

CURRICULUM VITAE

AMRI Ez-Zoubir

French

E-mail address: amri@unice.fr

Education:

2004 Capacity to Direct Research Programs (Habilitation), Sophia-Antipolis Nice University, France

1986 Doctor of Science (Ph.D.), Sophia-Antipolis Nice University, France. With honors

Current position:

2006- Research Director at Centre National de la Recherche Scientifique (CNRS),

Group leader: Cellular and Molecular Regulation of Fat Mass, IBV CNRS UMR7277 INSERM U1091, Nice; <http://ibv.unice.fr/EN/equipe/amri.php>

Academic appointment/Teaching

1998: Visiting scientist to the University of Southern Denmark, Odense

1997-1999: Researcher at Inserm U470

1991-2006: Established Investigator at CNRS, Associate Researcher.

1986-1988: Assistant Professor of Biochemistry – University of Oujda - Morocco

Post-doctoral fellowship

1988-1990: Research Investigator, INRA (National Institute of Agronomic Research), Nice

1991: Pos-doc Fellowship from Fondation pour la Recherche Médicale (FRM), Nice

Supervision of post-doctoral fellows, doctoral students and graduate students

Direct supervision of 3 post-doctoral fellows, 8 PhD students and 15 MSc (6-month research projects) students.

Institutional Responsibilities and Commissions of Trust

2011-2015: Workpackage leader and Project Board in the 7th framework project for DIABAT: Recruitment and activation of brown adipocytes as preventive and curative therapy for type 2 diabetes

2010-2014: Coordinator of ANR grant: miRBAT: Mechanisms of conversion of human white to brown adipocytes

2016-2019: Coordinator of ANR grant: NUTRIBRITE: Testing the potency of nutritional interventions to modulate eicosanoid metabolism in adipose tissues and brite adipogenesis.

2017-2022: Partner of ANR grant: HepAdialogue: Impact of Fatty Acid Metabolism in Adipose Tissues and Liver on Insulin Resistance

Scientific activities and expertise (current)

Committee member of Ph.D. evaluation

Committee member of Associate Professor Selection

International, European and French Associations for the Study of Diabetes

French-speaking Diabetes Society

French-speaking Nutrition Society

French-speaking Rheumatology Society

Referee for several Journals (JBC, Stem cells, BBRC, BBA, ECR, Eur. J. Pharmacol. JCMM, Biology of the Cell, Mol Metab, IJO ...).

Reviewer for Grant applications (ANR, KORANET, UKF Croatia, MRC, BBSRC, DIABETES UK, FWF, ETH Grants ...)

82 original publications and 12 review articles.

Patents:

- Established human brown adipocyte line and method for differentiation from hMADS cell line. Ailhaud, G, Dani, C, Elabd, C & Amri, EZ. WO/2009/156413. Licensing: 2 licenses since 2016: Energesis, Glycemicon.
- Composition inducing or up-regulating UCP1 for use in treating of preventing overweight, adiposity, obesity, metabolic syndrome or related diseases or disorders". Ailhaud, G, Dani, C, Amri, EZ, Karbiener, M and M Scheideler. WO 2011138457A1

Publications (2013-2018)

