

May 2013

CURRICULUM VITAE

DUFOUR Sylvie

Born December 2, 1955

Present position

Research Director at CNRS

Director of the Research Unit BOREA "Biology of Aquatic Organisms and Ecosystems"
National Museum of Natural History (MNHN) / National Center for Scientific Research
(CNRS) / University Pierre & Marie Curie (UPMC) / Institute for Research and
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Degrees

- 1974: Admission to the "Ecole Normale Supérieure" (ENS Sèvres/Ulm, Paris),
specialty: Biology
- 1976: Master Degree in Genetics, University Pierre & Marie Curie (UPMC)
- 1977: "Agrégation" in Natural Sciences, ENS
- 1980: PhD in Reproductive Physiology, UPMC
- 1985: Doctorat d'Etat ès Sciences, UPMC/MNHN

Professional Positions

- 1974-1978: Student-Professor, ENS Sèvres/Ulm
- 1978-1980: PhD Fellowship from the Minister of Research and Education
- 1980-1984: Research Associate, CNRS, Paris
- 1988-1989: NIH Fellowship, NIHCHD Bethesda, USA
- 1984-1998: Researcher, CNRS, Paris
- 1998- present: Research Director, CNRS, Paris
- 2003-2006: Vice-director of Research Unit "Biology of Marine Organisms and
Ecosystems" MNHN/ CNRS 5178/ UPMC
- 2007-2008: Director of Research Unit "Biology of Marine Organisms and
Ecosystems" MNHN/ CNRS 5178/ UPMC
- 2009-present: Director of Research Unit BOREA "Biology of Aquatic Organisms and
Ecosystems" MNHN/CNRS 7208/UPMC/IRD207 (63 permanent staff
members, total of > 100 people including Post-docs and PhD students).

Awards

- Bronze Medal, Physiology, CNRS, 1985
- Academy of Sciences, Vaillant's Prize, Physiology, 1992
- Academy of Sciences, Prize of the Scientific Foundation Taiwan-France, 2012
(co-Prize with Prof C-F Chang)

Other distinctions

- 2010-present: Invited Professor, National Taiwan Ocean University, Keelung, Taiwan
- 2012-present: Invited Researcher, National Institute for Scientific Research (INRS), Quebec, Canada

Research fields

Comparative and Evolutionary Neuroendocrinology

- Molecular and Functional Evolution of Neuroendocrine System
- Roles of neuroendocrine systems in the structure, plasticity and evolution of life cycles ; neuroendocrinology and ecophysiology of puberty and metamorphosis

Models: teleosts, molluscs, and cnidaria

Basic research with applications to aquaculture, conservation of biodiversity, and ecotoxicology.

Supervision of PhD students

Since 1992: 12 PhDs in France ; 8 PhDs in co-supervision with Professors from foreign Universities (National Taiwan Ocean University, Taiwan (2); University of Keele, UK; University of Bergen, Norway; Swedish University of Agriculture, Umea, Sweden; University of Valencia, Spain; INRS-ETE, Canada).

International cooperation

Long-term international cooperation with research groups in Europe (Denmark, Netherlands, Norway, Spain, Sweden, United Kingdom), North Africa (Tunisia), Asia (Taiwan, Japan), North America (USA, Canada), in the frame of various international programs.

International Research Grants

PICS CNRS-Taiwan
NIH Fellowship USA
CNRS/NSF USA Research Grant
PAI France-UK; France-Norway
MAE France-Sweden; France-Tunisia
ANR France/Taiwan; ANR France/Québec
GDRI CNRS (France-Monaco-Taiwan-Japan-USA-Australia-Israel)
European Community Training and Mobility Erasmus Programme (France-UK)
European Community Marie Curie Post-doctoral Fellowships and Research grants

European Community Cooperative Projects for Research and Development (Projects EELREP, PROEEL, Life+)

Member of jury and evaluation committees

- PhD jury in France (55) and other countries (10) (UK, Norway, Sweden, Netherlands, Australia, Canada), Jury for Habilitation (HDR) in France (10)
- Jury for recruitment and promotion of Permanent staff for Research and Education Institutions in France (CNRS, INRA, MNHN, UPMC and other Universities), Europe (UK), Canada and Taiwan.
- Evaluation committees of Research Units in France for CNRS, INRA, MNHN, University and AERES.
- National Committee of Scientific Research, Section "Reproduction and Development" (2001-2004) and Section "Evolution, Development, Reproduction and Aging" (2005-2008).
- Evaluation of Research Grant Applications (France, Italy, UK, Portugal, Norway, Israel, India, USA-NSF, Portugal, Taiwan, UK, Australia)

