

ALEXANDROS PETRELIS

HEAD OF RESEARCH, DATA & ANALYTICS



CONTACTS

+33695869209

apetrelis@live.com

SKILLS

Agile · Communication · Research ·
Process analysis · Statistics · Reporting ·
Protocol Design · Data management ·
Publications · Problem-solving ·
Statistical Programming · FAIR · SOPs · GDPR ·
FDA · CE mark · ISO · R Scripting · R Shiny ·
SAS · SQL · Power BI · Tableau · AWS ·
MongoDB · KNIME · Benchling · Jira ·
Confluence · Creative · Rigor · Autonomous ·
Team spirit · Organizational · Listener ·
Teaching · Simplification

INTERESTS

- Artificial Intelligence.
- Emotional Intelligence.

PROFESSIONAL ACHIEVEMENTS

- **10 data collection projects**
Led 10+ complex, multi-stakeholder data collection projects, from design to delivery, in regulated environments.

ACADEMIC ACHIEVEMENTS

- **20 Scientific Publication**
[9 Publications on medical research](#)
[4 Publications on medical device](#)
[7 Publication on conferences](#)
- **Patented by RANDOX Laboratories**
[Patented risk prediction model with Radox Laboratories.](#)

LANGUAGES

Spanish (Beginner) · French (Intermediate) ·
English (Advanced) · Greek (Native)

SUMMARY

Head of Research and Data Science Executive with **12+ years of experience** leading data science and analytics teams in **complex, regulated, and large-scale environments**. PhD in **Biostatistics** with postdoctoral training in **AI**, combining strong mathematical foundations with delivery of **production-grade ML and cloud platforms**. Proven track record in **building and scaling teams**, defining **algorithmic roadmaps**, enabling **data-driven decision-making** by deploying predictive and optimization models, while partnering with executive leadership to align **data strategy** with business outcomes and drive high-impact, fast-moving execution.

EXPERIENCE



Microper Technologies, BioTech, R&D - Start-up

Toulouse, France

Head of Data & Analytics

2024 - 2025

Development of biological products leveraging data-driven real-world evidence.

- Built **automated analytics and reporting pipelines** for production use.
- Integrated multi-source data using **FAIR principles**.
- Managed external data exchanges under **regulatory and quality constraints**.



Group-Epsilon MedTech, R&D - SME

Nancy, France

Director of Research, Data & Analytics

2018 - 2024

Connected technologies (IoT) based on IMU sensors for a SaMD.

Director of Research, Data and Analytics (2022-2024)

- Led **applied research and AI strategy** from innovation to production.
- Guided **ML and statistical models** into validated, production-ready solutions.
- Ensured **scientific rigor and regulatory compliance** (FDA, CE, ISO 13485, GDPR).

Head of Data & Analytics (2020-2022)

- Defined the **Data & Analytics strategy** aligned with business and R&D goals.
- Led **Analytics and BI teams**, delivering KPIs and decision-support products.
- Turned clinical and business needs into **actionable insights at scale**.

Data Team Leader - Data Engineering & Foundations (2018-2020)

- Built and led the **core Data team** (Data Engineering, Data Science, BI).
- Designed **cloud-based data platforms** integrating devices and operational data.
- Established **data governance, quality, security, and GDPR compliance**.



Philip Morris International (PMI), Goods, R&D - GE

Neuchâtel, Suisse

Senior Data Scientist

2017 - 2018

Designed and validated devices using respiratory signal and data analytics (IQOS).

- Contributed to **INTERVALS data governance platform**, ensuring traceability, interoperability, **reproducibility** and compliance.
- *Designed and evaluated metrics for machine learning models.*
- Collaborated with R&D and IT teams on **standardized data workflows** and **metadata harmonization**.



National Institute of Health & Medical Research (INSERM), Life Sciences - Public

Nancy, France

Data Scientist

2012 - 2016

Conducted data exploration and predictive modeling for chronic diseases in genetic epidemiology.

