

CURRICULUM VITAE

Nom: MIOT
Prénom: Françoise
Nationalité: Belge
Lieu et date de naissance: Bruxelles, le 12 octobre 1957

ETUDES.

1975-1979: Licence Sciences Chimiques, ULB (Biochimie)
Agrégation de l'enseignement secondaire supérieur.
Mémoire de Licence: Contribution à l'étude des propriétés pharmacologiques des inhibiteurs de phosphodiesterases thyroïdiennes.

1986 : Doctorat en Sciences Chimiques-Biochimie-ULB.
Thèse de Doctorat: Contribution à l'étude des mécanismes de contrôle négatif de l'accumulation de l'AMP-c par stimulation de l'activité phosphodiesterase.
Directeur de thèse: Prof. Dumont, J.E.

FONCTIONS: Carrière académique.

1979-1982: Chercheur I.R.S.I.A. à l'Institut de Recherche Interdisciplinaire (IRIBHN)
ULB, Faculté de Médecine,
Prof.Dumont, J.E.

1982-1983: Bourse de District de la " Rotary Foundation".
Séjour à la "Rijksuniversiteit te Leiden, Subfaculteit Biologie"
Prof. Konijn, T.M..

1984: Chercheur IRIBHN, ULB.

1985-1988 : Chercheur à la "Katholieke Universiteit Leuven,
Faculteit Geneeskunde, Afdeling Biochemie"
Prof. De Wulf, H.

1988-1991: Chercheur dans l'Unité de Résonance Magnétique Biomédicale

ULB-VUB.

Prof. J. Reisse

1991-200 : Chercheur IRIBHM, ULB.

Prof. J.E. Dumont

FONCTIONS PEDAGOGIQUES.

Supervision de mémoire en sciences chimiques (MS chemistry)

1993 : Uyttersprot N.

Supervision de mémoire en sciences biomédicales (MS in biomedical sciences)

1997 : De Deken X.

2004: Rigutto S.

Supervision de mémoires en médecine (MS in medicine)

1996: Renneboog B.

1996: Vilain C.

2002: Mahieu F.

Supervision de theses de doctorat (PhD)

1998: Uyttersprot N.

2002: De Deken X.

Wang D.

Milenkovic M.

2004: Rigutto S

PUBLICATIONS

1. MIOT, F. and ERNEUX, C.

Characterization of the soluble cyclic nucleotide phosphodiesterases in *Xenopus laevis* oocytes.

Biochim. Biophys. Acta (1982) 701, 253-259.

2. ERNEUX, C., MIOT, F., BOEYNAEMS, J.-M. and DUMONT, J.E.

Paradoxical stimulation by 1-methyl-3-isobutylxanthine of rat liver cyclic AMP phosphodiesterase activity.

FEBS Lett. (1982) 142, 251-254.

3. ERNEUX, C., COUCHIE, D., MIOT, F. and DUMONT, J.E.

Multiple forms of cyclic nucleotide phosphodiesterases in the thyroid gland.

Proc. First Latin American Thyroid Congress (1982) 42-53.

4. MIOT, F., DUMONT, J.E. and ERNEUX, C.

The involvement of a calmodulin-dependent phosphodiesterase in the negative control of carbamylcholine on cyclic AMP levels in dog thyroid slices.

FEBS Lett. (1983) 151,273-276.

