

Major Announcement - January 2024

Dear Friends, Investors, Supporters, and Innovators,

I share a transformative announcement with you today, one that marks a new era in the history of our company, and holds the promise of reshaping the future of healthcare for millions. It is with great excitement and a profound sense of purpose that we declare Openwater's commitment to becoming **the world's first open-source, open-patent, open-clinical-data, and open-safety-sharing company, centered on the new idea of the Silicon Hospital.**

This is a momentous decision, one that reflects our unwavering dedication to the betterment of human health. We believe that the path we have chosen aligns perfectly with our mission, and it is a reflection of the core values that have driven us since our inception.

The Reasons Behind Our Transformation

Our journey is driven by a deep understanding of the challenges and opportunities that lie ahead. The reasons for our transformation are rooted in a vision of creating a brighter, healthier future for all of humanity:

- **Enabling the “Silicon Hospital”:** Our work to date creates a path to what we term “the Silicon Hospital”. A new paradigm in which many diseases and conditions can be detected, diagnosed and treated, non-invasively using the best tools of our time: scalable semiconductor systems; evolving software algorithms; and more. We, alongside our partner researchers in top-tier research labs, have delivered indisputable proof that this is in reach for wildly different diseases. This radical idea demands a radical path to implementation.
- **Treatment for Hundreds of Diseases:** Our innovations have the potential to bring about treatments and cures for hundreds of diseases:

we see the opportunity to enable what semiconductor technologies allow: speed of innovation, and breadth of application, and extraordinary cost reduction cycles. We can, and aim to, break the single-disease paradigm that dominates medical R&D therapeutic and diagnostic development. Rather than focusing on a single rare disease, and then taking many years to create a single, specific, targeted resolution for it and for it alone, we commit to enabling efforts across dozens, even hundreds of conditions simultaneously. We commit to enabling research in as many research establishments as we can, focusing on breadth of outcomes. Our approach will revolutionize the industry, leading to treatments that are more accessible and affordable for all.

- **Remarkable Cost Savings:** By open-sourcing a platform that can address hundreds of diseases we are confident we can achieve groundbreaking cost reductions in the development of medical solutions. We will ride Moore's law; we will exploit the miniaturized cutting edge semiconductor sub-components we have developed; we will couple these with scale quality assembly manufacturing, and we will enable reconfigurability via open-source software. We envision a future where the cost of developing treatments is reduced by a factor of 1,000, and the price per treatment can be pennies. Let's put in the past the current system with new drugs priced at over \$1M per dose, and diagnoses costing thousands of dollars delivered by scarce machinery.
- **Shared Knowledge and Data:** We announce today opening this up and building a community around all of this. We are sharing all of our past, present and future R&D work. The software via [AGPL license](#), the hardware under [Creative Commons - ShareAlike 4.0](#), our 67 current patents and any and all future ones as described in our [Patent Pledge](#), plus a trove more including design decisions, lab recipes, FDA and clinical data and more. This openness will empower researchers, academics, and innovators with the tools and information needed to advance medical science and help the regulators lower the cost to clinical trials.

- **Eliminating Price Gouging:** Our commitment to open sharing will help eliminate price gouging and shortages, ensuring that, wherever technology allows it, critical treatments are accessible to those who need them most. In the future we see and will fuel, it becomes a software change, an algorithmic innovation, for a new therapy. Not the manufacture of a completely different chemical/drug.
- **Diverse Paths of Innovation:** We envision a future where billion-dollar pocketbooks and decades of research are no longer a requirement for groundbreaking innovations in healthcare. Our open-source approach and access to the platform + ability to change it will empower brilliant researchers, enabling them to build upon the knowledge they have published in over a million papers in the past 20 years alone.
- **Addressing Global Challenges:** We acknowledge the urgent need to address global challenges such as cancers, mental health disorders, COVID-19/Long COVID, and countless other health concerns including wellness, brain-computer-interface and longevity. Our open approach is a pledge to contribute to solving these challenges collaboratively.
- **Learning by doing:** There is no precedent for this approach. There is no prior exemplar for the Silicon Hospital. We have spent great energy in deliberating, imagining, and planning, but we understand that we will have to tune our approach, our technology roadmap, our regulatory understandings, our alliances and more. We won't be doing this to secure a narrow but lucrative business niche. We'll be doing this to enable a vital new approach to health care and to build a vibrant business for ourselves and for all. We'll make mis-steps. We'll learn.

A For-Profit Open Source Model

We recognize that our commitment to open-source principles represents a paradigm shift, an entirely new approach to a thorny set of problems. Many of you will wonder how we plan to sustain our operations. Openwater will follow the model of successful for-profit open-source companies like Red Hat and others in the tech industry. This approach ensures that we can continue to drive innovation while making our discoveries widely accessible.

It is my honor to lead Openwater's transformation into an open-source, open-patent, open-clinical-data, and open-safety-sharing company. This is not just a significant milestone for us; it is a pivotal moment in the history of healthcare innovation. We invite you to join us on this journey of discovery and progress, as we work together to create a world where access to healthcare solutions is universal, and the barriers to innovation are broken down.

Thank you for your continued support, and let us forge ahead towards a healthier, more equitable future for all.

Dr. Mary Lou Jepsen - CEO & Founder of Openwater