- Performed **statistical programming** and analysis on biological data.
- Designed and managed **data pipelines**, including **cleaning, transformation, and QC**.
- Managed a **large-scale epidemiology data platform** (5,000 families).

CERTIFICATION LICENSED

Essential Biostatistics For Agchem And Bioscience R&D

[BioScience Academy](#) - 2024

Speaker : 4th International Congress on Pharmacogenomics and Personalized Diagnosis and Therapy

[Faculty of Pharmacy, Athens, Greece](#) - 2023

Conduct a Clinical Evaluation in accordance with MEDDEV 2.7/1 Rev. 4 and EU Regulation (MDR) 2017/745.

[efor](#) - 2022

ISO 13485 : 2016 Certificate

[Baliston Health, Nancy, France](#) - 2022

AI4Health Winter School

[Health Data Hub](#) - 2021

Agile with Jira.

[Coursera - Atlassian](#) - 2020

Foundations in Data Science (IBM).

IBM - DS0101EN - 2019

Machine Learning for Big Data.

[Coursera - San Diego University](#) - 2019

SQL for Data Science.

[Coursera - University of California](#) - 2018

Practical Time Series Analysis

[Coursera - State University of New York](#) - 2018

Statistical methods and new research genes strategies involved in common diseases in the high-throughput sequencing era

[INSERM Workshop](#) - 2013

Advanced Training Course on System Biology

[ESPT European Society of Pharmacogenomics and Personalised Therapy](#) - 2012

FIND ME ONLINE

● **LinkedIn**

[Profil Alexandros Petrelis](#)

● **Publications**

[Google Scholar](#)

EDUCATION



DaSCI - Reference centre for Artificial Intelligence and Data Science, University of Granada

Granada, Spain

Post-Doc. Trustworthy and reliable AI systems.

2025 - 2026

- Applying **fine-tuning** to develop AI solutions.



BioSE - Doctoral School for Biology, Health and Environmental sciences, University of Lorraine

Nancy, France

Ph.D. Bio-Statistics in Genetic Epidemiology

2018 - 2022

- Predictive (ML) models and bioinformatics tools to identify genetic and molecular determinants of to support early diagnosis and precision medicine.



IECL - Elie Cartan Institute, Faculty of Science and Technology, University of Lorraine

Nancy, France

M.Sc. Statistics

2012 - 2014

- Data Science, Statistics
- Informatics Tools, Statistical Programming



Glyfada Private School

Athens, Greece

Mathematics Tutoring

2009 - 2012

- **Innovating education** with tech for impactful learning.
- Creation and expanded of an **e-learning web data platform**.



National University of Athens

Athens, Greece

B.Sc. Mathematics

2004 - 2008

- Applied Mathematics
- Statistics

ADDITIONAL EXPERIENCE



BI & Analytics Program at Group-Epsilon

Nancy, France

Internal Productivity & BI Dashboards

2022 - Present

[Project Link](#)

- **External B2B analytics dashboards** (client-facing Power BI, outcome tracking, usage KPIs, value demonstration)
- **Internal productivity dashboards** (team performance, data pipeline monitoring, study progress & delivery KPIs)
- **Sales & business intelligence** (revenue tracking, funnel analysis, customer segmentation, product adoption metrics)



INTERVALS at Philip Morris International

Neuchâtel, Switzerland

Data sharing and analytics platform supporting transparent, reproducible, evidence-based R&D through advanced visualization and statistical exploration.

2012 - Present

[Project Link](#)

- **Advanced analytical visualization** (interactive dashboards, multi-study exploration)
- **Statistical analyses** (longitudinal studies)
- **Scientific traceability and reproducibility** (data, protocols, metadata)



BioIntelligence with Dassault Systèmes

Nancy, France

Transforming life sciences and healthcare through in modeling, simulation, and digital collaboration.

2012 - 2016

[Project Link](#)

- **Multi-scale visualization** (model-driven views)
- **Simulation-driven analytics** (hypothesis testing, predictive outputs)
- **3Data interoperability** (curated academic datasets feeding industrial modeling platforms)