

Amar ABDERRAHMANI,
04/10/1792, married, three children
Professor of Cell and Molecular Biology, Faculty of Medicine, Lille University
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Education:

1994 Bachelor of Biochemistry (University of Science and Technology of Lille, USTL, France)
1995 Military service in the French Navy army
1996 Master in Life Science at USTL and Certificate of Pharmaceuticals Chemistry at Faculty of Pharmacy, Lille 2 University
1996-1999 Ph. D. with the highest honors in Molecular Genetic at USTL under the direction of Prof. Philippe Froguel at the Pasteur Institute of Lille (Genetics of Multifactorial Diseases), 1 rue du Professeur Calmette, 59000-Lille Cedex, France: «*The MODY diabetes: Role of Hepatocyte Nuclear Factors HNF1 α and HNF3 β* »

Appointment:

1999-2004 First assistant (Botnar Center for Clinical Research, Internal medicine, CHUV-Hospital, Lausanne, Switzerland)
2004-2011 Head of Lab and project manager at the Department of Fundamental Neuroscience, formerly the department of Cellular Biology and Morphology, Rue du Bugnon 9, 1005 Lausanne, Switzerland.
2006-2017 Privat-Docent at the Faculty of Biology and Medicine from Lausanne University
2011-now Full Professor of Cell and Molecular Biology at Lille University (since 10/2017- elected at the Exceptional class level by the National University Committee (national rank top 5%)
2015-2018 Deputy Director of the UMR CNRS 8199 “Integrative Genomics and Modelling of Metabolic Diseases”
2015-2019 Honorary Senior Research, Imperial College London.
Since 2019 Editor-in-chief of All Life journal (formerly named as Frontiers in Life Science journal), (<https://think.taylorandfrancis.com/all-life/>). Coordinating and supervising 14 disciplines sections headed by that include Section Editors, associate editors and members >50 persons

Consulting & Membership & commitment in Professional & Scientific Organisation:

2002 Consulting in molecular and cell biology for Addex Pharmaceuticals, Plan-les-Ouates, Geneva
2007 Consulting for Glaxosmithkline, King of Prussia, Philadelphia, USA
2003-now Member of SFD (French Society of Diabetology)/ Formerly known as ALFEDIAM (Association de langue Française pour l'étude du diabète et des maladies métaboliques):
2015-2018 SFD Scientific Committee member: <http://www.sfdiabete.org/medical/vie-de-lassociation/conseil-scientifique/composition-du-conseil-scientifique>)
2005-now Member of the European association for the study of diabetes (EASD)
2006-2011 Member of the Swiss Society of Endocrinology and Diabetologia (SSED)
2016-now Elected member of academic and research board at Lille University
2016 Individual consultant for UNESCO (Program II/ Natural Sciences/ Strengthening capacity-building and innovation in science and technology)
2017-2020 Scientific Committee Member of EuroDia meeting (<http://www.ceed-diabete.org/fr/eurodia-meeting/>)

Honors:

2002 Recipient of the «Gabriel Baud award» by the Swiss University of Lausanne.
2003 Recipient of the «Young Investigator award, 2003» by the French ALFEDIAM/SFD society.
2004 Recipient of the «SERVIER Annual award, 2004» for basic research by Swiss Society of Endocrinology and Diabetologia (SSED)
2006 Recipient of the «Young independent investigator award grant» by the SSED.
2010 Recipient of Chair of Excellence from French National Agency of Research N° ANR-10-CEXC-005-01

2014

Recipient of the SFD-Novartis award

Grants:

Principal investigator (PI)

