

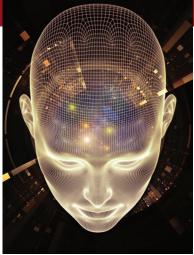
# **3rd Annual Innovations in Psychiatry and Behavioral Health: Virtual Reality and Behavior Change**

A Continuing Medical Education Conference Presented by the Department of Psychiatry and Behavioral Sciences at the Stanford University School of Medicine

**October 6-7, 2017** Li Ka Shing Center for Learning and Knowledge Stanford, CA

Sponsored by the Stanford University School of Medicine





# Faculty

#### WELCOME MESSAGE FROM THE COURSE DIRECTORS

#### Dear Colleagues,

We invite you to register for our 3rd annual conference of innovations in psychiatry and behavioral health. This year our conference is completely devoted to virtual and augmented reality (VR/AR) technologies and behavioral change. We will explore the application of immersive technologies for treating and researching addictions, ADHD, anxiety, PTSD, psychosis, pain, depression, psychosomatic illness and more. In addition to lectures with time for questions and answers, the conference will feature a "shark-tank" style innovation lab, demonstrations, and scientific posters. Please join our conference and interact with all stakeholders in this VR/AR and behavioral change space, including psychiatrists, psychologists, behavioral scientists, neuroscientists, engineers, developers, designers, computer scientists, business people, etc.

Sincerely, Alan K. Louie, MD and Kim Bullock, MD

#### **STATEMENT OF NEED**

This symposium seeks to fulfill the need for physicians, psychologists, nurse practitioners, and clinical social workers to increase their knowledge and competence regarding innovations in the application of virtual reality (including augmented reality) in psychiatry and behavioral health, including appropriate referral of patients for these treatments. Topics will also include discussions of virtual and augmented reality innovations and resources that are most likely to change the field including, but not limited to: emerging therapies and devices, impactful combinations of existing treatments with virtual reality, and models for how clinicians may collaborate on these innovations with computer scientists and engineers. Notably, teaching techniques at the symposium will include speakers, posters, and an innovation lab, in which attendees may apply to present solutions to challenge problems in an award contest and engage in experiential learning to improve upon ideas in real-time through expert feedback and interaction.

#### **TARGET AUDIENCE**

This is an international program, designed for physicians, psychologists, nurse practitioners, and clinical social workers practicing in the following specialties:

- Family Practice
- Primary Care
- Neurology
- Psychiatry
- Anesthesiology
- Pediatrics

Neurosurgery

Also welcomed are people interested in VR/AR from fields like medicine, engineering, computer science, business, education, law, etc.

#### **LEARNING OBJECTIVES**

At the conclusion of this activity, learners will be able to:

• Evaluate and appropriately refer

patients for the newest virtual and augmented reality treatments for health behaviors and mental health including: addiction, anxiety disorders, functional neurological disorder, mood disorders, post-traumatic stress disorder, pain disorders, and other psychiatric disorders.

• Evaluate and appropriately refer patients for the newest virtual and augmented reality treatments for the management of pain disorders.

• Effectively collaborate with interdisciplinary teams of physicians, computer scientists, engineers, and business people to provide optimal psychiatric and behavioral care to patients.

#### ACCREDITATION

The Stanford University School of Medicine is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

#### **CREDIT DESIGNATION**

The Stanford University School of Medicine designates this live activity for a maximum of **16.50** *AMA PRA Category 1 Credits*<sup>TM</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

The California Board of Registered Nursing recognizes that Continuing Medical Education (CME) is acceptable for meeting RN continuing education requirements; as long as the course is certified for *AMA PRA Category 1 Credit*<sup>TM</sup> (**rn.ca.gov**). Nurses will receive a Certificate of Participation following this activity that may be used for license renewal.

#### COMMERCIAL SUPPORT ACKNOWLEDGEMENT

This CME activity is supported in part by educational grants. A complete list of commercial supporters will be published in the course syllabus.

#### COURSE DIRECTOR Alan K. Louie, MD

Professor, Associate Chair, and Director of Education, Department of Psychiatry

and Behavioral Sciences; Moderator, and Course Content Validation Reviewer

#### COURSE CO-DIRECTOR Kim Bullock, MD

Clinical Associate Professor, Department of Psychiatry and Behavioral Sciences; Director, Virtual Reality-Immersive Technology Lab

#### KEYNOTE SPEAKERS

**Jeremy Bailenson, PhD** Thomas More Storke Professor, Virtual Human Interaction Lab, Department of Communication, Stanford

Walter Greenleaf, PhD Visiting Scholar, Virtual Human Interaction Lab, Stanford

Giuseppe Riva, PhD

Professor, ICE-NET Lab, Università Cattolica, Milan, Italy & ATN-P Lab, Istituto Auxologico, Milan, Italy

**Albert "Skip" Rizzo, PhD** Research Professor, Department of Psychiatry; Director, Medical Virtual Reality; University of Southern California

#### STANFORD FACULTY

Jacob Ballon, MD Clinical Assistant Professor, Department of Psychiatry and Behavioral Sciences

