CIRS Bulletin

"Stay Informed, Stay Empowered, and Continue the Journey Toward Healing"

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THE CIRS SUMMIT
A Patient Centered Event

Welcome to the initial edition of the CIRS Bulletin Newsletter, dedicated to advancing understanding, treatment, and recovery from Chronic Inflammatory Response Syndrome (CIRS).

This issue features insights from leading experts in environmental health, clinical practice, lifestyle support, innovative housing solutions, scientific updates, and a special tribute to Dr. Ritchie Shoemaker.
Our goal is to provide evidence-based, actionable information for clinicians, patients, and researchers navigating the complexities of CIRS.

A Sneak Peak Inside This Issue

By Jenny Johnson, PT, FMCHC
Senior Editor at CIRS Research Foundation, Shoemaker Proficiency Partner at Simplified Wellness Designs, and Founder of the CIRS Healing Collective

- **Clearing Up Confusion: MSqPCR vs. ERMI in Mold Testing** by John C. Banta: Discover the critical differences between these mold testing tools—unlock why the MSqPCR is your go-to for precise, actionable results in single ho7mes, avoiding common pitfalls that could derail your CIRS recovery.

- **Mindful Money Habits for CIRS** by Melanie Joy Pensak: Transform financial stress into empowered healing. Explore mindfulness techniques to budget wisely, uncover hidden resources, and make intentional choices that support your journey through remediation and treatment.

- **Persistently Elevated VEGF in Patients with CIRS: A Red Flag for Underlying Bartonella Infection** by Dr. Margaret DiTulio: Uncover the hidden link between stubborn VEGF levels and stealthy Bartonella. Learn key symptoms and why this biomarker could be the clue to resolving lingering CIRS symptoms.

- **A Regenerative Healing Village: Geoship Homes for CIRS Recovery** by Ming Dooley: Envision a sanctuary in the Arizona desert; dive into innovative, toxin-free geodesic domes designed for ultimate CIRS safety, offering clear air, durability, and a regenerative path to true recovery.

- **How CIRS Impacts the Brain - And Why Our 2026 Research Focuses Here** by Christina Navarro-Torres: Delve into the brain's battle with CIRS; gain insights on fog, mood shifts, and new NeuroQuant studies, plus exciting global science updates that promise better diagnostics and neurological healing

- **To Dr. Ritchie Shoemaker: The Compassionate Trailblazer Who Gave Hope to the Forgotten** by Glenn DiTulio: A moving tribute to the pioneer of CIRS. Celebrate Dr. Shoemaker's legacy of discovery, compassion, and breakthroughs that have illuminated paths for the overlooked and transformed lives.

All Things Environmental

Clearing Up the Confusion: MSqPCR vs. ERMI in Mold Testing

By John C. Banta, CIH (retired)
Indoor Environmental Consultant, author of *Mold Controlled: A Guide to Finding, Fixing, Preventing, and Getting Help with Mold Problems in Homes,* and co-author of *Prescriptions for a Healthy House*

When patients are exposed to mold in water-damaged homes or buildings, understanding the testing tools used can help doctors and environmental professionals make better decisions. Two terms often come up: **MSqPCR** and **ERMI**. These are related, but they are not the same—and mixing them up can lead to mistakes in how we evaluate buildings.

MSqPCR, or Mold-Specific Quantitative Polymerase Chain Reaction, refers to a laboratory analysis method. It looks for mold DNA in dust or building material samples. It tells us exactly which types of mold are present—even if they are dead, dormant, or no longer growing. qPCR technology was developed for broad scientific and medical purposes in the 1990s. In the 2000s, the Mold-Specific qPCR method was developed by scientists at the EPA in response to requests from the World Health Organization and the Institute of Medicine for better ways to measure mold exposure.

In 2007, the EPA created a research tool called **ERMI**, or the Environmental Relative Moldiness Index. ERMI is a scoring system that uses **MSqPCR** results from 36 specific mold types to produce a single number, or score, that compares how "moldy" one home is to others. This index was developed by testing dust samples from over 1,000 homes across the U.S.

