

PEPTIDE DRUG HUNTING CHRONICLE

PDHC VISION



TOMI K. SAWYER

- FOUNDER & PRESIDENT, PDHC
- PRESIDENT & CHIEF DRUG HUNTER, MAESTRO THERAPEUTICS



CHARLES W. JOHANNES

- CO-FOUNDER & VICE-PRESIDENT, PDHC
- PRESIDENT & CHIEF SCIENTIST, EPOC SCIENTIFIC



WENDY J. HARTSOCK

- CO-FOUNDER & MEMBER-AT-LARGE, PDHC

HIGHLIGHTS

In this inaugural article, we share our inspiration and founding vision for the Peptide Drug Hunting Consortium (PDHC) as a global initiative to champion entrepreneurial science and innovative technologies in peptide drug discovery.

For each of us, building the PDHC has been a memorable and rewarding journey uniting bold ideas, dedicated people, and a shared belief that peptides still have untapped medical applications.

For the broader community, we hope this marks the beginning of an adventure that is both inspiring and catalytic—a call to advance the multidisciplinary science, innovation, and strategy that will define the next generation of peptide therapeutics.

OUR MUSINGS OF BEGINNING THE PDHC



“First, I wish to share my warmest wishes to all who may be reading this inaugural article in our PDHC Chronicle Peptide Drug Hunting! After 40+ years as a (mostly) peptide drug hunter, I am pleased to share in the beginning of the Peptide Drug Hunting Consortium and envision how it may enable the science and business enterprise of peptide medicines for the benefit of humanity. My experience has been blessed with many opportunities to contribute to drug discovery campaigns, including those targeting GPCRs, proteases, intracellular protein-protein interactions and enzymes, as well as diverse peptide modalities, ranging from linear to macrocyclic and conjugates thereof. It has been my desire to create this consortium for the worldwide peptide drug hunting community and share my adventures, odyssey, and legacy in gratitude for the gift of being a scientist.”



“There are moments in science when the right combination of curiosity, controversy, and collaboration ignites something bigger than the sum of its parts. For me, one of those moments came in 2015—what I’ve since come to think of as the third wave of peptide therapeutics.

At the time, I had the privilege of collaborating with Tomi, a humble visionary within Merck (MSD), on a project with A*STAR in Singapore. The literature was buzzing—sometimes antagonistically—with debates on what peptides could or couldn’t do. But beneath the noise, there was a quiet convergence happening: better chemistry, more predictive modeling, a renaissance of interest in intracellular targets long considered undruggable.

Tomi’s passion for the field was contagious. What began as a Merck initiative to explore peptides soon caught fire, spreading globally and influencing others—myself included. It planted the seed that would grow into the Peptide and Protein Society Singapore (P2S2) and later a national peptide engineering program. We were fortunate to build in an environment that encouraged bold thinking, including collaborators like Sir David Lane and Greg Verdine pushing the boundaries of what chemistry and biology could achieve together.

Years later, as I moved into my role at FOG Pharma, the momentum didn’t slow. The Helicon™ platform was born, and with it, novel peptide therapeutics like FOG-001. At the same time, I reconnected with Wendy at Aralez Bio, a rising biotech that was pushing the limits of biosynthetic amino acids. The landscape was evolving—but one thing was clear: even with growing commercial success (GLP-1s, GIPs, IL-23 antagonists), the peptide field was still missing something. Specifically, it lacked a community built to explore without the pressure to commercialize too early. It lacked a home for ideas that were too translational for academia, but too risky for venture. It lacked connective tissue between innovation and infrastructure. That’s when the idea for the PDHC began to crystallize. Not as a company. Not as a lab. But as a mission-driven nonprofit—a place where scientists, entrepreneurs, and technologists could tackle the hardest problems in peptide drug discovery. A place built to de-risk, to dream, and to deliver.

I often wonder what the fourth wave of peptides will look like. Will it be shaped by AI? By noncanonical biology? By new delivery modalities? Or will it come from unexpected places—people and perspectives we haven’t yet included? Whatever it is, I hope it will be collaborative, open, and unapologetically ambitious. Because the future of peptide therapeutics isn’t just about the next drug—it’s about the ecosystem we build to make the impossible, possible.”



“To me, the PDHC represents the ultimate collaboration model to realize ideas from inception to market and tackle barriers to the peptide drug discovery and development process. It is a tool to help every member of the peptide community from entrepreneurs to seasoned drug hunters connect with the right information (which could be in the form of a chronicle, website, network, 1:1 connections, and so many other possibilities).

As a non-profit, the PDHC is accessible to every member of the community so that they can participate in initiatives and gain benefit from shared knowledge and collective innovation. When Tomi approached me to help formally launch the PDHC, we shared the experience (Tomi to a few orders of magnitude above mine) of being asked the same questions repeatedly by different peptide drug hunters looking for answers for things as simple as the best technique to determine and remove trifluoroacetic acid to pathways of starting a company. And that is what the PDHC can offer, solutions that impact all aspects of the peptide drug hunter’s mission.”



