



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 neurosciences. My project is focused on cerebellar development and apnea of prematurity.

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🏠 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: A1)

German

Beginner (CEFR: A1)

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 May 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 05 Panthéon, 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](#) 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, Université PUCMM](#) Santiago de los Caballeros, République Dominicaine

- 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, République Dominicaine

- Topic: "Hypercaloric effect of biofunctionalized carbon nanotubes as a photothermal agent on *Staphylococcus 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.<https://doi.org/10.1186/s13578-022-00869-5>
- **Rodriguez-Duboc A**, Rivière M-A, Basille-Dugay M, Debonne A, 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

ImageJ/Fiji

SPSS

Python

Teaching and Supervision

From October 2014 to November 2015

Teaching Assistant
PUCMM University Santiago, Dominican Republic
Anatomy, Embryology, and Histology.

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

Medical Experience

From May 2016 to August 2016

Internal Medicine Internship
Saint Barnabas Hospital New York, NY, États-Unis
Neurology; Rheumatology; Pneumology; Nephrology

From August 2016 to March 2017

OB/GYN and Psychiatry Internships
Hospital Regional Universitario José María Cabral y Báez Santiago de los Caballeros, République Dominicaine
Peripartum; Partum; Ambulatory / Consults

From October 2016 to February 2017

Surgery and Pediatrics Internships
Hospital Metropolitano de Santiago République Dominicaine
Surgery; Pathology; Oncology; Pediatric and Neonatal ICU

From March 2017 to May 2017

Social and Family Medicine Internship
Centro de Salud Integral Bella Vista République Dominicaine
HIV Clinic; Epidemiology; ER

Practical Skills

Laboratory and Expérimentation

- 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 PCR (Techniques, Robot, Analysis...)
- Conventional microscopy
- Immunohistochemistry
- Transparisation

Research and Communication

- Research methodology and statistical analysis
- Scientific presentation and communication
- Theoretical and practical teaching
- 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