The problem comes when people confuse the two. Some patients are told not to use **ERMI** and, as a result, avoid **MSqPCR**—not realizing they are avoiding a helpful lab test. Here's the key difference:

- **MSqPCR is a validated lab analysis method.** It gives species-level mold results and is helpful in checking individual homes.
- **ERMI is a scoring system.** It only works when many homes are tested and compared. It is a research tool—not a test meant for single homes or patient decision-making.

The EPA makes this clear in their fact sheet: *"ERMI has been peer reviewed for research purposes but has not been validated for non-research purposes. EPA does not recommend the routine public use of the ERMI index or score in homes, schools, or other buildings."*

This means that while the ERMI scoring system is not intended for everyday use, MSqPCR remains **a strong choice for single-building investigations**—especially when people are sick and need answers.

Newer lab analysis methods, like **Next-Generation Sequencing (NGS)**, are becoming more common. NGS can detect many more mold types simultaneously. But MSqPCR is still one of the most targeted, affordable, and reliable tools we have, especially when we know which molds we're looking for.

For patients and clinicians, using the correct term matters. Request MSqPCR testing for mold results in a single building. Don't let confusion over the ERMI scoring system stop you from getting the information you need.

CIRS Lifestyle Corner

Mindful Money Habits for CIRS

By Melanie Joy Pensak, SLP
Shoemaker Proficiency Partner, Certified Mindfulness & Nature-Based Meditation Teacher, and Founder of Meditation 4 CIRS

Mindfulness loosely means "*to remember.*" There is no better time "to remember" and be aware of your financial habits than in CIRS recovery. Spending money intentionally and finding resources is essential.

During times of challenge, it is common for fear and worry to arise from a deep, primal place. People require a sense of safety to feel capable of moving forward. Money and resources help patients feel safe.

Strong emotional responses can arise around remediation costs, health treatment and replacing items. Bringing mindfulness to the relationship with money brings understanding, which leads to less spending impulsivity. Wisdom makes choices versus fear driving the spending.

The process begins by asking oneself hard questions. It is helpful to see the patterns our caregivers modeled with money. Are we are bringing their stories into our current experience? Old stories subconsciously impact how a patient uses money, especially during CIRS when safety is challenged.

- Did you grow up in an environment where money was plentiful, scarce or in the middle?
- How did your caregivers relate to money? Did they say phrases such as, "Money doesn't grow on trees." "Save for a rainy day."
- Did caregivers NOT model how to budget? Did they spend frivolously?
- Was there fear getting basic needs (housing, food and clothing) met?

How does your body, mind and heart react when financial amounts are brought into the conversation?

- When you feel afraid, nervous or anxious, soothe yourself with compassion. (Say to yourself, "Of course you would be scared. "It's natural to worry if there is enough.")
- Relax the body through grounding and breath before making financial decisions.
- Wait 24 hours before purchasing to prevent impulse spending which leads to more stress.
- Make time to create a current realistic budget for CIRS recovery.
- Allow yourself to ask for help if unable to make a decision.

Some ways to be mindful of resources include:

- Find the pharmacy with the lowest medication price.
- Find discount codes for air purifiers, supplements and environmental testing.
- Save money for future air filters and ongoing cleaning supplies.
- Save for future VIP treatment, expecting possibly 6 months.
- Investigate long term disability or SSDI, state medicaid, food benefits, electric and/or heat assistance and discount internet and cell service.
- Call your bank about a forbearance program.
- Sign up for subscriptions for frequently used products.
- Learn if local churches and programs provide rent support.
- Have a friend set up a GoFundMe and share it.
- Give an online wish list with items you need to those who want to "help."
- Ask for grocery or Instacart gift cards for deliveries of all kinds.

Seeing the past, finding ways to calm and facing the new budget will give you a grounded place from which to make wise financial choices as you heal.

Each time you spend, thank the money for supporting your recovery. You're investing in your future.