1. Beranger, G. E., Karbiener, M., Barquissau, V., Pisani, D. F., Scheideler, M., Langin, D., and Amri, E. Z. (2013) In vitro brown and "brite"/"beige" adipogenesis: human cellular models and molecular aspects. *Biochim. Biophys. Acta* **1831**, 905-914
2. Roux, C., Pisani, D. F., Yahia, H. B., Djedaini, M., Beranger, G. E., Chambard, J. C., Ambrosetti, D., Michiels, J. F., Breuil, V., Ailhaud, G., Euller-Ziegler, L., and Amri, E. Z. (2013) Chondrogenic potential of stem cells derived from adipose tissue: a powerful pharmacological tool. *Biochem. Biophys. Res. Commun.* **440**, 786-791
3. Beranger, G. E., Pisani, D. F., Castel, J., Djedaini, M., Battaglia, S., Amiaud, J., Boukhechba, F., Ailhaud, G., Michiels, J. F., Heymann, D., Luquet, S., and Amri, E. Z. (2014) Oxytocin reverses ovariectomy-induced osteopenia and body fat gain. *Endocrinology* **155**, 1340-1352
4. Breuil, V., Panaia-Ferrari, P., Fontas, E., Roux, C., Kolta, S., Eastell, R., Ben Yahia, H., Faure, S., Gossiel, F., Benhamou, C. L., Euller-Ziegler, L., and Amri, E. Z. (2014) Oxytocin, a new determinant of bone mineral density in post-menopausal women: analysis of the OPUS cohort. *J. Clin. Endocrinol. Metab.* **99**, E634-641
5. Karbiener, M., Pisani, D. F., Frontini, A., Oberreiter, L. M., Lang, E., Vegiopoulos, A., Mosenbock, K., Bernhardt, G. A., Mayr, T., Hildner, F., Grillari, J., Ailhaud, G., Herzig, S., Cinti, S., Amri, E. Z., and Scheideler, M. (2014) MicroRNA-26 family is required for human adipogenesis and drives characteristics of brown adipocytes. *Stem Cells* **32**, 1578-1590
6. Lopez-Mejia, I. C., de Toledo, M., Chavey, C., Lapasset, L., Cavelier, P., Lopez-Herrera, C., Chebli, K., Fort, P., Beranger, G., Fajas, L., Amri, E. Z., Casas, F., and Tazi, J. (2014) Antagonistic functions of LMNA isoforms in energy expenditure and lifespan. *EMBO reports* **15**, 529-539
7. Olsen, J. M., Sato, M., Dallner, O. S., Sandstrom, A. L., Pisani, D. F., Chambard, J. C., Amri, E. Z., Hutchinson, D. S., and Bengtsson, T. (2014) Glucose uptake in brown fat cells is dependent on mTOR complex 2-promoted GLUT1 translocation. *J. Cell Biol.* **207**, 365-374
8. Pisani, D. F., Ghandour, R. A., Beranger, G. E., Le Faouder, P., Chambard, J. C., Giroud, M., Vegiopoulos, A., Djedaini, M., Bertrand-Michel, J., Tauc, M., Herzig, S., Langin, D., Ailhaud, G., Duranton, C., and Amri, E. Z. (2014) The omega6-fatty acid, arachidonic acid, regulates the conversion of white to brite adipocyte through a prostaglandin/calcium mediated pathway. *Molecular metabolism* **3**, 834-847
9. Rieder, D., Ploner, C., Krogsdam, A. M., Stocker, G., Fischer, M., Scheideler, M., Dani, C., Amri, E. Z., Muller, W. G., McNally, J. G., and Trajanoski, Z. (2014) Co-expressed genes prepositioned in spatial neighborhoods stochastically associate with SC35 speckles and RNA polymerase II factories. *Cell. Mol. Life Sci.* **71**, 1741-1759
10. Beranger, G. E., Djedaini, M., Battaglia, S., Roux, C. H., Scheideler, M., Heymann, D., Amri, E. Z., and Pisani, D. F. (2015) Oxytocin reverses osteoporosis in a sex-dependent manner. *Front. Endocrinol. (Lausanne)* **6**, 81

