

CURRICULUM VITAE

Family name : CASSIM
First name : Shamir

Professional address : CENTRE SCIENTIFIQUE DE MONACO
8 Quai Antoine 1er
MC 98000 MONACO

e-mail : scassim@centrescientifique.mc
shamir.cassim@umontreal.ca

SUMMARY

- Strong background in oncology and metabolism.
- Good scientific communication ability, knowledge, and networking.
- Skilled in independent project management and valorisation of the results.
- Understand the scientific rationale and clinical issues related with the project targeted.
- Research and analysis of scientific literature.
- Excellent organizational and time management skills.
- Writing scientific reports, research protocols.
- Demonstrate ability to work within tight and strict deadline.

EDUCATION

2010 – 2012 Bachelor's degree health sciences, université Évry, France.
2012 – 2013 Master 1 health biology, Immunology specialty, université Paris 7 Diderot, Paris, France.
2013 – 2014 Master 2 Advanced Immunology, Institut Pasteur, Paris, France.
2014 – 2018 Junior research fellow/PhD candidate, Biomedical Sciences, université de Montréal, Canada. *Glucose metabolism of Hepatocellular Carcinoma cells*, CRCHUM.

TRAINING

06/2011 – 08/2012 Breast cancer molecular basis in the laboratory of Dr. **Hugues de Thé**, CNRS, Paris, France.
06/2012 – 07/2012 Role of IL-2 in autoimmune diabete in the laboratory of Dr. **David Klatzmann**, INSERM, Paris, France.
06/2013 – 07/2013 Study of degenerative retinal diseases in the laboratory of Dr. **Marc Peschanski**, I-Stem, Genopole d'Evry, France.

08/2013 – 08/2013	Student visitor in the laboratory of Dr. Dhanjay Jhurry , Polymers in Medicine and Polymer Therapeutics, MSIRI, Mauritius.
09/2013 – 06/2014	Role of FAM65b in T cell migration in the laboratory of Dr. Alain Trautmann and Dr. Georges Bismuth , INSERM, Paris, France.
09/2014 – 10/2018	Role of glucose metabolism in the tumorigenicity of Hepatocellular Carcinoma cells in the laboratory of Dr. Marc Bilodeau , CRCHUM, Montreal, Canada.
01/2019 – 03/2019	Visiting Scientist - Understanding how host metabolism regulates Toxoplasma infection, Max Planck Institute for Biology of Ageing, Cologne, Germany.
04/2019 – to date	Post-doctoral Fellow - Elucidating metabolic adaptations and redox biology of Pancreatic Cancer in the laboratory of Dr. Jacques Pouysségur , Centre Scientifique de Monaco, Principauté de Monaco.

SEMINAR PRESENTATIONS

10/2016	Mitochondrial metabolism is combined with the Warburg Effect in HCC cells, 7th World Congress on Targeting Mitochondria, Berlin, Germany.
11/2016	From in vivo to in vitro: Primary hepatocytes display major metabolic alterations during the isolation procedure, The Liver Meeting 2016®, American Association for the Study of Liver Diseases, Boston, USA.
03/2017	Targeting the Warburg Effect in Hepatocellular Carcinoma Cells, Canadian Digestive Diseases Week, Banff, Canada.
10/2017	Establishment of Hepatocellular Carcinoma derived from a cancer stem cell line is characterized by significant metabolic reprogramming, The Liver Meeting 2017®, American Association for the Study of Liver Diseases, Washington, USA.
10/2017	Targeting the Warburg effect prevents cancer metabolic reprogramming in hepatocellular carcinoma cells and promotes cell death, The Liver Meeting 2017®, American Association for the Study of Liver Diseases, Washington, USA.
10/2017	Cancer metabolic reprogramming allows hepatocarcinoma cells to efficiently adapt to their microenvironment, The Liver Meeting 2017®, American Association for the Study of Liver Diseases, Washington, USA.
02/2018	Establishment of Hepatocellular Carcinoma in vivo is associated with major metabolic reprogramming, The Canadian Liver Meeting 2018®, Toronto, Canada.
02/2018	Metabolic reprogramming of hepatocellular carcinoma cells is mediated by a rearrangement in glucose transporters, The Canadian Liver Meeting 2018®, Toronto, Canada.