Member of Scientific Councils from Research institutions

- National Museum of Natural History (MNHN) (2001-2005; 2006-2011; 2011-present)
- National Institute for Agronomic Research (INRA), Department of Animal Physiology (PHASE) (2007-2011 and 2011- present)
- University Pierre & Marie Curie (UPMC), Council of Marine Sciences (CSM) (2009-present), Federation of Science and Education in Ecology and Biodiversity (2007-present)
- National Center for Scientific Research, Institute of Ecology and Environnement (CNRS-INEE) (2011-present)

Member of other Scientific Committes

- International Scientific Council for the Conservation of the Atlantic salmon from the Loire, Ministry of Environment (2007-present)
- Scientific Committee for Marine Fisheries and Aquaculture, Ministry of Agriculture and Fisheries (2011- present)
- Scientific Committees of the National Research Agency (ANR), section Ecology and Agronomy, Programme "Blanc" (2006); Programme BIOADAPT (2011).
- National Programme for Sea Research, Allenvi (2012- present)

List of recent Invited Conferences in International Meetings

- Dufour S. (2000) - "Multiple control of growth hormone production in the European eel". *State of the art lecture*. The 3rd East Asian Symposium on Eel Research - Sustainability of resources and aquaculture of eels. Taiwan Fisheries Research Institute, Keelung, Taiwan, 2000
- Dufour S. (2000) - "Evolution of the control of growth hormone (GH) secretion: contribution of teleost models". *State of the art lecture* - 20th Conference of European Comparative Endocrinologists, Faro, Portugal, 2000

- Dufour S. (2000) - "Comparative neuroendocrinology of puberty: from fishes to mammals". - *State of the art lecture* - 14th International Congress of Comparative Endocrinology, Sorrento, Italy, 2001
- Dufour S. (2001) - "Reproductive endocrinology of the eel". - *State of the art lecture* – International Symposium Advances in eel biology, The University of Tokyo, Japan, 2001
- Dufour S. (2002) - "Reproduction and migration" – *Plenary lecture* - 5^{ème} Tunisian Conf on Marine Sciences, Aïn Draham, Tunisie, 2002
- Dufour S. (2004) - "Dopaminergic inhibition of reproduction in teleost fishes: ecophysiological and evolutionary implications" – *Plenary lecture*- 22nd Congress of European Comparative Endocrinologists, Uppsala, Sweden, 2004.
- Dufour S. (2005) - "Freshwater ecosystems: Fish as bioindicators for water quality" - *State of the art lecture* – Workshop: Biodiversity Indicators and the 2010 target: scientific challenges. International Conference on Biodiversity: Science and Governance, UNESCO Paris, France, 2005.
- Dufour S., Thillart G. (2005) - "Conclusions from the European Project EELREP 2002-2005: Estimation of European Eel Reproductive capacity". International Symposium on Diadromous Fishes, Eel Rep Symposium Bordeaux, France, 2005.
- Dufour S. (2006) - "The reproduction of the eel is controlled by its brain".- *Invited Speaker* - Internatinal Workshop on the recovery and artificial reproduction of the eel., Bilthoven, Netherlands, 2006.
- Dufour S. - "Ancient origin and evolution of the neuroendocrine control of reproduction: what do we learn from aquatic species?" - *State of the art lecture* –. World Academy of Biomedical Technologies UATI-ICET/UNESCO. BEST for HEALTH (Bio-Economy and Sustainable Technologies for Haelth), Budapest. Budapest, Hungary, 2006.
- Dufour S. (2006) – "Neuroendocrinology of fish metamorphosis and puberty: evolutionary and ecophysiological perspectives". *Invited Speaker/ Chairman*. International Conférence on Ecophysiology of Marine Organisms, Center for Marine Bioscience and Biotechnology, National Taiwan Ocean University, Keelung, Taiwan, October 2006
- Dufour S (2006) – "The dual brain control of reproduction in fish". *Invited Speaker*. International Conference « Fish for Future » University of Leiden, The Netherlands, October 2006.
- Dufour S. (2007) – "Neuroendocrinology of metamorphosis and puberty : the case of the eel". *Invited Speaker* Symposium on Fish Reproductive Physiology. Annual meeting of the Scandinavian Physiological Society, Oslo, Norway, August 2007.
- Dufour S. (2007) - "Neuroendocrinology of silvering: metamorphosis or puberty?" *Co-organizer and Speaker*. Workshop on European eel reproduction. Meeting of the European Aquaculture Society, Istanbul, October 2007.
- Dufour S. (2008) - (1) "Origin and evolution of the neuroendocrine control of reproduction." - (2) "Teleost fishes as sentinels and models for endocrine disruption". *Invited Speaker* Universidad de Concepcion, Summer school, January 2008, programme ARCUS.
- Dufour S. (2008) – "Neuroendocrinology of eel reproduction". *Invited Speaker*. Workshop on European eel reproduction. Meeting of the European Aquaculture Society, Krakow, Poland, September 2008.