11. Breuil, V., Fontas, E., Chapurlat, R., Panaia-Ferrari, P., Yahia, H. B., Faure, S., Euller-Ziegler, L., Amri, E. Z., and Szulc, P. (2015) Oxytocin and bone status in men: analysis of the MINOS cohort. *Osteoporos. Int.* **26**, 2877-2882
12. Karbiener, M., Glantschnig, C., Pisani, D. F., Laurencikiene, J., Dahlman, I., Herzig, S., Amri, E. Z., and Scheideler, M. (2015) Mesoderm-specific transcript (MEST) is a negative regulator of human adipocyte differentiation. *Int. J. Obes. (Lond.)* **39**, 1733-1741
13. Loft, A., Forss, I., Siersbaek, M. S., Schmidt, S. F., Larsen, A. S., Madsen, J. G., Pisani, D. F., Nielsen, R., Aagaard, M. M., Mathison, A., Neville, M. J., Urrutia, R., Karpe, F., Amri, E. Z., and Mandrup, S. (2015) Browning of human adipocytes requires KLF11 and reprogramming of PPARgamma superenhancers. *Genes Dev.* **29**, 7-22
14. Pisani, D. F., Amri, E.-Z., and Ailhaud, G. (2015) Disequilibrium of polyunsaturated fatty acids status and its dual effect in modulating adipose tissue development and functions. *Ocl* **22**, D405
15. Sacco, S., Giuliano, S., Sacconi, S., Desnuelle, C., Barhanin, J., Amri, E. Z., and Bendahhou, S. (2015) The inward rectifier potassium channel Kir2.1 is required for osteoblastogenesis. *Hum. Mol. Genet.* **24**, 471-479
16. Amri, E. Z., and Pisani, D. F. (2016) Control of bone and fat mass by oxytocin. *Horm. Mol. Biol. Clin. Investig.* **28**, 95-104
17. Barquissau, V., Beuzelin, D., Pisani, D. F., Beranger, G. E., Mairal, A., Montagner, A., Roussel, B., Tavernier, G., Marques, M. A., Moro, C., Guillou, H., Amri, E. Z., and Langin, D. (2016) White-to-brite conversion in human adipocytes promotes metabolic reprogramming towards fatty acid anabolic and catabolic pathways. *Molecular metabolism* **5**, 352-365
18. Ghandour, R. A., Giroud, M., Vegiopoulos, A., Herzig, S., Ailhaud, G., Amri, E. Z., and Pisani, D. F. (2016) IP-receptor and PPARs trigger the conversion of human white to brite adipocyte induced by carbaprostacyclin. *Biochim. Biophys. Acta* **1861**, 285-293
19. Ghandour, R. A., Pisani, D. F., and Amri, E. Z. (2016) Acide arachidonique et prostaglandines : impact sur la formation des adipocytes blancs, bruns et brites/beiges. *Obésité* **11**, 159-167
20. Giroud, M., Karbiener, M., Pisani, D. F., Ghandour, R. A., Beranger, G. E., Niemi, T., Taittonen, M., Nuutila, P., Virtanen, K. A., Langin, D., Scheideler, M., and Amri, E. Z. (2016) Let-7i-5p represses brite adipocyte function in mice and humans. *Sci. Rep.* **6**, 28613
21. Giroud, M., Pisani, D. F., Karbiener, M., Barquissau, V., Ghandour, R. A., Tews, D., Fischer-Posovszky, P., Chambard, J. C., Knippschild, U., Niemi, T., Taittonen, M., Nuutila, P., Wabitsch, M., Herzig, S., Virtanen, K. A., Langin, D., Scheideler, M., and Amri, E. Z. (2016) miR-125b affects mitochondrial biogenesis and impairs brite adipocyte formation and function. *Molecular metabolism* **5**, 615-625
22. Pisani, D. F., Beranger, G. E., Corinus, A., Giroud, M., Ghandour, R. A., Altirriba, J., Chambard, J. C., Mazure, N. M., Bendahhou, S., Durantou, C., Michiels, J. F., Frontini, A., Rohner-Jeanrenaud, F., Cinti, S., Christian, M., Barhanin, J., and Amri, E. Z. (2016) The K⁺ channel TASK1 modulates beta-adrenergic response in brown adipose tissue through the mineralocorticoid receptor pathway. *FASEB J.* **30**, 909-922
23. Pisani, D. F., Dumortier, O., Beranger, G. E., Casamento, V., Ghandour, R. A., Giroud, M., Gautier, N., Balaguer, T., Chambard, J. C., Virtanen, K. A., Nuutila, P., Niemi, T., Taittonen, M., Van Obberghen, E., Hinault, C., and Amri, E. Z. (2016) Visfatin expression analysis in association with recruitment and activation of human and rodent brown and brite adipocytes. *Adipocyte* **5**, 186-195
24. Rohm, M., Schafer, M., Laurent, V., Ustunel, B. E., Niopek, K., Algire, C., Hautzinger, O., Sijmonsma, T. P., Zota, A., Medrikova, D., Pellegata, N. S., Ryden, M., Kulyte, A., Dahlman, I., Arner, P., Petrovic, N., Cannon, B., Amri, E. Z., Kemp, B. E., Steinberg, G. R., Janovska, P., Kopecky, J., Wolfrum, C., Bluher, M., Berriel Diaz, M., and Herzig, S. (2016) An AMP-activated protein kinase-stabilizing peptide ameliorates adipose tissue wasting in cancer cachexia in mice. *Nat. Med.* **22**, 1120-1130
25. Szulc, P., Amri, E. Z., Varennes, A., Panaia-Ferrari, P., Fontas, E., Goudable, J., Chapurlat, R., and Breuil, V. (2016) High serum oxytocin is associated with metabolic syndrome in older men - The MINOS study. *Diabetes Res. Clin. Pract.* **122**, 17-27
26. Abumrad, N. A., Amri, E. Z., Luquet, S., and Forest, C. (2017) Pleiotropic physiological roles of PPARs and fatty acids: A tribute to Paul Grimaldi. *Biochimie* **136**, 1-2

