

Outline

What Does Biology Have to do With It?

The Nature of Stress and the Stress Response

- The nature of stress
  - Homeostasis
  - The dichotomy between short-term and long-term stress exposure
- The stress response
  - Hormones and autonomic pathways
  - How the long-term stress response impacts the brain and body

Clinical Manifestations of Chronic Stress in Your Clients

- Impaired declarative memory
- Vulnerability to anxiety and fear conditioning
- Impaired executive functioning
- Impaired empathy

The Interplay of Stress, Depression and Developmental Trauma

The Neurochemistry and Neuroanatomy of Stress, Depression and Childhood Adversity

- How and why stress becomes depression
  - Neurobiological mechanisms
  - The psychological components of stress
  - Learned helplessness as a model for depression

Objectives

- Analyze the neurobiological mechanisms of how and why stress becomes depression, differentiate this from anxiety, and explain how this information impacts the clinician and their treatment plans.
- Evaluate how childhood trauma changes the developmental trajectory of the brain, explore the clinical manifestations of these impacts, and apply clinical strategies to make your client's brains less susceptible to traumatic stress-based damage.
- Characterize how the stress pathway, stress response, and brain interact to produce the experience of stress, and communicate how stress can be managed using therapeutic techniques that impact these areas of the brain and body.

- Stress as a bridge linking the biological and psychological features of depression
  - The genetics of affective resilience in the face of stress
  - Childhood adversity as a risk factor
  - How traumatic stress shifts the trajectory of brain development
- Clinical implications

Connecting Biology to Psychology in Your Clinical Practice: An Interview with Dr. Jennifer Sweeton

- When is stress good?
- How can neurobiology help you to determine treatment methods and set goals?
- Coping with stress – social isolation vs. social affiliation
- Techniques that impact stress pathways, the stress response and the brains limbic regions
- Strategies to create resilient brains that are less susceptible to stress-based damage
- Gratitude interventions for stress and depression

Live Seminar & Webcast Schedule (Times listed in Pacific)

- 8:30 Registration (morning coffee & tea)
- 9:00 Program begins
- 12:00 Program ends

For locations and maps, go to [www.pesi.com](http://www.pesi.com), find your event, and click on the seminar title.

Target Audience: Counselors • Psychotherapists  
Psychologists • Social Workers • Addiction Counselors  
Marriage & Family Therapists • Case Managers  
Therapists • Nurses • Other Mental Health Professionals

Questions? Call customer service at 800-844-8260

CANCELLATION POLICY: Hassle-Free Cancellation Policy: If you contact us before the event date, you can exchange for a DVD or CD package on the subject (self-study continuing education credit may be available), a certificate to attend another seminar, or receive a tuition refund less a \$30 cancel fee. Substitutions are permitted at any time.

SEMINAR ON CD OR DVD PACKAGE: You can purchase a self-study package on the subject. You will receive a set of CDs or DVDs and post-test/evaluation. You and your colleagues can receive CE hours for a nominal fee. To determine if homestudy credits are available for your profession go to [www.pesi.com](http://www.pesi.com) or call 800-844-8260. Check with your licensing board to verify acceptance of self-study credits for license renewal. Order today by using the order form on this brochure or by calling 800-844-8260.

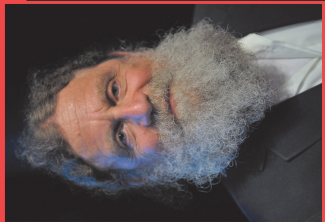
HAVE A SEMINAR IDEA? A manuscript to publish? The nation's top speakers and authors contact PESI first. If you are interested in becoming a speaker or have a new topic idea, please contact Ryan Bartholomew at [rbartholomew@pesi.com](mailto:rbartholomew@pesi.com) or call 715-855-8225.

LEARN FROM THE MASTERS

The Neuroscience of Stress, Depression, and Developmental Trauma  
Connect Physiology to Psychology with Dr. Robert Sapolsky

SPECIAL 3 HOUR SEMINAR!

