Thomas Fessard – CEO & Co-founder, SpiroChem

Complexity is not a barrier — it's our everyday business.

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SpiroChem has evolved from a niche ETH Zurich spin-out into a global discovery partner recognised for tackling some of the most complex challenges in modern drug design. Over more than a decade, co-founder and CEO Thomas Fessard has steered the company's transformation from a product-focused catalogue into a solution-driven, modality-agnostic engine for early-stage innovation, expanding its footprint to North America and forging strategic partnerships along the way.

What is your professional background, and what led you to establish SpiroChem?

I am originally from France, where I studied chemistry before moving to the UK to complete my PhD. Twenty years ago, I arrived in Switzerland to undertake postdoctoral research at ETH Zurich – the Swiss Federal Institute of Technology – and chose to remain, as the environment offered both exceptional opportunities for researchers and a high quality of life. At that time, many of my peers followed the well-trodden path into Big Pharma, but I decided to take a more adventurous route, joining a biotech spin-off from ETH as its first employee. In that role, I built and managed a multidisciplinary team of chemists and biologists, reported directly to the board, and interacted with investors, ultimately contributing to the discovery of a molecule that was ready for preclinical evaluation.

That experience served as a springboard for my career, compelling me to mature quickly as both a scientist and a leader, and instilling in me a strong appetite for entrepreneurship. When the company shifted away from discovery research, I decided to apply the lessons learned from rapidly identifying and advancing novel molecules to a new venture, which led me to co-found SpiroChem together with Professor Erick M. Carreira of ETH Zurich and Peter Harboe-Schmidt, a serial entrepreneur.

How did SpiroChem come into being, and how has it established its position within the discovery landscape?

SpiroChem was founded in 2012 as a spin-off from ETH Zurich, built on the conviction that true value in discovery comes from quality rather than cost. At that time, much of the industry was shifting its chemistry resources to India and China to reduce expenses, but we chose to move against that flow by focusing on a niche area – spirocycles, which gave us our name – and by creating a service organisation in one of the world's highest-cost countries. Many peers found it counterintuitive and questioned the sustainability of this model, yet our catalogue of highly distinctive molecules quickly attracted interest, and within a short period, we were supplying leading pharma and biotech companies in 30 countries.

Although these compounds were often copied in Asia and Eastern Europe, this only reinforced a key realisation: the real value we created was not in the products themselves but in the knowledge and problem-solving capability behind them. This guided the evolution of our business model from a product-based to a solution-oriented organisation, enabling clients to pursue the most scientifically promising avenues without being constrained by complexity. Unlike CROs that position themselves on price, our model rests on outcomes. While our Full-Time Equivalent (FTE) rates are obviously higher than those of Asian providers, the efficiency, innovation, and quality embedded in our deliverables mean that, on a per-result basis, we are more cost-effective. Over the past 15 years, this approach has allowed us to support hundreds of clients worldwide, with the United States now our largest market, complemented by a strong base in Switzerland and a network spanning Europe, Japan, and North America.

How has the company evolved from its product origins, and what services define your work today?

Although we still provide a small portfolio of products, mainly screening libraries that give research programmes a solid starting point, the essence of our work now lies in tailored services and integrated solutions. We cover the full spectrum of discovery, from hit validation through medicinal chemistry and lead optimisation, and we frequently take the lead in managing projects. By collaborating with a trusted network of partners in biology and biophysics, we orchestrate a best-in-class consortium able to guide molecules seamlessly from hit to candidate. Clients particularly value the pace, problem-solving mindset, and high level of communication that our model provides.

Beyond discovery sciences, our role now increasingly extends beyond discovery into the early stages of development, where we perform what we call “route scouting,” process research aimed at establishing efficient synthetic pathways that CDMOs can directly scale. This stage is critical: in discovery, the objective is to generate as many diverse analogues as possible to find the right candidate, but in development, the challenge shifts to producing that single molecule reliably and at scale. By optimising synthesis routes at this transition, we help ensure continuity and reduce risk, which is why CDMOs themselves increasingly turn to us to support their clients through this delicate handover.

An example of such collaboration with CDMOs is the one announced with EUROAPI. What was the rationale behind these collaborations, and how do they complement your work?

This partnership is distinct from our integrated discovery projects, which are centred on the design and optimisation of new molecules. EUROAPI, as other large CDMOs, plays a different but equally critical role in the value chain towards new medicines: scaling up and producing compounds to the quality and volumes required for clinical trials and, eventually, market supply. EUROAPI is headquartered in France and also operates as a large-scale manufacturer of active pharmaceutical ingredients (APIs) and generics, which gives it an important position within the global value chain.

