



Alexandru Bogdan Stache

Home : Bisericii, Nr. 65 , 617320, Piatra Șoimului, Romania

Email: stache.bogdan@gmail.com **Phone:** (+40) 746903339

Date of birth: 12/04/1992 **Nationality:** Romanian

WORK EXPERIENCE

[30/09/2016 – 23/11/2019]

Sales representative

Dexter Com S.R.L.

City: Bucharest

Country: Romania

[01/04/2020 – Current]

Scientific Research Assistant

Regional Institute of Oncology

City: Iasi

Country: Romania

Scientific research assistant, biology specialty (COR 213137), within the Molecular Biology department of the "Center for fundamental research and experimental development in translational medicine - TRANSCEND"

EDUCATION AND TRAINING

[08/2007 – 07/2011]

Baccalaureate Diploma and Professional Certificate in Computer Science

National College of Informatics

City: Piatra Neamt

Country: Romania

Real profile, Intensive Mathematics-Informatics.

[09/2011 – 07/2014]

Bachelor's degree

"Alexandru Ioan Cuza" University of Iasi, Faculty of Biology

City: Iasi

Country: Romania

Field: Biology

Specialization: Biology

[05/2015 – 08/2015]

Erasmus+ internship

University of Konstanz, Limnological Institute

City: Konstanz

Country: Germany

Participation in the summer school 'Limnology of the Lakes and Dynamics of Aquatic Systems,' during which I collected biological samples, conducted DNA extractions, PCR amplifications, agarose gel electrophoresis migrations, and fragment analysis (microsatellites). I gained knowledge in using data analysis software (TPSDIG2, TPSRegr, TPSRelw, TPSUtil, PAST, Structure, and Arlequin) for the purpose of performing morphometric analyses on fish species and analyzing population structures.

[09/2014 – 07/2016]

Master's degree

"Alexandru Ioan Cuza" University of Iasi, Faculty of Biology

City: Iasi

Country: Romania

Field: Biology

Specialization: Molecular Genetics

[30/09/2018 – Current]

Doctor's degree

"Alexandru Ioan Cuza" University in Iasi, Faculty of Biology, Doctoral School of Biology

City: Iasi

Country: Romania

Doctoral Studies - Field of Biology

LANGUAGE SKILLS

Mother tongue(s): Romanian

Other language(s):

English

LISTENING B2 READING B2 WRITING B2

SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

Social Media | Microsoft/ Microsoft Office | Browsing the Internet (experienced) | Communication Software | HTML (Basics) | C++ (beginner) | SQL (beginner) | Remote Communication tools: Skype, Teams, Meet, Discord, TeamSpeak | R-Studio (basic)

DRIVING LICENCE

Cars: B

CONFERENCES AND SEMINARS

Conferences

Poster participation at **SYMPOSIUM 'ECOLOGY AND PROTECTION OF ECOSYSTEMS' THE XI TH EDITION, Bacau 2015**

Alexandru Bogdan STACHE, Mitică CIORPAC, Lucian Dragoş GORGAN - A new insight on *Carassius gibelio* phylogeography

Poster participation at **IX-th International Conference of Zoologists "SUSTAINABLE USE, PROTECTION OF ANIMAL WORLD AND FOREST MANAGEMENT IN THE CONTEXT OF CLIMATE CHANGE", Chisinau 2016**

Alexandru B. Stache, Mitica Ciorpac, Ovidiu A. Popescul, Lucian D. Gorgan - Dynamics of cytochrome B and MHC class II genes of *Carassius gibelio* species correlated with the specific life environment

Poster participation at **SYMPOSIUM 'ECOLOGY AND PROTECTION OF ECOSYSTEMS' THE XII TH EDITION, Bacau 2017**

ALEXANDRU-BOGDAN STACHE, MITICĂ CIORPAC, LUCIAN DRAGOŞ GORGAN - The dynamics of cytochrome b and MHC class II genes correlation to the specific life environment in *Carassius gibelio*

