



History's first proof-as-a-service company, enabling non-pharmaceuticals to easily prove their true effects beyond placebo

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OUR RADICLE MISSION:

To close the proof gap between supplements and pharmaceuticals

OUR RADICLE VISION:

An abundant future where democratized access to clinical trials transforms non-pharmaceutical products into proven personalized medicines accessible by all.

Radicle Science was borne of our deep conviction that there's an untapped universe of democratized wellness solutions hidden among the nonprescription consumer health landscape. We founded Radicle Science to create the future of personalized wellness, powered by proof. Our award-winning Proof-as-a-Service platform generates first-of-its-kind data at unprecedented speed, affordability and precision. Our Al-powered turnkey approach leverages this never-before-seen health and behavior data across large and diverse populations to reveal predictive insights that transform business and health.

Companies can deliver innovative, effective products for specific segments, supported by proof.

Consumers can confidently buy products proven to work for someone like them. Retailers can readily stock inventory proven for their shoppers. Healthcare systems can finally integrate proven wellness products to improve outcomes.

That's the power of Proof-as-a-Service.



rad·i·cle

/'radik(ə)l/

The first root to emerge from a plant.

A constant reminder of our radically disruptive approach.

OUR ORIGIN STORY:

Dr. Jeff Chen, a physician researcher, was pained by the pharma-model of medicine. He wanted to find better and cheaper health treatments, so he created and led a first-of-its-kind natural products research center at UCLA. However, he became frustrated with the slow, costly trials and their limitations.

Meanwhile, Pelin Thorogood, a tech CEO turned philanthropist, was funding innovative natural medicine trials, including one of the largest autism trials using botanical products. As a data expert, she realized that small-scale, homogeneous studies would never achieve her goal of personalized medicine for all.

Pelin and Jeff joined forces to fix a broken

healthcare system that largely ignored natural medicines. And that's how Radicle Science was born.

From our first job postings, we drew inspiration from legendary Antarctic explorer Ernest Shackleton: "The work will be hard, and safety is not guaranteed, but if we succeed, we will permanently alter the course of medicine for all future generations."

This call is what prompted many to leave retirement-track positions and take pay cuts in order to revolutionize healthcare. The Radicle crew is driven by our shared mission to make personalized, evidence-based wellness treatments accessible to all.





Since launching in 2021, Radicle Science has:

- Studied 55,000+ Americans. (This is 3x more than all participants in NIH-funded Phase III trials during the same period.)
- Achieved historical inclusion and diversity milestones for those traditionally excluded from clinical trials, including:
 - Gender equity, with 54% of participants being women
 - 20% are from minority groups (Compare this to 3.95% the total percentage of minority inclusion from all randomized controlled trials published in the United States in the last 25 years. Source: Mayo Clinic)
 - 20% of study participants being rural populations who otherwise cannot access traditional clinical trials
- Conducted some of history's largest clinical trials on dietary supplements, including the largest double-blind randomized placebo controlled trial to demonstrate effectiveness of a non-melatonin supplement for improving sleep. (Full peer-reviewed journal article in <u>Nutrients</u>)
- Led history's first study comparing the effects of CBN against a placebo, which was also one of the largest in history to evaluate a cannabinoid. (Full peer-reviewed journal article in *Journal of the American Nutrition Association*)

RADICLE SCIENCE OVERVIEW

Radicle Science is an Al-driven healthtech company, offering non-pharmaceuticals history's first easy and affordable path to prove their true effects beyond placebo. Radicle's pioneering Proof-as-a-Service approach combines gold-standard double-blind, randomized, placebo-controlled trial design with a unique Al-driven, virtual, direct-to-consumer approach to productize clinical proof generation. The result is rigorous health outcome data at unprecedented affordability, speed and scale across diverse populations and conditions. Now, any wellness product can access Proof-as-a-Service throughout their lifecycle to develop truly effective products, market strong health claims, increase customer loyalty, and win trust among retailers, doctors, and investors.