Tom Caruso, MD, MEd Clinical Assistant Professor, Department of Anesthesiology

Anne Dubin, MD Professor, Department of Psychiatry and Behavioral Sciences

Kate Hardy, Clin.Psych.D Clinical Assistant Professor, Department of Psychiatry and Behavioral Sciences

Hadi Hosseini, PhD Instructor, Department of Psychiatry and Behavioral Sciences

Sean Mackey, MD, PhD Redlich Professor, Department of Anesthesiology

Laura W. Roberts, MD, MA Chairman and Katharine Dexter McCormick and Stanley McCormick Memorial Professor, Department of Psychiatry and Behavioral Sciences

Sam Rodriguez, MD Clinical Assistant Professor, Department of Anesthesiology

Nina Vasan, MD Psychiatric Resident, Department of Psychiatry and Behavioral Sciences

Leanne Williams, PhD Professor, Department of Psychiatry and Behavioral Sciences

GUEST FACULTY Pat Bordnick, PhD, MPH, LCSW Dean, School of Social Work, Tulane University

**JoAnn Difede, PhD** Professor, Psychology in Psychiatry, Cornell University

**Diane Gromala, PhD** Professor, School of Interactive Arts and Technology, Simon Fraser University, British Columbia, Canada

Hunter Hoffman, PhD Professor, Mechanical Engineering, University of Washington

**Elizabeth McMahon, PhD** *Clinical Psychologist, Private Practice, Case Western Reserve University, San Francisco* 

Christina Spellman, PhD Executive Director, The Mayday Fund, New York City

David Thomas, PhD National Institute of Drug Abuse (NIDA), Washington DC

Matt Vogl, MPH Executive Director, National Behavioral Health Innovation Center, University of Colorado Depression Center

#### FACULTY DISCLOSURE

The Stanford University School of Medicine adheres to ACCME Criteria, Standards and Policies regarding industry support of continuing medical education. Disclosure of faculty and their commercial relationships will be made prior to the activity.

## Please register early – space is limited!

### Friday, October 6, 2017

riluay, Octo	Der 0, 2017			
7:00-7:45 AM	Registration and Light Breakfast			
7:45-8:00 AM	VR and Behavior Change: Day 1 (NO CME) Alan Louie, MD; Kim Bullock, MD; Laura Roberts, MD, MA			
8:00-8:40 AM	<b>Overview of Medical VR</b> Walter Greenleaf, PhD			
8:40-8:55 AM	Q&A			
8:55-9:35 AM	VR and Functional Neurological Disorder Kim Bullock, MD			
9:35-9:50 AM	Q&A			
9:50-10:05 AM	Break			
10:05-10:45 AM	VR: The Future of Substance Abuse Research and Treatment Pat Bordnick, PhD, MPH, LCSW			
10:45-11:00 AM	Q&A			
11:00-11:25 AM	Translation of Technology into Clinical Care Matt Vogl, MPH			
11:25 AM-12:15 PM	Keynote: Neuroscience of VR and Behavioral Change Giuseppe Riva, PhD			
12:15-12:30 PM	Q&A			
12:30-1:00 PM	Lunch			
1:00-1:10 PM	Announcements Alan Louie, MD and Kim Bullock, MD			
1:10-2:00 PM	Keynote: Experience on Demand Jeremy Bailenson, PhD			
2:00-2:15 PM	Q&A			
2:15-2:55 PM	<b>VR, Trauma, and Anxiety</b> JoAnn Difede, PhD			
2:55-3:10 PM	Q&A			
3:10-3:25 PM	Break			
3:25-4:05 PM	VR, Brain Circuits and Precision Psychiatry – Targeting Depression Leanne Williams, PhD			
4:05-4:20 PM	Q&A			
4:20-5:00 PM	VR in Clinical Practice Elizabeth McMahon, PhD			
5:00-5:15 PM	Q&A			
5:15-5:45 PM	VR from Bench to Clinic Panel Jeremy Bailenson, Pat Bordnick, Kim Bullock, JoAnn Difede, Walter Greenleaf (Facilitator), Elizabeth McMahon, Giuseppe Riva, Matt Vogl, Leanne Williams			
	MISSIONS			

CALL FOR SUBMISSIONS

**BRAINSTORM VR INNOVATION LAB:** Virtual and augmented reality technologies are transforming what is possible in mental healthcare. That's why we at Stanford are hosting a competition for ideas in virtual and augmented reality that can reimagine the way mental healthcare is delivered. Entries that are selected by the Scientific Committee will present/pitch an idea at our innovation lab and receive expert feedback from our judges. The one person presenting/ pitching an accepted entry will be provided with free registration to the conference; email us if you have more than one person presenting/pitching.

**POSTERS**: The conference will feature a number of innovative posters concerning scientific work using virtual and augmented reality in mental healthcare, health behaviors, and healthy behavior change. Posters will preferably include demonstrations and interactive technologies associated with current work. The first author of accepted posters will be provided with free registration to the conference.

Information about submission to the innovation lab and poster abstracts may be found on the conference website at **cme.stanford.edu/psychiatry**.