Poster participation at **11TH NATIONAL CONGRESS WITH INTERNATIONAL PARTICIPATION AND 37TH ANNUAL SCIENTIFIC SESSION OF ROMANIAN SOCIETY FOR CELL BIOLOGY, Constanta, June 20th-23rd, 2019**

ALEXANDRU BOGDAN STACHE, LOREDANA DRAGOȘ, ILARION MIHĂILĂ, IONUȚ TOPALĂ, LUCIAN DRAGOȘ GORGAN - Cold plasma-induced apoptosis in osteosarcoma cells

Participation with presentation at **CONFERINȚA ȘCOLILOR DOCTORALE DIN CADRUL UNIVERSITĂȚII „ALEXANDRU IOAN CUZA” DIN IAȘI, Iași (on-line), 22-23 octombrie 2020**

A.B. STACHE, L. M. DRAGOȘ, I. MIHAILA, I. TOPALA, D.L. GORGAN - CAP treatment modulates the apoptosis and cell cycle control in a human osteosarcoma cell line

Participation with e-poster at **CONFER 2020, Iași (on-line), 19-22 noiembrie 2020**

A.B. STACHE, LOREDANA MIHAIELA DRAGOȘ, I.C. IVANOV, I. MIHAILA, I. TOPALĂ, C.T. MIHAI, D.L. GORGAN - The impact of two different cold atmospheric plasma-exposed media treatments on the osteosarcoma cells viability

Participation with e-poster at **SESIUNEA ȘTIINȚIFICĂ A FACULTĂȚII DE BIOLOGIE - Tendi nțe în biologie: de la molecule la sisteme complexe, Iași (on-line), 28-29 octombrie 2021**

ALEXANDRU BOGDAN STACHE, LOREDANA MIHAIELA DRAGOȘ, IONUȚ TOPALĂ, ILARION MIHĂILĂ, COSMIN TEODOR MIHAI, DRAGOȘ LUCIAN GORGAN - Impactul tratamentului cu plasmă non-termică la presiune atmosferică asupra expresiei genelor asociate controlului apoptozei

Participation with e-poster at **CONFER 2021, Iași (on-line), 18-21 noiembrie 2021**

A.B. STACHE, LOREDANA MIHAIELA DRAGOȘ, I.C. IVANOV, I. TOPALĂ, I. MIHĂILĂ, C.T. MIHAI, D.L. GORGAN - Cold atmospheric plasma indirect treatment generates different anti-apoptotic genetic response in osteoblasts and osteosarcoma cells

Poster participation at **CONFER 2022, Iași, 24-26 noiembrie 2022**

A.B. STACHE, LOREDANA MIHAIELA DRAGOȘ, I.C. IVANOV, I. TOPALĂ, I. MIHĂILĂ, C.T. MIHAI, D.L. GORGAN - Evaluation of the intracellular reactive oxygen and nitrogen species induced by cold atmospheric plasma treatment

COURSES

[10/09/2017 – 14/09/2017] **UK Sales and Applications Training**

The course was organized by Molecular Devices, in the field of laboratory imaging

[09/05/2018 – 09/05/2018] **Analysis of Gene Expression and Regulation on Several Levels**

Organizing: Promega

Speaker: Oleksii Ivanov

[03/04/2019 – 04/04/2019] **5th @RoBioinfo Seminar: Bioinformatics tools for exploring protein biology**

The course was organized by the Romanian Society of Bioinformatics, in the field of bioinformatics.

[09/06/2020 – 09/06/2020] **Restart Cell Culture with Merck**

Organizing: Merck Romania

Speaker: Igor Pongrac

[25/06/2020 – 25/06/2020] **Cultivate Reality – Take Advantages of Using 3D Cell Culture**

Organizing: Merck Romania

Speaker: Igor Pongrac

[13/07/2020 – 13/07/2020] **Rethink Western blotting with Merck**

Organizing: Merck Romania

Speaker: Igor Pongrac

[23/07/2020 – 24/07/2020] **Scopus - importanta metricilor**

Organizing: Elsevier Romania

Speaker: Dr. Horea Gurgu

[04/10/2020 – 05/10/2020]