Our IRB-approved clinical trials study sleep, gut health, pain, cognition, focus, stress/anxiety, women's health, men's health and libido.

Radicle Science has received significant industry recognition, including being named as "World Changing Idea" by Fast Company, a Top Ten U.S. "Tech Innovator" by KPMG, "Startup of the Year" by NutraIngredients, and a UCSF Digital Health Awards "Rising Star."

The B-corp was co-founded by Dr. Jeff Chen, MD/MBA (who created and founded and led a UCLA natural products research center) and Pelin Thorogood, M.Eng/MBA (Inc200 Female Founder, Trustee & Treasurer UC San Diego Foundation).

The broader Radicle Science team includes luminaries ranging from Peter Diamandis (named "50 Greatest World Leaders" by Fortune) to Dr. Jonathan Fielding (Professor, UCLA Fielding School of Public Health, former advisor to President Obama).

Clients range from innovative start-ups to billion-dollar traded companies, including Gaia Herbs, MayPro, Neurohacker, MDBio Wellness, Charlotte's Web, Rae Wellness, and FloraWorks.

We are dedicated to research and development, including choosing our ingredients using the best data available. We are thrilled to take our research to the next level with Radicle Science's disruptive clinical trials, which will provide invaluable data on optimal dosages and efficacy across all key demographics.

James Schmachtenberger
Co-Founder and CEO of Neurohacker

Radicle Science offers a game changing solution for generating gold-standard proof of effectiveness at an affordable price. We couldn't be happier to finally have access to such a disruptive clinical trial approach that will build our body of evidence to further validate the effectiveness of our product.



Matt Gallant
CEO and Co-Founder of BioOptimizers

Founded in 1987 on the principles of purity, potency and transparency, Gaia Herbs is committed to ensuring all of our products are 'Made to a Gaia Standard.' This means using ingredients that undergo rigorous DNA and purity testing, and collaborating with industry-changing companies like Radicle Science who share our high standards. We are excited to partner with them to conduct novel large-scale, randomized, placebo-controlled clinical trials to build our body of evidence to further validate the efficacy of our formulations.



Jeremy Stewart

Gaia Herbs Chief Scientist and VP of
Scientific Affairs

"As a brand committed to supporting the wellbeing of all, we're thrilled to partner with Radicle Science on their unprecedented clinical studies to champion evidence-based formulation development."



Angie Tebbe CEO & Co-founder, Rae Wellness

ADVISORS

Our advisory board consists of luminaries from public health leadership and the FDA to the largest CPG companies in the world. <u>Meet our advisory board</u>.

"Radicle is generating some of history's first data on the safety and effectiveness of non-prescription products used by millions, and their findings will empower both consumers and health professionals to make better evidence-based health decisions."



Dr. Jonathan Fielding MD, MBA, MA, MPH
Professor at the Jonathan Fielding
School of Public Health at UCLA, former
Director of the Los Angeles Department
of Public Health and White House advisor

"Radicle's audacious mission has the potential to democratize clinical trials and unlock a future of abundant health products for all."



Dr. Peter Diamandis Chairman of XPrize, Fortune Magazine's "World's 50 Greatest Leaders"

SCIENTIFIC ADVISORY BOARD

in



Rhona S. Applebaum, PhD Former Chief Science and Health Officer, Coca Cola



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in



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Science Advisor



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in

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Diseases and Functional Medicine,
UCLA



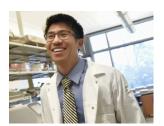
Ryan Vandrey, PhD
Professor, Behavioral Pharmacology,
Johns Hopkins University



Marcha Isabelle Chaudry, Esq. Attorney, Founder of The Equity and Wellness Collaborative (EWC)

in

COFOUNDERS



Dr. Jeff Chen, MD, is one of the foremost physician scientists on plant medicines. As the CEO and Cofounder of <u>Radicle Science</u>, he has created history's first easy path for non-pharmaceutical products to prove their true effects.