- Dufour S. (2008) – "Role of melatonin in the neuroendocrine control of eel reproduction: a possible pathway for environmental cues". *Key-note lecture* – Eel Workshop; Meeting of the World Aquaculture Society, Yokohama, Japan, October 2008.
- Dufour S. (2008) – Eel conservation and research in France. *Invited speaker*, International Eel Meeting, Miyazaki, Japan, October 2008.
- Dufour S. (2009) - Evolution of neuroendocrine systems in fish. *Invited speaker*, 36ème Colloque de la Société de Neuroendocrinologie, Nice, Septembre 2009.
- Dufour S. (2009) - "Endocrine control of a complex life cycle: new advances in the eel" - Part 1 "Control of metamorphosis and migration" - Part 2 "Control of sexual maturation". *Invited speaker* National Taiwan Ocean University, Keelung, Taiwan, November 2009
- Dufour S. (2009) - "Endocrine and environmental control of eel reproduction ?" *Invited speaker* National Kaoshiung Marine University, Kaoshiung, Taiwan, November 2009.
- Dufour S. (2010) - "Origin, evolution and disruption of the neuroendocrine control of reproduction" - *Invited speaker* PhD School, University Milano-Bicocca, Italy, February 2010
- Dufour S. (2010) - "Role of neuroendocrine systems in the diversity of teleost life cycles" - *Invited speaker* - Israel-France Workshop on Biodiversity, Tel Aviv, Israel, October 2010
- Dufour S. (2010) - "Origin and evolution of the neuroendocrine control of reproduction" - *Co-organizer* -Taiwan-France Meeting on Marine Biodiversity and Ecophysiology, National Taiwan Ocean University, Keelung, Taiwan, November 2010.
- Dufour S. (2011). Neuroendocrine control of eel puberty. *Invited speaker*. NSC-ANR Workshop, Taipei, Taiwan.
- Dufour S., (2012). Neuroendocrinology of fish metamorphosis and puberty. *Invited speaker*. 7th International Symposium on Fish Endocrinology, Buenos Aires, Argentine, 2012.
- Dufour S. (2012). Impact of genome duplication on fish neuroendocrine functions. *Invited Speaker*. 38e de la Société de Neuroendocrinologie. Banyuls, 2012.

List of Publications

1. Peer-reviewed Articles

1. Dufour S., Burzawa-Gerard E., Fontaine Y.A. (1979) - Evolution des hormones glycoprotéiques hypophysaires: données radioimmunologiques sur les sous-unités de l'hormone gonadotrope de la carpe (*Cyprinus carpio* L.) *C. R. Acad. Sci. Paris, Ser. D.*, 289: 137-140.
2. Burzawa-Gerard E., Dufour S., Fontaine Y.A. (1980) - Relations immunologiques entre les hormones glycoprotéiques hypophysaires de poissons et de mammifères ainsi qu'entre leurs sous-unités alpha et beta. *Gen. Comp. Endocrinol.*, 41: 199-211.
3. Dufour S., Pasqualini C., Kerdelhue B., Fontaine Y.A. (1982) - Presence and distribution of radioimmunoassayable LHRH in the european eel, *Anguilla anguilla*. *Neuropeptides*, 3: 159-171.
4. Dufour S., Delerue-Le Belle N., Fontaine Y.A. (1983a) - Development of a heterologous radioimmunoassay for eel (*Anguilla anguilla* L.) gonadotropin. *Gen. Comp. Endocrinol.*, 49: 404-413.

