

# CROSSROADS

THE OFFICIAL NEWSLETTER OF THE PREMED SCENE



Dear medical newsletter readers,

Happy March! Today, we bring to you the most recent news in medical research! I am this month's Rising Stars in Medicine writer, talking about Dr. Quardt and her work in plastic surgery. Next, I spread greater awareness regarding the impact of depression and anxiety on multiple sclerosis. Then, Siri Nikku focuses on the different types of kidney disease. Ashby Glover talks about the origin and history of myalgic encephalomyelitis. Finally, Mahima Bhat ends by sharing the benefits of the kalawalla root.

Please enjoy reading The Premed Scene's March 2024 Medical Newsletter!

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*Alana Saidou*

# *Multiple Sclerosis Awareness Month*

BY ILANA SAIDOV



March is

**MULTIPLE SCLEROSIS**

Awareness Month

Researchers from the University of British Columbia discovered that "people are nearly twice as likely to experience mental illness in the years leading up to the onset of the diseases." The studies suggest that psychiatric conditions such as depression and anxiety may manifest as early signs of multiple sclerosis (MS), shedding light on the potential connection between mental health and neurological disorders.

Multiple sclerosis is a complex condition that affects the central nervous system. It is an autoimmune disorder where the immune system mistakenly attacks myelin, the protective sheath surrounding nerve fibers. The damage to the myelin disrupts communication between the brain and the rest of the body. By recognizing the early signs of MS in the form of depression and anxiety, healthcare professionals can take the necessary steps to support individuals at risk and provide comprehensive care that addresses both their mental and neurological health.

Source:

University of British Columbia. "Depression, anxiety may be among early signs of MS."

ScienceDaily. ScienceDaily, 25

September 2023. <[www.sciencedaily.com/releases/2023/09/230925190519.htm](http://www.sciencedaily.com/releases/2023/09/230925190519.htm)>.

## *Rising Stars in Medicine:*

# Dr. Suzanne Marie Quardt

BY ILANA SAIDOV

Dr. Suzanne Marie Quardt, also known as Dr. Q, is a Board Certified Plastic Surgeon who has made remarkable contributions to cosmetic surgery. Her commitment to the field of plastic surgery, coupled with her compassion and dedication, enables her to create a significant impact in the lives of her patients.



Dr. Quardt's journey in medicine began at Rutgers University, where she earned her bachelor's degree. She then attended the University of Medicine & Dentistry of New Jersey-NJ Medical School and earned her Medical Degree. After furthering her medical expertise during her surgical training programs, she became Board-Certified by the American Board of Plastic Surgery. In 2020, she was a part of the reality show "Dr.90210," where she showcased her expertise and professionalism in the field of plastic surgery. Her participation in the show further solidified her reputation as a leading figure in the medical field. Dr. Quardt's current medical practice focuses on providing her patients with exceptional results in all cosmetic procedures and reconstructions. She is known for her expertise in cosmetic procedures for the face and body, as well as complex reconstructions following conditions such as breast, skin, and other cancers, trauma, and other medical challenges. Dr. Quardt's commitment to her patients and contributions to the cosmetic and reconstructive surgery field have solidified her status as a respected and influential figure. Her dedication to excellence and compassionate approach to patient care continue to make a meaningful impact in the lives of those she serves.

Source:

<https://palmdesertplasticsurgery.com/meet-dr-quardt/>

# *The Silent Disease of the Kidneys*

**BY SIRI NIKKU**

Kidneys are the two bean-shaped organs on either side of your spine just above your waist. When a person's kidneys do not function correctly, waste products accumulate, leading to swelling in the ankles, nausea, weakness, difficulty sleeping, and shortness of breath.

Kidney disease can alter how one's body cleans blood, filters water, and maintains blood pressure. This disease can also affect red blood cell production and vitamin D metabolism required for bone health. About one in seven Americans have this condition.

Chronic kidney disease (CKD) occurs when the kidneys cannot filter blood effectively. If left untreated, this condition can lead to kidney failure. In this stage, it is called end-stage renal disease (ESRD) and can be treated by dialysis or a kidney transplant. 40% of those with severe CKD are often unaware that they have this, which is why the disease is usually called the "silent" disease.

Other types of kidney diseases include polycystic kidney disease, lupus nephritis, interstitial nephritis, glomerular disease, APOL1-mediated kidney disease, long-lasting viral illnesses, and pyelonephritis. All of these forms of the disease are inherited genetically or from a disease called malfunction in the kidneys. Since the kidneys are flexible and cover up any problems, detecting whether someone has kidney disease is difficult due to the slow and almost undetectable progression. Common symptoms include high blood pressure, fatigue, shortness of breath, a metallic taste, muscle itching and cramping, trouble thinking, chest pain, and a loss of appetite.



While the condition's symptoms are slow, there are tests to detect it. These include blood tests to determine the amount of waste products in your blood, urine tests to check for kidney failures, ultrasound of the kidneys, and a kidney biopsy.

After being diagnosed, there are treatments available depending on the type of kidney disease. Blood pressure medications are common when it comes to treating kidney disease; these medications also lower the amount of urine in one's blood. Medication to increase the amount of red blood cells is also a potential option. Being on a diet comprised of less potassium, protein, sodium, and phosphate is also a common solution to address kidney disease.

