

## PERSONAL INFORMATION

## Petar Penev

 301 10th Street NW, 30318 Atlanta (United States)

 404-476-0547  +359885847639

 peteripenev@gmail.com

 <http://www.prism.gatech.edu/~ppenev3/>

## WORK EXPERIENCE

2 Mar 2015–8 May 2015

Biochemistry Laboratory, Wageningen (Netherlands)

The two months in the laboratory of Dolf Weijers were filled with lots of experimental work, data analysis and presentations but the time there has made me feel the most fulfilled in my life. We were working in a team of two students on a project that was elucidating possible interactors of the Auxin Response Factor in *Arabidopsis Thaliana*. I performed a lot of PCR and qPCR reactions as well as an immunoprecipitation protocol. Furthermore we did auxin resistance tests on plant embryos to observe possible differences in mutant plants.

1 Sep 2013–1 Nov 2013

Bulgarian Academy of Sciences - Institute of Plant Physiology and Genetics, Sofia (Bulgaria)  
<http://www.ifrg-bg.com/>

During my time spend in the Institute of Plant Physiology and Genetics I developed valuable abilities related not only to the practical aspect of a laboratory work but to the social one as well. While I do not underrate the significance of the professional set of skills, I find more important the ability to work in a team and the freedom to easily communicate with everybody in the workplace.

Some of the competences I have acquired or further developed are listed here:

- Planning and executing experiments
- Cultivating and working with the model plant *Arabidopsis Thaliana*
- Isolation and purification of DNA, RNA and proteins from plant material
- Separation of nucleic acids with electrophoresis in agarose gel, SDS-PAGE for proteins
- Work with quantitative rt-PCR and analysis of expression levels of plant genes

Nov 2012–Apr 2013

Bulgarian Academy of Sciences - Institute of Molecular Biology "Roumen Tsanev"

Although I yearned strongly to spend more time in the Institute I could not go there for more than 2 days a week since I had to put priority to my university commitments. Even with the limited time I had I was able to meet many of the scientist there and understand more about their work and the problems they face daily. I was also able to learn the following skills:

- Work with Nanodrop
- Restrictase reaction in plasmid vectors.
- Amplification of nucleic acids (via precipitation)
- Agarose gel electrophoresis- SDS-PAGE and Western Blot

## EDUCATION AND TRAINING

Aug 2015–Present

## MSc in Bioinformatics

Georgia Institute of Technology, Atlanta (United States)

EQF level 7

1 Sep 2014–1 Jun 2015

## MSc Molecular Life Sciences

Wageningen University, Wageningen (Netherlands)

The time I spent in the Netherlands proved to be of utmost importance for my development as a scientist. Not only was I put in a real scientific laboratory and experienced the flow of work practiced in Europe but I also got to connect with many of the people there.

|                        |  |             |
|------------------------|--|-------------|
| Oct 2010–Present       | <b>Bachelor of Molecular Biology</b><br>Sofia University "St. Kliment Ohridski", Sofia (Bulgaria)<br><br>The four years in my university gave me an excellent theoretical preparation for work in a laboratory. Some of the more important courses I have studied are as follows(in chronological order):<br><br>Cytology; Chemistry (Inorganic and Organic); Physics; Physical Chemistry and methods; Biochemistry; Biophysics; Fundamentals of Genetics; Microbiology; Physiology of Animals and Man and of Plants; Molecular Biology; Immunology; Biological membranes; Molecular Virusology<br><br>The electives I have had during the course are listed bellow (in chronological order):<br>Fundamentals of modern Physics; Intracellular and Intercellular Communication Systems; Mathematic Modelling of Biological Processes; Recombinant DNA; Selected methods in Molecular Biology<br><br>I have done two course assignments in my third year one in the Biochemistry Department on the theme - "Structure of the Amyloid $\beta$ protein" and the other in the Microbiology Department on the theme - "Saccharomyces Cerevisiaeas a model system" | EQF level 6 |
| 22 Nov 2013            | <b>Workshop on Molecular Life Sciences Education.</b><br>Federation of European Biochemical Societies, Sofia (Bulgaria)<br><br>This workshop familiarized me with good practices in writing project proposals and planning a project, also I actively participated in the discussion with subject "Skills and Key Knowledge Expected from a Molecular Life Sciences Graduate"  |             |
| 25 Aug 2011–3 Sep 2011 | <b>Volunteer</b><br>Harmonic World - Socially Aware Youth ('Youth in Action' Programme), Dobrichovice (Czech Republic)<br><br>The ten days I spent in the Czech Republic were extremely valuable for me as I got to meet many people on the same age as me from the European Union and learn more about the traditions in their respective countries and the problems they face in integrating minorities. Skills I have acquired while being there:Communication with people from different countries;Team building and Teamwork; Brainstorming;  |             |
| Sep 2005–Jul 2010      | <b>High School Degree</b><br>National High School of Science and Mathematics, Sofia (Bulgaria)<br><br>During my high school I had intensive biology, chemistry and mathematics classes in preparation for the university. I graduated with excellent results.  |             |
| Jan 2007–Dec 2010      | <b>Volunteer</b><br>Bulgarian Red Cross<br><br>The time I spend as a volunteer in the Bulgarian Red Cross is indispensable for me and I cherish it greatly. It allowed me to meet many people and broaden my view of our world. Some of the activities I was participating in where as follow:Fund raising;Blood donor campaigns;Orphanage visits;Sports events.   |             |

**PERSONAL SKILLS**

Mother tongue(s)

Bulgarian

Other language(s)

English

|  | UNDERSTANDING |         | SPEAKING           |                   | WRITING |
|--|---------------|---------|--------------------|-------------------|---------|
|  | Listening     | Reading | Spoken interaction | Spoken production |         |
| English  | C1            | C2      | C1                 | B2                | B2      |
| TOEFL test with 108 points<br>GRE Verbal Reasoning - 159; Quantitative Reasoning - 164; Analytical Writing - 4.0 |               |         |                    |                   |         |

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user  
Common European Framework of Reference for Languages

**Communication skills**

During my week in the Czech Republic I gained great communication skills. Many different people from countries all over Europe were attending and we were discussing social problems that are present in our home countries and how they have been solved in their homelands. During my years as a volunteer in the "Bulgarian Red Cross" I have met with many people from all levels of the social ladder. I was able to connect with them and provide some kind of relief. I have acquired excellent contact skills with children gained through regular visits to a local orphanage. Three years I have been a goalkeeper in my high-school's handball team. During our trainings and excursions I gained excellent ability to work in a team and always cover for my teammates.

**Organisational / managerial skills**

In the Czech republic as the leader of our team in a mock lawsuit I managed to prompt and help every member to give all their ideas during our brainstorming session and afterwards to organise them in a discreet and proper manner so we could convince the jury of our point.

During my time as a goalkeeper of a handball team I have led several practices.

**Digital competence**

Good command of the perl programming language.

Good command of the office suite (word processor, spread sheet, presentation software).

I have acquainted myself with a wide variety of software pipelines (both online and offline) for different analysis of genomic data, protein structures and mathematical modeling. Some of them are Galaxy, R, ClustalX, Swiss-PDB Viewer, ProSA, Matlab.

Good command of the Office suite, Compilation and presentation of experimental resultsSoftware analysis of quantitative rt-PCR data