# HOPE THROUGH RESEARCH



FUNDING THE BEST MINDS, TO HEAL MINDS.™

# HDRF RECRUITS THREE NEW SCIENTISTS TO ITS DEPRESSION TASK FORCE

The **Depression Task Force** is an acclaimed collaboration of top neuroscientists who have been working together since 2012 to accelerate discovery of new and better treatments for depression. In 2019, we added three young scientists who bring important new imaging tools and expertise to the group, further augmenting our ability to move research discoveries from the laboratory to the clinic.



**Elisabeth Binder, M.D., Ph.D.** Psychiatrist, Neurogeneticist, Epigeneticist Max Planck Institute, Munich, Germany

Dr. Binder is an international leader in the genetic basis of depression. Her lab studies a central question: Why do some people face adversity and seem to bounce back, while others get stuck in depression? Can we predict beforehand who is vulnerable? Dr. Binder's work will uncover the human genes that will allow us to know who is at risk to develop depression after significant adversity, so we can intervene early with precision treatments.



Kafui Dzirasa, M.D., Ph.D. Psychiatrist, Neurobiologist, Biomedical Engineer Duke University

The search for new treatments for depression has largely focused on chemical processes in the brain. Dr. Dzirasa, however, is studying electrical activity emanating from brain circuits. To date, he has identified neural oscillations that show if an individual is vulnerable and likely to develop depression. His goal is to identify electrical signatures of full-blown depression, suggesting a potential tool for diagnosis.



Conor Liston, M.D., Ph.D. Psychiatrist, Neuroscientist Weill Cornell Medicine

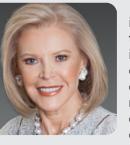
For many patients, depression is a fundamentally episodic and chronic form of illness, with low moods cycling in between periods of wellness. Dr. Liston is working to understand how these episodes emerge and persist, then go away. What molecules change in the brain? Can we identify the signal of an oncoming attack? Dr. Liston is particularly focused on circuits in the prefrontal cortex, a brain area that controls memory and motivation.

### FOUNDER'S MESSAGE

HDRF is built on a bold dream. I founded the charity in 2006 to take on a massive yet widely ignored public health issue. At that time, I vowed to shake up the field for answers that will finally lead to new treatments for depression. There has been scant progress in drug discovery

since the advent of the first SSRI (Prozac) in 1985 - over 30 years ago.

HDRF's convention-busting strategy consists of the Depression Task Force, an outstanding collaboration of leading brain scientists - each a pioneer in their own right - who have agreed to work as an integrated team to develop and execute urgently needed research programs.



Our unique approach is working. We have three clinical trials in different stages of development for compounds that show rapid antidepressant capabilities. Each compound represents a new departure from

the outdated SSRI drugs in common use today.

I want to thank each and every one of our donors for your role in this remarkable progress. Your support has and will continue to make a world of difference.

Thank you,

Andrey Shum

**Audrev Gruss** Founder & Chair



#### For more information, please contact:

#### **New York HDRF**

40 West 57th Street, Ste. 1440 New York, NY 10019 Phone: 212.676.3200 Fax: 212.676.3219 Email: hdrf@hopefordepression.org

#### **Palm Beach HDRF**

777 S. Flagler Drive, Ste. 801E West Palm Beach, FL 33401 Phone: 561.515.6454 Fax: 561.514.3520 Email: hdrf@hopefordepression.org

# **NEXT GENERATION MENTAL HEALTH**

#### HDRF's Next **Generation Mental Health Symposium**

continued for its second year at the Paley Center for Media on May 29, 2019. This year, the topic was "Bullying and Mental Health."

The symposium was free to the public and drew over 100 people including teens, parents,

social workers, guidance counselors and more.

Depression and suicide are tragically spiking in teens, and bullying is a known trigger. Neuroscience has revealed that bullying can impact the brain's wiring for a lifetime.

Our goal is to get the science into



the hands of the general public so they have a deeper understanding of bullying as a public health issue. The panel was moderated by HDRF Executive Director Louisa Benton and consisted of (left to right):

• Jill Brown, President and Founder of Generation Text Online: • Eric Nestler. M.D., Ph.D.,

Director of the Friedman Brain Institute at Mount Sinai:

• Susan M. Swearer. Ph.D., Professor of School Psychology at the University of Nebraska -Lincoln:

• Jeff Lima, actor and anti-bullying activist; • Angela Diaz, M.D., Ph.D., MPH, Director of the Mount Sinai

Adolescent Health Center: and • Emily Marrero, student at SUNY Morrisville and graduate of the Police Athletic League of New York City.

For highlights of the discussion and to view the video, please visit hopefordepression.org/ next-generation-mental-healthsymposium/.