- 2004-2008 Swiss National Science Foundation Grant (SNSF) No: 3100A0-105425: «*Role of islet-brain 1/JNK-interacting protein-1 in glucose-induced insulin secretion*». (SNSF, homepage <http://www.projectdb.snf.ch/WebForms/Frameset.aspx>). Amount: 260'000.-CHF.
- 2006 Young Independent Investigator Research Grant from the SSED: «*Mechanisms of pancreatic β -cell dysfunction induced by oxidized Low Density Lipoprotein: Relevance for the molecular pathogenesis of Diabetes*». Amount: 50'000.- CHF
- 2007-2009 European Studies on Beta Cell Function and Survival, from European Foundation for the Study of Diabetes and Merck Sharp & Dohme (MSD): «*Role of human oxidized low density lipoprotein and high density lipoprotein in pancreatic β -cells: "Relevance for the molecular pathogenesis of Diabetes"*». Amount:
- 2008-2011 SNSF Grant No: 310000-121999. «*Role and regulation of islet-brain 1 in pancreatic β and adipose cells: Novel insights into the molecular pathogenesis of type 2 diabetes*». (SNSF homepage: <http://www.projectdb.snf.ch/WebForms/Frameset.aspx>).
- 2009 Novartis Foundation for the project: «*Role of the adipose cAMP early repressor (ICER) in the development of insulin resistance in obesity*».
- 2010-2014 Chair of Excellence from French National Research Agency N° ANR-10-CEXC-005-01 «*Role and Regulation of Islet Brain 1 in β -cells exposed to diabetogenic stressors*» Homepage: (http://www.agence-nationale-recherche.fr/fileadmin/user_upload/documents/aap/2010/selection/chex-selection-2010.pdf). (Amount: 450'000€)
- 2011-2013 European Regional Development Funds (ERDF), and Regional Council Nord Pas de Calais: «*Establishment of a new team in EGID for β -cells research and Diabetes*»: Amount: 580'000.- €
- 2014-2016 Lille Métropole Communauté Urbaine: «*Régulation of adipose HDACs in obese patients with type 2 diabetes. 2-years Salary Post-Doctorant: Dr. Julien Bricambert*
- 2014-2017 LABEX EGID ANR for emerging team.
- 2014 French Society of Diabetes-Novartis: «*JNK3 activation: New mechanism required for the cytoprotective effects of Exendin 4 in human and mouse islets of Langerhans*»:
- 2016 Leader of the workpackage 3 of the ANR proposal entitled «*The impact of gestational diabetes mellitus (GDM) upon the epigenetics of mother and newborn infant and long-term risk of type 2 diabetes*»
- 2017 French Society of Diabetes-MSD: «*From Insulin resistance to NASH: Role of the Growth Factor PDGFA in the hepatic function and glucose metabolism* »:
- 2017-2018 Institut Pasteur de Lille CPER CTRL Longevity (international peer reviewed project): «*Effect of a novel MET agonist for combating beta cell decline in type 2 diabetes*»
- 2019-2022 I-SITE ULNE Sustain project «**Betaprotect**»: *Effect of a novel MET agonist for combating beta cell decline in type 2 diabetes*
Grant from CNRS
Regional funding «*Actions d'initiatives régionales pour la recherche (airr)/Start-AIRR*» (prématuration project) : «*Improvement of insulin secretion by a peptide of Phyllomedusa Bicolor and its analogues and nanoparticles for the development of new diabetes drugs*»
Industrial Contract with Vitricell: Vitrification of Islets for clinical purpose
ANR MRSEI supporting the H2020 FET open Call «*Theranostic imaging of pancreatic islet for precision medicine of diabetes*»

As a co-PI:

- 2005-2008 SNSF No: 32-066892.01 «*High-Density Lipoproteins and Insulin-Secreting Cell Function*»: Pr. Gérard Waeber
- 2008-2011 SNSF No: 310030-122586. «*Contribution of the nuclear receptor protein ESRRgamma to insulin-secreting beta cell function*»: Pr. Gérard Waeber
- 2015-2016 Start-AIRR for the Interdisciplinary research project «*Transdermal insulin patch*»: Coordinator: Pr. Sabine Szunerits

2018	Co-PI in the “I-SITE ULNE Expand” « <i>Photothermal insulin delivery through the skin</i> »: Coordinator: Pr. Sabine Szunerits
2020	I-SITE ULNE PEARL. Coordinator: Pr. Sabine Szunerits

Teaching at University of Lausanne:

- Problem-based learning for M.D students (of 2nd year) in endocrinology and metabolism (since 2005, total 8 hours/ year, focused on “*Thyroid*” (4 hours) and “*cholesterol metabolism*” (4 hours)
- Master degrees (total 10 hours/ year): «*Physiology and Pathophysiology of diabetes*»
- Ex-cathedra lecture for the Master of biological and medical (MBM) option metabolism “*Glucose as a signal for metabolic regulation*”.