Clinical Pearls

Persistently Elevated VEGF in Patients with CIRS: A Red Flag for Underlying Bartonella Infection

By Dr. Margaret DiTulio DNP, APRN, MBA
Medical Director at Regenix Healing; President of the CIRS Research Foundation

Chronic Inflammatory Response Syndrome (CIRS) is a complex physiological situation evidenced by a central feature of neurologic and endocrine dysfunction. One of numerous dysregulated markers of the condition is Vascular Endothelial Growth Factor (VEGF). Typically, VEGF will rise in the early stages of a CIRS event and then subsequently fall below normal levels. A red flag for the possible presence of an atypical bacteria called Bartonella is a persistently elevated VEGF even after successful treatment for CIRS.

VEGF is an influential protein that plays an important role in our vascular system in addition to assisting with bone formation, new cell production, and wound healing. As a supporter of new blood vessel development, VEGF enhances oxygen delivery to tissues and supports the health of muscles. Adversely, consistently rising VEGF can be present in tumor growth making ongoing care by a primary care provider essential (Lee et al.; 2025)

The genus Bartonella includes several species which cause human illness. Symptoms can vary between mild fever and malaise to severe pain states and psychiatric distress. Many researchers believe that the prevalence of these atypical bacteria is far greater than documented as there are multiple potential hosts including: humans, cats, dogs, rabbits, rodents, horses, cattle and other wild animals (Cheslock & Embers; 2029). The microbe's DNA can be passed to mammals by ticks, fleas, red ants and spiders. When considering all these known vectors and reservoirs, a heightened level of suspicion should be offered to the general population when evaluating illness. For the individual, recovering from an immune dysregulating condition like CIRS, Bartonella should be high on the differential list when there are persistent symptoms or abnormal biomarkers.

Numerous studies have documented up-regulation of VEGF production in Bartonella infections making persistent elevations of VEGF a reason to consider this stealth-like pathogen (Resto-Ruiz et al., 2001). Clinical findings supportive of this possibility would encompass signs of vasoproliferation such as redness of eyes, palms, soles and stretch marks (striae rubra distensae) (Lins, Drummond, Velho; 2019).

As with all matters of health, please have your suspicions reviewed and evaluated by a CIRS literate clinician knowledgeable about tick-borne illnesses.

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The Cutting Edge

A Regenerative Healing Village: Geoship Homes for CIRS Recovery

By Ming Dooley, DACM, BSN, RN, L.Ac., Dipl. O.M. (NCCAOM)®

Shoemaker-Certified Clinician and Scientific Advisory Board Member of the CIRS Research Foundation

About ten minutes from Winslow, Arizona, in the high desert, a new kind of healing village is taking shape. This land is for people living with Chronic Inflammatory Response Syndrome (CIRS) — people who have been harmed by the very buildings meant to shelter them. The project is in the site development stage now. Construction will begin once Geoship expands manufacturing outside California, expected in 2028. At the heart of the vision is a future Amma Dome for gathering, teaching, and peace, with nine smaller studio domes placed like stones across the land.

I have visited Geoship's headquarters twice in the past year. I walked among their prototypes and met the team. I went searching for answers for CIRS patients — and found a home strong enough to hold them.

Homes the Body Can Trust

People with CIRS live with a nervous system that never truly rests. Recovery requires more than medical care. It requires a safe environment. Geoship domes provide that. They are built from bioceramic, a material more like stone than any common building product. It doesn't rot or release fumes. Each dome is formed from triangle panels connected by strong struts and hubs, creating a geodesic shell that does not sag or secretly collect moisture. Walls and roof are one continuous protective skin. Wind, fire, and time have a hard time breaking through.

For someone with CIRS, every breath matters. Inside, ERV systems with MERV-13 filtration, upgradeable to HEPA, bring in clean air and remove stale air. Humidity stays controlled.

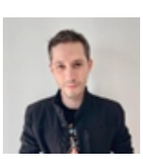
Regenerative Housing in the High Desert

This project does not stop at "safe." It follows the principles of regenerative housing — building in a way that heals people and honors the land. Bioceramic domes use non-toxic materials, and are built to last for generations.

Geoship is approved for California Factory-Built Housing, one of the toughest systems in the country. Anyone can place a $500 refundable deposit to reserve a place in line for a future dome.