“Perhaps to look into the future is to imagine what may be and dedicate one’s effort to make it happen. From a past interview discussing the role of a drug discovery scientist and addressing a question of what makes research important, I stated, “The most important impact of this research, whether my own or that of other biomedical scientists, is that of providing hope a reality — for some a cure and others a chance to alleviate some of the suffering they live with.” Providing hope a reality has been my passion as a drug discovery scientist. It is also something which I seek to inspire in others, including peptide drug hunters; the peptide medicines we bring forth to humanity ought to provide hope a reality for those in need. I’m pleased to have an outstanding inaugural PDHC Leadership Team, Entrepreneurial Advisory Board, and Entrepreneurial Business Network, many PDHC Followers (>2,800), PDHC Media Partners, and PDHC Sponsors! Thank you, all, for your support to this laudable cause!”



“Sometimes I wonder: if we were to start over—today—how would we build a drug discovery ecosystem around peptides? Not just a company or a lab, but a true ecosystem. One that prioritizes the most impactful science. One that welcomes uncertainty. One that doesn’t ask, “How fast can we get to market?” but instead, “What new capabilities are needed to unlock biology and medicines we can’t currently touch?”

That’s the spirit behind the PDHC. Not another incubator. Not another accelerator. But something different—a nonprofit, purpose-built to serve a translational void that many of us in science have felt for years.

The PDHC was born from the conviction that the next wave of peptide innovation won’t come from any single lab, company, or investor, but from the space in between. It will require new chemistries, noncanonical thinking, AI models that learn from sparse data, and an openness to collaboration that goes beyond institutional boundaries.

So where are we going? We’re setting our sights on three areas where progress has stalled:

- Predictive design and screening: tools to go beyond brute-force selection, and instead use smart, learnable models.
- Scalable, modular synthesis: platforms to make what we imagine, not just what’s convenient.
- Integrated delivery systems: solving for intracellular targets, oral bioavailability, and stability in ways that aren’t siloed by modality.

But beyond the tech, the structure matters. We chose to build PDHC as a nonprofit to keep the mission at the center: scientific advancement in service of patients, not shareholders. We think that’s the kind of clarity that can attract both visionary talent and aligned capital—including venture partners who see value in early de-risking, not just in fast exits.

The question I keep coming back to is, “How do we build something durable? Not just flashy or fundable—but an institution that can move the needle for the next generation of peptide drug hunters?”

The answers won’t come from any one of us. That’s the point. But if you believe that peptides are more than a niche, if you believe there’s untapped biology still waiting to be drugged, then the PDHC might be the experiment worth running.

Let’s build the future—together, deliberately, and without compromise.”



“As the collective genius grows and PDHC members drive the initiatives, new concepts arise and new philosophies are discovered. I believe we will witness a perpetuation of novel ideas and unique avenues of thinking about peptide therapeutics, from dynamic personalized polypharmacology to revolutionary methods for peptide synthesis across discovery and commercial scales to clinical trial design and biomarker identification. The future is rich and vast for peptide drug hunters and the PDHC will be there to connect them with one another, capture their input, and communicate their insights.”

CONCLUDING REMARKS



“My special comments here are to acknowledge my two great friends and PDHC Co-Founders, Charlie and Wendy, who have taken so much of their time and energy to build the PDHC. As you read their musings, vision and concluding remarks, you will know how passionate and dedicated they each are. Their contributions, along with so many others, including my friends Danielle, our awesome PDHC Project & Operations Manager, and Jeff Geniesse, our amazing PDHC Website & Media Portal Designer, are highly appreciated. I’m truly humbled to work with everyone in our talented and ambitious PDHC team!

Please share this inaugural article with your colleagues and friends, and we invite you to join us as Peptide Drug Hunters!”



“As we close, one idea keeps surfacing: breakthroughs don’t just come from solving problems, they come from choosing the right ones.

At the PDHC, we believe the future of peptide therapeutics depends on this kind of focus. It’s not just about speed or scale—it’s about picking the bottlenecks that matter, where progress unlocks new biology, new modalities, and new ways of thinking. But that’s only part of the equation.

We also believe that what we build—whether it’s tools, data, or insight—shouldn’t stay siloed. Sharing knowledge is how early ideas become real impact. It’s how we make discovery more accessible, and progress more durable.

We founded PDHC as a nonprofit to keep this mission front and center: Identify the right problems. Solve them collaboratively. Share what works. Because when we do that, we don’t just push peptide science forward—we pull the whole field with us.

Thank you for being part of this. Let’s keep building—deliberately, together!”



“At the end of the day, therapeutics have one goal, to help patients. If we can elevate the peptide drug hunting community through networking and education, we can ultimately help more patients gain access to effective peptide medicines, particularly those that treat so-called undruggable diseases. To me, this is the fundamental reason to volunteer my time and ensure that the PDHC is successful long after I am gone. Though, I will admit, I also find deep joy in connecting with the community and spending time with my all-time peptide hero, Tomi Sawyer.”