Teaching at Lille University:

- Since 2012, head and lecturer of the Master 1 “Health and Biology” entitled “**Regulation of the energy balance**” (40 hrs) and “**Unbalance of glucose metabolism, diabetes and obesity**” (40 hrs), at the Lille Faculty of Medicine
- Since 2019, teacher Physiology of organs (20 hrs, respiration, cardiovascular, kidney excretion, calcium homeostasis) at Faculty of Sciences and Technology
- Since 2017, teacher (2hr) at University Diploma “Aging” (Epigenetics)

Selected invited Lectures

- «*Model for identification of genes involved in the control of insulin secretion*» (Hôpital Hôtel-Dieu, Paris, France, 2002) and (Pasteur Institute of Lille, Lille, France, 2003)
- «*REST: A determinant for the differentiated phenotype of insulin-secreting cells*» (Sophia-Antipolis, France, 2003)
- «*The transcriptional repressor ICER: A key for beta cells to adapt insulin secretion in response to environmental cues*», invited in the 3rd CardioMet Symposium on the Metabolic Syndrome, March 30th 2007, Nestle Research Center, Vers-Chez-Les-Blanc
- Seminar of the Service of Endocrinology and Diabetologia «*Dysfunction of β -cells in type 2 diabetes: Role for lipoproteins*», (CHUV, Lausanne, 2007)
- Montreal Diabetes Research Center (Montreal, Canada, May 25th, 2007).
- Guest Seminar for the opening of the European Genomic Institute for Diabetes (EGID), Lille, France, (July 03rd 2009). «*Maintaining β -cell survival and function in Diabetes: Role for the JNK-interacting protein 1/Islet Brain 1*»
- Seminar in the «Genève-Lausanne-Grenoble-Lyon annual meeting»: «*The repressor ICER: role and therapeutic issue for β -cell failure evoked by diabetes stressors*» (Lausanne, October 15th 2010).
- Seminar at Faculty of Medicine (Lille, December 7th 2011): «*Obesity: an environmental source for metabolic diseases*».
- Seminar U1010 (Lille, December 6th 2012): «*Role for JNK in islet b-cells plasticity in pregnancy, obesity and diabetes*»
- Seminar at Faculty of Medicine (Lille, December 11th 2012): «*Role of the transcriptional ICER in insulin resistance associated with obesity*»
- Institute of Functional Genomic, INSERM 661, CNRS 5203, Montpellier 1 and 2 Universities (Montpellier, December 5th 2013) «*Compensatory mechanism of islet b-cells: Role for the JNK pathway*»
- Speaker at the session “Diabetes and the nervous system: an important crosstalk” in the 50th European Association for the Study of Diabetes Annual Meeting (Vienna, Austria, September 17th 2014): title “*Similarities between neuronal and pancreatic beta cells*”. (<http://www.easdvirtualmeeting.org/resources/18253>)
- Plenary Lecture at Speaker at the 2nd International Conference and Exhibition on Bioscience, Biotechnology and Bio-engineering , (Vienna, Austria, 11th November 2020): “Bioscience in Diabetes: Where do we go? ”

Editor and Reviewer

- **Reviewer of Grants for**
 - ❖ Regional council des “Hauts-de-France” (since 2015)
 - ❖ European Foundation for the Study of Diabetes-GlaxoSmithKline (since 2007)
 - ❖ Diabetes UK Research Grant (since 2014)
 - ❖ Swiss National Science Foundation (since 2015)
- **Regular reviewer for**
 - ❖ American Journal of Physiology-Endocrinology & Metabolism journal, Journal Cell and Biochemistry; Cellular and molecular Life sciences, Diabetologia, Molecular Metabolism, Journal of Molecular Endocrinology, Journal of Endocrinology, Brain Research Bulletin, The FEBS journal, PLoS one, Current Medicinal Chemistry, Frontiers in Cell and Developmental Biology, JCI.
- **Academic Editor**
 - ❖ Since 2011, PLoS one
 - ❖ Since 2015, Journal of Diabetes research (<http://www.hindawi.com/journals/jdr/osi/>; IF 2013: 3.5):
- **Editor-in-Chief- All Life**
 - ❖ Since 2019, <https://think.taylorandfrancis.com/all-life/>; coordinating 13 discipline sections a team gathering 55 board members including section and associate editors and board members)

Thesis director

-Dr. Mourad Ferdaoussi (1st January 2005-08th January 2009): «***Role and regulation of islet-Brain 1 in pancreatic β -cells***».