- 10/2018 Targeting the Warburg effect in Hepatocellular Carcinoma: An efficient way to potentiate cisplatin-induced anti-tumor effects, The Liver Meeting 2018®, American Association for the Study of Liver Diseases, San Francisco, USA.
- 03/2019 Seminar about the role of glucose metabolism in the tumorigenicity of Hepatocellular Carcinoma - Invited by Dr. Jacques Pouyssegur, Centre Scientifique de Monaco, Principauté de Monaco.

AWARDS & HONORS

- 10/2016 Poster of distinction From in vivo to in vitro: Primary hepatocytes display major metabolic alterations during the isolation procedure, The Liver Meeting 2016®, American Association for the Study of Liver Diseases, Boston, USA.
- 03/2017 Poster of distinction Targeting the Warburg Effect in Hepatocellular Carcinoma Cells, Canadian Digestive Diseases Week, Banff, Canada.
- 05/2017 Travel scholarship, CRCHUM, Université de Montréal.
- 02/2018 Poster of distinction Metabolic reprogramming of hepatocellular carcinoma cells is mediated by a rearrangement in glucose transporters, The Canadian Liver Meeting 2018®, Toronto, Canada.
- 05/2018 Scholarships from Université de Montréal to support the dissemination of research results.

AD HOC REVIEWER

<i>Cell cycle</i>	(2018-Today)
<i>Oncotarget</i>	(2018-Today)
<i>International Journal of Cancer</i>	(2018-Today)
<i>Aging</i>	(2018-Today)

REFEREED PAPERS

Highly tumorigenic hepatocellular carcinoma cell line with cancer stem cell-like properties. Lacoste B, Raymond VA, **Cassim S**, Lapierre P, Bilodeau M. *PLoS One*. 2017 Feb 2;12(2):e0171215. doi: 10.1371/journal.pone.0171215. eCollection 2017.

Novel Immunotherapies for Autoimmune Hepatitis. **Cassim S**, Bilodeau M, Vincent C, Lapierre P. *Front Pediatr*. 2017 Jan 26;5:8. doi: 10.3389/fped.2017.00008. eCollection 2017. Review

From *in vivo* to *in vitro*: major metabolic alterations take place in hepatocytes during and following isolation. **Cassim S**, Raymond VA, Lapierre P, Bilodeau M. *PLoS One*. 2017 Dec 28;12(12):e0190366. doi: 10.1371/journal.pone.0190366. eCollection 2017.

Metabolic reprogramming allows hepatocarcinoma cells to efficiently adapt and survive to a nutrient-restricted microenvironment. **Cassim S**, Raymond VA, Dehbidi-Assadzadeh L, Lapierre P, Bilodeau M. *Cell Cycle*. 2018 May 21;1-14. doi: 10.1080/15384101.2018.1460023.

Metabolite profiling identifies a signature of tumorigenicity in hepatocellular carcinoma. **Cassim S**, Raymond VA, Lacoste B, Lapierre P, Bilodeau M. *Oncotarget*. 2018; 9:26868-26883. <https://doi.org/10.18632/oncotarget.25525>.

Upregulation of Krebs cycle and anaerobic glycolysis activity early after onset of liver ischemia. Chan TS, **Cassim S**, Raymond VA, Gottschalk S, Merlen G, Zwingmann C, Lapierre P, Darby P, Mazer CD, Bilodeau M. *PLoS One*. 2018 Jun 14;13(6):e0199177. doi: 10.1371/journal.pone.0199177. eCollection 2018.

Fam65b phosphorylation relieves tonic RhoA inhibition during T cell migration. Megrelis L, El Ghoul E, Moalli F, Versapuech M, **Cassim S**, Ruef N, Stein JV, Mangeney M, Jérôme Delon J. *Front Immunol*. 2018 Sep 11;9:2001. doi: 10.3389/fimmu.2018.02001. eCollection 2018.

Oxaloacetate protects the liver from experimental ischemia and reperfusion injury by improving energy metabolism. Merlen G, Raymond VA, **Cassim S**, Lapierre P, Bilodeau M. *Liver Transpl*. 2019 Jan 21. doi: 10.1002/lt.25415.