

Scientist-operator bridging life sciences, AI integration and corporate strategy. Combines a Physical Chemistry PhD and an Executive MBA to translate complex scientific and AI concepts into actionable boardroom execution. Proven ability to lead cross-functional initiatives, drive operational efficiency, and build scalable biotech strategies from the ground up.

EXPERIENCE

Senior Consultant · EY-Parthenon

May 2025 – Present

- Develop R&D portfolio go-to-market and optimisation strategies for top pharmaceutical clients.
- Built a Python-based Monte Carlo model for pipeline value and probability-of-success analysis on a \$1B+ R&D budget, identifying ~\$200M in portfolio efficiency gains.

Independent Strategy Consultant · Carter Consulting

Feb 2024 – Present

- Acting QMS lead for a large pharmaceutical client; designed strategic frameworks delivering ~20% operational efficiency gains in quality management.
- Built go-to-market and regulatory strategies for biotech clients in Switzerland, France and Germany.

Entrepreneurial Period — Biotech Venture Building

2023 – 2024

Founded a deep-tech biotech venture, with a concurrent founder fellowship to test alternative theses before reconverging.

Founder & CEO · Micromagnetix Biophysics

2023 – 2024

- Founded venture out of PSL Research University in partnership with a multinational pharmaceutical company.
- Led company structure, negotiation strategy and market positioning; concluded venture in 2024 after evaluating commercial viability against alternative paths into strategy consulting.

Founder in Residence · Entrepreneur First

Apr – Jun 2024

- Selected for competitive 3-month founder program; explored personalised diagnostics, electrochemical biosensors and DNA computing before returning focus to Micromagnetix.

Collège des Ingénieurs Fellowship — Executive MBA & Doctorate

2020 – 2023

Competitive 3-year program (<5% admission) combining a PhD with rotational placements at leading European firms.

Organisational Capabilities Strategist · Sanofi Digital

- Project-managed organisational transformation across 2,400 employees, lifting productivity ~10%.
- Future-proofed organisational health and improved decision-making structures.

Chemistry R&D Engineer · BforCure

- Co-developed qPCR kits for COVID-19 and respiratory viruses.
- Oversaw design, installation and regulatory compliance of the chemistry lab; supervised 2 interns.

Doctoral Research · École Normale Supérieure

- “Innovative Strategies for DNA Analysis using Supramolecular Assemblies and qPCR Multiplexing.”
- Developed novel qPCR multiplexing methodology yielding 2N targets per N channels.
- Discovered light-based detection of single-point mutations in short DNA sequences (basis of forthcoming publication).

Regulatory Affairs Specialist & Scientific Advisor · Lallemand

2018 – 2019

- Led product registrations across 9 South-East Asian countries; advised regulatory affairs officers on compliance requirements.

Concurrent part-time (2018–2021): Chemist & Formulations Consultant, *Lilly's Eco Clean* — recurring 1–2 month contracts supporting formulation development and EU CLP regulatory classifications, alongside MSc, PhD and BforCure work.

VENTURES & SIDE PROJECTS

Founder · Catalyst Ventures catalyst-ventures.eu

2023 – Present

- Built an AI-powered biotech investment intelligence platform covering 350+ US/EU tickers — uses Python and the Google Gemini API to parse SEC filings, track FDA/EMA catalysts, and generate sentiment scores and daily executive summaries.
- Lead the associated investment club; 30% returns through systematic technology review and market analysis.

Builder · AuraFast — AI Fasting & Metabolic Health Tracker

2024 – Present

- Independently built consumer health app with AI-driven personalised scheduling. Stack: React/Next.js, Firebase.

Also: VC Scout, *G. Ventures* (2022–2023) · **VP, CDI Alumni Association** (2022–Present).

EDUCATION

PhD, Physical Chemistry

École Normale Supérieure
2020 – 2023

MBA in Science Management

Collège des Ingénieurs
2020 – 2023 · <5% admission rate

MSc, Chemistry & Life Sciences

École Normale Supérieure
2017 – 2018 · Mention Très Bien

BSc, Chemical & Pharmaceutical Sciences

Dublin City University
2012 – 2016 · 2nd class honours

PUBLICATIONS & WRITING

“Innovative Strategies for DNA Analysis using Supramolecular Assemblies and qPCR Multiplexing”

PhD Thesis · École Normale Supérieure · 2023
theses.hal.science/tel-05484029v1

“Quantifying the Edge: Statistical Arbitrage in Clinical-Stage Biotech Events”

Catalyst Ventures · Jan 2026

SNP detection via supramolecular assemblies

Manuscript in preparation

SKILLS

Strategy & Operations: board-level execution, organisational design, GTM strategy, QMS & regulatory.

Scientific & Technical: analytical physical chemistry, molecular diagnostics, qPCR, DNA nanotechnology, NGS, microfluidics.

Data & AI: Python (Pandas, Scikit-learn), Gemini API, SQL, Monte Carlo modelling, Power BI.

Tools: PyMOL, Benchling, Adobe Suite, LaTeX, MS Office.

LANGUAGES

English — native

French — fluent (C1)

German — studying

Irish — foundational

INTERESTS

Healthcare & Diagnostics

Personalised healthcare, molecular diagnostics, anti-aging and longevity epigenetics.

Business & Finance

Evaluating biotech innovations for market viability and investment potential.

Building with AI

Vibe coding side projects with Claude Code & Cowork — algorithmic trading models, analytics tooling and small AI experiments.

Sailing

Member, West Pier Sailing Club, Dún Laoghaire; trained at Les Glénans sailing school; sails in Brittany in summer.

Skiing

Regularly in France, Switzerland and Austria.

Training

Strength training; MMA / BJJ / Muay Thai (5 yrs). Earlier: 7 yrs Irish Boy Scouts.