study credit. Alternatively, a full-value voucher can be obtained good for one year for a future program. In the unlikely event that the program cannot be held (e.g., an act of God), registrants will receive full admission to a rescheduled program or a full-voucher refund, good for one year, for a future program. All requests must be made in writing or online. No IBP program has ever been cancelled as the result of low attendance.

User-Friendly Technical Support: If you are not computer savvy, we can help. Just call us anytime at (650) 652-5332. We have presented webcasts to over 100,000 health professionals since 2013.

24/7 Customer Service: Call (888) 220-2938 to ask about course content, instructions, request accommodations for disability, submit a formal grievance, or remove your name from a list. For other questions, call (665) 652-7414.

Institute for Brain Potential: 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.
Understanding Brain Development: How Brain Circuits and Maturation Explain Behavior

Frequently Asked Questions

Q: Is there a way to enjoy the webcasts without being at my computer for 6 hours? What if I am not free on any of the scheduled dates of the broadcasts?
Yes! First, register for the program. You will receive a link to view the program starting August 4 until September 4. 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 the program. Want the CD or DVD set (specify which), and make sure your profession is included in our online brochure.

Q: My profession is not included on the brochure. Can I receive continuing education credit?
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: How long does it usually take to receive a certificate of completion?
Typically, within 3 or 4 business days.

Advances in research have shed light on how the brain develops in the early years and how brain circuits mature and become wired in the adult brain. These findings provide a much better understanding of the basis of developmental disorders and psychopathology that begins in early life. Participants completing this program should be able to identify:

1. Development of key cognitive abilities
2. Development and maturation of brain circuits, especially in emotional and reward systems
3. Brain mechanisms underlying developmental disorders such as autism spectrum disorders, ADHD, Down syndrome, and schizophrenia
4. The role of early life experience and how infants can inherit the trauma and stress experienced by their parents
5. The role of early life stress and fragmentation of maternal care in development of later adult psychopathology including depression and PTSD, and
6. Strategies to better understand and help children and adolescents with vulnerabilities that increase risk of mental disorders.

Development of Cognitive Abilities

- **Learning and Memory**: working memory, short-term memory and long-term memory for events, names, places and concepts; effects of sleep and types of practice—what happens when the two cerebral hemispheres are disconnected?
- **Language**: how the hemisphere dominant for language is organized including the temporal lobes (lateralized aspects of listening, remembering and comprehending, and articulating) and parietal lobes (reading, writing, calculating).
- **Non-Verbal Abilities**: role in recognizing voices, faces, music, art, and reasoning that does not rely on words.

Brain Circuits and Early Childhood Development

- **What Makes Us Human?** Brain size, circuits, intelligence that enable tool use, language, and imagining the future
- **The Developing Brain**: stages of development, migration, differentiation, maturation, development and the pruning of dysfunctional nerve cells.
- **Steroid Hormones and Brain Circuits**: male- and female typical behaviors and sexual differentiation, critical and sensitive periods.
- **Stages of Early Cognitive Development**: Piaget’s theory, growth spurts, problem solving abilities, development of intelligence.
- **Development of Impulse Control**: overcoming the need for immediate gratification, reward expectation, the D1 and D2 dopamine circuits, and overcoming automatic fear-based or reward-based impulses.

Developmental Disorders

- **Autism Spectrum Disorders**: definitions, signs and symptoms, developmental trajectory, diagnosis, genetic risk factors, increased recent prevalence, treatments and therapies.
- **Attention-Deficit-Hyperactivity Disorder**: definitions, signs and symptoms, different classifications e.g. inattentive vs. impulsive/hyperactive, genetic and environmental risk factors, treatments and therapies.
- **Schizophrenia Spectrum**: definitions, signs and symptoms, different classifications, genetic vs. environmental risk factors, psychosocial factors, treatments and therapies, altered brain chemistry, dual hit hypothesis.
- **Mood Disorders**: diagnosis and prediction of self-harm; how severe maltreatment in childhood can the serotonin receptors and response to stress, not only in the person but in the individuals’ children.
- **Generalized Anxiety and PTSD**: pediatric and childhood stress and the development generalized anxiety; trauma, short-term memory and PTSD.

Environmental Effects on Brain Development

- **Stress Experienced by One’s Parents**: how this can modify the developing brain; understanding epigenetics.
- **Impact of Early Life Events**: role of maternal care on stress response during early life, fragmentation and unpredictability, role of cortisol, epigenetic programming of emotional and reward circuits; developing resilience and stress vulnerability.
- **Environmental Effects on Brain Plasticity**: Impact of enriched vs. impoverished environments, cognitive training, physical exercise and neurogenesis, the rebirth of neurons to protect the developing and adult brain.
- **Adult Outcomes of Early Life Events**: how early life stress increases risk of adult psychopathology including vulnerability to PTSD in civilians and the military; increased vulnerability to PTSD in different populations e.g. military.

Strategies for Increasing Developmental Resilience

- **The Developing Brain**: how lack of consistency of caregiving alters the brain and behavior, and its relation to developmental psychopathology and impaired attachment; what parents need to know.
- **Increasing Stress-Resilience in School Settings**: applying principles of cognitive neuroscience in the classroom to apply strategies that can help children and teens develop impulse control, focused awareness, and cognitive enhancement.
- **Full Spectrum Strategies To Improve Stress Resilience**: dietary variety, physical activities, cognitive challenges, stress inoculation, cognitive enrichment and reframing, and obtaining the right amount of restorative sleep.

About the Instructor

Mike Yassa, Ph.D., Associate Professor in the Department of Neurobiology and Behavior and Neurology and Director of the Center for the Neurobiology of Learning and Memory at the University of California, Irvine. Dr. Yassa and his colleagues recently discovered that a fragmented, unpredictable connection between mother and child is a key factor that predicts developmental disorders of learning, memory, and impulse control.

Dr. Yassa has received multiple awards including from the National Science Foundation, National Institute on Aging, National Institute on Mental Health, and private foundations. An inspiring and inspired instructor, Dr. Yassa is one of the most highly rated instructors at Irvine. Dr. Yassa has won multiple awards for research and teaching excellence. Dr. Yassa has appeared on BBC World News, ABC News, CNN Health, Fox News, NBC News and the PBS Newshour. Dr. Yassa is highly recommended by health professionals for his ability to communicate key concepts and their practical applications with warmth and enthusiasm.