- ❖ Award for the best poster presentation (*Islet Brain 1 is required for glucose-induced insulin secretion and is regulated by the cAMP signalling pathways*) received in the meeting organised by the Swiss society of Endocrinology and Diabetologia (SSED), Bern, November, 2006
- ❖ Recipient of Faculty “Gabriel Baud” award, **December 2008**

Dr Dimitri Favre (1st June 2006-14th June 2011) : «***A role for the transcriptional repressor Icer in the pathogenesis of type 2 diabetes***»

- ❖ Award of the best oral presentation (*Human oxidized LDL cause a loss of insulin secretion by inducing the transcriptional repressor ICER*) at the 3rd Symposium of the Zurich Center for integrative Human Physiology, Zurich, August 2007
- ❖ Award of the best posters presentation at Day of Research at CHUV hospital, 2009 and 2010

Mrs Nicole Beeler: (1st February 2009-December 2012): «***Role of c-Jun Amino terminal Kinase signaling in pancreatic beta cells*** »

Mrs Saska Brajkovic (1st March 2009-December 2012) : « ***Role for JIP-1/IB1 in pancreatic beta-cell and adipocyte dysfunction in Type 2 Diabetes and Obesity*** »

Mrs Mathie Tenenbaum (1st October 2015-14th September 2018) «***Role of Serine-Threonine Kinase in pancreatic beta-cell***»

Referee for Master and Ph.D students

- Dr. Saida Abdelli: «*Why human islets die? Analysis of death signalling pathways during isolation and following cytokine treatments*» (April 20th 2006), Lausanne, Switzerland
- Dr. Dagmara Lagnaz: «*Regulation of the NaCl cotransporter and the SGK1-Nedd4-2 pathway*» (January 20th 2012) Lausanne, Switzerland
- Mrs Waechter Vanessa.: «*Role of microRNAs in control of β -cell functions*» (January 15th 2006) Lausanne, Switzerland
- Mrs Valeria Nesca: «*The role of microRNAs in the control of β -cell proliferation and survival*» (December 08th 2008) Lausanne, Switzerland
- Mr Julien Dubuis: «*Effet des protéines sur l'altération du métabolisme des lipides induite par le fructose*». (January 09th 2009) Lausanne, Switzerland

- Mrs Delphine Jacot-Descombes: «*Are women protected against deleterious effects of fructose*». (January 09th 2009) Lausanne, Switzerland
- Mr Philippe Diderich: «*Understanding the protective mechanisms induced by the RasGAP derived fragment N*». (January 15th 2010) Lausanne, Switzerland
- Mr David Bovard: «*Post-translational modification of the IGF1R by the GLP-1 metabolic pathway in beta cells*». (January 27th 2010) Lausanne, Switzerland
- Mr Thierry Bouduban: «*Study of novel regulators in adipose tissue development*» (January 27th 2010) Lausanne, Switzerland
- Mr Darko Maric: «*Role of Shb in the function of RasGAP fragment N*» (December 20th 2010) Lausanne, Switzerland
- External expert for «*Habilitation à Diriger des Recherches*», of Dr Cyril Couturier. (09th October 2009), Lille, France.
- External expert for the thesis of Mr. Johan Baccart (June 08th 2010). Lille, France
- Dr Sophie Lecompte: «*Rôle du gene PROX1 dans le Diabète de type 2*» (December 4th 2012), Lille, France
- Dr Adrien Sterkers: «*La Greffe d'îlots pancréatique en intramusculaire: de l'animal à la Clinique*» thesis defense (september 13th 2013), Lille, France
- Dr Sofia Gargani: «*Adaptive changes of human islets to an obesogenic environment in the mouse*» (September 17th 2013), Lille, France
- As the president of the jury, Dr Pierrette Perimenis, «*Prolactine Placentaire et anomalies de croissance au cours du diabète maternel*» thesis defense (September 30th 2014), Lille, France
- As the president of the jury «*Habilitation à Diriger des Recherches*», of Dr Bernadette Neve. (June 03th 2015), Lille, France.
- External Expert for Dr. Morgane Roussel's Ph.D. thesis: «*Modulation du Trafficking et de la signalization du récepteur au GLP-1 sur la cellule bêta pancréatique par un traitement aux glucocorticoïdes*» (Montpellier, December 15th 2015).
- Expert for the Dr. Sarah Ducastel Pharmacist's thesis «*Déréguler le récepteur nucléaire FXR dans l'intestin : une nouvelle cible intéressante dans le traitement du diabète de type 2 ?* » (June 24th 2016)
- External expert for the Dr. Baroj Abdouklari 's thesis «*The eukaryotic translation initiation factor 2, a hero turned villain in β cells* » (ULB Brussels, April 19th 2017)
- As member of the Jury "aggregation" of Dr Pierrette Perimenis "*Diabète Maternel: le role clé du Placenta*" (31th may 2018)