Learn how the stress pathway, stress response, and brain interact to produce the experience of stress, and discover how to manage stress using techniques that impact these areas of the brain and body



Join world-renowned neuroscientist Robert Sapolsky, Ph.D. as he effortlessly (and utterly enjoyably) transforms cutting-edge neurological research into meaningful, understandable information you can use in your treatment plans

PESI  
P.O. Box 1000  
Eau Claire, WI 54702-1000  
A division of PESI, Inc.

NON-PROFIT ORG  
US POSTAGE PAID  
EAU CLAIRE WI  
PERMIT NO 32729

SAN FRANCISCO, CA  
Thursday, April 12, 2018

LIVE VIDEO WEBCAST  
Thursday, April 12, 2018



Register now! [pesi.com/express/61308](http://pesi.com/express/61308)

LEARN FROM THE MASTERS

The Neuroscience of Stress, Depression, and Developmental Trauma

Connect Physiology to Psychology with Dr. Robert Sapolsky



Join world-renowned neuroscientist Robert Sapolsky, Ph.D. as he effortlessly (and utterly enjoyably) transforms cutting-edge neurological research into meaningful, understandable information you can use in your treatment plans

- What cutting-edge research in neuroscience means for you and your clients
- The neurobiology of how and why stress becomes depression and what this means for therapy
- Uncover how neuroscience can help you determine treatment methods and set goals
- Explore how childhood trauma changes the developmental trajectory of the brain

SPECIAL 3 HOUR SEMINAR!



SAN FRANCISCO, CA  
Thursday, April 12, 2018

LIVE VIDEO WEBCAST  
Thursday, April 12, 2018

Register now! [pesi.com/express/61308](http://pesi.com/express/61308)



# The Neuroscience of Stress, Depression, and Developmental Trauma

## Connect Physiology to Psychology with Dr. Robert Sapolsky

In this captivating 3-hour event, you'll have the rare opportunity to **learn from Dr. Robert Sapolsky, one of the world's leading researchers on the physiology and psychology of stress.**

Dubbed the "world's funniest neuroscientist" (Salon.com), Dr. Sapolsky will guide you through physiological explanations for stress and depression, interconnect the fields of psychology and neurobiology, and strengthen the case for brain-based therapeutic treatments.

Two hours of an enlightening and entertaining lecture from Dr. Sapolsky are followed by a unique one-hour interview with clinical psychologist, international speaker, and author Dr. Jennifer Sweeton. In what is sure to be a lively, informative, and thought-provoking discussion, doctors Sapolsky and Sweeton **will cover a variety of topics about stress, depression, and trauma, and tie it all back to the strategies and techniques that you can use in the office with your clients each day.**

### Key Benefits of Attending:

- 3-hour format gives you the chance to learn from a remarkable and memorable expert without a day-long commitment.
- Dr. Sapolsky brings humor and humanity into his discussions of research and physiology, all while making the science of the brain-body connection to our psychological well-being accessible and useable.
- Learn to apply neuroscientific principals to your practice to enhance clinical outcomes.
- Integrate research findings into treatment with proven therapeutic methods based in mindfulness, positive psychology, and somatic psychologies.

Space is limited!

**Don't miss out on your chance to learn from this fascinating luminary!!!**

## Live Webcast Details

### Join us on April 12, 2018, for this live, interactive webcast!

Invite your entire office and, like a live seminar, "attend" the webcast at its scheduled time. It's easy and convenient! Webcasts provide everything you need for a premier educational experience including real-time video and audio of the speaker. See and hear the speaker and watch the slides all on your computer screen. One CE Certificate is included. Only \$29.99 per CE Certificate for each additional participant.

 **It's easy and convenient!**  
**Sit at your own computer or gather your coworkers and watch and participate in the live video webcast as a group!**

- Watch and participate in the seminar in real time
- Your whole organization can attend for one low price!

