

About

Bioinformatics Scientist with experience in analyzing and visualizing Next Generation Sequencing (NGS) data. Strong background in translational biomedical research, with a focus on extracting meaningful biological insights from complex datasets. Experienced in developing interactive web applications, websites and tools that enhance data exploration and accessibility for researchers.

Work Experience

- **Bioinformatics Scientist**, [Bioinformatics Lab](#), 11/2023 – present

Institute of Applied Biosciences, CERTH, Thessaloniki, Greece

Supervisor: [Dr. Fotis Psomopoulos](#)

- Participated in the organization and delivery of data analysis activities for EU-funded research projects.
- Designed, optimized, and deployed bioinformatics workflows for genomics, transcriptomics, metagenomics and biodiversity data.

- **Master Student**, Immunogenetics Lab, 10/2021 – 10/2023

Institute of Applied Biosciences, CERTH, Thessaloniki, Greece

- Conducted wet lab experiments and NGS workflows for research on hematological malignancies.
- Performed bioinformatics analysis of sequencing data, integrating variant and gene-level insights.

- **Undergraduate Student**, Immunogenetics Lab, 03/2020 – 09/2021

Institute of Applied Biosciences, CERTH, Thessaloniki, Greece

- Assisted in basic laboratory procedures and introductory bioinformatics tasks for research projects.

- **Internship**, Immunogenetics Lab, 07/2019 – 08/2019

Institute of Applied Biosciences, CERTH, Thessaloniki, Greece

- Gained experience in fundamental molecular biology techniques and laboratory practices.

Education

- **M.Sc. in Translational Research in Biomedicine**, 2021 – 2023

Molecular Biology & Genetics Department, Democritus University of Thrace, Alexandroupoli, Greece

Supervisor: [Dr. Anastasia Chatzidimitriou](#)

- **B.Sc. in Biochemistry & Biotechnology**, 2016 – 2021

Biochemistry & Biotechnology Department, University of Thessaly, Larisa, Greece

Supervisor: [Dr. Kostas Stamatopoulos](#)

Scholarship

- 10/2021 – 10/2023, Received a scholarship from the INAB | CERTH to support my Master's research.

Technical skill

- **Languages**: R, Python, Bash, HTML, CSS

- **Data Science**: ggplot2, Quarto, R shiny, data.table, stringr, tidyverse

- **Bioinformatics Tools**: STAR, SAMTOOLS, GATK, TrimGalore, DESeq2, Kraken2

- **Workflows**: Nextflow

- **Version Control & Deployment**: Git, GitHub

Participation in Funded Projects

- [LATE-AYA](#), 06/2025 – present, Help Adolescents and young adults (AYA) survivors monitor and manage late effects of cancer treatment (*European Union's Horizon Europe - HORIZON.2.1 - Health*)
- [Odyssey](#), 05/2024 – present, Connecting molecular and geographical biodiversity data (*ELIXIR BFSP commissioned service, part of the 2024-2028 Biodiversity, Food Security & Pathogens Programme*)
- [ELIXIR STEERS](#), 03/2024 – Present, Developing, consolidating and optimising ELIXIR as an European research infrastructure (*HORIZON INFRA 2023 DEV 01*)
- [SciLake](#), 09/2023 – 05/2024, Algorithms for large-scale biodata analysis (*HORIZON-INFRA-2021-EOSC-01-04*)

Community & Open-Source Contributions

- **Immunovisual:** Interactive gallery of Immunogenetics charts built with R ([Quarto webpage](#))
- **TidyTuesday:** Data visualization contributions ([GitHub](#) | [Shiny App](#))
- **30DayChartChallenge:** Data visualization contributions ([GitHub](#) | [Quarto webpage](#))

Selected Publications

- F. Psomopoulos, C. O'Cathail, **N. Anastasiadou**, C. Cocuzza, W. L. Cuypers, O. Idowu, K. Kyritsis, K. B. Lauer, M. Lavitrano, G. Leoni, J.-L. Liu, G. Macori, G. Mannarà, M. Martinelli, N. Pechlivanis, et. all, “Toward a unified approach: Considerations for bioinformatic and sequencing activities & data in wastewater surveillance of biologic public health threats,” *Open Research Europe*, vol. 5, p. 267, Sep. 2025, doi: [10.12688/openreseurope.20934.1](https://doi.org/10.12688/openreseurope.20934.1).

Selected Conference Activity

Poster

- N. Pechlivanis, **A. Anastasiadou**, A. Papageorgiou , E. Pafilis , and F. Psomopoulos, “Odyssey: an R Shiny App Approach to explore Molecular Biodiversity in Greece, 23rd European Conference on Computational Biology (ECCB)”, Sep. 2024. doi: <https://doi.org/10.5281/zenodo.14186453>
- M. Gerousi, M. Fitopoulou, N. Pechlivanis, **A. Anastasiadou**, P. Rock, G. Karakatsoulis, M. Smaropoulou, P. Talimtzi, C. C. Chu, C. Zent, R. Burack, E. Theodosiou, F. Psomopoulos, A. Chatzidimitriou, K. Stamatopoulos, “Molecular and Cellular Responses to External Triggering in Primary Splenic Small B-Cell Lymphomas: A Transcriptomic and Bioenergetic Perspective, 30th European Hematology Association Congress (EHA)”, June 2025, PF1011.

Languages

- English: Full professional proficiency (C2)
- German: Intermediate proficiency (B1)
- Greek: Native proficiency