



# Naeem A. Ghafoor

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English, Turkish, Arabic, and Tajik (Native). Learning French (A1).  
Antwerp, Belgium

## EDUCATION

### Erasmus+ Mundus Joint Masters Degree

| Sept 2022 - Present

#### Leading International Vaccinology Education - Full EACEA Scholarship Holder

A multidisciplinary program that combines the fields of immunology, infectiology, and vaccinology provided by Universitat Autònoma de Barcelona, Universitat de Barcelona, Universiteit Antwerpen, Université Claude Bernard Lyon 1, and Université Jean Monnet.

### Bachelor of Science in Molecular Biology & Genetics

| Sept 2018 - Aug 2021

#### Department of Molecular Biology and Genetics, Mugla Sitki Kocman University, Turkey

I attended classes in genetics, cell and molecular biology, microbiology, biochemistry, and bioinformatics. My thesis topic was on the investigation of potent HIV-1 inhibitors via computational drug discovery methodologies. I graduated with a CGPA of 3.68/4.00 as a high honors student, top 1% of the class.

### Erasmus+ Exchange Student

| Feb 2021 - June 2021

#### Department of Animal Breeding & Biotechnology, University of Science and Technology, Poland

In the final year of my bachelor's, I joined the Erasmus+ Exchange program at UTP where I worked on developing a machine learning-based solution to combat mastitis in the dairy industry. I completed the semester with a CGPA of 4.00/4.00.

## RESEARCH EXPERIENCE

### Graduate Researcher

| Sept 2021 - Sept 2022

Cell biology and neuroscience laboratory, Mugla Sitki Kocman University, Turkey  
Supervisor: Assoc. Prof. Dr. Ayşegül Yildiz

I worked on mining and analyzing MDM2-p53 bioactivity data, developed machine-learning models, conducted molecular docking and dynamics analyses, and performed drug treatments on neuroblastoma and glioblastoma cell lines. I also supervised undergraduates projects.

### Undergraduate Researcher

| Dec 2020 - Sept 2021

Center For Research Laboratories, Mugla Sitki Kocman University, Turkey  
Supervisor: Assoc. Prof. Dr. Ergun Kaya & Assoc. Prof. Dr. Nurdan Sarac

I lead a project investigating the potential cytotoxicity and wound-healing effects of the extract of endemic *Thymus cilicicus* Boiss. & Bal on *in vitro* cultures of murine fibroblast cell lines.

### Undergraduate Researcher

| Oct 2020 - June 2021

Molecular Microbiology Laboratory, Mugla Sitki Kocman University, Turkey  
Supervisor: Prof. Dr. Omur Baysal

I worked on an *in silico* screening drug discovery project, I performed homology modeling for SARS-CoV-2 proteins and investigated lead interactions using molecular docking and molecular dynamics.

## HONOURS & AWARDS

- **Best Poster Award** | **Oct 2021**  
First place in the International Conference "Environment-Animal-Human" Young Scientists Session's poster competition, organized by the West Pomeranian University of Technology, Szczecin.
- **Academic Incentive Award** | **May 2021**  
Monetary award by the Turkish NSF for co-authoring a manuscript in a reputed SCI-index journal.
- **Excellence Scholarship** | **Oct 2020 - July 2021**  
Merit-based scholarship awarded by Tukey's Directorate General of Foundations for distinctive academic performance.

## PUBLICATIONS

- **Abdul Ghafoor, N.**, & Sitkowska, B. (2022). Computational repurposing of FDA-approved drugs against specific mastitis-causing pathogens. *Acta Scientiarum Polonorum Zootechnica*, 20(4), 5–14. <https://doi.org/10.21005/asp.2021.20.4.02>
- **Abdul Ghafoor, N.**, Galatali, S., Yeniocak, S., Kaya, E., Sarac, N., & Ugur, A. (2022). Investigating anticancer potency of in vitro propagated endemic thymus cilicicus boiss. & bal. extract on human lung, breast, and prostate cancer cell lines. *Biologia*, 77(11), 3229–3239. <https://doi.org/10.1007/s11756-022-01168-7>
- **Abdul Ghafoor, N.**, & Sitkowska, B. (2021). MASPA: A machine learning application to predict risk of mastitis in cattle from AMS Sensor Data. *AgriEngineering*, 3(3), 575–584. <https://doi.org/10.3390/agriengineering3030037>
- Baysal, Ö., **Abdul Ghafoor, N.**, Silme, R. S., Ignatov, A. N., & Kniazeva, V. (2021). Molecular dynamics analysis of N-acetyl-D-glucosamine against specific SARS-COV-2's pathogenicity factors. *PLOS ONE*, 16(5). <https://doi.org/10.1371/journal.pone.0252571>
- **Abdul Ghafoor, N.**, Sitkowska, B. "Computational Repurposing of FDA-approved Drugs Against Specific Mastitis-causing Pathogens" (2021). International Conference Environment - Animal - Human. Remote, Poland, **poster presentation**.
- **Abdul Ghafoor, N.**, Galatali, S., Yeniocak, S., Saman, Z., Kaya, E., & Sarac, N. "Cytotoxicity, wound healing & anti-cancer potency of in vitro cultured Thymus cilicicus Boiss. & Bal. ethanolic extracts" (2021). 1st International Conference on Experimental Sciences and Biotechnology. Mugla, Turkey, **oral presentation**.
- **Abdul Ghafoor, N.**, Yildiz, A. "A machine learning approach to predict in vitro efficacy of human lung adenocarcinoma proliferation inhibitors" (2021). 5th International Symposium on Bioinformatics. Istanbul, Turkey, **poster presentation**.

## CERTIFICATES & WORKSHOPS

- VaxInLIVE Symposium 2022
- 16th Congress of Catalan Society of Immunology - 2022
- Academic IELTS (C2 Proficient) - 2022
- RSG Turkey Computational Structural Biology Virtual Workshop - 2021
- Introduction to Machine Learning, Duke University - 2021
- Welcome to Game Theory, the University of Tokyo - 2021
- Introduction to Python, Global AI hub, Turkey - 2021
- 1st National Structural Biology Workshop, Koc University, Turkey - 2021

## REFERENCES

- Prof. Dr. Dolores Jaraquemada** Department of Cellular Biology, Physiology, and Immunology, Universitat Autònoma de Barcelona, Spain.  
**Dolores.jaraquemada@uab.es** <portalrecerca.uab.cat/en/persons/dolores-jaraquemada-p%C3%A9rez-de-guzm%C3%A1n-6>
- Assoc. Prof. Dr. Aysegul Yildiz,** Department of Cell Biology & Neuroscience, Mugla Sitki Kocman University, Turkey.  
**aysegulunal@mu.edu.tr** <mu.edu.tr/tr/personel/aysegulunal>
- Assoc. Prof. Beata Sitkowska,** Department of Animal Biotechnology & Genetics, Bydgoszcz University of Science and Technology, Poland.  
**beatas@utp.edu.pl** <researchgate.net/profile/Beata-Sitkowska>
- Assoc. Prof. Dr. Ergun Kaya,** Department of Molecular Biology & Genetics, Mugla Sitki Kocman University, Turkey.  
**ergunkaya@mu.edu.tr** <mu.edu.tr/tr/personel/ergunkaya>