## Speaker

**Dr. Robert Sapolsky** is a MacArthur "Genius" Fellow, a professor of biology and neurology at Stanford University, and a research associate with the Institute of Primate Research at the National Museum of Kenya. In 2008, National Geographic & PBS aired an hour-long special on stress featuring Dr. Sapolsky and his research on the subject. In addition to *A Primate's Memoir*, which won the 2001 Bay Area Book Reviewers Award in nonfiction, He has written three other books, including *The Trouble with Testosterone*, *Why Zebras Don't Get Ulcers*, and *Monkeyluv and Other Essays on our Lives as Animals*. Dr. Sapolsky was awarded Rockefeller University's Lewis Thomas Prize for Writing about Science for 2008. His articles have appeared in publications such as *Discover* and *The New Yorker*, and he writes a biweekly column for the *Wall Street Journal* entitled "Mind & Matter." His new book is *Behave: The Biology of Humans at Our Best and Worst* (Penguin Press May 2017).

As a boy in New York City, Dr. Sapolsky dreamed of living inside the African dioramas in the Museum of Natural History. By the age of 21, he made it to Africa and joined a troop of baboons. Although the life of a naturalist appealed to him because it was a chance to "get the hell out of Brooklyn," he never really left people behind. In fact, he chose to live with the baboons because they are perfect for learning about stress and stress-related diseases in humans. Like their human cousins, baboons live in large, complex social groups and have lots of time, Dr. Sapolsky writes, "to devote to being rotten to each other." Just like stressed-out people, stressed-out baboons have high blood pressure, high cholesterol, and hardened arteries. And just like people, baboons are good material for stories. His gift for storytelling led *The New York Times* to suggest, "If you crossed Jane Goodall with a borscht-belt comedian, she might have written a book like *A Primate's Memoir*," Dr. Sapolsky's account of his early years as a field biologist.

The uniqueness of Dr. Sapolsky's perspective on the human condition comes from the ease with which he combines his insights from the field with his findings as a neuroscientist. For more than 30 years he has divided his time between field work with baboons and highly technical neurological research in the laboratory. As a result, he can effortlessly move from a discussion of pecking orders in primate societies (human and baboon) to an explanation of how neurotransmitters work during stress—and get laughs doing it.

The humor and humanity he brings to sometimes-sobering subject matter make Dr. Sapolsky a fascinating speaker. He lectures widely on topics as diverse as stress and stress-related diseases, baboons, the biology of our individuality, the biology of religious belief, the biology of memory, schizophrenia, depression, aggression, and Alzheimer's disease.

#### Speaker Disclosure:

Financial: Robert Sapolsky is a professor at Stanford University. He is a research associate at the National Museum of Kenya. Dr. Sapolsky receives a speaking honorarium from PESI, Inc.

Non-financial: Robert Sapolsky has no relevant non-financial relationship to disclose.

### Live Seminar & Webcast Continuing Education Credit Information

*Credits listed below are for full attendance at the live event only. Certificates of Completion are distributed at the conclusion of the live seminar for those who register prior to the event date and attend the full day. A letter of attendance will be issued to participants who register at the event, arrive late, or leave early. For those who registered day of (walk-ins), and are in full attendance, a certificate of completion for full CE credit will be sent within 30 days following the event. For those in partial attendance (arrived late or left early), an adjusted certificate of completion reflecting partial credit will be issued within 30 days (if your board allows). Please see "live seminar schedule" for full attendance start and end times. NOTE: Boards do not allow credit for breaks or lunch.*

*If your profession is not listed, please contact your licensing board to determine your continuing education requirements and check for reciprocal approval. For other credit inquiries not specified below, or questions on home study credit availability, please contact cepesi@pesi.com or 800-844-8260 before the event.*

*Materials that are included in this course may include interventions and modalities that are beyond the authorized practice of mental health professionals. As a licensed professional, you are responsible for reviewing the scope of practice, including activities that are defined in law as beyond the boundaries of practice in accordance with and in compliance with your professions standards.*

*PESI, Inc. offers continuing education programs and products under the brand names PESI, PESI Healthcare, PESI Rehab and Psychotherapy Networker.*

**ADDICTION COUNSELORS:** This course has been approved by PESI, Inc., as a NAADAC Approved Education Provider, for 3.0 CE in the Counseling Services skill group. NAADAC Provider #77553. PESI, Inc. is responsible for all aspects of their programming. Full attendance is required; no partial credit will be awarded for partial attendance.

