Diana Marek Chemin des Lys 7

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As a Ph.D. scientist passionate about science and technology, I have been able to develop projects and relationships through working with scientists and clinicians from different expertise. With strong communication skills and rich experiences, I actively communicate our research and I strongly believe in the importance of informing the media and the broader community.

SUMMARY OF SKILLS

Project management and communication

- Strong experience in developing and conducting scientific projects, in ensuring project advancement and completion
- Strong experience in coordinating international collaborations
- Ability to communicate and present results in meetings, talks and articles, and to meet expected deadlines, strong interpersonal skills in international environments
- Ability to supervise students
- Ability to communicate science to non-scientific audiences (scientific mediation) and to "translate" science between different scientific audiences in French and English

Languages

- Bilingual French Spanish
- Fluent in English

Scientific

- Pharmacogenetics and computational genomics
- Statistical genetics in human health and disease

Technical

- Experience in promoting relations and communication with the use of web tools
- Update and maintenance of websites (Jahia, Wiki)
- Ability to work on Windows, Mac and Linux operating systems and common office softwares
- Proficiency in programming (Matlab, R)
- Expertise in genomic statistical data analysis, data-mining and machine learning

EDUCATION

10/2005-09/2010

Ph.D. in Computational Biology, Medical Genetics Department, University of Lausanne, Switzerland

09/2003-06/2005

M.Sc. in Bioinformatics and Biostatistics, University of Orsay (Paris XI), France

09/2000-06/2003

B.Sc. in Biology, Bioinformatics and Biostatistics, University of Orsay (Paris XI), France

PROFESSIONAL EXPERIENCE

10/2010- Present

<u>Swiss Institute of Bioinformatics and Medical Genetics Department</u> <u>University of Lausanne, Switzerland</u>

Biostatistics Research fellow

Principal Investigator: Pr. Sven Bergmann

- Execution of Genome-Wide Associations Studies on human cytokine levels in collaboration with the CHARGE consortium Inflammatory Working Group
- Management, collaboration and statistical analysis of a clinical project consisting on the study of cytokines levels in FMR1 premutation carriers
- Data presentation and delivery to life scientists

10/2005-09/2010

Medical Genetics Department

University of Lausanne, Switzerland

Ph.D. student in Computational Biology

Principal Investigators: Pr. Sven Bergmann and Pr. Jacques S. Beckmann

- Development and execution of a research project consisting of the identification of statistical interactions between genetic variations and environmental factors, within the Swiss HIV Cohort Study
- Genome-Wide Associations Studies projects on various human biological and anthropometric traits, through collaborative work with various world-wide large consortia (GIANT, MAGIC)
- Genotype calling and quality control of a EU-funded collaborative Hypergenes project, with the NCCR Genomics Platform (University of Geneva)
- Data presentation and delivery to life scientists

03/2005-09/2005

Genomics Science and Bioinformatics Department

Sanofi-Aventis, Vitry-sur-Seine, France

Master of Science student

Principal Investigators: Dr. Arne Müller and Dr. David Heard

- Development and execution of a research project aiming at developing computational prediction of siRNA efficacy
- Implementation of machine learning and statistical methods

07/2003-02/2005

<u>Institut de Génétique et Microbiologie , Laboratoire de Recherche en Informatique</u>

University of Orsay (Paris XI), France

Bachelor and Master of Science student

Principal Investigators: Pr. Alain Denise and Dr. Michel Termier

- Research and development of weighted genetic substitution matrices based on the genetic code, for sequences alignments purpose
- Implementation of probabilistic automatons for genomic sequences modeling

05/2002-07/2002

Institut National de la Santé Et de la Recherche Médicale (NSERM)
U131 research laboratory, Institut Paris-Sud Cytokines, Clamart, France

Bachelor of Science student

Principal Investigator: Dr. Andreas Tsapis

 Implementation of molecular/cell biology and genetic techniques for the study of the P12 protein encoded by the natural antisense RNA of BCMA

COACHING EXPERIENCE AND SCIENTIFIC COMMUNICATION

2007-2012

• Conception, organization and presentation work at the large public open doors "Journées de la recherche en génétique" (Gene Days); and article contribution to the Gene Days review

2012

- Visit of schools to encourage exchanges between life sciences and the young public
- Active participation at the University of Lausanne open doors (Les Mystères de l'UNIL)
- Semi-finalist at the Swiss FameLab contest, at the CERN

2011-2012

• Supervision of bachelor and master students in biology, and management of students research project ("solving biological problems that require maths" course)

2007-2008

Supervision of students in biology during practical computer sessions

2005-2012

- Organization of meetings to report progress of projects and make decisions to reach goals
- Seminar given as invited speaker and posters presentation in international conferences

LINGUISTIC SKILLS

French Mother tongue **Spanish** Mother tongue

English Fluent

ADDITIONAL INFORMATION

- Member of the International Society of Computational Biology (ISCB) since 2008
- President of the "AMERICA" association from 2003 to 2008 with the aim of spreading the Spanish language and South American culture
- Math, Biology, English, Spanish teaching and homework help to school age children from 2000 to 2009
- Organization of social activities and events
- Volleyball team member for 16 years
- PADI open water certificate
- Indoor and outdoor climbing
- B driving license
- First Aid certificate

PUBLICATIONS

• Available upon request