

HOPE THROUGH RESEARCH



BREAKTHROUGH NEWS FROM OUR DEPRESSION TASK FORCE

Depression Could One Day Be Diagnosed with a Blood Test



A major study funded by HDRF made headline news this summer with coverage in *Newsweek*, *ABC News*, and *USA Today*, among other national outlets.

The study discovered a link between depression and a natural molecule in the body called acetyl-L-carnitine, or LAC. Human patients with major depressive disorder have lower levels of LAC in their blood, according to the study, published July in *Proceedings of the National Academy of Sciences*.

What's more, patients with very low LAC levels were more likely to have more serious depressive symptoms and to have developed depression earlier in life. This suggests that in the near future, doctors can use a LAC blood test to diagnose the severity of depression in each person. Currently, there is

no physical diagnosis for depression.

"These findings are clinically impactful and groundbreaking ... They hold the possibility of a new era of biological markers, personalized medicine, and paradigm-shifting acute and preventative treatments," wrote Dr. Robert M. Post of George Washington University in a review.

The study reveals that LAC may also be a breakthrough new treatment for depression that is faster-acting and with fewer side effects than the current treatments in use for the past 30 years. The researchers found that intravenous and oral administration of

LAC in mice actually reversed depressive symptoms and restored normal behavior within a few days.

The senior author of the paper is HDRF Depression Task Force member Dr. Bruce McEwen, head of the Laboratory of Neuroendocrinology at Rockefeller University. The lead author is Carla Nasca, PhD, a post-doctoral scholar in McEwen's lab.

Their extensive animal research was funded by HDRF.

Dr. McEwen and the Depression Task Force will continue this promising research in the coming year with the intent of beginning human clinical trials soon. "It is likely that other

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FOUNDER'S MESSAGE

As we mark the end of 2018, I can't help but marvel at all that we've accomplished, and with your help, all that we will accomplish.

With our acclaimed Depression Task Force, HDRF has become the definition of frontier science. Our team of seven top scientists have made clinically impactful and groundbreaking discoveries that point to a new era in the diagnosis and treatment of depression.

HDRF is also at the forefront of changing public attitudes about depression. Our Walk of Hope + 5K Run has been so successful in Southampton that we're bringing



the event to Palm Beach in 2019! We also launched a public symposium in New York to discuss mental health in our communities and nation and we will hold it annually.

I hope you're as excited as we are about the promise that lies ahead. Your support will continue to propel awareness and discovery. One hundred percent of your gift goes directly to research.

Thank you,



Audrey Gruss
Founder & Chair

BREAKTHROUGH NEWS FROM OUR DEPRESSION TASK FORCE

continued from page 1

biomarkers will be needed to further identify, or narrow down, to create a more specific depression subtype," said Dr. McEwen. "That is, a combination of biomarkers may be needed rather than just one alone."

"Hopefully within the next year or two there will be additional information that will lead to a blood test," he added.

Dr. McEwen's study represents one of the first efforts to achieve a precision medicine approach that treats the sub-types of depression, a major goal of the Depression Task Force since it was created in 2010.

The Depression Task Force is a team of seven world leaders in brain science from different research institutions who are pooling expertise and data to accelerate discovery. They are conducting the most advanced depression research in the country today.

YOUNG SCIENTISTS EMBRACE COLLABORATION TO DEFEAT DEPRESSION



The Depression Task Force senior investigators with junior scientists at their annual retreat. Montreal, Canada, May 17-18, 2018

The collaborative team approach of the Depression Task Force represents a new direction in neuroscience research, with seven world-acclaimed brain scientists working together on a joint research plan and sharing data in real time to accelerate discovery.

This sense of excitement is now

being passed down to a whole new generation of younger scientists working in the Depression Task Force laboratories.

"Young scientists are often told 'Don't share your work – it's a competitive world out there,' but with the HDRF Task Force, it's okay, you are among family," said Dr. Huda Akil

of the University of Michigan.

"So now we are starting to see a number of collaborations between the young people bubble up across laboratories," she continued. "*And I have found that the young neuroscientists actually love it.* As soon as you reassure them that nobody is going to steal their hard work, that this is all going to be value added, they are on board."

