

CURRICULUM VITAE

NAME Pirson
FIRSTNAME Isabelle
PLACE AND DATE OF BIRTH Brussels, 25 March 1968
NATIONALITY Belgian

WORK ULB - Faculté de Médecine
IRIBHN - Campus Erasme
route de Lennik, 808
1070 Bruxelles
Tel. : 555.41.37
FAX : 555.46.55
e-mail address : ilpirson@ulb.ac.be

STUDIES

- 1980-1986 : Atheneum Joseph Bracops
Enseignement Classique (option Latin-Mathématique)
- 1986-1990 : Free University of Brussels
Licence in Chemical Sciences (option biochemistry)
" Etude de l'expression des protooncogènes c-myc et c-jun dans les cellules thyroïdiennes."
Graduated with : La Plus Grande Distinction
Directed by Professeur J.E. Dumont
- 1990-1995 : Free University of Brussels
Doctorat in Sciences - equivalent PHD
" Etude de la régulation d'expression des familles de protooncogènes jun et myc en réponse à différentes stimulations mitogéniques du thyrocyte."
Complementary theses: " L'utilisation de la technique des doubles hybrides, nous permettrait d'isoler et d'identifier les protéines cellulaires interagissant avec la calcyphosine : protéine de jonction des voies de transduction de deux signaux intracellulaires principaux, le calcium et l'AMPc."
Graduated with : La Plus Grande Distinction
Directed by Professeur J.E. Dumont
- Financially supported by the Institut pour l'encouragement de la Recherche Scientifique dans l'Industrie et l'Agriculture (I.R.S.I.A.) and by the Fonds National de la Recherche Scientifique.
- 1995-
january1998 Free University of Brussels
Postdoctorat in Sciences
Mandat de Chargé de Recherches : Financial support accorded by the FNRS.

january 98-
September
00 Free University of Brussels
Postdoctorat in Sciences
Mandat de Chercheur ULB

October 00 Free University of Brussels
Chef de Travaux ULB – Group leader

AWARDS.

Prix Béatrice Libotte 1990 for the best end of studies work in biochemistry.

Solvay Award 1996 for the work realized during the PHD.

PUBLICATIONS.

- 1- Differential regulation of protooncogenes c-jun and jun D. Expression by protein tyrosine kinase, protein kinase C, and cyclic AMP mitogenic pathways in dog primary thyrocytes : TSH and cyclic AMP induce proliferation but downregulate c-jun expression.
Reuse S., **Pirson I.**, Dumont J.E..
Experimental Cell Research 196,(1991) 210-215.
- 2- Growth Factors Controlling the thyroid gland.
Dumont J.E., Maenhaut C., **Pirson I.**, Baptist M., Roger P.P..
Baillière's Clinical Endocrinology and Metabolism, vol.5, 4,(1991) 727-753.
- 3- The TSH cyclic AMP cascade in the control of thyroid cell proliferation: the story of a concept.
Ledent C., Parmentier M., Maenhaut C., Taton M., **Pirson I.**, Lamy F., Roger P.P., Dumont J.E..
Thyroidology 3, (1991) 97-102.
- 4- Regulation of the Max Gene Expression by Different Mitogenic Pathways in Dog Primary Thyrocytes.
Pirson I., Reuse S., and Dumont J.E..
Experimental Cell Research 210, (1994) 33-38..
- 5- Jun B expression is regulated differently by three mitogenic pathways in thyrocytes.
Pirson I., and Dumont J.E..
Experimental Cell Research 214, (1994) 561-569.
- 6- Highly sensitive control of transcriptional activity by factor heterodimerization.
Swillens S., and **Pirson I.**
Biochemical Journal. 301, (1994) 9-12.

