

Danielle Badro, Ph.D.

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BIOGRAPHICAL SKETCH

Dr. Danielle Badro earned a B.S. degree in Biology from Saint Joseph University (USJ), Beirut, in 2002. She then completed her M.S. degree in Developmental Biology, in 2004, at the Faculty of Luminy, at the Université de la Méditerranée (Aix-Marseille 2) in Marseille. During that time, she was a trainee at La Timone Hospital in Marseille, the largest hospital in France, under the supervision of Professor Michel Fontes. The purpose of her work was to genetically modify the Polycystic Kidney Disease 1 gene for the production of mutant mice. In May 2009, Dr. Badro obtained a Ph.D. degree in Molecular and Cell Biology at the Université de Nice-Sophia Antipolis, under the supervision of Dr. Andreas Schedl. Her thesis research aims were to identify the transcriptional targets of WT1 in the developing kidney of mammals, and address their exact functions using mouse embryos. Her study was published in Nature Communications and included *ex vivo* analyses, microarray analyses, and CHIP procedures that uncovered the roles of the BMP and FGF signaling in the control of cell survival in the embryonic kidney.



After completing her Ph.D., Dr. Badro was appointed as a post-doc fellow in Human Genetics at the Lebanese American University in Beirut, and later in Molecular Cancerology at the Faculty of Medicine at the American University of Beirut. Beginning 2013, she started teaching Biology courses in Saint Joseph University (USJ), the Lebanese American University, the Lebanese University (Hadath and Fanar campuses) and AUST. In October 2015, she became a full-time Assistant Professor at the Faculty of Health Sciences at AUST, and is currently the Coordinator for the Graduate Program at the Faculty. Her research currently addresses tumorigenic events in human immortalized and transformed cells, using *in vitro* strategies and knockdown approaches in cells. She was recently awarded a grant by the Lebanese CNRS to investigate the use of nanoparticles in the treatment of aggressive types of metastatic breast cancers.

Over the past ten years, Dr. Badro has been a board and committee member for several NGOs in Lebanon. She has been working closely with cancer children, refurbishing hospital rooms in pediatric cancer wards and teaching the said children during their recovery time. She is an outdoor enthusiast; she summited Mount Kilimanjaro in September 2016 (#UP382150) and completed the GR20 180 km-trail in Corsica in June 2018 to raise awareness of the importance of early detection of cancer and raise funds for treatments.

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LIST OF RECENT PUBLICATIONS

1. Harajly M, Zalzali H, Nawaz Z, Ghayad SE, Ghamloush F, Basma H, Zainedin S, Rabeh W, Jabbour M, Tawil A, **Badro DA**, Evan GI, Saab R. p53 Restoration in Induction and Maintenance of Senescence: Differential Effects in Premalignant and Malignant Tumor Cells. *Mol Cell Biol*. 2015 Nov 23;36(3):438-51. doi: 10.1128/MCB.00747-15.
2. Motamedi FJ, **Badro DA**, Clarkson M, Lecca MR, Bradford ST, Buske FA, Saar K, Hübner N, Brändli AW, Schedl A. WT1 controls antagonistic FGF and BMP-pSMAD pathways in early renal progenitors. *Nat Commun*. 2014 Jul 17;5:4444. doi: 10.1038/ncomms5444. (Co-first authorship)
3. **Badro DA**, Douaihy B, Haber M, Youhanna SC, Salloum A, Ghassibe-Sabbagh M, Johnsrud B, Khazen G, Matisoo-Smith E, Soria-Hernanz DF, Wells RS, Tyler-Smith C, Platt DE, Zalloua PA; Genographic Consortium. Y-chromosome and mtDNA genetics reveal significant contrasts in affinities of modern Middle Eastern populations with European and African populations. *PLoS One*. 2013;8(1):e54616. doi: 10.1371/journal.pone.0054616. Epub 2013 Jan 30.
4. Grandjean V, **Badro DA**, Kiani J. RNA: a possible contributor to the 'missing heritability'. *Basic Clin Androl*. 2013 Nov 1;23:9. doi: 10.1186/2051-4190-23-9. eCollection 2013.
5. Hager J, Kamatani Y, Cazier JB, Youhanna S, Ghassibe-Sabbagh M, Platt DE, Abchee AB, Romanos J, Khazen G, Othman R, **Badro DA**, Haber M, Salloum AK, Douaihy B, Shasha N, Kabbani S, Sbeite H, Chammas E, el Bayeh H, Rousseau F, Zelenika D, Gut I, Lathrop M, Farrall M, Gauguier D, Zalloua PA; FGENTCARD Consortium. Genome-wide association study in a Lebanese cohort confirms PHACTR1 as a major determinant of coronary artery stenosis. *PLoS One*. 2012;7(6):e38663. doi: 10.1371/journal.pone.0038663. Epub 2012 Jun 20.
6. Ghassibe-Sabbagh M, Platt DE, Youhanna S, Abchee AB, Stewart K, **Badro DA**, Haber M, Salloum AK, Douaihy B, el Bayeh H, Othman R, Shasha N, Kibbani S, Chammas E, Milane A, Nemr R, Kamatani Y, Hager J, Cazier JB, Gauguier D, Zalloua PA; FGENTCARD Consortium. Genetic and environmental influences on total plasma homocysteine and its role in coronary artery disease risk. *Atherosclerosis*. 2012 May;222(1):180-6. doi: 10.1016/j.atherosclerosis.2012.02.035. Epub 2012 Feb 28.