Chairman of meetings

- Session for basic research at the national annual meeting organized by Swiss society of Endocrinology and Diabetology, Bern 2010
- Chairman of the symposium "insulin secretion" in the annual meeting of Diabetologia SFD, scheduled in Bordeaux, 2015/Lyon, 2016/Lille, 2017/Nantes, 2018).
- Chairman in the 1st international Symposium Research on Healthy Ageing (Lille, 8-9th December 2016)
- President, organizer and chairman of the French Islet study group (Lille, 2017 and Nantes, 2018). The meeting is yearly organized as a satellite of the National Meeting of Diabetes SFD approved by the SFD
- Chairman of the 26th European Group for the Study of Insulin Resistance (Lille, 6-7th June 2018)
- Chairman of the session: "Cell Therapy and Type 1 diabetes" at the 3rd EuroDia Meeting organised by CEED (Strasbourg, 21-22th November 2019)

BIBLIOGRAPHY-PUBLICATION LIST

<http://www.researcherid.com/rid/O-3124-2017> (119 publications)

Selection of original peer reviewed publications (n= 62)

1. Tenenbaum M, Plaisance V, Boutry R, Pawlowski V, Jacovetti C, Sanchez-Parra C, Ezanno H, Bourry J, Beeler N, Pasquetti G, Gmyr V, Dalle S, Kerr-Conte J, Pattou F, Hirai SI, Regazzi R, Bonnefond A, Froguel P and **Abderrahmani A**. The Map3k12 (Dlk)/ JNK3 signaling pathway is required for pancreatic beta-cell proliferation during postnatal development. **Cell and Molecular Life Science**. Accepted
2. Chengnan L, Ye R, Pagneux Q, Barras A, Hennuyer N, Staels B, D. Caina Aysabucha D, Avila Osses J, **Abderrahmani A**, Plaisance V, Pawlowski V, Li M, Boukherroub R, Melinte S, Szunerits S. Electrothermal patches driving the transdermal delivery of insulin. **Nanoscale Horizon**. 2020 Apr 1;5(4):663-670
3. Chengnan L, Pagneux Q, Voronova A, Barras A, **Abderrahmani A**, Plaisance V, Pawlowski V, Hennuyer N, Staels B, Rosselle L, Skandrani N, Li M, Boukherroub R, Szunerits S. Near-Infrared Light activatable hydrogels for metformin delivery. **Nanoscale**, 2019 Aug 29;11(34):15810-15820.
4. **Amar Abderrahmani**, Loïc Yengo, Robert Caiazzo, Mickaël Canouil, Stéphane Cauchi, Violeta Raverdy, Valérie Plaisance, Valérie Pawlowski, Stéphane Lobbens, Julie Maillat, Laure Rolland, Raphael Boutry, Gurvan Queniat, Maxime Kwapich, Mathie Tenenbaum, Julien Bricambert, Sophie Saussenthaler, Elodie Anthony, Pooja Jha, Julien Derop, Olivier Sand, Iandry Rabearivelo, Audrey Leloire, Marie Pigeyre, Martine Daujat-Chavanieu, Sabine Gerbal-Chaloin, Tasnim Dayeh, Guillaume Lassailly, Philippe Mathurin, Bart Staels, Johan Auwerx, Annette Schürmann, Catherine Postic, Clemens Schafmayer, Jochen Hampe, Amélie Bonnefond, François Pattou et Philippe Froguel. Increased hepatic PDGF-AA signaling mediates liver insulin resistance in obesity associated type 2 diabetes. **Diabetes**, 2018. Jul;67(7):1310-1321. doi: 10.2337/db17-1539. Epub 2018 May 4.
5. Perimenis P*, Gosset P, Eury E¹, Storme L, Froguel P, **Abderrahmani A*** and Vambergue A. Regulation of decidual PRL, vasoinhibins and vascularization in the placenta during gestation in the diabetic rat. **Accepted in Annals of Reproductive Medicine and Treatment**, 2017. *Corresponding authors
6. Saeed S, Bonnefond A, Tamanini F, irza MU, Manzoor J, Qasim M. Janjua QM, Din SM, Gaitan J, Milochau A, Durand E, Vaillant E, Haseeb A, De Graeve F, Rabearivelo I, Sand O, Queniat G, Boutry R, Schott DA, Ayesha H, Ali M, Khan WI, Butt TA, Rinne T, Stumpel C, **Abderrahmani A**, Lang J, Arslan M and Froguel P. Loss-of-function mutations in *ADCY3* cause monogenic severe obesity. **Nat Genet**. 2018 Feb;50(2):175-179.
7. Fatou K Ndiaye, Ana Ortalli, Mickaël Canouil, Marlène Huyvaert, Clara Salazar-Cardozo, Cécile Lecoœur, Marie Verbanck, Valérie Pawlowski, Raphaël Boutry, Emmanuelle Durand, Iandry Rabearivelo, Olivier Sand, Lorella Marselli, Julie Kerr-Conte, Vikash Chandra, Raphaël Scharfmann, Odile Poulain-Godefroy, Piero Marchetti, François Pattou, **Amar Abderrahmani**, Philippe Froguel & Amélie Bonnefond. Expression and functional assessment of candidate type 2 diabetes susceptibility genes identify four new genes contributing to human insulin secretion. **Molecular Metabolism**, 2017 Apr 8;6(6):459-470. doi: 10.1016/j.molmet.2017.03.011
8. Teodorescu F, Quéniat G, Foulon C, Lecoœur M, Hubert T, **Abderrahmani A**, Boukherroub R and Szunerits S. Transdermal skin patch based on reduced graphene oxide: a new approach for photothermal triggered permeation of ondansetron across porcine skin. **Journal of Controlled Release**, 2016 Oct 27. pii: S0168-3659(16)31081-1. doi: 10.1016/j.jconrel.2016.10.028. [Epub ahead of print]
9. Hivelin C, Béraud-Dufour S, Devader C, **Abderrahmani A**, Moreno S, Moha ou Maati H, Djillani A, Heurteaux C, Borsotto M, Mazella J, and Coppola T. Potentiation of calcium influx and insulin secretion in

