

# CROSSROADS

THE OFFICIAL NEWSLETTER OF THE PREMED SCENE



Dear medical newsletter readers,

We wish all of you a happy May! This month, we bring you the most updated news in the field of medical research. April was Stress Awareness Month. I am this month's Rising Stars in Medicine writer, talking more about Dr. David Langer and his remarkable work in the field of neurosurgery. Next, Ashby Glover talks about the adverse effects of chronic stress on health. Finally, Siri Nikku ends by sharing more about how stress influences crisis supporters.

Please enjoy reading The Premed Scene's May 2025 Medical Newsletter!

*Alana Saidou*

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## Stress Awareness Month

By: Ilana Saidov

Today's fast-paced world can leave people feeling stressed and overwhelmed. Now more than ever, it is essential to learn how to manage these stressors and return to living a more peaceful and joyful life. One way to manage stress is by frequently exercising, which has been linked with increased focus and improved mood. Engaging in regular physical activity in the forms of walking, running, and biking can help lower stress levels. In addition to staying active, it is also crucial to maintain a healthy diet rich in fruits and vegetables. Staying away from excessive alcohol and caffeine can also help you maintain lower anxiety levels.

A healthy mind is just as important as a healthy body when it comes to lowering stress levels. Frequent meditation can help calm your mind from racing thoughts and help you keep a sense of balance. You can practice mindfulness techniques at any time and at any place, such as when you are walking or waiting in line. Another form of practicing mindfulness is yoga. Yoga can be a great stress reliever as it helps calm the mind and relax the body. Taking a moment to calm your mind can help you feel less anxious and give you the confidence to handle any challenges.

When stressed, it is vital to prioritize getting enough sleep. Aim for about seven to nine hours per night, as maintaining a consistent sleep schedule can help your mind and body recharge. Since stress can make it difficult for you to fall asleep, it is essential to establish a relaxing bedtime routine. Try journaling, reading a book, and playing calm music before bed to soothe your mind.

By using these simple techniques to handle everyday stress, you can feel more relaxed and balanced.

Source:

<https://www.mayoclinic.org/healthy-lifestyle/stress-management/in-depth/stress-relievers/art-20047257>





# Rising Stars in Medicine: Dr. David Langer, MD

**By: Ilana Saidov**

From performing life-saving surgeries to developing unique medical innovations, Dr. David Langer has been transforming the field of neurosurgery for over twenty years. Dr. Langer received his undergraduate and medical school degrees at the University of Pennsylvania. Following medical school, he stayed at the University of Pennsylvania to complete his neurosurgery residency. Currently, Dr. Langer serves as the Chair of Neurosurgery at Lenox Hill Hospital and Vice President of Neurosurgery for Northwell Health's Western Region.

During his career as a neurosurgeon, Dr. Langer developed the 3D exoscope device and the Playback Health smartphone app. The 3D exoscope device has been used to enhance the quality of neurosurgical procedures, while the Playback Health app has been used to improve patient experience. These innovations have been paramount in strengthening a patient's overall quality of care, showcasing Dr. Langer's immense dedication to patient care during and after their procedure.

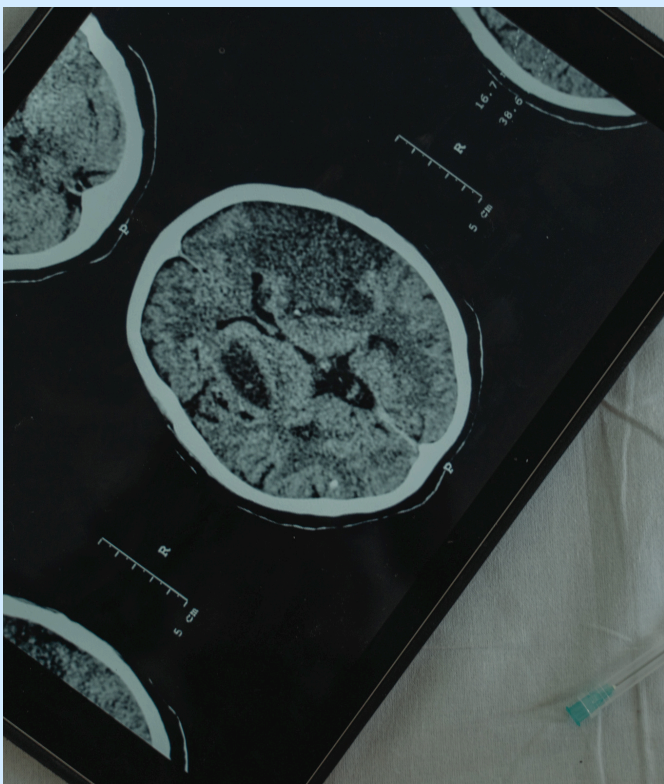
Dr. Langer demonstrated his immense commitment to educating the next generation of healthcare workers by creating BRAINterns, the global summer internship program, during the COVID-19 pandemic. This program allowed over 15,000 students to learn about neurosurgical procedures, medical school applications, and medical innovations from distinguished healthcare workers.