Dr. Akil pointed out that the building of trust across labs is one of the great accomplishments of the HDRF Depression Task Force: "We really have become a community. The richness of the data is such that nobody can wrap their brain around it all. We need this community to tackle a complex problem like depression."

The Depression Task Force is comprised of seven powerful laboratories from Columbia University, Icahn School of Medicine at Mount Sinai, McGill University, University of Michigan and Rockefeller University.

TEENS, SOCIAL MEDIA and MENTAL HEALTH

HDRF Launches Public Symposium on Brain Wellness

Are smartphones making teens depressed? We addressed this question with a panel of doctors, brain experts and young writers who shared their stories in a public forum on Tuesday, May 8, at the Paley Center for Media in NYC.

The event was HDRF's first annual public symposium on brain wellness. We will hold the event every year to invite panelists and the public to discuss urgent mental health issues facing our communities.

The moderator was Elyse Fox, founder of Sad Girls Club, an online and IRL (in real life) forum for young people to talk about mental health openly. The audience consisted of more than 125 people, including



NYC teens and their parents.

The inaugural panel included (left to right) writer Scarlett Curtis of *Vogue*; Dr. Alexander Harris of Columbia University; Dr. Marianne Chai of NYU; Elyse Fox; writer Philip Eil of *Vice*; 17-year-old Em Odesser, Editor-in-Chief of *Teen Eye Magazine*;

and UCLA's Dr. Yalda T. Uhls, author of *Media Moms and Digital Dads, A Fact Not Fear Approach to Parenting in the Digital Age*.

"Great discussion and panel," said teacher Andy LaCoppola of Johnstown, NY. "Very balanced in terms of presenting the positive and negative effects of social media. Very good to get a teen perspective, too."

The event was made possible with generous support from Art Findlay, Tania Higgins, and the Stavros Niarchos Foundation.

To learn more, please view the entire symposium at hopefordepression.org

2018 CHAIRMAN'S COUNCIL DINNER

HDRF Celebrates Top Donors in Palm Beach, Florida

We held our fourth annual Palm Beach Chairman's Council Dinner on Sunday, March 25, at the beautiful Club Colette in Palm Beach.

It was a memorable evening featuring NFL legend Joe Namath, who spoke about his recovery from brain injury and his commitment to neurological research.

We created the Chairman's Council to honor donors who make annual gifts of \$10,000 or more to HDRF's

advanced depression research. Members of the Council participate in an active schedule of events and have insider's access to HDRF's team of psychiatrists and neuroscientists.

We thank our Chairman's Council and each and every one of you who have supported HDRF's unique research model.

For more information about the Chairman's Council, contact Kelli Teglas at kt@hopefordepression.org.



Joe Namath with Audrey Gruss

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WALK OF HOPE + 5K RUN TO DEFEAT DEPRESSION

Our Southampton, NY Event Raised \$250,000 for Research



Southampton Mayor Michael Irving and Audrey Gruss at the starting line

Over 500 participants came out for our third annual Walk of Hope + 5K Run to Defeat Depression on Sunday, August 5, in Southampton, New York.

Hope was in abundant supply as everybody sported caps in HDRF's signature sunshine yellow, along with t-shirts with a custom design by renowned artist Robert Wilson of the Watermill Center. The competitive runners – 150 in all – burst through the starting line, followed by families

and fun runners. Following the race, Audrey Gruss and the HDRF team presented medals for best times in the adult and youth categories.

HDRF recognizes the top individual fundraisers Scott Snyder and Kim Heirston, and the Top Fundraising Team, Arthur Dunnam and Roy Cohen of Oskar's Papa's Team. Thank you to all of our fundraisers who are truly making a difference with 100% of funds going directly to research.



UPCOMING EVENTS

GIVING TUESDAY

Tuesday, November 27, 2018
Online

INAUGURAL PALM BEACH RACE OF HOPE

Sunday, January 27, 2019
Palm Beach, FL

SOUTHAMPTON RACE OF HOPE

Sunday, August 4, 2019
Southampton, NY

HELP SUPPORT HDRF

100% of all donations go directly to research leading to a better diagnosis, new treatments and prevention of depression and its related mood and emotional disorders. HDRF is a non profit 501(c)(3) public charitable organization. All donations are tax-deductible to the fullest extent of the law.

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