The collaboration reflects the increasing complexity of today’s pipelines. The molecules now advancing through discovery – whether small molecules, antibody-drug conjugates (ADCs), macrocycles, peptides, or oligonucleotides – are far more intricate than those already on the market and demand new technologies and processes from CDMOs. For SpiroChem, such complexity is “everyday business” but may be outside others’ comfort zone. This is why we are often seen by manufacturing partners as a window into the future, exposing them to the types of

projects that will soon require scale-up. By linking discovery to development and manufacturing, we ensure a continuity of quality and expertise that benefits clients and ultimately strengthens their path to market. This is why we are becoming a key partner for CDMOs.

With the rapid emergence of new modalities and technologies, what trends are shaping demand in discovery today?

From the outset, we designed SpiroChem as a modality-agnostic discovery engine, able to take on whichever scientific challenges our clients face, whether unusually complex small molecules, bifunctional constructs, radiopharmaceuticals, or antibody-drug conjugates. We have developed the infrastructure to support this breadth, including a dedicated tox laboratory that allows us to handle cytotoxic payloads and undertake the chemistry required for ADCs, while our expertise increasingly extends into areas traditionally associated with biologics. In parallel, we see particularly strong momentum in peptides and macrocycles, which today represent some of the fastest-growing areas of interest across the industry.

This evolution is closely tied to the concept of "**b**eyond the **R**ule **o**f **F**ive" (bRo5). Two decades ago, Pfizer scientist Christopher Lipinski introduced the Rule of Five, a set of guidelines outlining the physicochemical properties a molecule should ideally meet to become a drug. For more than a decade, these parameters were applied so rigidly that many organisations refused to explore molecules that would not comply to these rules; scientists around the world were inhibited from considering such complexity. Over time, however, pioneering projects demonstrated that significant therapeutic opportunities lie beyond those boundaries. Modalities such as peptides, macrocycles, ADCs, radiopharmaceuticals, and biologics all fall into the bRo5 space, which has since become highly attractive to investors and entrepreneurs. For us, this shift is entirely natural, as navigating molecular and structural complexity has always been central to SpiroChem's role in discovery.

What enables SpiroChem to succeed in highly complex discovery projects, and how do people, culture, and technology underpin this capability?

The foundation of our strength lies in our people. SpiroChem is probably one of the most demanding chemistry-focused organisations to join, with a recruitment process designed to admit only the very best. We are very strict about maintaining extremely high standards of recruitment, but also over the years, which inevitably limits the speed of our expansion, but ensures that quality is never compromised. Growing toward 100 employees has been a milestone, but our ambition is

not to become a thousand-people enterprise but to grow only as fast as excellence allows. As a founder-led, privately held company, we take personal ownership of every project, and that sense of responsibility has become embedded in our culture. Passion, accountability, and a strong “can-do” attitude define our approach, allowing us to solve problems in real time. Clients value us not for the hours we spend but for the solutions and results we deliver.

Attracting talent is always a challenge, particularly in Switzerland, where we compete with some of the largest players in the industry. While we cannot rival them on scale, our offering is very competitive against neighbouring countries (France or Germany), which makes us attractive to scientists. Furthermore, the large pharmaceutical companies maintain relatively small discovery teams and therefore do not absorb the entire talent pool, leaving room for us to secure a significant share. We also recruit internationally, which has allowed us to build a culturally diverse team across our two R&D hubs in Basel and Montreal. The Montreal site, in particular, gives us access to a broader North American talent market and has become a key asset in sustaining the calibre of expertise required to maintain SpiroChem’s position as a premium discovery partner.

What was the reasoning behind establishing a hub in Montreal, and how does it fit into SpiroChem’s international growth strategy?

Our decision to build a presence in Montreal was not driven by the need to be physically closer to US clients, as we has been winning business and delivering successful projects with American companies for over a decade, but rather by the need to access new talent and technologies. Recruiting overseas scientists into Switzerland is often slowed by visa restrictions and administrative processes, and the best candidates rarely wait. In June 2023 ,we acquired Cyclenium Pharma, a small biotech in Montreal with a differentiated macrocycle platform, which immediately gave us both a new technology base and a way to tap into North America’s broader talent pool.

When assessing possible locations, we quickly realised that the obvious US hubs – Boston, San Francisco, San Diego – were not a realistic option for a service organisation like ours. While they are home to leading universities and research centres, they are also saturated with pharmaceutical and biotech companies competing aggressively for talent, and the cost of operating there is prohibitive. Montreal and the province of Quebec offered a more sustainable alternative: a region with a strong heritage in life sciences, a thriving ecosystem of service and research companies that emerged after large pharma withdrew 15 to 20 years ago, and supportive policies at both the

provincial and federal levels. We saw it as fertile ground to grow.