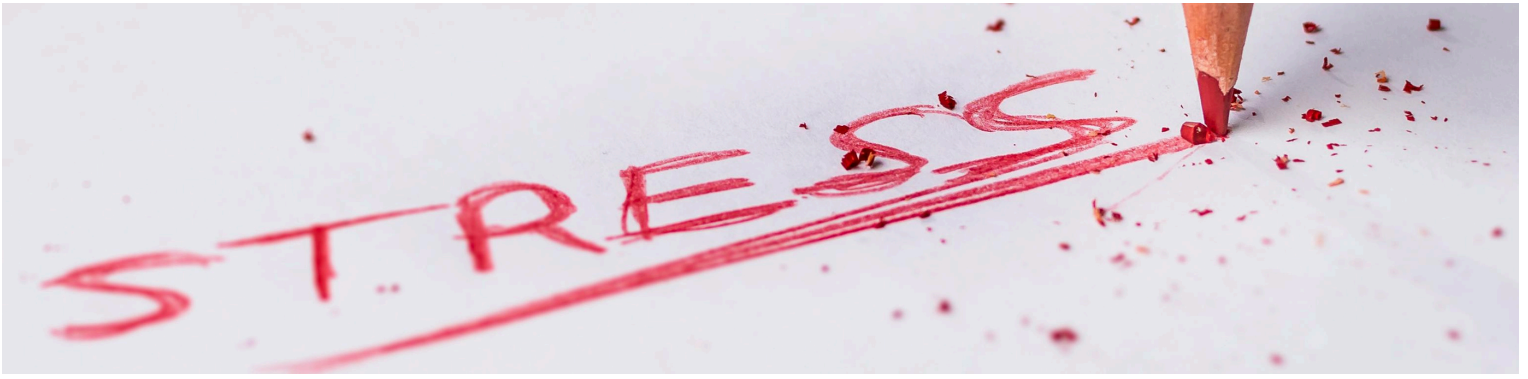
Dr. Langer remains at the forefront of neurosurgery, not only through his life-saving clinical work but also as a leading figure in medical education—shaping the future of healthcare in profound and lasting ways.

## Sources:

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## The Long-Term Effects of Stress

By: Ashby Glover

Chronic stress negatively impacts health in many ways, from suppressing the immune system to increasing the risk of cardiovascular disease. An increasing number of American adults report feeling stressed regularly. A Gallup poll in 2023 found that 49% of Americans report frequently experiencing stress in their daily lives, with young women the most badly affected. For healthcare providers, it is essential to understand the conditions that will increase as chronic stress takes its toll on the population.

While acute (brief) stress has been found to have beneficial effects on health, chronic stress has been found to have significant detrimental effects. Chronic stress suppresses key immune responses, such as type-1 cytokine-driven protective immune responses, while it enhances others, including proinflammatory responses. The result of this is that chronic stress “is likely to exacerbate proinflammatory diseases and increase susceptibility to infections and cancer.” Why is it that acute stress and chronic stress have vastly different effects on health? When someone experiences acute stress, there is a rapid physiological stress response when the stressor is present, but the response is then rapidly shut down when the stressor goes away. In contrast, repeated or prolonged stressful periods result in dysregulation of the physiological stress response. This causes it to persist long after the stressor has gone away or repeatedly activates in a way that overworks the body systems as they try to maintain equilibrium.

Chronic stress has long been known to correlate with an increased risk of cardiovascular disorders. A constantly activated stress response impacts important regulatory centers in the brain, causing vascular dysfunction. Stress is positively correlated with cardiac risk factors such as hypertension and insulin resistance and with outcomes such as ischemia, arrhythmia, and pump failure.

As the population grapples with the increasing frequency of chronic stress, the prevalence of stress-induced illness will likely increase in turn. The healthcare community should advocate for stress management and mental health resources, as well as for social improvements that will alleviate sources of stress for the general population.

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Photo by Pedro Figueras: <https://www.pexels.com/photo/stress-handwritten-text-on-white-printer-paper-626165/>



**By: Siri Nikku**

To combat the stress, crisis lines providing peer support to their crisis supporters have proven helpful. Training at crisis support organizations should emphasize problem-focused coping strategies, which can include reframing stressors and avoiding avoidant coping.

