BIOGRAPHICAL SKETCH

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NAME: Millissia Ben Maamar

eRA COMMONS USER NAME (credential, e.g., agency login):

POSITION TITLE: Research Associate / Lab Manager

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE	Completion Date	FIELD OF STUDY
Washington State University	Postdoc	2016	Epigenetics
V.A.S. Doctoral School (Rennes - France)	PhD	2015	Reproduction & Toxicology
François Rabelais University, (Tours - France)	MSc	2012	Reproduction & Development
Mont-Saint-Aignan University, (Rouen - France)	BSc	2010	Biochemistry & molecular biology
Medicine School, (Rouen - France)	PCEM1	2007	Medicine
Gustave Flaubert High School, (Rouen - France)	Baccalaureat	2005	Biology

A.
Personal Statement
I have experience in reproductive and developmental biology in the testis. This includes organotypic cultures, hormonal assays, qPCR, PCR, libraries, MeDIP, ChIP, perform statistical tests, and summarize the analysis results. My previous research has used hormonal assays, immunohistochemistry and molecular biology techniques to identify links between *in utero* exposure to chemicals and testis diseases (such as hypospadias, cryptorchidism and testis cancer). I am now involved in the field of epigenetic transgenerational inheritance with a more specific focus on histones.

B.
Positions and Honors

2011	CHRU Lille, Spermatology Laboratory, Intern Reproduction (France)
2012	INSERM, IRSET U1085 -Research Group on Human and Mammalian Reproduction, Rennes I University, Intern Reprotoxicology (France)
2012-2015	IRSET Work, Health and Environment Research Institute, Rennes I University, PhD student, Reproduction & Toxicology (France)
2016-2018	Postdoctoral Research Associate in Dr. Michael K. Skinner's Laboratory, Washington State University
2018-2019	Research Associate / Lab Manager in Dr. Michael K. Skinner's Laboratory, Washington State University

C.
Contributions to Science
https://www.ncbi.nlm.nih.gov/pubmed/?term=ben+maamar+m

Major Contributions:

(1) Elucidation of epigenetic transgenerational inheritance mechanisms.

Ben Maamar M, Sadler-Riggleman I, Beck, D, McBirney M, Nilsson, E, Klukovich R, Xie Y, Tang C, Yan W & Skinner MK. (2018) Alterations in sperm DNA Methylation, Non-Coding RNA expression, and histone retention mediate Vinclozolin induced epigenetic transgenerational inheritance of disease. Environmental Epigenetics 4(2):1-19, dvy010. PMID: 29732173

Ben Maamar, M, Sadler-Riggleman, I, Beck, D & Skinner, MK. Epigenetic Transgenerational Inheritance of Altered Sperm Histone Retention Sites. Sci Rep. 2018 Mar 28;8(1):5308. PMID: 29593303

Skinner MK, **Ben Maamar M**, Sadler-Riggleman I, Beck D, Nilsson E, McBirney M, Klukovich R, Xie Y, Tang C, Yan W. Alterations in Sperm DNA Methylation, Non-coding RNA and Histone Retention Associate with DDT Induced Epigenetic Transgenerational Inheritance of Disease. Epigenetics Chromatin. Epigenetics Chromatin. 2018 Feb 27;11(1):8. PMID: 29482626

(2) Elucidation of endocrine disruption on fetal testis function

Ben Maamar M, Lesné L, Desdoits-Lethimonier C, Coiffec I, Hennig K, Kristensen DM, Lavoué V, Antignac JP, Le Bizec B, Chevrier C, Dejucq-Rainsford N, Mazaud-Guittot S and Jégou B (2016) Ibuprofen results in alterations of human fetal testis development. Sci Rep. 2017 Mar 10;7:44184. PMID: 28281692

Ben Maamar M, Lesné L, Desdoits-Lethimonier C, Coiffec I, Lassurguère J, Lavoué V, Deceuninck Y, Antignac JP, Le Bizec B, Perdu E, Zalko D, Pineau C, Chevrier C, Dejucq-Rainsford N, Mazaud-Guittot S, Jégou B. (2015) An investigation of the endocrine-disruptive effects of bisphenol a in human and rat fetal testes. PLoS One. 23;10(2):e0117226. Erratum in: PLoS One. 2015;10(5):e0128051. PMID: 25706302

Mazaud-Guittot S, Nicolas Nicolaz C, Desdoits-Lethimonier C, Coiffec I, **Ben Maamar M**, Balaguer P, Kristensen DM, Chevrier C, Lavoué V, Poulain P, Dejucq-Rainsford N, Jégou B. (2013) Paracetamol, aspirin, and indomethacin induce endocrine disturbances in the human fetal testis capable of interfering with testicular descent. J Clin Endocrinol Metab. 98(11):E1757-67. PMID: 24030937

(3) Elucidation of endocrine disruption on fetal ovary function

Leverrier-Penna S, Mitchell RT, Becker E, Lecante L, **Ben Maamar M**, Homer N, Lavoué V, Kristensen DM, Dejucq-Rainsford N, Jégou B, Mazaud-Guittot S. Ibuprofen is deleterious for the development of first trimester human fetal ovary ex vivo. Hum Reprod. 2018 Feb 2. doi: 10.1093/humrep/dex383.

(**4**) Education

Skinner MK, **Ben Maamar M**, Sadler-Riggleman I (2018) Semen Analysis: Assaying Sperm Epigenetics in: Encyclopedia of Reproduction. 2nd. Edition, Ed: MK Skinner. Elsevier. Vol 5, Ch 25 (ePub). https://doi.org/10.1016/B978-0-12-801238-3.64846-8

Skinner MK, Kubsad D, **Ben Maamar M** (2018) Developmental Epigenetic Analysis of Sperm in: Encyclopedia of Reproduction. 2nd. Edition, Ed: MK Skinner. Elsevier. Vol 5, Ch 46 (ePub). https://doi.org/10.1016/B978-0-12-801238-3.64864-X

Nilsson E, Ben Maamar M, Skinner MK (2019) Definition of Epigenetic Transgenerational Inheritance and Biological Impacts. Transgenerational Epigenetics. Editor: Trygve Tollefsbol. Publisher: Elsevier (accepted – in press, publication date June 28, 2019)

D.
Research Support
No independent funding