Sensitivity you can count on with Merck ELISA and SMC™ assays for protein biomarker detection

Organizing: Merck Romania

Speaker: Igor Pongrac

[10/02/2021 – 10/02/2021]

NGSO (Next-Gen Sequencing Oligos) for Consistent and Proper Sequence Assembly

Organizing: Millipore Sigma

Speaker: Tom Russell

[16/02/2022 – 16/02/2022] **Real-Time Live-Cell Imaging and Analysis for Drug Discovery**

Organizing: Promega

Speakers: Terry Riss and Christian Oberdanner

PROJECTS

[23/10/2019 – 22/06/2021] **Doctoranzi și cercetători postdoctorat pregătiți pentru piața muncii!**

Member of the project target group:

FONDUL SOCIAL EUROPEAN

Programul Operațional Capital Uman 2014-2020

Axa prioritară 6: Educație și competențe

O.S.6.13. - Creșterea numărului absolvenților de învățământ terțiar universitar și non universitar care își găsesc un loc de muncă urmare a accesului la activități de învățare la un potențial loc de muncă / cercetare/ inovare, cu accent pe sectoarele economice cu potențial competitiv identificate conform SNC și domeniile de specializare inteligentă conform SNCDI

Cod proiect: POCU/380/6/13/123623

[2022 – 2023]

Active targeted drug delivery systems based on peptide-functionalized magnetic nanoparticles for the treatment of inner ear diseases (TargEar)

Research assistant in the project

RO-NO-2019-0187

[2022 – 2023]

Development of the Monitoring Station for migratory fish: sturgeon and mackerel - Isaccea

Research assistant in the project

Cod SMIS 2014+ 136849

ORGANISATIONAL SKILLS

Organizational skills

- good organizational skills acquired from my work as a sales representative
- organizer of the seminar **Analysis of Gene Expression and Regulation on Several Levels**, presented by **Mr. Dr. Oleksii Ivanov - Promega GmbH**, in Iasi
- I held the position of secretary in the organizing committee of the "**FACULTY OF BIOLOGY ANNUAL SCIENTIFIC MEETING - FBASM 2016**" conference

COMMUNICATION AND INTERPERSONAL SKILLS

Communication and interpersonal skills

- good communication and negotiation skills gained from my experience as a sales representative

SKILLS ACQUIRED IN THE WORKPLACE

Skills acquired in the workplace

- A solid understanding of activities conducted in research laboratories across various fields (cell cultures, cellular imaging, immunohistochemistry, molecular genetics, cytogenetics).
- Proficiency in understanding workflows and materials, reagents, and equipment used in research laboratories.
- Developed skills in creating necessity reports for the procurement of reagents, consumables, and laboratory equipment, tailored to the conducted activities and needs.
- Teamwork ability, efficiency, results-oriented mindset, flexibility, adaptability, responsibility, capacity to work effectively under pressure, and problem identification and resolution skills.

OTHER ACTIVITIES

Volunteer activities

1. Highlighting Genetic Diversity in *Fritillaria* Species

Molecular Genetics Laboratory, Faculty of Biology, "Alexandru Ioan Cuza University" of Iasi

-DNA extraction, DNA quantification, and RAPD analysis.

2. Identification of the relative haplotype frequencies in populations from different habitats in *Carassius gibelio* and phylogenetic reconstruction

Molecular Genetics Laboratory, Faculty of Biology, "Alexandru Ioan Cuza University" of Iasi

-extraction and quantification of nucleic acids from *Carassius gibelio*

-PCR amplification of target genes (cytb, D-loop, COX1, MHC2-DAB)

-Purification and sequencing of amplicons

3. Analysis of interspecific and intrapopulation polymorphism in the species *Bison bonasus*

Molecular Genetics Laboratory, Faculty of Biology, "Alexandru Ioan Cuza University" of Iasi

-DNA extraction, PCR amplification, and sequencing of genes of interest

4. Genetic analysis of ancestral human fragments discovered in the territory of Romania

Molecular Genetics Laboratory, Faculty of Biology, "Alexandru Ioan Cuza University" of Iasi