pancreatic beta cell by the specific TREK-1 blocker Spadin. **J. Diabetes Res**, 2016;3142175. doi: 10.1155/2016/3142175. Epub 2016 Dec 25

10. Teodorescu F, Oz Y, Quéniat G, **Abderrahmani A**, Sanyal R, Sanyal A, Boukherroub R and Szunerits S. Photothermally triggered on-demand insulin release from reduced graphene oxide modified hydrogels. **Journal of Controlled Release**, 2016, Nov 30;245:137-146. doi: 10.1016/j.jconrel.2016.11.029. [Epub ahead of print].
11. Bricambert J, Favre D, Brajkovic S, Bonnefond A, Boutry R, Salvi R, Plaisance V, Chikri M, Chinetti-Gbaguidi G, Staels B, Giusti V, Caiazzo R, Pattou F, Waeber G, Froguel P and **Abderrahmani A**. Impaired histone deacetylases 5 and 6 expression mimics the effects of obesity and hypoxia on adipocyte function. **Molecular Metabolism**, 2016 Oct 5;5(12):1200-1207.
12. Plaisance V, Brajkovic S, Tenenbaum M, Favre D, Ezanno H, Bonnefond A, Bonner C, Gmyr V, Kerr-Conte J, Gauthier BR, Widmann C, Waeber G, Pattou F, Froguel P, **Abderrahmani A**. Endoplasmic Reticulum Stress Links Oxidative Stress to Impaired Pancreatic Beta-Cell Function Caused by Human Oxidized LDL. **PLoS One**. 2016 Sep 16;11(9):e0163046. doi: 10.1371/journal.pone.0163046. eCollection 2016.
13. Belkhalifa H, Teodorescu F, Quéniat G, Coffinier Y, Dokhan N, Sam S, **Abderrahmani A**, Boukherroub R and Szunerits S. Insulin impregnated reduced graphene oxide/Ni(OH)₂ thin films for electrochemical insulin release and glucose sensing. **Sensors and Actuators B: Chemical**, Volume 237, December 2016, Pages 693-701
14. Rabhi N, Denechaud PD, Gromada X, Hannou SA, Zhang H, Rashid T, Salas E, Durand E, Sand O, Bonnefond A, Yengo L, Chavey C, Bonner C, Kerr-Conte J, **Abderrahmani A**, Auwerx J, Fajas L, Froguel P, Annicotte JS. KAT2B Is Required for Pancreatic Beta Cell Adaptation to Metabolic Stress by Controlling the Unfolded Protein Response. **Cell Rep**. 2016 May 3;15(5):1051-61. doi: 10.1016/j.celrep.2016.03.079. Epub 2016 Apr 21.
15. Teodorescu F, Rolland L, Ramarao V, **Abderrahmani A**, Mandler D, Boukherroub R, Szunerits S. Electrochemically triggered release of human insulin from an insulin-impregnated reduced graphene oxide modified electrode. **Chem Commun (Camb)**. 2015 Sep 28;51(75):14167-70. doi: 10.1039/c5cc05539c
16. **Abderrahmani A**. Rest/Nrsf Target Genes In Neuronal And Beta Cells: Pathophysiological And Therapeutic Perspectives For Diabetes And Neurodegenerative Disorders. **European Medical Journal**. 2015;3[1]:87-95
17. Brajkovic S*, Ferdaoussi M*, Pawlowski V*, Ezanno H, Plaisance V, Zmuda E, Hai T, Annicotte JS, Waeber G and **Abderrahmani A**. Islet Brain 1 protects insulin producing cells against lipotoxicity. **J. Diabetes Res** 2016. ID 9158562. doi: 10.1155/2016/9158562.
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20. Regazzi R, Dalle S, **Abderrahmani A**. Compensatory mechanisms of pancreatic beta cells: insights into the therapeutic perspectives for diabetes. **J. Diabetes Res**. 2014;2014:217387. doi: 10.1155/2014/217387.
21. Ezanno H, Pawlowski V, Abdelli S, Boutry R, Gmyr V, Kerr-Conte J, Bonny C, Pattou F, **Abderrahmani A**. JNK3 is required for the cytoprotective effect of exendin 4. **J Diabetes Res**. 2014;2014:814854. doi: 10.1155/2014/814854. Epub 2014 Jun 16.