- 7- Positive control of proliferation by the cyclic AMP cascade: An oncogenic mechanism of hyperfunctional adenoma.
Ledent C., Parma J., **Pirson I.**, Taton M., Roger P., Maenhaut C., Van Sande J., Pohl V., Lamy F., Parmentier M., Vassart G., Dumont J.E..
Journal of Endocrinological Investigations 18,(1995) 120-122.
- 8- c-Myc expression is controlled by the mitogenic cAMP-cascade in thyrocytes.
Pirson I., Coulonval K., Lamy F., Dumont J.E..
Journal of Cellular Physiology 168:59-70 (1996)
- 9- Induction of Nerve Growth Factor Induced Gene-B as an early event in the Cyclic Adenosine Monophosphate Response of dog Thyrocytes in primary culture.
Pichon B., Jimenez-Cervantes C., **Pirson I.**, Maenhaut C., Christophe D..
Endocrinology 137(11) (1996) 4691-4698.
- 10- TSH via cAMP induces insulin receptor expression, insulin co-stimulation of growth and amplifies insulin and insulin-like growth factor signaling pathway in dog thyroid epithelial cells.
Burikhanov R., Coulonval K., **Pirson I.**, Lamy F., Dumont J.E., Roger P.P.
Journal of Biological Chemistry 271(46) (1996) 29400-29406.
- 11- Comparison of different 'housekeeping' genes as standards for quantitation of mRNA in dog thyrocytes.
Savonet V., Maenhaut C., Miot F., **Pirson I.**
Analytical Biochemistry 247 (1997) 165-167.
- 12- The cAMP Pathway in thyroid : from the TSH receptor to mitogenesis and tumorigenesis.
Uyttersprot 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., Panneels V., Parma J., Parmentier M., **Pirson I.**, Pohl V., Roger P., Savonet V., Taton M., Tonacchera M., Van Sande J., Wilkin F., Vassart G., Dumont J.E.
Adv.in Second Messenger and Phosphoprotein Research , 31 (1997) 125-140.
- 13- The dog thyroid primary culture system : a model of regulation of function, growth and differentiation by cAMP and other well defined signaling cascades.
Roger P.P., Christophe D., Dumont, J.E., **Pirson I.**
Eur. J. Endocrinol. 137 (1997) 579-598.

- 14- A rare case of false positive in a yeast two-hybrid screening: the selection of rearranged bait constructs that produce a functional Gal4 activity.
El Housni H., Vandebroere I., Perez-Morga D., Christophe D., **Pirson I.**
Analytical Biochemistry, 262 (1998) 94-96.
- 15- Signal transduction and thyroid disease : environment and genetics.
Pirson I. , Contempré B., Goffart J.-C., Van Sande J., Dumont J.E.
C.R. Soc. Biol., 192 (1998) 847-856.
- 16- Identification and characterization of mRNAs differentially expressed in thyroid cells stimulated by a mitogenic treatment.
Pirson I., Behrends J., Savonet V., Goffard J.C., Dumont J.E., Schurmans S., Maenhaut C.
Biochimie, 81 (1999) 309-314.
- 17- IGF-1 or insulin, and the TSH cyclic AMP cascade separately control dog and human thyroid cell growth and DNA synthesis and complement each other in inducing mitogenesis.
Deleu S.*, **Pirson I.***, Coulonval K., Drouin A., Taton M., Clermont F., Roger P.P., Nakamura T., Dumont J.E., Maenhaut C.
*equal authors.
Mol. Cell. Endocrin., 149 (1999) 41-51.
- 18- Use of two-hybrid methodology for identifying proteins of interest in endocrinology.
Pirson I., Jacobs C., Vandebroere I., El Housni H., Dumont J.E., Perez-Morga D.
Mol. Cell. Endocrin., 151 (1999) 137-141.
- 19- Immediate early gene expression in dog thyrocytes in response to growth proliferation and differentiation stimuli.
Deleu S.*, **Pirson I.***, Clermont F., Nakamura T., Dumont J.E., Maenhaut C.
*equal authors.
J. Cell. Physiol., 181 (1999) 342-354.
- 20- Transforming growth factor β 1 selectively inhibits the cyclic AMP-dependent proliferation of primary thyroid epithelial cells by preventing the association of cyclin D3-cdk4 with nuclear p27^{kip1}.
Depoortere F., **Pirson I.**, Bartek J., Dumont J.E., Roger P.P.
Mol. Biol. of the Cell. (2000), 11 (3) 1061-1076.
- 21- Characterization of autonomous thyroid adenoma: Metabolism, Gene expression and Pathology.
Deleu S., Allory Y., Radulescu A., **Pirson I.**, Carrasco N., Corvilain B., Salmon I., Franc B.,

Dumont J.E., Van Sande J., Maenhaut C.
Thyroid (2000), 10 (2) 131-140.

22- The visual display of regulatory information and networks.

Pirson I., Fortemaison N., Jacobs C., Dremier S., Dumont J.E., Maenhaut C.
Trends in Cell Biology 10 (10) 404-408.

23- Identification and characterization of a novel activated RhoB binding protein containing a PDZ domain and whose expression is specifically modulated in thyroid cells by cAMP.

Mircescu*H., Steuve*S., Savonet V., Degraef C., Mellor H., Dumont J.E., Maenhaut C.,
Pirson I.
European Journal of Biochemistry 269 (2002) 6241-6249.