27. Amri, E. Z., and Scheideler, M. (2017) Small non coding RNAs in adipocyte biology and obesity. *Mol. Cell. Endocrinol.*
28. Barquissau, V., Ghandour, R. A., Ailhaud, G., Klingenspor, M., Langin, D., Amri, E. Z., and Pisani, D. F. (2017) Control of adipogenesis by oxylipins, GPCRs and PPARs. *Biochimie* **136**, 3-11
29. Dumortier, O., Roger, E., Pisani, D. F., Casamento, V., Gautier, N., Lebrun, P., Johnston, H., Lopez, P., Amri, E. Z., Jousse, C., Fafournoux, P., Prentki, M., Hinault, C., and Van Obberghen, E. (2017) Age-Dependent Control of Energy Homeostasis by Brown Adipose Tissue in Progeny Subjected to Maternal Diet-Induced Fetal Programming. *Diabetes* **66**, 627-639
30. Santo, J., Lopez-Herrera, C., Apolit, C., Bareche, Y., Lapasset, L., Chavey, C., Capozzi, S., Mahuteau-Betzer, F., Najman, R., Fornarelli, P., Lopez-Mejia, I. C., Beranger, G., Casas, F., Amri, E. Z., Pau, B., Scherrer, D., and Tazi, J. (2017) Pharmacological modulation of LMNA SRSF1-dependent splicing abrogates diet-induced obesity in mice. *Int. J. Obes. (Lond.)* **41**, 390-401
31. Babaei, R., Schuster, M., Meln, I., Lerch, S., Ghandour, R. A., Pisani, D. F., Bayindir-Buchhalter, I., Marx, J., Wu, S., Schoiswohl, G., Billeter, A. T., Kronic, D., Mauer, J., Lee, Y. H., Granneman, J. G., Fischer, L., Muller-Stich, B. P., Amri, E. Z., Kershaw, E. E., Heikenwalder, M., Herzig, S., and Vegiopoulos, A. (2018) Jak-TGFbeta cross-talk links transient adipose tissue inflammation to beige adipogenesis. *Sci Signal* **11**
32. Balaguer, T., Fellah, B. H., Boukhechba, F., Traverson, M., Mouska, X., Ambrosetti, D., Dadone, B., Michiels, J. F., Amri, E. Z., Trojani, C., Bouler, J. M., Gauthier, O., and Rochet, N. (2018) Combination of blood and biphasic calcium phosphate microparticles for the reconstruction of large bone defects in dog: A pilot study. *J Biomed Mater Res A*
33. Barquissau, V., Leger, B., Beuzelin, D., Martins, F., Amri, E. Z., Pisani, D. F., Saris, W. H. M., Astrup, A., Maoret, J. J., Iacovoni, J., Dejean, S., Moro, C., Viguerie, N., and Langin, D. (2018) Caloric Restriction and Diet-Induced Weight Loss Do Not Induce Browning of Human Subcutaneous White Adipose Tissue in Women and Men with Obesity. *Cell reports* **22**, 1079-1089
34. Ghandour, R. A., Colson, C., Giroud, M., Maurer, S., Rekima, S., Ailhaud, G. P., Klingenspor, M., Amri, E. Z., and Pisani, D. F. (2018) Impact of dietary omega3 polyunsaturated fatty acid supplementation on brown and brite adipocyte function. *J. Lipid Res.*
35. Lasar, D., Rosenwald, M., Kiehlmann, E., Balaz, M., Tall, B., Opitz, L., Lidell, M. E., Zamboni, N., Krznar, P., Sun, W., Varga, L., Stefanicka, P., Ukropec, J., Nuutila, P., Virtanen, K., Amri, E. Z., Enerbäck, S., Wahli, W., and Wolfrum, C. (2018) Peroxisome Proliferator Activated Receptor Gamma Controls Mature Brown Adipocyte Inducibility through Glycerol Kinase. *Cell reports* **22**, 760-773
36. Pisani, D. F., Barquissau, V., Chambard, J. C., Beuzelin, D., Ghandour, R. A., Giroud, M., Mairal, A., Pagnotta, S., Cinti, S., Langin, D., and Amri, E. Z. (2018) Mitochondrial fission is associated with UCP1 activity in human brite/beige adipocytes. *Molecular metabolism* **7**, 35-44