Source:

<https://www.webmd.com/a-to-z-guides/understanding-kidney-disease-basic-information>

# Shedding Light on ME/CFS

BY ASHBY GLOVER

A recent study by the National Institutes of Health (NIH) demonstrated that myalgic encephalomyelitis (ME), or chronic fatigue syndrome, is “unambiguously biological, with multiple organ systems affected.”(1) This challenges a long history of the condition being dismissed as psychological in nature.

Although ME was first identified and named in 1955, it only took one paper in 1970 to stymie research into the condition for the next fifty years. (2) Two psychiatrists in the UK reviewed reports of 15 outbreaks of ME. To be clear, the symptoms of ME are far from mild. One patient reported to a research committee in 2015: “My personal experience of having ME/CFS feels like permanently having the flu, a hangover, and jet lag while being continually electrocuted.”(2) Despite the intensity of physical symptoms because they could not identify a cause, and most of the people reporting symptoms were women, the psychiatrists concluded that mass hysteria was the significant contributing factor to the illness and that it was primarily psychological. (3)

“We believe these epidemiological peculiarities — the predilection for young women and institutions containing an undue proportion of them— provide positive evidence for mass hysteria as an explanation of the illness.”  
McEvedy and Beard, 1970. (3)



Their conclusion was strongly refuted by Dr. Melvin Ramsay, who demonstrated that the disease was severely disabling. (2) Despite his work, the prevailing attitude toward ME continued to be that it was psychological, so there were relatively limited efforts to research it outside of psychiatry and psychology.”(2) The recent landmark study found physiological differences between the ME/CFS group and the healthy volunteers, including immune system differences, reduced neurotransmitter metabolism, autonomic nervous system dysfunction, impaired cardiorespiratory performance, and more. (1) They also noted that psychiatric disorders were not a major feature in the cohort and did not account for the severity of their symptoms. The study provides several leads that invite future research. For those in the ME/CFS community, the study offers new hope that, after decades of dismissal, research into the condition will be given the attention it deserves.

“It’s a systemic disease, and the people living with it deserve to have their experiences taken seriously.”  
Avindra Nath, neurologist MD and clinical director for NIH’s National Institute of Neurological Disorders and Stroke. (1)

1. Quinn Eastman. “NIH Study Provides Long-Awaited Insight Into Encephalomyelitis/Chronic Fatigue Syndrome.” JAMA, 15 March 2024. doi:[10.1001/jama.2024.3603](https://doi.org/10.1001/jama.2024.3603).

2. Committee on the Diagnostic Criteria for Myalgic Encephalomyelitis/Chronic Fatigue Syndrome; Board on the Health of Select Populations; Institute of Medicine. “Beyond Myalgic Encephalomyelitis/Chronic Fatigue Syndrome: Redefining an Illness.” National Academies Press, 10 February 2015. [www.ncbi.nlm.nih.gov/books/NBK284897/](https://www.ncbi.nlm.nih.gov/books/NBK284897/)

3. Colin P. McEvedy and A.W. Beard. “Concept of Benign Myalgic Encephalomyelitis.” British Medical Journal 1, no. 5687 (1970): 11-15. doi:[10.1136/bmj.1.5687.11](https://doi.org/10.1136/bmj.1.5687.11).

# *Benefits of the Kalawalla Root*

**BY MAHIMA BHAT**

Kalawalla root, derived from the *Polypodium leucotomos* plant native to Central and South America, offers a myriad of benefits for human health. Renowned for its potent immunomodulatory properties, kalawalla has been traditionally used by indigenous communities to support immune function and overall wellness. Its rich composition of antioxidants, including flavonoids and phenolic compounds, helps combat oxidative stress and reduce inflammation within the body. Research suggests that kalawalla may also exhibit anti-inflammatory effects, making it beneficial for individuals managing conditions such as arthritis and inflammatory bowel diseases. Furthermore, kalawalla is celebrated for its potential to support skin health, as it may aid in protecting against UV-induced damage and promoting skin regeneration.

In the Honduran tradition, the ancient Mayans would drink kalawalla tea decoction as a blood purifier. This plant was part of their daily diet and highly revered for its medicinal value. In Ecuador, they boil the root and drink it as tea to support the kidneys. They also infuse it in vinegar to use as medicine and in culinary preparations. In South America, the leaves are crushed and made into a poultice for eczema, psoriasis, and other itchy, inflamed skin conditions. The use of kalawalla as a skin remedy and an amazing immune tonic is where this magnificent fern shines.

Research has shown that it can also lower blood pressure by increasing nitric oxide synthesis, enhance sleep quality, and support mood health by boosting serotonin.



In a 2017 study involving 40 people, Kalawalla extract increased skin hydration, elasticity, and reduced redness. Another study exposed volunteers to artificial UV radiation and performed skin biopsies afterward, noting that the herb was able to reduce the number of damaged cells as well as the presence of mast cells, a component of the immune system that releases histamine and other inflammatory mediators.

The researchers found that nearly 75% of the participants benefited from taking Kalawalla extract, noting a “significant reduction of skin reactions and subjective symptoms.” With its diverse range of health-promoting properties, kalawalla root stands as a natural remedy with promising implications for human health and well-being.

Source:

<https://choq.com/kalawalla-root-all-star-skin-supplement-or-over-hyped-fad/#:~:text=Kalawalla%20root%20protects%20the%20skin%20from%20UV%20radiation&text=Research%20has%20shown%20that%20it,mood%20health%20by%20boosting%20serotonin.>