24- The c-Cbl associated protein (CAP) and c-Cbl are two new partners of the SH2-containing inositol polyphosphate 5- phosphatase SHIP2.

Vandenbroere I., Paternotte N., Dumont J.E., Erneux C., **Pirson I.**
Biochemical and Biophysical Communications 300 (2003) 494-500.

25- Growth and proliferation of the thyroid cell in normal physiology and in disease.

Dumont J.E., Maenhaut C., Lamy F., **Pirson I.**, Clement S., Roger P.P.
Ann. Endocrinol. 64:1 (2003) 10-11

26- Pitfalls in the use of transfected overexpression systems to study membrane proteins function : the case of TSH receptor and Pra-1.

Jacobs C., **Pirson I.**
Mol. and Cell. Endocrinology in press

PROCEEDINGS

1- The cyclic AMP cascade as a trigger or stimulant of epithelial cell proliferation : The example of the thyroid.

Reuse S., **Pirson I.**, Pohl V., Maenhaut C., Roger P.P., Dumont J.E..
Excerpta Medica International Congress Series of Nordisk Insulin Symposium n°4: Growth Factors in Health and Disease - Basic and Clinical Aspects, 925, (1990) 199-214.

DIDACTICAL REVIEW

1- La cascade mitogénique de l'AMPc dans la thyroïde et dans d'autres tissus.

Maenhaut C., **Pirson I.**, Baptist M., Lamy F., Miot F., Roger P.P., Dumont J.E..
Médecine et Sciences 11,(1995) 204-213

- 2- Cross signaling, cell specificity, and physiology.
Dumont J.E., Dremier S., **Pirson I.**, Maenhaut C.
Am. J. Physiol. Cell Physiol. 283, (2002) C2-C28.

3. COMMUNICATIONS

- **I. Pirson**, S. Reuse.

Differential regulation of protooncogenes c-jun and jun D expressions in dog primary thyrocytes : TSH and cyclic AMP induce proliferation but downregulate c-jun expression.

19th Annual Meeting of the European Association Abstracts, vol.52, (1),(1991) p.25.

- J.E. Dumont, C. Ledent, **I. Pirson**, C. Maenhaut, M. Baptist, P.P. Roger, F. Lamy.

Control of thyroid function, growth and differentiation by membrane receptors.

Journal of Endocrinology, vol.132 (1991).

- **I. Pirson**, S. Reuse, C. Maenhaut, M. Taton.

Protooncogenes expression in the mitogenic cyclic AMP pathway.

EMBL Conference: Oncogenes and growth control 1992, (1992) p.175.

- J.E. Dumont, C. Maenhaut, C. Ledent, **I. Pirson**, M. Taton, P.P. Roger, F. Lamy.

Positive control of proliferation by the cyclic AMP cascade: an oncogenic mechanism of hyperfunctional adenoma.

EMBL Conference: Oncogenes and growth control 1992, (1992) p.59.

- J.E. Dumont, J. Van Sande, J. Parma, S. Dremier, V. Savonet, A. Radulescu, C. Maenhaut, F.

Wilkin, **I. Pirson**.

Positive control of proliferation by the cyclic AMP cascade: an oncogenic mechanism of hyperfunctional adenoma. A competent mechanism for malignant tumors?

Joint Symposium Lausanne Switzerland : Cancer and the cell cycle.

- J.E. Dumont, K. Coulonval, F. Lamy, J. Van Sande, J. Parma, S. Dremier, C. Ledent, F. Coppee,

V. Savonet, C. Maenhaut, F. Wilkin, **I. Pirson**.

Control of thyroid function and growth: cell division induced by cAMP is conditional on cell hypertrophy induced by IGF-1.

Turkisch Society of Endocrinology 1996

- B. Pichon, C. Jimenez-Cervantes, **I. Pirson**, C. Maenhaut, D. Christophe.

NGFI-B expression in primary cultured dog thyrocytes.

ETA 1996

- R. Burikhanov, K. Coulonval, **I. Pirson**, F. Lamy, P.P. Roger.

TSH induces insulin receptor expression and insulin comitogenic stimulation in dog thyroid cells.

ETA 1996

SCIENTIFIC MANIFESTATIONS

- Conférence Philippe Laudat (1991)

Oncogènes, gènes suppresseurs et contrôle du cycle cellulaire.

- Conférence de l'EMBL (1992)

Oncogènes et contrôle cellulaire.

- Conférence de l'EMBL (1994)

Oncogènes et croissance cellulaire.

- FEBS meeting (2003)

Signal Transduction