He is also the founder and former Executive Director of the UCLA Cannabis Research Initiative, where he created and led some of history's first official

clinical trials on the medical potential of cannabis products.

Dr. Jeff personally was selected as an Industry Mentor for the National Institutes of Health I-CORPs startup accelerator, named a "Global Shaper" by the World Economic Forum, and awarded a David Geffen Fellowship.

Dr. Jeff is a Medical Editor at Healthline, and he has been interviewed by *Forbes, Wall Street Journal, TIME*, *NPR, Newsweek*, CNN, NBC News, CBS Sunday, Fox, TV shows including "The Doctors" and more.

He has also presented domestically for the National Academies of Science, American Bar Association, California Medical Association, California Senator Feinstein, Colorado Governor John Hickenlooper, the Yale School of Management, Columbia University, and the Young President's Organization (YPO). Internationally, he has advised the Mexico Senate and the Royal Court of the Kingdom of Bhutan.

Following a BS at Cornell, Dr. Jeff earned his MD and MBA concurrently on a full merit scholarship at UCLA.

Dr. Jeff quotes:

"We've pioneered an Al-driven, crowdsourced, virtual, direct-to-consumer clinical trial approach that delivers rigorous health outcome data," said Dr. Jeff Chen, Radicle Science CEO and Co-Founder. "For the first time ever, we've made trials fast and affordable. Essentially, we've transformed clinical trials with automation and standardization the same way Ford Motors transformed auto manufacturing a century ago. We believe every non-pharmaceutical product has the right to compete on real merit and win in the marketplace and, to that end, should have easy access to a clinical trial."

"Our team is grateful and humbled by the support and acknowledgements," said Dr. Jeff Chen, Radicle Science CEO and Co-Founder. "We are excited to work with research-driven brands such as Gaia Herbs and Neurohacker as we bridge the proof gap between nutraceuticals and

prescription drugs. It's an honor to generate this first-of-its kind evidence as we help shepherd an amazing new chapter for human health and consumer empowerment."

"With sleep issues impacting 50 to 70 million Americans, scientifically-validated research is needed more than ever on how to help improve rest. Sleep is among one of the most popular therapeutic usages for cannabinoids, and we're excited to have begun this groundbreaking work in researching formulations and dosages to discover those with greatest effect," shared Dr. Jeff Chen, Radicle Science's CEO and co-founder.

"I spent my whole life becoming a physician so I could heal, only to realize our modern medicines were failing so many folks who were suffering. I co-founded Radicle Science to unlock an entirely new category of trusted treatments. Radicle Science is ushering in a new era of effective democratized medicines by validating the health effects of natural products for the first time."



Jeffrey Chen, MD, MBA Radicle Science Co-founder



Pelin Thorogood has been leading industry-disrupting, award-winning companies at the forefront of big data/analytics and tech. She is currently re-imagining ways to achieve precision medicine as Executive Chair and Cofounder of Radicle Science.

Previously, Pelin was a leader in creating the digital marketing space as CMO of WebSideStory (IPO, acquisition by Adobe/Omniture), the pioneer of web

analytics, as well as CEO of Anametrix (acquisition by Ensignten), an award-winning multichannel predictive analytics company serving multinationals including Chrysler, J&J, and Viacom.

Deeply committed to impact, education, and community, Pelin is trustee and Treasurer of the <u>UC San Diego Foundation</u>, Executive Board member of the <u>UC San Diego Basement</u> start-up incubator, Co-Chair of the UC San Diego Innovation and Entrepreneurship Council, and an advisor for the proposed School of Computing, Information and Data Science at UC San Diego.

She is also the Industry Scholar for the Cornell Institute of Healthy Futures and served for many years as Executive-in-Residence for Cornell's Johnson Graduate School of Management.

Pelin holds a B.S. in Operations Research & Information Engineering, M.Eng and MBA, all from Cornell.

