

Agalic Rodriguez-Duboc

MD, PHD IN DEVELOPMENTAL NEUROBIOLOGY

Trained as a general physician and passionate about research, I am currently finalizing my PhD dissertation in the field of cellular and molecular neuroscience. My research is focused on cerebellar development and apnea of prematurity.

agalic.rd@gmail.com

76000 Rouen, France

Date of birth 10/05/1990

https://agalic-rd.com/

French

Languages

French

Native language

Spanish

Native language

English

Native proficiency

Norwegian

Intermediate (CEFR: B1)

Italian

Beginner (CEFR: A2)

German

Beginner (CEFR: A2)

Assets

Determination

Creativity

Curiosity

Autonomy

Professional interests

Molecular biology and signaling pathways

Neurosciences, neurology, psychiatry

Preventive medicine and public health

Personal interests

Reading and literature

Painting and drawing

Knitting and crochet

Nature and sustainability

Education

From September 2019 to June 2023 PhD in Molecular and Cellular aspects of Biology Rouen University Mont-Saint-Aignan, France

Specialty in Neurosciences

From October 2019 to November 2019

Certification in Animal Experimentation

Paris Descartes Paris, France

From September 2018 to June 2019 Master's in Research: Neurosciences (MSc) Rouen University Mont-Saint-Aignan, France

Molecular, Cellular, and Integrated Neurosciences - Cum Laude

October 2017

USMLE (United States Medical Licensing Examination) Step 1 National Board of Medical Examiners Philadelphia, PA, USA

From September 2011 to June 2017 Medical Doctor (MD)

PUCMM University Santiago, Dominican Republic

Magna Cum Laude

Research Experience

From September 2019 to May 2023 **Doctoral Candidate**

INSERM U1245 CBG Rouen, France

- Topic: "Cellular, molecular and vascular alterations induced by apnea of prematurity in the murine cerebellum."
- Advisor: Dr. Delphine Burel.

From January 2019 to June 2019

Master's Research Internship

Inserm U1239 DC2N Mont-Saint-Aignan, France

- Topic: "Effects of perinatal hypoxia on the expression of genes involved in oxidative stress.".
- Advisor: Dr. Delphine Burel.

From August 2015 to April 2017

Medical Dissertation

Departamento de Investigación, PUCMM University Santiago de los Caballeros, Dominican Republic

- Topic: "Psychological factors associated with nicotine addiction in college students."
- Advisor: Dr. Zahíra Quiñones de Monegro.

From March 2014 to December 2014

Research Assistant Experience

Laboratory of Nanosciences, PUCMM University Santiago de los Caballeros, Dominican Republic

- Topic: "Hypercaloric effect of biofunctionalized carbon nanotubes as a photothermal agent on Staphilococcus aureus."
- Advisor: Dr. Oliver Pfaff.

Publications

- Leroux S, Rodriguez-Duboc A, Arabo A, Basille-Dugay M, Vaudry D, Burel D. 2022. Intermittent hypoxia in a mouse model of apnea of prematurity leads to a retardation of cerebellar development and long-term functional deficits. Cell Biosci. 12(1):148.
- Rodriguez-Duboc A, Basille-Dugay M, Debonne A, Vaudry D, Burel D. Apnea of prematurity induces oxidative stress-mediated transcriptional changes in the murine cerebellum (in preparation).

Posters

LARC Neurosciences 2019 Effects of perinatal hypoxia on oxidative stress-related gene expression in the murine cerebellum.

JED EDNBISE 2022 Apnea of Prematurity induces molecular, cellular, and vascular alterations in the murine cerebellum: focusing on angiogenesis.

Talks

JED EDNBISE 2021 Therapeutic potential of neurotrophic factors on cellular and molecular alterations induced by Apnea of Prematurity in the murine cerebellum.

ISTW Disabilities and Integration 2022

Cellular and molecular alterations induced by Apnea of Prematurity in the murine cerebellum.

Computer skills

Photoshop	
Cytoscape	
IMARIS	
R	
PRISM	
lmageJ/Fiji	
SPSS	
Python	

Teaching and Supervision

From September 2019 to March 2023

Supervision of Students and Interns

Rouen University Mont-Saint-Aignan, France

- Supervision of a MSc intern during 3-month
- Training of several students rotating through the laboratory

From October 2014 to November 2015

Teaching Assistant

PUCMM University Santiago, Dominican Republic

- Topics: Anatomy, Embryology, and Histology.
- Lab and practical sessions

Medical Experience

From March 2017 to May 2017

Social and Family Medicine Internship

Centro de Salud Integral Bella Vista Dominican Republic

HIV Clinic; Epidemiology; ER

From October 2016 to February 2017

Surgery and Pediatrics Internships

Hospital Metropolitano de Santiago Dominican Republic Surgery; Pathology; Oncology; Pediatric and Neonatal ICU

From August 2016 to March 2017

OB/GYN and Psychiatry Internships

Hospital Regional Universitario José María Cabral y Báez Santiago de

los Caballeros, Dominican Republic

Peripartum; Partum; Ambulatory / Consults

From May 2016 to August 2016

Internal Medicine Internship

Saint Barnabas Hospital New York, NY, United States Neurology; Rheumatology; Pneumology; Nephrology

Practical Skills

Laboratory and Experimentation

- Preparation and mounting of anatomo-pathological samples
- Bacterial culture (agars, selective media, antibiogram)
- Preparation and analysis of blood smears
- Molecular biology (RNA extraction, reverse transcription...)
- Laser capture microdissection
- Quantitative RT-PCR
- Pipetting system robot programming
- Confocal microscopy
- Immunohistochemistry
- Transparisation and tissue clearing

Research and Communication

- Experimental design
- Statistical modeling (GLM, GLMM...)
- Scientific communication
- Theoretical and practical classes
- Writing scientific reports
- Scientific illustration
- Grant application writing
- Translation and simultaneous interpretation

Surgery and clinical skills

- Minor surgery
- Pre and post-operative follow-up
- Complete physical examination
- Differential diagnosis
- Pharmacology