A Place Where Healing Can Begin

This project is more than buildings. It is a promise — clean air, strong walls, quiet land, and a home that does not turn against the people inside it. For those with CIRS, it offers a place where healing is not only possible, but invited by the land itself.



The Science Corner

How CIRS Impacts the Brain and Why Our 2026 Research Focuses Here

By Christian Navarro-Torres, Ph.D.

Co-Founder of CIRS Lab, and Science Director of the CIRS Research Foundation

Many patients tell me that learning the "why" behind their symptoms brings a sense of direction and hope. The purpose of Science Corner is to share short updates on what the CIRS Research Foundation is researching and what new discoveries in the scientific world might mean for all of us in the CIRS community.

Our Scientific Committee has identified several major research goals for 2026. These projects reflect some of the biggest questions that patients, clinicians, and other professionals face, and the areas where strong science can make the most immediate impact.

Brain health is one of those key goals.

Many people with CIRS experience brain fog, memory problems, mood changes, and sensory overload — symptoms that show just how strongly this illness affects the brain. This year, we plan to publish new studies using NeuroQuant imaging to better understand brain changes tied to CIRS. We already have two important studies from **Dr. Shoemaker** and **Dr. McMahon** showing clear links between water-damaged buildings and measurable brain abnormalities. Our goal is to expand on these findings and help establish a scientific consensus that the indoor environment has a direct, undeniable impact on brain health.

Understanding the brain is one of the most important parts of understanding CIRS. The brain is where CIRS starts, and where long-term healing needs the most support. The encouraging news is that many CIRS-related brain changes are **identifiable** and **improvable**. By studying these patterns more deeply, we can identify who may be at higher risk, guide more personalized treatment, and support long-term neurological recovery.

Across the country, **legal battles involving CIRS are increasing every year**. But because this field is still new, attorneys often face major challenges: the research base is small, the science is evolving, and many courts do not yet understand how serious CIRS truly is. This is why brain research matters so much. Clear, objective evidence showing how CIRS can affect an otherwise healthy brain gives lawyers and medical experts the solid scientific foundation they need to defend patients. Strong research turns confusion into clarity and becomes one of the most powerful tools for conveying the truth about a misunderstood illness.

What's New in the World of Science?

Did you know that...

- **A new genetic study found a blood test that can accurately diagnose Chronic Fatigue Syndrome?** Many of the inflammatory and immune patterns the test picked up are the same ones we see in CIRS, giving us hope that we may soon have better diagnostic tools for CIRS as well!

- **A major national study just discovered that about 180 million Americans — almost half the country — are living with a neurological condition like Autism, ADHD, or Alzheimer's?** While this study wasn't about CIRS, we know that CIRS can increase the risk for neurological problems or make pre-existing ones feel worse.

- **A large-scale European survey study found that people who speak more than one language age more slowly in terms of brain health?** Learning a new language challenges the brain in a positive way — the kind of challenge that may offer protection from brain injury due to mold and water-damage exposure. And the best part: it is ***never*** too late to start learning a new language!

- **A new psychiatric study found that teens treated with doxycycline had a lower chance of developing schizophrenia later on?** This is part of a growing wave of research suggesting that chronic infections — like Lyme, Bartonella, and even *Cutibacterium acnes*, all of which we commonly see in CIRS — may play a much bigger role in mental health than anyone realized.

Special Feature

A Heartfelt Dedication to Dr. Ritchie Shoemaker: The Compassionate Trailblazer Who Gave Hope to the Forgotten

By Glenn DiTulio
Shoemaker Proficiency Partner and Executive Director of the CIRS Research Foundation

In a world where countless souls suffer in silence, dismissed by medicine and misunderstood by society, one man has stood as a beacon of hope and as a relentless champion for the unseen. Dr. Ritchie Shoemaker, the visionary who discovered Chronic Inflammatory Response Syndrome (CIRS), has not only reshaped our understanding of environmental illness but has touched hearts with his unwavering dedication to those lost in the shadows of chronic disease. This is a deeply emotional tribute to a man whose compassion, brilliance, and courage have restored lives, rekindled hope, and reminded us all of the power of one person's resolve to make a difference.