### Saturday, October 7, 2017

	Saturday, October 7, 2017						
	7:00-7:45 AM	7:45 AM Light Breakfast					
	7:45-8:00 AMVR and Behavior Change: Day 2 (NO CME) Alan Louie, MD and Kim Bullock, MD						
		storm VR Innovation Lab Innovation Lab: Introduction Nina Vasan, MD	<b>Track 2: Lectu</b> 8:00-8:35 AM	res VR and Attention Deficit/Hyperactivity Disorder Hadi Hosseini, PhD			
	8:15-9:25 AM	Innovation Lab: Part IA Finalists' Oral Presentations Nina Vasan, MD	8:35-9:10 AM	<b>VR and Psychosis</b> Jake Ballon, MD and Kate Hardy, Clin.Psych.D			
	9:25-9:35 AM	Innovation Lab: Part IB Panel and Q&A Nina Vasan, MD	9:10-9:45 AM	<b>VR, Anxiety Reduction,</b> <b>and Pain</b> Sam Rodriguez, MD and Tom Caruso, MD, MEd			
	9:35-9:45 AM	Break	9:45-9:55 AM	Break			
	9:45-10:45 AM	Innovation Lab: Part II Team Problem Solving and Iterating Nina Vasan, MD	9:55-11:00 AM	Virtual Reality Poster Presentations (NO CME)			
	10:45-11:05 AM	Innovation Lab: Part III Finalists' Oral Presentations Nina Vasan, MD	11:00-11:05 AM	Introduction of Afternoon (NO CME) Christina Spellman, PhD			
	11:05-11:35 AM	Virtual Reality Poster Presentations (NO CME)	11:05-11:40 AM	VR and Pain Management/Addiction David Thomas, PhD			
	11:35 AM -12:15 PM	Innovation Lab: Part IV Debrief and Recap Nina Vasan, MD	11:40 AM -12:15 PM	Advances in Pain Management Sean Mackey, MD			
	12:15-12:45 PN	Lunch					
	12:45-1:35 PM	Keynote: VR Exposu to Address PTSD Iss Albert "Skip" Rizzo, P	ues	Humans			
	1:35-1:50 PM	Q&A					
	1:50-2:30 PM	<b>VR and Burn Pain</b> Hunter Hoffman, PhI	)				
	2:30-2:45 PM	Q&A					
	2:45-3:00 PM	Break					
	3:00-3:40 PM	VR and Chronic Pair Diane Gromala, PhD	ı				
	3:40-3:55 PM	Q&A					
-	3:55-4:35	VR and Anxiety with Anne Dubin, MD	VR and Anxiety with Painful Procedures in Children Anne Dubin, MD				
ī.	4:35-4:50	Q&A					
/ - 1 /	4:50-5:30 PM	Tom Caruso, Anne Di Sean Mackey, Albert	<b>Panel on Technology for Pain Management</b> Tom Caruso, Anne Dubin, Diane Gromala, Hunter Hoffman, Sean Mackey, Albert "Skip" Rizzo (Facilitator), Sam Rodriguez				
-	5:30 PM	<b>Adjourn</b> Alan Louie, MD and K	<i>Adjourn</i> Alan Louie, MD and Kim Bullock, MD				

**Stanford University** 

Stanford Center for Continuing Medical Education 1520 Page Mill Road Palo Alto, CA 94304



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Phone: 650-497-8554 • Fax: 650-497-8585 cme.stanford.edu

# Registration

#### REGISTRATION

Registration fee includes course materials, certificate of participation, breakfast, lunch and refreshment breaks.

Register online with a Visa or Master Card by visiting **cme.stanford.edu/psychiatry**. If you prefer to pay by check or need assistance, please call **(650) 497-8554** or email **stanfordcme@stanford.edu**. Be sure to register with an email address that you check frequently. Your email address is used for critical information, including registration confirmation, evaluation, and certificate.



#### **CANCELLATION POLICY**

Cancellations received in writing no less than 30 days before the course will be refunded, less a 20% administrative fee. No refunds will be made on cancellations received after that date. Please send cancellation requests to **stanfordcme@stanford.edu**.

Stanford University School of Medicine reserves the right to cancel this program; in the event of cancellation, course fees will be fully refunded.

#### **CONFERENCE LOCATION**

Li Ka Shing Center for Learning and Knowledge 291 Campus Drive, 2nd Floor Conference Center Stanford, California 94305 conferencecenter.stanford.edu

#### conterencecenter.stanior

ACCOMMODATIONS

Hotels near campus: Sheraton Palo Alto Hotel (650) 328-2800 The Westin Palo Alto (650) 321-4422

#### VISITOR INFORMATION

To learn more about traveling to Stanford University, please browse visit.stanford.edu.

#### **CONTACT INFORMATION**

For questions about the symposium, please contact **Yolanda Cervantes**, CME Conference Coordinator, **(650) 724-9549** or email **ycervant@stanford.edu**.

**Stanford Center for Continuing Medical Education** 1520 Page Mill Road, Palo Alto, CA 94304

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# Please register early – space is limited! • Register online at cme.stanford.edu/psychiatry