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Editorial

- ❖ Meet the editor (<https://think.taylorandfrancis.com/all-life/meet-the-editor-of-all-life/>)

Invited article reviews:

- ❖ French medical journal « *Diabète & Obésité* » (<https://diabeteetobesite.fr/la-revue/>):
 - 1) « *Les histones désacétylases: de nouvelles cibles thérapeutiques pour sauver les cellules bêta pancréatiques dans le diabète?* », octobre 2016 • vol. 11 • numéro 1013
 - 2) « *L'épigénétique dans le diabète de type 2: Quel impact pour le traitement des patients ?* », Janvier/Février 2018 • numéro 114.
 - 3) « *Ce que les neurones peuvent nous apprendre sur les cellules bêta et le diabète* », juin 2019 • vol. 14 • numéro 125
 - 4) « *La théranostique du diabète avec les nanotechnologies: Rêve ou Réalité ?* » octobre 2019 • vol. 14 • numéro 127
 - 5) « *Les innovations thérapeutiques du diabète: Et si la solution se trouvait dans la nature ?* ». 2020
- ❖ French Journal « *la Revue Francophone des Laboratoires* » (<https://www.em-consulte.com/revue/RFL/presentation/rfl-revue-francophone-des-laboratoires>):
 - 1) “*Actualités sur la Physiopathologie du Diabète*”, Mai 2018, 2016 • numéro 502
- ❖ Morocco Journal of Endocrinology and Diabetology « *Journal Marocain d'Endocrinologie et de Diabétologie* » (<http://smedian.ma/smedianj3/index.php/actualites/150-journal-endocrinologie-diabetologie>):
 - 1) “*Epigénétique et Diabète*”, 2018;1(4):276-9.
 - 2) “*Les innovations (nano)technologiques du diabète*”, 2019;2(6):90-4

Public media

- Article in «Le quotidien du médecin», the medical newspaper issue: November 20th 2012 number 9192: sauver la cellule bêta
- Invited for French Public conference, **Le Diabète... Parlons-en !**, in Lille Grand Palais, 2th October 2013
- Since 2012, interviewed for EDIMARK-Santé regarding the breakthrough reported from the European Association for the Study of Diabetes meeting (Berlin, Barcelona)

Book chapter:

- 1 Abderrahmani Amar. Adaptation of the secretory machinery to pathophysiological conditions. Molecular Mechanisms of Exocytosis. p1-13, Landes Bioscience 2006.