### **TEAMING UP TO TAKE DOWN DEPRESSION**



#### Annual Depression Task Force Laboratory Retreat Tarrytown, NY

In June 2019, the senior members of HDRF's Depression Task Force gathered for a weekend in Tarrytown, NY, along with 30 of the young postdoctoral fellows in their labs for the third annual retreat of brainstorming and bonding. "We need this community to tackle a complex problem like depression," said Dr. Huda Akil of the University of Michigan and a founding member of the Task Force. "The data is so rich, we need to join forces to drive science forward."

# **MEET AN HDRF NEUROSCIENTIST**

Dr. Carla Nasca, a postdoctoral fellow with our Depression Task Force, was named a finalist for the

2019 Blavatnik Award for Young Scientists earlier this year.

Dr. Nasca's work has discovered that a natural chemical in the body (acetyl-L-carnitine, or **LAC** for short) can rewire the brain and is a possible new treatment for depression.

LAC's main function in the brain is to enhance actions of the neurotransmitter glutamate, which helps cells recover after a major stressful event.

Her work brings the glutamate

system into the spotlight for drug discovery. The common antidepressants on the market today focus on the

serotonin system (the SSRIs) and were introduced in 1985. Since then, targets for new treatments have been vexingly elusive.

Dr. Nasca is a molecular neuroscientist at Rockefeller University in the lab of Dr. Bruce McEwen, a founding member of the HDRF Depression Task Force.

"I have grown so much scientifically in the past several

years," said Dr. Nasca. "I hope to contribute to the HDRF mission for many years ahead."

#### DEPRESSION TASK FORCE

Eric Nestler, M.D., Ph.D., Chair Mount Sinai School of Medicine

> Huda Akil, Ph.D. University of Michigan

Elisabeth Binder, M.D., Ph.D. Max Planck Institute of Psychiatry

Kafui Dzirasa, M.D., Ph.D. Duke University

> René Hen, Ph.D. Columbia University

Jonathan Javitch, M.D., Ph.D. Columbia University

Conor Liston, M.D., Ph.D. Weill Cornell Medicine

Helen S. Mayberg, M.D. Mount Sinai School of Medicine

Bruce McEwen, Ph.D. Rockefeller University

Michael Meaney, Ph.D. Douglas Institute & McGill University

#### HDRF BOARD OF DIRECTORS

Audrey Gruss, *Chair* David Kahn, M.D. Harold W. Koenigsberg, M.D. Robert Michels, M.D. Steven Roose, M.D. William Speck, M.D.

#### DEVELOPMENT ADVISORY COUNCIL

Arthur Dunnam Peter Gregory Scott Snyder



**Dr. Carla Nasca** 

# 4<sup>TH</sup> ANNUAL SOUTHAMPTON 5K RACE OF HOPE SETS NEW RECORDS



#### Co-Grand Marshals Sailor Brinkley Cook, Arthur Dunnam, Audrey Gruss and Jack Brinkley Cook

A crowd of over 700 men, women and children gathered on Sunday, August 4, in Southampton to participate in the fourth annual 5K Race of Hope. Sailor Brinkley Cook and Jack Brinkley Cook, whose mother is famed Hamptons resident Christie Brinkley, were the Grand Marshals, along with HDRF's Founder and Chair Audrey Gruss and Advisory Board Member Arthur Dunnam.

Both in their early 20s, the Brinkley Cook siblings represent a post-millennial generation that is not only more open about mental health issues, but also increasingly vulnerable. Rates of depression and suicide among teens have risen sharply in the past decade according to recent studies.

Audrey Gruss said, "In the United States, depression is the leading cause

of suicide and affects more than 18 million adults each year. Among teens, depression and suicide rates are the highest on record. We are working to turn the tide on depression and suicide in this country, but we can't do it without your help, so thank you all for coming out to support the cause today."

Best time medals went to Dan Gargaro (male) and Tara Farrell (female). Arthur Dunnam won the award for Top Fundraising Team, raising \$42,832, and Scott Snyder won the award for Top Individual Fundraiser, raising \$41,000. Kim Heirston received the runner up award and a notable mention highlighting that \$10,000 of the funds she raised had been donated by **Oprah Winfrey**. All in all, the Race raised over \$285,000 for depression research.



Natasha Jeffries, of Dakari's Heartbeats, also won an award for Team Captain of the Largest Team with 35 members.

#### **UPCOMING EVENTS**

#### **GIVING TUESDAY**

Tuesday, December 3, 2019 Online

#### PALM BEACH 5K RACE OF HOPE

Saturday, February 15, 2020 Palm Beach, FL

#### SOUTHAMPTON 5K RACE OF HOPE

Sunday, August 2, 2020 Southampton, NY



FALL 2019 ISSUE

#### SUPPORT HDRF

100% of all donations go directly to research into the origins, diagnosis, treatment and prevention of depression and its related mood disorders including: bipolar disorder, post-partum depression, post-traumatic stress disorder, anxiety disorders, and suicide.

HDRF is a non profit 501(c)(3) public charitable organization. All donations are tax-deductible to the fullest extent of the law.

#### Visit us at: hopefordepression.org