**Veronica Donato, Ph.D**

**drverodonato@gmail.com**

| INSTITUTION AND LOCATION | DEGREE | END DATE | FIELD OF STUDY |
| --- | --- | --- | --- |
| NATIONAL UNIVERSITY OF ROSARIO, ARGENTINA | B.S | 07/2000 | BIOTECHNOLOGY |
| NATIONAL UNIVERSITY OF ROSARIO, ARGENTINA | Ph.D. | 08/2012 | BIOLOGICAL SCIENCES |
| NATIONAL UNIVERSITY OF ROSARIO, ARGENTINA | Postdoctoral fellow | 07/2018 | GUT MICROBIOME-AGING |
| UNIVERSITY OF ALABAMA AT BIRMINGHAM (UAB) | Postdoctoral fellow | CURRENT (11/2019) | GUT MICROBIOME-AGING AND DISEASES |
| HARVARD MEDICAL SCHOOL | Certificate in Clinical and Translational research | 07/2019 | TRANSLATIONAL AND CLINICAL RESEARCH |

 **Master degree under development:**

2020- Student at Harvard Medical School. Master of Medical Science in Clinical

 Investigation. Translational Research Track.

**Other certificates and degrees**

2019 ACSTH Coaching Certificate. International Coach Federation (ICF).

2019 Executive Coaching Certificate. ICF.

2019 Introduction to the Principles and Practice of Clinical Research. National

 Institute of Health (NIH).

2019 Clinical and Translational Science (CTS) Training Program. University of

 Alabama at Birmingham.

2015- Online Bachelor Degree in Law. Universidad Siglo 21. Argentina.

2011-2013 Master in Molecular Oncology. Centro Nacional de Investigaciones

 Oncologicas (CNIO) diploma pending.

**RESEARCH EXPERIENCE**

2020- Research Fellow at Dana-Farber Cancer Institute Department of Medical

 Oncology. Department of Medical Oncology. Pediatric/Adult Hematopoietic

 Stem Cell Transplantation projects. Mentor: Jennifer Whangbo, MD, PhD.

2018-2020 Postdoctoral Student. University of Alabama, Birmingham (UAB). Department of Biology. School of Art and Sciences. Gut microbiome, aging, probiotics and neurodegenerative and metabolic diseases in mice, rats and *C. elegans*. Mentor: Liou Sun.

2017 Postdoctoral Scholar Internship. Dietrich School of Arts and Sciences, University of Pittsburgh, Pittsburgh, PA. Multiple advisors. This position allowed me to learn the last molecular biology and genetics techniques as well as cells culture methods.

2015-2018 Postdoctoral Fellow. National University of Rosario. School of Biochemistry. CONICET. Molecular Microbiology Lab. Mentor: Roberto Grau, PhD. *Bacillus subtilis*, gut microbiome, and aging in *C. elegans.*

2016 Research Postdoctoral Internship. Duke University, Durham, North Carolina. Molecular Genetics and Microbiology Lab. Mentor: Alejandro Aballay, PhD. This internship allowed me to learn techniques to study the microbiota effects in *C. elegans* nervous system.

2013-2015 Lab Business Manager. National University of Rosario. Molecular Microbiology Lab. Lab Director: Roberto Grau.

# 2006-2012 PhD in Biological Sciences. National University of Rosario. Pharmacology and Physiology Lab. Mentor: Liliana Monasterolo, PhD. GABAB agonist, baclofen and diabetes in rats.

2001-2005 Research Scientist in Pharmacology and Physiology Lab. National University of

 Rosario. Mentor: Liliana Monasterolo.

**TEACHING EXPERIENCE**

1997-1998 National University of Rosario. School of Biochemistry. Ad honorem Teacher Assistant for Biology Course.

2001-2004 National University of Rosario. School of Biochemistry Principal Instructor for Inorganic Chemistry Course.

2014-2016 National University of Rosario. School of Biochemistry Principal Instructor for Inorganic Chemistry Course.

2001-2018 National University of Rosario. School of Medicine. Instructor for Transport through membrane Course in the Doctoral degree of Biomedical Sciences.

# 2007-2008 Universidad Abierta Interamericana (UAI). Principal Instructor for Human Genetics Course.

2013-2018 National University of Rosario. School of Biochemistry. Instructor for Microbiology Course in the Bachelor degree in Biotechnology and Biochemistry.

2014-2018 National University of Rosario. School of Engineering. Instructor for Biotechnology of industrial microorganisms Course in the Master degree in Food Technology.

2020- Part-time Lecturer at Northeastern University. College of Sciences.

 Biotechnology Master Program.

**CLINICAL EXPERIENCE**

2017-2018 Centenario Hospital, Rosario, Argentina. Research Fellow in Clinical Trial

 design Team.

2016-2018 Universidad Interamericana- Hospital, Rosario, Argentina. Research Fellow in Drug Development Lab.

2020- Dana-Farber Cancer Institute. Medical Oncology Department.

**COACH AND CAREER ADVISOR EXPERIENCES**

2018- New York Academies of Sciences Mentor Programs.

2018- Individual Life Coaching and Executive Coaching Elena Spinal Master Coaching

 Program.

**GRANTS AND FELLOWSHIPS**

2015-2018 PDTS38 CONICET Postdoctoral fellowship. Mentor: Dr. Grau, Roberto. National University of Rosario. School of Biochemistry. Molecular Microbiology Lab.

2016 CONICET grant for Postdoctoral Short Research Internship. 3 months. Duke University, Durham, North Carolina, US. Mentor: Aballay, Alejandro. 3000 dollars and benefits.