**CALIFORNIA ALCOHOLISM & DRUG ABUSE COUNSELORS:** PESI, Inc. is an approved provider by the CCAPP-EI, Provider #: OS-03-036-1017. This activity meets the qualifications for 3.0 CEHs (continuing education hours).

**COUNSELORS:** This intermediate activity consists of 3.0 clock hours of continuing education instruction. Credit requirements and approvals vary per state board regulations. Please save the course outline, the certificate of completion you receive from the activity and contact your state board or organization to determine specific filing requirements.

**MARRIAGE & FAMILY THERAPISTS:** This activity consists of 180 minutes of continuing education instruction. Credit requirements and approvals vary per state board regulations. You should save this course outline, the certificate of completion you receive from the activity and contact your state board or organization to determine specific filing requirements.

**NURSE/NURSE PRACTITIONERS/CLINICAL NURSE SPECIALISTS:** This intermediate activity consists of 3.0 clock hours of continuing education instruction. Credit requirements and approvals vary per state board regulations. Please contact your licensing board to determine if they accept programs or providers approved by other national or state licensing boards. A certificate of attendance will be awarded at the end of the program to participants who are in full attendance and who complete the program evaluation.

**CALIFORNIA NURSES:** PESI, Inc. is a provider approved by the California Board of Registered Nursing, Provider Number 13305 for 3.0 contact hours. Full attendance is required. No partial contact hours will be issued for partial attendance. Please bring your license number to the seminar; certificates of successful completion will not be issued without your license number.

**PSYCHOLOGISTS:** PESI, Inc. is approved by the American Psychological Association to sponsor continuing education for psychologists. PESI maintains responsibility for this program and its content. PESI is offering this activity for 3.0 hours of continuing education credit. Full attendance is required; no partial credits will be offered for partial attendance.

**SOCIAL WORKERS:** PESI, Inc. Provider #:1062, 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. PESI, Inc. maintains responsibility for the program. ASWB Approval Period: January 27, 2017 - January 27, 2020. Social workers should contact their regulatory board to determine course approval for continuing education credits. Social workers participating in this course will receive 3.0 (Clinical) continuing education clock hours for this intermediate course. A certificate of attendance will be awarded at the end of the program to social workers who complete the program evaluation.

**CALIFORNIA SOCIAL WORKERS/COUNSELORS/MARRIAGE & FAMILY THERAPISTS/ LICENSED EDUCATIONAL PSYCHOLOGISTS:** This intermediate activity consists of 3.0 clock hours of continuing education instruction. Credit requirements and approvals vary per state board regulations. Please contact your licensing board to determine if they accept programs or providers approved by other national or state licensing boards. A certificate of attendance will be awarded at the end of the program to participants who are in full attendance and who complete the program evaluation.

**OTHER PROFESSIONS:** This activity qualifies for 180 minutes of instructional content as required by many national, state and local licensing boards and professional organizations. Save your course outline and certificate of completion, and contact your own board or organization for specific requirements.