A Heart Rooted in Humanity

Dr. Ritchie Shoemaker's journey began not in sterile labs or lecture halls, but in a profound connection to the world around him. In Pocomoke City, Maryland, Dr. Shoemaker's life reflects a love for both people and nature. His days spent building nature trails and restoring wetlands speak to a soul that cherishes healing, not just for individuals, but for the earth itself. This harmony between man and environment is the heartbeat of his mission and a calling that would lead him to uncover truths that medicine overlooked. A graduate of Duke University, where he earned honors in both his undergraduate and medical degrees, Dr. Shoemaker's brilliance was evident early on. Yet, it is not his accolades but his heart that truly defines him. It is a heart that refused to turn away from those crying out for answers.

In the late 1990s, when a mysterious outbreak linked to the dinoflagellate Pfiesteria struck the Chesapeake Bay, leaving over 300 people sick and desperate, Dr. Shoemaker didn't just see patients; he saw people in pain, families in distress, and lives unraveling. This moment ignited his "Holy Grail," a quest to understand the silent scourge of biotoxin-related illnesses. From that anguish was born the discovery of Chronic Inflammatory Response Syndrome (CIRS), a condition that explained the torment of those whose bodies could not clear biotoxins from mold, fungi, or cyanobacteria. Dr. Shoemaker's work gave a name to the unnamed, a voice to the voiceless. He identified the 37 symptoms—fatigue, pain, brain fog, and more—that plagued the genetically susceptible, offering clarity where there was only confusion. With biomarkers like C4a, TGF beta-1, and MMP9, he mapped the invisible, proving that what was once dismissed as "all in their heads" was a measurable, treatable reality. For those misdiagnosed with fibromyalgia or chronic fatigue, he offered not just a diagnosis but a path to healing through protocols like cholestyramine and immune-regulating therapies.

A Voice That Echoes Hope

Dr. Shoemaker's compassion spills from the pages of his eight books, including Surviving Mold, a beacon for those navigating the darkness of CIRS. His countless papers, audio resources, conference presentations and the treasure trove of knowledge on SurvivingMold.com are gifts to a world in need. He has carried his message to the U.S. House and Senate, to global conferences, and to the hearts of patients. As a lead contributor to the 2010 Policy Holders of America report, he fought for rigorous standards to validate and treat CIRS, ensuring no one's suffering would be ignored.

A Hero Honored, A Legacy Unfolding

The world has taken notice of Dr. Shoemaker's extraordinary heart. In 2000, he was named Maryland's Physician of the Year by the Academy of Family Physicians, and in 2002, he stood as a finalist for the national honor. In 2019, the Albert Nelson Marquis Lifetime Achievement Award celebrated his transformative contributions. Yet, the true measure of his impact lies in the tears of gratitude from patients who, because of him, reclaimed their lives. Colleagues call him a "formidable genius." Through 2025, Dr. Shoemaker's fire has

continued to burn brightly. At the CIRSx Annual Conference in Tempe, Arizona, he shared breakthroughs in GENIE testing, pushing the boundaries of science further. In August 2025, his team unveiled a profound link between CIRS and Parkinson's Disease, offering new hope to those battling neurological decline. His once-controversial detox protocols now find vindication, as recent discussions on biotoxin and mold exposure affirm his foresight.

Gratitude to a Healer

Dr. Ritchie Shoemaker, you are more than a physician. You are a lifeline, a warrior, and a beacon. You saw the invisible, heard the silenced, and fought for the forgotten. Your work has mended broken bodies, restored shattered spirits, and reminded us that compassion can change the world. To you, we offer this heartfelt dedication with gratitude that knows no bounds. Your legacy is not just in science but in the lives you've touched, the hope you've kindled, and the love you've shown. Thank you, Dr. Shoemaker, for being the heart that beats for us all.

Thank you for reading the "CIRS Bulletin" Newsletter. For more resources, visit our website at www.cirs- research-foundation.org or contact us at ADMIN@cirs-research-foundation.org.