The acquisition of Cyclenium was also a timely opportunity. At the time, macrocycles were only beginning to attract attention as a promising modality, but Cyclenium had already developed a highly robust and differentiated platform. This gave us a head start in a complex and increasingly important field, which we could then integrate with our expertise in Basel. Since then, the Montreal site has grown from three scientists to a team of 15. While still small in scale, its focus on technology platforms, peptides, and macrocycles – leveraging parallelisation and automation – complements the high-level medicinal chemistry in Basel. Together, the two hubs give us a balanced model: Basel as our “Rolex,” premium and precise, and Montreal as our “Swatch,” equally high quality but designed for greater throughput.

How did you build SpiroChem’s client base and reputation, and how would you describe its positioning today?

Building recognition has been a long but rewarding process. As a spin-out from ETH Zurich, we benefited from the institution’s reputation and from my co-founder, Professor Erick M. Carreira, whose standing as a leading figure in organic chemistry gave us immediate credibility. For several years SpiroChem was closely linked to his name, which opened many doors, but over time, we established our own identity. In the early days I was effectively our first salesperson, travelling to conferences and visiting companies to explain our science and the value we could create. With spirocycles in high demand, we quickly generated revenue, and clients soon returned with additional requests.

Despite this momentum, we faced the widespread perception that a Swiss company must inevitably be too expensive. While our FTE rates were indeed higher than those in India or China, we consistently demonstrated that the quality and speed of our deliverables more than compensated for the difference. Many of our first projects came to us in “rescue mode,” when programmes elsewhere had stalled. By delivering under these conditions we earned a reputation as the “firefighters” or “A-Team” of discovery chemistry. Over time, however, discerning clients realised it was far more efficient to involve us from the outset, allowing us to shape programmes proactively rather than stepping in at the eleventh hour. This shift led us to engage earlier with biotechs, investors, and academic founders, ensuring that we were present when decisions were made about advancing projects. As a result, we have been able to take compounds from hit identification all the way to development candidates and even into process R&D for scale-up.

Today, our brand rests firmly on performance and trust. Clients who have worked with us almost always return, and many invite us to join them when they move to new organisations. While we are still associated with spirocycles, our scope is far broader: we are modality-agnostic, able to solve problems across a wide range of chemotypes. Our clients value us not only for stepping in when challenges arise, but increasingly for helping them avoid those challenges and pitfalls altogether.

Looking ahead over the next three years, what priorities and opportunities will guide SpiroChem's development?

Since the end of 2023, the market has become more challenging, with investors showing greater caution, financing slowing, and geopolitical uncertainty creating limited visibility. Yet the scientific drive towards complexity continues unabated. The easier biological targets, molecules, and diseases have largely been addressed, and what remains requires increasingly sophisticated modalities and deeper innovation. For us, this underlines the need to keep investing, not only in the research we deliver for clients but also in our own technologies, concepts, and capabilities that allow us to explore complex chemical space and remain ahead of the curve.

In this financial climate, it is also important to focus on areas that continue to attract resources, and we see significant opportunities in peptides, macrocycles, bifunctional molecules with linkers, and ADCs. Over the next three years, we plan to reinforce our position across all these modalities, with a particular emphasis on building a comprehensive, one-stop-shop solution for ADCs that combines chemistry, bioconjugation, and linker technologies, thereby bringing more rational design to early ADC projects.

Equally important is our investment in technology. We are expanding our use of parallelisation and automation, and have transferred the Lilly Discovery Studio chemistry platform, originally developed in San Diego and managed by Strateos, to our Montreal facility. Although Eli Lilly discontinued it due to limited returns, we saw its potential, acquired the equipment, and reconfigured it to deliver greater productivity, faster turnaround times, and the ability to work across a wider diversity of modalities. This fusion of advanced technology with the collective expertise of our team – the "SpiroBrain" – will guide our growth. Small molecules will remain part of our work, but the greatest opportunities, and those with the least competition, lie in the more complex modalities that few organisations can master.

As a final thought, what message would you like to leave with our international audience about SpiroChem?

I would encourage decision-makers to look beyond simple cost comparisons and focus instead on the real value of what is delivered. The essential question is not how much a CRO charges, but what outcomes are achieved within the budget provided and timelines agreed upon. When considered in that light, it becomes evident that some partners consistently deliver more for the same investment. This has been our guiding principle from the very beginning, and it is the reason clients continue to place their trust in us. Whatever the level of complexity, whatever the urgency of the project, our commitment is to provide solutions that meet those challenges and ensure that their resources are used to maximum effect.

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