5. Dufour S., Delerue-Le Belle N., Fontaine Y.A. (1983b) - Effects of steroid hormones on pituitary immunoreactive gonadotropin in european freshwater eel, *Anguilla anguilla* L. *Gen. Comp. Endocrinol.*, 52: 190-197.
6. Dufour S., Delerue-Le Belle N., Fontaine Y.A. (1984) - Stimulation de la libération d'hormone gonadotrope et du développement des gonades sous l'effet conjoint d'un agoniste de la LHRH et du pimozide chez l'anguille femelle argentée prétraitée à l'oestradiol. *C. R. Acad. Sci. Paris, Ser III*, 229: 231-234.
7. Dufour S., Fontaine Y.A. (1985) - La migration de reproduction de l'anguille européenne (*Anguilla anguilla* L.): un rôle probable de la pression hydrostatique dans la stimulation de la fonction gonadotrope. *Bull. Soc. Zool.*, 110: 291-299.
8. Dufour S., Fontaine Y.A., Kerdelhue B. (1985) - Increase in brain and pituitary radioimmunoassayable gonadotropin releasing hormone (GnRH) in the european silver eel treated with sexual steroid or human chorionic gonadotropin. *Neuropeptides*, 6: 495-502.
9. Fontaine Y.A., Dufour S., Fontaine M. (1985) - Un vieux problème très actuel: la reproduction des anguilles. *La Vie des Sciences, Comptes Rendus, Série générale*, 2: 1-10.
10. Fontaine Y.A., Dufour S., Alinat J., Fontaine M. (1985) - L'immersion prolongée en profondeur stimule la fonction hypophysaire gonadotrope de l'anguille européenne (*Anguilla anguilla* L.) femelle. *C. R. Acad. Sci. Paris, Ser III*, 300: 83-87.
11. Dufour S. (1986) - La saga des anguilles (Review article). *La Recherche*, 182: 1456-1459.
12. Counis R., Dufour S., Ribot G., Querat B., Fontaine Y.A., Jutisz M. (1987) - Estradiol has inverse effects on pituitary glycoprotein hormone alpha subunit mRNA in the immature european eel and gonadectomized rat. *Endocrinology*, 121: 1178-1184.
13. Dufour S., Lopez E., Le Menn F., Le Belle N., Baloché S., Fontaine Y.A. (1988) - Stimulation of gonadotropin release and of ovarian development, by the administration of a gonadoliberin agonist and of dopamine antagonists, in female silver eel pretreated with estradiol. *Gen. Comp. Endocrinol.*, 70: 20-30.
14. Dufour S., Monniot F., Monniot C., Baloché S., Kerdelhue B., Fontaine Y.A. (1988) - Dosage radioimmunologique, chez *Asciidiella aspersa*, d'un facteur de type gonadoliberine (GnRH) de poids moléculaire apparent supérieur à celui du décapeptide mammalien. *C. R. Acad. Sci. Paris, Ser III*, 306: 253-256.
15. Le Belle N., Dufour S., Marquet G., Kerdelhue B., Fontaine Y.A. (1988) - Etat sexuel et axe gonadotrope hypothalamo-hypophysaire chez les trois espèces d'anguilles de Tahiti (*Anguilla marmorata*, *A. megastoma* et *A. obscura*). *Bull. Mus. natn. Hist. nat., Paris, sect. A*, 1: 147-160.
16. Dufour S., Le Belle N., Baloché S., Fontaine Y.A. (1989) - Positive feedback control by the gonads on gonadotropin (GTH) and gonadoliberin (GnRH) levels in experimentally matured female silver eels, *Anguilla anguilla*. *Fish Physiol. Biochem.*, 7: 157-162.
17. Kah O., Dufour S., Baloché B., Breton B. (1989) - The GnRH systems in the brain and pituitary of normal and hCG treated european silver eels. *Fish Physiol. Biochem.*, 6: 279-284.
18. King J.A., Dufour S., Fontaine Y.A., Millar R.P. (1990) - Chromatographic and immunological evidence for mammalian GnRH and chicken GnRH II in eel (*Anguilla anguilla*) brain and pituitary. *Peptides*, 11: 507-514.

