

Aristeidis Sionakidis

Precision Medicine MSc, PhD, Pharmacy BSc

👤 Profile

Enthusiastic early-stage researcher at the crossroads of bioinformatics, cancer genomics, and machine learning, I'm a final-year PhD student dedicated to unlocking the potential of gene expression profiles for transformative patient outcomes. My expertise spans R, Python, and state-of-the-art techniques, fueling my passion for early diagnosis, targeted treatment, and reduced recurrence in breast, pancreatic, and oral cancers. Eager to bring my innovative skillset to high-dimensional cancer data analysis, I am excited to join forces with like-minded pioneers in the field.

🎓 Education

PhD in Precision Medicine, University of Edinburgh, Edinburgh

September 2020 — February 2024

MRC DTP in Precision Medicine

Project Title: Molecular Dynamics of the Response to Breast Cancer Therapies

Supervisors: Dr. Jonine Figueroa, Dr. Timothy Cannings, Dr. Andrew Sims

Skills:

- Data analysis with advanced statistical and machine learning techniques
- Bioinformatics (Differential Gene Expression Analysis, Pathway Analysis, Network Analysis, Genomics)

MSc in Precision Medicine and Pharmacological Innovation, University of Glasgow, Glasgow

September 2019 — September 2020

Grade: Distinction

Dissertation Project:

Supervisor: Professor Sandosh Padmanabhan

Title: Creating a patient-centric educational platform for personalised medicine

Skills:

- Data analysis in R & MS Excel
- Visualisations in Circos (Perl, command line)
- Building an interactive web tool for blood pressure pharmacogenomics

BSc in Pharmacy, Aristotle University of Thessaloniki, Thessaloniki

September 2013 — July 2018

Average Grade: 8.57/10, Equivalent in the UK: 1st class

Details

Edinburgh

United Kingdom

aressionakides@gmail.com

Links

[Personal webpage](#)

[LinkedIn](#)

[Twitter](#)

[GitHub](#)

[ResearchGate](#)

Skills

R

Python

LaTeX

Omics

Machine Learning

Hobbies

Piano, bouzouki, basketball, football, movies, travelling

Languages

Greek, Modern (1453-)

English

French

Admission Rank (2013): 2nd

Graduation (2018): 3rd (class), 7th (year)

Undergraduate thesis project:

Supervisor: Associate Professor Lefkothea Papadopoulou

Title: Cloning of IL-2 coding sequence via recombinant DNA technology.

Skills:

- Browsing online omics databases (GeneCards, NCBI, COSMIC etc.)
- RNA extraction, cDNA synthesis, PCR
- Southern blotting, product purification
- Bacterial cultures transformation, diagnostic cuts with nucleases

★ Publications

Published papers

- Sionakidis, A., McCallum, L., & Padmanabhan, S. (2021). Unravelling the tangled web of hypertension and cancer. Clinical science (London, England: 1979), 135(13), 1609–1625. <https://doi.org/10.1042/CS20200307>
- du Toit, C., Tran, T. Q. B., Deo, N., Aryal, S., Lip, S., Sykes, R., Manandhar, I., Sionakidis, A., Stevenson, L., Pattnaik, H., Alsanosi, S., Kassi, M., Le, N., Rostron, M., Nichol, S., Aman, A., Nawaz, F., Mehta, D., Tummala, R., McCallum, L., ... Padmanabhan, S. (2023). Survey and Evaluation of Hypertension Machine Learning Research. Journal of the American Heart Association, e027896. Advance online publication. <https://doi.org/10.1161/JAHA.122.027896>

Preprints

- [A novel gene signature to predict response to neoadjuvant chemotherapy and endocrine treatment in estrogen receptor-positive breast cancer patients](#)
- [Identification of early diagnosis markers of pancreatic ductal adenocarcinoma \(PDAC\) using publicly available transcriptomic tumor and blood sample data](#)

★ Presentations

Posters

[AACR 2022 poster](#)

[EACR 2022 poster](#)

★ Scholarships & Awards

Scholar-in-training award (AACR)

April 2022

Doreen J. Putrah Cancer Research Foundation Scholar-in-Training Award

Onassis Foundation scholarship for PhD students

September 2021 — Present

Bodossaki Foundation scholarship

As a MSc student (09/2019-09/2020)

As a PhD student (09/2021-Present)

Aristotle University of Thessaloniki Excellence Award

May 2019

Aristotle University of Thessaloniki undergraduate student scholarship

March 2017 — November 2017

★ More skills and certificates

“Python 3” ([SoloLearn](#))

“Data Science in Stratified Healthcare & Precision Medicine” ([Coursera](#))

“Introduction to Statistics & Data Analysis for Public Health” ([Coursera](#))

“Logistic Regression in R for Public Health” ([Coursera](#))

“Statistics for Genomic Data Science (in R)” ([Coursera](#))

“Python for Genomic Data Science” ([Coursera](#))

“Network Analysis in Systems Biology” ([Coursera](#))

“Practical Neural Networks & Deep Learning in R” ([Udemy](#))

“Deep Learning in Python track” ([DataCamp](#))

“JavaScript Essential Training” ([LinkedIn learning](#))

“Shiny Fundamentals with R” ([DataCamp](#))

“Genomics for Educators” ([FutureLearn](#))

“Full-Stack Engineering PRO Career Path” (ongoing, [Codecademy](#))

📁 Employment History

Advisor at iGEM Thessaloniki

April 2021 — April 2022

Advisor in Bioinformatics and Data Analysis

Data analysis on Pancreatic Ductal Adenocarcinoma (PDAC) gene expression studies with a focus on the development of early-diagnosis tools for precision medicine interventions.

Pharmacy internships

June 2017 — June 2018

- 3 months at “AHEPA” General Hospital, Thessaloniki
- 9 months at three different community pharmacies in Thessaloniki and Lefkas

🍷 Extra-curricular activities

Member at ATP (Aristotle Team of Pharmacy, NGO), Thessaloniki

December 2015 — July 2018

Soft skills and managerial skills acquired through organizing academic seminars, conferences and social events (charity sports tournaments, open-public blood donations, team-fairs etc.).

References

Jonine D. Figueroa from **National Institute of Health**

jonine.figueroa@ed.ac.uk

Timoth I. Cannings from **University of Edinburgh**

timothy.cannings@ed.ac.uk