PLEASE RETURN ENTIRE REGISTRATION FORM

How to Register	
LEARN FROM THE MASTERS—THE NEUROSCIENCE OF STRESS, DEPRESSION, AND DEVELOPMENTAL TRAUMA: CONNECT PHYSIOLOGY TO PSYCHOLOGY WITH DR. ROBERT SAPOLSKY QUESTIONS? Call 800-844-8260 or e-mail us at <a href="mailto:info@pesi.com">info@pesi.com</a> .	
<b>ONLINE</b>  <a href="http://pesi.com/express/61308">pesi.com/express/61308</a>	<b>1 Please complete entire form</b> (to notify you of seminar changes): <i>please print; staple duplicate forms.</i>  <b>Mail Code:</b> _____ <i>See mail code box on address panel on reverse side</i>  Name _____ Profession _____  Employer Name _____  Employer Address _____  Dept/Floor/Suite _____  City _____ County _____  State _____ Zip _____  Home/Cell Ph ( ) _____  Dept. Ph ( ) _____  E-mail address _____  <i>For your convenience, confirmations are sent via email.</i>
<b>PHONE</b>  <b>800-844-8260</b> Please have credit card available	
<b>FAX</b>  <b>800-554-9775</b>	
<b>MAIL</b>  PESI PO BOX 1000 Eau Claire, WI 54702-1000	
<b>2 Check location:</b> <i>(make copy of locations)</i>  <input type="checkbox"/> <b>SAN FRANCISCO, CA</b> <b>April 12, 2018</b> <b>61308SFR</b> Holiday Inn Golden Gateway 1500 Van Ness Avenue • 94109 (415) 441-4000  <input type="checkbox"/> <b>LIVE VIDEO WEBCAST</b> <b>April 12, 2018</b> <b>PLW61308</b> Broadcast LIVE to your computer!	
<b>3 Check tuition:</b> <b>On-Site Tuition</b> <b>\$139.99</b> – choose one of the options below: <input type="checkbox"/> per person for 2 or more preregistering together —OR— <input type="checkbox"/> single registration postmarked 3 weeks prior to seminar date <input type="checkbox"/> <b>\$149.99</b> standard  <b>Webcast</b> <input type="checkbox"/> <b>\$139.99</b> registration (+ tax in MN, PA, WI)	
<b>4 Indicate method of payment:</b> <b>ALL REGISTRATIONS MUST BE PREPAID. Purchase orders welcome (attach copy).</b> <input type="checkbox"/> Check enclosed payable to <b>PESI, Inc.</b> <input type="checkbox"/> MC 16 digits <input type="checkbox"/> VISA 13-16 digits <input type="checkbox"/> AE 15 digits <input type="checkbox"/> Discover Novus 16 digits  Card # _____  Card Exp. _____ V-Code #*: _____  Signature _____  <small>(*MC/VISA/Discover: last 3-digit # on signature panel on back of card.) (*American Express: 4-digit # above account # on face of card.)</small>	
<b>ADA NEEDS</b> We would be happy to accommodate your ADA needs; please call at least two weeks prior to the seminar date.  Walk-ins are welcome but admission cannot be guaranteed. Call M-F 7:00-6:00 Central Time for space availability if registering within one week of seminar.  <b>TUITION OPTIONS</b> <ul style="list-style-type: none"><li>• <b>\$30 Tuition:</b> If you are interested in being our registration coordinator for the day, go to: <a href="http://www.pesi.com/coord">www.pesi.com/coord</a> for availability and job description, or call our Customer Service Dept. at 800-844-8260.</li><li>• <b>Groups of 5 or more:</b> Call 800-844-8260 for discounts.</li><li>• <b>Discounted Student Rate:</b> As part of its mission to serve educational needs, PESI, Inc. offers a reduced rate of 50% off standard tuition for students. Enclose a current student schedule with registration form. Go to <a href="http://www.pesi.com/students">www.pesi.com/students</a> or call 800-844-8260 for details. <i>Advance registration required. Cannot be combined with other discounts.</i></li></ul>	
<div><div></div><div>FOR OFFICE USE ONLY <b>Fed ID # 26-3896894</b> © 2018 PESI, Inc.</div></div>	
<div><div></div><div><b>Satisfaction 100% Guaranteed</b></div><div></div></div>	

*Shipping is \$6.95 first item + \$2.00 each add'l item.	Product total \$ _____
**Residents add applicable state and local taxes except in AK, DE, MT, NH, OR	*Shipping _____
	Subtotal _____
	**Tax _____
	TOTAL _____

#### CAN'T ATTEND THE SEMINAR?

**Learn from the Masters The Neuroscience of Stress, Depression, and Developmental Trauma: Connect Physiology to Psychology with Dr. Robert Sapolsky**

\_\_\_ Seminar on DVD\* (video) \$139.99 (RNV053710)

\_\_\_ Seminar on CD\* (audio) \$119.99 (RNA053710)