5. DUMONT, J.E., MIOT, F., ERNEUX, C., COUCHIE, D., COCHAUX, P., GERVY-DECOSTER, C., VAN SANDE, J. and WELLS, J.N.
Negative regulation of cyclic AMP levels by activation of cyclic nucleotide phosphodiesterases: the example of the dog thyroid.
Adv. Cycl. Nucl. Prot. Phosphoryl. Res.(1984) 16, 325-336.
6. MIOT, F., ERNEUX, C., WELLS, J.N. and DUMONT, J.E.
The effect of alkylated xanthenes on cyclic AMP accumulation in dog thyroid slices exposed to carbamylcholine.
Mol. Pharmacol. (1984) 25,261-266.
7. MIOT, F., VAN HAASTERT, P.J.M. and ERNEUX, C
Specificity of cGMP binding to a purified cGMP-stimulated phosphodiesterase from bovine adrenal tissue.
Eur. J. Biochem. (1985) 149, 59-65.
8. ERNEUX, C., MIOT, F. and DUMONT, J.E.
The control mechanisms of cyclic nucleotide phosphodiesterase activities: Regulation potential of cAMP catabolism.
Horm. Cell Regul. (1985) 9, 169-184.
9. ERNEUX, C., MIOT, F., VAN HAASTERT, P.J.M and Jastorff,B.
The binding of cyclic nucleotide analogs to a purified cGMP-stimulated phosphodiesterase from bovine adrenal tissue.
J. Cycl. Nucl. Prot. Phosphoryl. Res. (1985) 10, 463-472.
10. ERNEUX, C., MIOT, F., VAN SANDE, J., COCHAUX, P., DECOSTER, C. and DUMONT, J.E.
A new mechanism in the control of intracellular cAMP level: the activation of a calmodulin-sensitive phosphodiesterase by a rise of intracellular free calcium.
Mol. Cell. Endocrinol. (1985) 43, 123-134.
11. ERNEUX, C.and MIOT, F.
Use of cyclic nucleotide analogs to study phosphodiesterase catalytic and allosteric sites.
Meth. Enzymol. (1988) 159, 520-530.
12. MIOT, F., KEPPENS, S., ERNEUX, C., WELLS, J.N. and DE WULF, H.
Involvement of a plasma membrane phosphodiesterase in the negative control of cyclic AMP levels by vasopressin in rat hepatocytes.
Biochem. Pharmacol. (1988) 37, 3447-3453.
13. VANDEKERKHOVE, A., MIOT, F., KEPPENS, S.and DE WULF, H.
Lack of V₁ vasopressin receptors in rabbit hepatocytes.
Biochem. J. (1988) 259, 609-611.
14. MIOT, F.,VAN CAUTEREN, M., ROOZE, A.K., GEERTS, A., OSTEАUX, M and

WILLEM, R.

Non-invasive in vivo determination of the absolute ATP concentration in the rat liver by ^{31}P NMR spectroscopy.

Bull. Soc. Chim.(1992), 101(2), 113-118.

15. VAN CAUTEREN, M., MIOT, F., SEGEBARTH, C.M., EISENDRATH, H, OSTEAX, M. and WILLEM, R.
Excitation characteristics of adiabatic half-passage RF pulses used in surface coil MR spectroscopy. Application to ^{13}C detection of glycogen in the rat liver. Phys. Med. Biol. (1992), 37(5), 1055-1064.
16. VAN CAUTEREN, M., MIOT, F, OSTEAX, M., EISENDRATH, H, and WILLEM, R
Editing with a three RF pulse sequence for NMR proton surface coil spectroscopy.
J. Magn. Res. (1993), B101, 297-303.
17. SCHURMANS, S., MUSCATELLI, F., MIOT, F., MATTEI, M.G., VASSART, G. and PARMENTIER, M.
The OLF1R1 gene encoding the HGMPO7E putative olfactory receptor maps to the 17p12-17p13 region of the human genome and reveals a MSPI restriction fragment length polymorphism .
Cytogenet. Cell Genet. (1993), 63, 200-204.
18. MIOT, F., WILKIN, F., DREMIER, S., UYTTERSROT, N., LAMY, F., DUMONT, J.E. and MAENHAUT, C.
Cloning of cDNA specifically involved in the thyroid cAMP mitogenic pathway.
Horm. Res. (1994), 42, 27-30.
19. MAENHAUT, C., PIRSON, I., BAPTIST, M., LAMY, F., MIOT, F., ROGER, P. and DUMONT, J.E.
La cascade mitogène de l'AMP-c dans la thyroïde et d'autres tissus.
Médecine/sciences (1995) 11, 204-213.
20. SAVONET, V., MAENHAUT, C., MIOT, F. and PIRSON I.
Pitfalls in the use of several "housekeeping" genes as standards for quantitation of mRNA: The example of thyroid cells.
Anal. Biochem. (1997) 247, 165-167.
21. UYTTERSROT, N., ALLGEIER, A., BAPTIST, M., CHRISTOPHE, D., COPPEE, F., COULONVAL, K., DELEU, S., DEPOORTERE, F., DREMIER, S., LAMY, F., LEDENT, C., MAENHAUT, C., MIOT, F., PANEELS, V., PARMA, J., PARMENTIER, M., PIRSON, I., POHL, V., ROGER, P., SAVONET, V., TATON, M., TONACCCHERA, M., VAN SANDE, J., WILKIN, F., VASSART, G. and DUMONT, J.E.