Pelin quotes:

"Proof creates trust with all stakeholders; Proof also drives transformation, and we're transforming natural health products and dietary supplements into proven personalized medicines that are accessible to all," notes Pelin Thorogood, Radicle Science Co-Founder and Executive Chair. "Our study results have benefitted our clients in so many ways: Everything from tens of millions of dollars of increased public company valuation to triple digit increases in sales. And, just as importantly, the large scale and diversity of the populations we study make our findings more equitable, relevant and personalized for society at large."

"A key difference in the 'Radicle' approach is the vast scale and heterogeneity of our clinical trials, enabling us to study dosages, consumption, effectiveness and side effects across large numbers of diverse participants," said Pelin Thorogood, Radicle Science Co-Founder and Executive Chair. "The large scale of our studies serve to increase the statistical confidence of findings and their relevance to the broader population."

"By reducing the cost and increasing the speed, we are able to democratize access to clinical trials for pretty much any company."

"I've personally experienced how a data-driven approach can transform entire industries. I cofounded Radicle Science to bring that same evidence-based thinking to advance natural medicine science. It is about time we leverage the power of rigorous health outcome data at scale to inform smarter health and business decisions for all."



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March 11 2024



Radicle Ideas: How Two Industry Leaders Champion the Power of Proof

March 2024



Radicle Science Shares Proof-as-a-Service Case Study

January 12, 2024



Radicle Science Aims to Set New Trajectory for Healthcare with Modern Clinical Trial Model

November 29, 2023

Natural Products Insider

Hundreds Participate in "Virtual" Energy Supplement Study at SSW

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FAST @MPANY

This service is trying to fix a big problem with clinical medical trials

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NutraIngredients

Radicle Science: Blazing the trail to accessibility

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UC San Diego

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July 2023



Why Science Needs to Get Behind Natural Medicines

April 2023

Forbes

'Thinkers And Innovators': How Radicle Science Is Pioneering Proof-As-A-Service For Clinical Trials

November 14, 2022

Newsweek

Free Radicles: A New Model for Democratizing Clinical Trials

October 31, 2022



Supplement-pharma 'Proof Gap' finally resolved by disruptive healthtech

October 14, 2022

Nutritional OUTLOOK

Radicle Science launches Radicle Proof Engine to make clinical validation more accessible

December 2, 2022



Consumer transparency non-profit Clean Label Project and Proof-as-a-Service Pioneer Radicle Science Announce Strategic Partnership

November 30, 2022



Sleep quality improves when combining CBD and melatonin, finds landmark clinical trial

October 13, 2022

AWARDS





2023 Startup of the Year



2022 Rising Star finalist















ASSOCIATIONS









CONSUMER
HEALTHCARE
PRODUCTS
ASSOCIATION

Taking healthcare personally.



The Supplement industry is vital to our nourishment and well-being, yet has represented a small group of clinically backed ingredients to date. Radicle Science effectively democratizes the science of wellness and nutrition by enabling all companies to safely, rapidly and affordably conduct clinical trials. Now we can make better choices about the health benefits of emergent technologies and ingredients on a broader base of consumers of all socioeconomic levels and identities. This approach fosters thriving companies and a thriving industry from both a profit and human health perspective.



Lara Dickinson

Co-founder One Step Closer, J.E.D.I
Collaborative, and Climate Collaborative

"Marketing departments do a good job at selling comfort, security, and effects. Let's be honest, when was the last time that you saw a label on a supplement product that said this product DOESN'T work? Rather than simply taking the brand's 'word for it,' Radicle provides an evidence-based platform that empowers consumers to make the best choice for themselves and the condition they are managing."



Jaclyn Bowen, MPH, MS

Executive Director, Clean Label Project

Logos and media assets are available for download.

For additional information or to schedule interviews, please contact Grace Lightfoot, Director of Communications, at Grace@radiclescience.com