2016 Jackson Lab Fellowship to attend Advance Course of Surgical Techniques. Bar Harbor, Maine. US. 2500 dollars.

2016 EMBO Grant to attend the course Small Brains Big Ideas, Chile.

**HONORS AND AWARDS**

2010 Best student in the Course Urology and Oncology. National University of Mendoza, Mendoza, Argentina.

2012 International Cell culture techniques Course. Fellowship to attend it. Pasteur Institute, Montevideo, Uruguay.

2015-2018 Mutual Carlos Pellegrini, Rosario, Santa Fe, Argentina. Best Young Researcher of National university of Rosario. 5000 dollars each year.

2017 Award of Excellence in Science as a first author of “Bacillus subtilis biofilm extends Caenorhabditis elegans longevity through a downregulation of the insulin-like signaling pathway” a project of national and international relevance for human quality of life and longevity. Municipalidad de Rosario. Santa Fe Government.

 **CONTRIBUTIONS TO SCIENCE**

1. **GABAergic system and renal function.**

In this project we discovered that the “in vivo” administration of Baclofen, a GABAb agonist, induces disturbances in the renal tubular function by acting at different segments of the nephron. We also reinforced the hyphotesis that the component of the GABAergic system present in the kidney may be involved in modulatory mechanisms of the renal function. Also, we introduced an important approach to the effects of baclofen in clinic.

**Donato V**, Pisani G B, Trumper L, Monasterolo L. 2013. Effects of "in vivo" administration of baclofen on rat renal tubular function. **Eur. J Pharmacol.** 715 (1 - 3): 117-122.

1. **Microbial Biofilms.**

The model used in this project was Bacillus subtilis and we wanted to see how bacteria make the collective decision to move over or stay attached to surface. We discover that biofilm format and social sliding motility share the same structural components and the Sp0A regulatory network via sensors kinases, KinB and KinC.

Roberto R. Grau, Paula de Oña, Maritta Kunert, Cecilia Leñini, Ramses Gallegos-Monterrosa, Eisha Mhatre, Darío Vileta, **Verónica Donato**, Theresa Hölscher, Wilhelm Boland, Oscar P. Kuipers, and Ákos T. Kovács. 2015. A duo of potassium-responsive histidine kinases govern the multicelular destiny of *Bacillus subtilis*. **mBio**. Jul-Aug; 6(4): e00581-15.

1. **Beneficial bacteria and host longevity.**

We studied how beneficial bacteria, specially Bacillus subtilis affect host longevity in C. elegans. We discovered the molecular mechanism mediating this relationship and the importance of the biofilm formation in the host gut to increase host lifespan. Also we discoverd that the quorum sensing pentatpetide CSF and the bacterial nitric oxide are also importance in this lifespan increase. The results of this study highlights the capacity these bacteria have to form spores that makes them easy to incorporate into any type of food or drink that will produce the desired effect if they are consumed regularly.

**Verónica Donato**, Sebastián Cogliati, Facundo Rodríguez Ayala, Juan Gabriel Costa, Cecilia Leñini and Roberto Grau. 2016. "Bacillus subtilis biofilm extends Caenorhabditis elegans longevity through a downregulation of the insulin-like signaling pathway". Nature Communications. 2017 Jan 30;8:14332. doi: 10.1038/ncomms14332.

1. **Bacterial biofilms.**

This e-book allowed me to introduce my approach to bacteria biofilms and to enhance the concept that bacteria are communities and not individual unicellular units.

**Verónica Donato**. El Mundo de los Biofilms. Editorial: Autores de Argentina. 2017. e**Book** <http://autoresdeargentina.com/el-mundo-de-los-biofilms-veronica-donato/>

1. **Gut microbiome and aged-related diseases.**

The goal of this study is to characterize the gut microbiome composition using 16S rRNA sequencing from the fecal samples of growth hormone releasing hormone Knockout mice and control mice at different age.

**Donato,Veronica**; Sharma,Ashok; Gomez,Andres and Sun,Liou.Age- and sex-dependent alterations in gut microbiome of the long-lived growth hormone-releasing hormone knockout mice. Under review.

**PROFESSIONAL SOCIETIES AND MEMBERSHIPS**

2011-2016 American Association of Cancer Research, Associate member.

2014-2017 Argentina Society of General Microbiology.

2014-2019 American Society of Microbiology postdoctoral membership.

2014-2019 American Society of Genetic postdoctoral membership.

2017-2019 American Association for the Advancement of Sciences.

2018-2019 National Postdoc Association (NPA).

2018-2019 New York Academy of Sciences.

2020- American Society of Hematology

**COUNCILS AND COMMITTEES**

2017-2018 Scientific writer to Micronow (American Association for the (Advancement of Sciences).

2018-2020 Leader of the Genetics Society Association Early Career Scientist Steering Committee.

2018-2019 Mentor in the Skype a Scientist Program.

2018- 2019 Mentor at Junior Academy of the New York Academy of Sciences.

2019- 2020 Mentor in the STEM U Program New York Academy of Sciences.

2019-2020 Mentor in 1000 GIRLS, 1000 Future Program New York Academy of Sciences.

2019-2020 Mentor-Mentor Program New York Academy of Sciences.

2019- Harvard Medical School and Harvard ex alumni.

**EDITORIAL BOARD MEMBERSHIPS**

2017- Editorial Board Member in the Clinical Immunology and Research Journal.

2018- Editorial Board Member in the International Journal of Microbiology.

2018- Reviewer Board Member in the Journal of Genetics, Genetics Society of America.

**LANGUAGES**

Spanish (native), English, Italian, French.