- The cAMP in thyroid: From the TSH receptor to mitogenesis and tumorigenesis.
 Adv. Sec. Messenger and Phosphoprot. Res.- Signal Transduction in Health and Disease (eds: Corbin,J. and Francis,S.) (1997) vol.31,pp125-140.
22. UYTTERSROT, N., PELGRIMS, N., CARRASCO,N., GERVY,C., MAENHAUT, C., DUMONT, J.E. and MIOT, F.
 Moderate doses of iodide in vivo inhibit cell proliferation and the expression of thyroperoxidase and Na⁺/I symporter mRNAs in dog thyroid.
 Mol. Cell. Endocrinol. (1997) 131, 195-203.
23. UYTTERSROT, N. and MIOT, F.
 Dog CREM transcription factors: cloning and tissue distribution.
 Biochem. Biophys. Res. Commun. (1997) 237, 74-78.
24. UYTTERSROT, N., COSTAGLIOLA, S. and MIOT, F.
 A new tool for efficient transfection of dog and human thyrocytes in primary culture.
 Mol. Cel. Endocrinol. (1998) 142,35-39.
25. DE DEKEN, X., VILAIN, C., VAN SANDE, J., DUMONT,J.E. and MIOT, F.
 Decrease of telomere length in thyroid adenomas without telomerase activity.
 J. Clin. Endocrinol. Metab. (1998) 83,4368-4372.
26. UYTTERSROT, N., COSTAGLIOLA, S., DUMONT, J.E. and MIOT, F.
 Requirement for CREB/CREM transcription factors in TSH-induced proliferation of dog thyroid cells in primary culture.
 Eur. J. Biochem. (1999) 259,370-378.
27. GOLSTEIN, J., KIMURA, T., MIOT, F. And DUMONT, J.E.
 Loss of several cell functions including okadaic acid-induced apoptosis after multiple passages in FRTL-5 cells.
 Mol. Cel. Endocrinol. (1999) 150, 141-149.
28. DE DEKEN, X., WANG,D., MANY, M-C., COSTAGLIOLA, S., LIBERT, F., VASSART, G., DUMONT, J.E. and MIOT, F.
 Cloning of two human thyroid cDNAs encoding new members of the NADPH oxidase family.
 J. Biol. Chem. (2000) 275, 23227-23333
29. DE DEKEN, X., WANG,D., DUMONT, J.E. and MIOT, F.
 Characterization of ThOX proteins as components of the thyroid H₂O₂ generating system.
 Exp. Cell Res. (2002) 273, 187-196
30. GERARD, A-C., MANY, M-C., DAUMERIE,C., COSTAGLIOLA, S., MIOT, F., DEVIJLDER, J.J.M., COLIN, I.M. and DENEFF,J-F.

Structural changes in the angiofollicular units between active and hypofunctioning follicles align with differences in the epithelial expression of newly discovered proteins involved in iodine transport and organification.

J. Clin. Endocrinol. Metab. (2002) 87,1291-1299

31. GERARD, A-C., DAUMERIE, C., MESTDAGH, C., GOHY, S., DE BURBURE, C., COSTAGLIOLA, S., MIOT, F., NOLLAVAUX, MC. DENEFF, J-F., RAHIER, J., FRANC, B., DEVIJLDER, J.J.M., COLIN, I.M. and. MANY, M-C.

Correlation between the loss of thyroglobulin iodination and the expression of thyroid-specific proteins involved in iodine metabolism in thyroid carcinomas.

J. Clin. Endocrinol. Metab. (2003) 88,4977-4983

32. PACHUCKI, J., WANG, D., CHRISTOPHE, D. and MIOT, F.

Structural and functional characterization of the two human *ThOX/Duox* genes and their 5'-flanking regions.

Mol. Cell. Endocrinol. (2004) 214, 53-62

33. WANG, D., DE DEKEN, X., MILENKOVIC, M., SONG, Y., PIRSON, I., DUMONT, J.E. and MIOT, F.

Identification of a novel partner of duox: EFP1, a thioredoxin-related protein.

J Biol Chem. (2005) 280(4), 3096-3103

34. FORTEZA, R., SALATHE, M., MIOT, F., FORTEZA, R. and CONNER, G.E.

Regulated H₂O₂ production by Duox in human airway epithelial cells.

Am J Respir Cell Mol Biol. 2005 Jan 27; [Epub ahead of print]

35. FORTEMAISON, N., MIOT, F., DUMONT, J.E. and DREMIER S.

Regulation of H₂O₂ generation in thyroid cells does not involve Rac activation

European Journal of Endocrinology (2005) in press