-DNA extraction from ancestral human bones

-PCR amplification

-DNA sequencing

5. Molecular identification of *Lactobacillus* species

Molecular Genetics Laboratory, Faculty of Biology, "Alexandru Ioan Cuza University" of Iasi

-DNA extraction, nucleic acid quantification, PCR amplification, amplicon purification, and sequencing

6. Gene expression analysis in tumor cell cultures treated with non-thermal atmospheric plasma

Molecular Genetics Laboratory, Faculty of Biology, "Alexandru Ioan Cuza University" of Iasi

-RNA extraction from cell cultures treated with plasma

-Quantification of gene expression through RT-qPCR

7. Analysis of BDNF and IL gene expression in rats with an amyloid-induced Alzheimer's dementia model

Molecular Genetics Laboratory, Faculty of Biology, "Alexandru Ioan Cuza University" of Iasi

-RNA extraction and quantification

-Analysis of gene expression of interest through RT-qPCR

PUBLICATIONS

[2023]

[Optimization of Indirect CAP Exposure as an Effective Osteosarcoma Cells Treatment with Cytotoxic Effects](#)

Stache, A.B.; Mihăilă, I.; Gerber, I.C.; Dragoș, L.M.; Mihai, C.T.; Ivanov, I.C.; Topală, I.; Gorgan, D.-L., 2023. Optimization of Indirect CAP Exposure as an Effective Osteosarcoma Cells Treatment with Cytotoxic Effects. *Appl. Sci.*, 13, 7803. .

[2023]

[Cold atmospheric plasma treatment modulates the expression of cdk1, tnfa and tp53 genes in human osteosarcoma cells](#)

Stache, A.B.; Mihăilă, I.; Gerber, I.C.; Dragoș, L.M.; Mihai, C.T.; Ivanov, I.C.; Topală, I.; Gorgan, D.-L., 2023. Cold atmospheric plasma treatment modulates the expression of cdk1, tnfa and tp53 genes in human osteosarcoma cells. *J Exp Molec Biol* 24(3):x-xx..

[2022]

[Prognostic Value of Association of Copy Number Alterations and Cell-Surface Expression Markers in Newly Diagnosed Multiple Myeloma Patients](#)

Dragoș, M.L.; Ivanov, I.C.; Mențel, M.; Văcărean-Trandafir, I.C.; Sireteanu, A.; Titianu, A.A.; Dăscălescu, A.S.; **Stache, A.B.;** Jitaru, D.; Gorgan, D.L., 2022. Prognostic Value of Association of Copy Number Alterations and Cell-Surface Expression Markers in Newly Diagnosed Multiple Myeloma Patients. *Int. J. Mol. Sci.*, 23, 7530

[2021]

[Anxiolytic, Promnesic, Anti-Acetylcholinesterase and Antioxidant Effects of Cotinine and 6-Hydroxy-L-Nicotine in Scopolamine-Induced Zebrafish \(*Danio rerio*\) Model of Alzheimer's Disease](#)

Boianiu, R.S.; Mihasan, M.; Gorgan, D.L.; **Stache, B.A.**; Hritcu, L., 2021. Anxiolytic, Promnesic, Anti-Acetylcholinesterase and Antioxidant Effects of Cotinine and 6-Hydroxy-L-Nicotine in Scopolamine-Induced Zebrafish (Danio rerio) Model of Alzheimer's Disease. *Antioxidants*, 10, 212.

[2020]

Cotinine and 6-Hydroxy-L-Nicotine Reverses Memory Deficits and Reduces Oxidative Stress in A β 25-35-Induced Rat Model of Alzheimer's Disease

Boianiu, R.S.; Mihasan, M.; Gorgan, D.L.; **Stache, B.A.**; Petre, B.A.; Hritcu, L., 2020. Cotinine and 6-Hydroxy-L-Nicotine Reverses Memory Deficits and Reduces Oxidative Stress in A β 25-35-Induced Rat Model of Alzheimer's Disease. *Antioxidants*, 9, 768.