19. Stojilkovic S.S., Stutzin S., Izumi S.I., Dufour S., Torsello A., Virmani M.A., Rojas E., Catt K.J. (1990) - Generation and amplification of the cytosolic calcium signal during secretory responses to gonadotropin-releasing hormone. *The New Biologist*, 2: 272-283.
20. Fontaine Y.A., Dufour S. (1991) - The eels: from life cycle to reproductive endocrinology. (Review article). *Bull. Inst. Zool., Academia Sinica*, Monograph 16 : 237-248.
21. Krsmanovic L.Z., Stojilkovic S.S., Merelli F., Dufour S.M., Virmani M.A., Catt K.J. (1992) - Calcium signaling and episodic secretion of gonadotropin-releasing hormone in hypothalamic neurons. *Proc. Natl. Acad. Sci. USA*, 89 : 8462-8466.
22. Dufour S., Montero M., Le Belle N., Bassompierre M., King J.A., Millar R.P., Peter R.E., Fontaine Y.A. (1993) -Differential distribution and response to experimental sexual maturation of two forms of brain gonadotropin-releasing hormone (GnRH) in the European eel, *Anguilla anguilla*. *Fish Physiol. Biochem.*, 11 : 99-106.
23. Dufour S., Marchelidon J., Milet C., Querat B., Salmon C. (1994)- Methods for endocrine studies of a wild species. (Invited review article).*Bull. Fr. Pêche Piscic.*, n° spécial Anguille 335: 147-169.
24. Dufour S. (1994) – The neuroendocrinology of eel reproduction: from fundamental research to applied problems. (Invited review article) *Bull. Fr. Pêche Piscic.*, n° Spécial Anguille 335: 187-211.
25. Medina M., Reperant J., Dufour S., Ward R., Le Belle N., Miceli D. (1994) - The distribution of GABA-immunoreactive neurons in the brain of the silver eel (*Anguilla anguilla* L.) *Anat. Embryol.* 189 : 25-39.
26. Montero M., Vidal B., King J.A., Vandesande F., Dufour S., Kah O. (1994) - Immunocytochemical localization of mammalian GnRH (gonadotropin-releasing hormone) and chicken GnRH-II in the brain of the European silver eel (*Anguilla anguilla* L.). *J. Chem. Neuroanat.*, 7: 227-241.
27. Cardinaud B., Querat B., Dufour S., Vincent J.D., Vernier P. (1995)- Molecular diversity of dopamine D1-like receptors in the European eel. *Netherl. J. Zool.*, 45: 157-159.
28. Montero M., Le Belle N., King J.A., Millar R.P., Dufour S. (1995) - Differential regulation of the two forms of gonadotropin-releasing hormone (mGnRH and cGnRH-II) by sex steroids in the European female silver eel (*Anguilla anguilla*). *Neuroendocrinology*, 61: 525-535.
29. Dufour S. (1996) - An example of a reproductive cycle under environmental control: the case of the eel. *C.R. Acad. Agric. Fr.*, 82 : 17-26.
30. Marchelidon J., Schmitz M., Houdebine L.M., Le Belle N., Vidal B., Dufour S. (1996) - Development of a radioimmunoassay for European eel growth hormone (GH) and application to the study of silvering and experimental fasting. *Gen. Comp. Endocrinol.*, 102 : 360-369.
31. Montero M., Le Belle N., Vidal B., Dufour S. (1996) - Primary cultures of dispersed pituitary cells from estradiol-pretreated female silver eels (*Anguilla anguilla* L.): immunocytochemical characterization of gonadotropic cells and stimulation of gonadotropin release. *Gen. Comp. Endocrinol.*, 104 : 103-115.
32. Montero M., Dufour S. (1996) -Gonadotropin-releasing hormones in fishes : evolutionary data on their structure, distribution, function and regulation. (Review Article) *Zool. Studies*, 35 : 149-160.

33. Pradet-Balade B., Schmitz M., Salmon C., Dufour S., Querat B. (1997) - Down-regulation of TSH subunit mRNA levels by thyroid hormones in the European eel. *Gen. Comp. Endocrinol.* 108 : 191-198.
34. Lau E.-L., Lin B.-Y., Lee L.-T., Sun L.-T., Dufour S., Chang C.-F. (1997) - Stimulation of testicular function by exogenous testosterone in male protandrous black porgy, *Acanthopagrus schlegeli*. *J. Fish Biol.* 51 : 327-333.
35. Huang Y.-S., Schmitz M., Le Belle N., Chang C.-F., Querat B., Dufour S. (1997) - Androgens stimulate gonadotropin-II b subunit in eel pituitary cells in vitro. *Mol. Cell. Endocrinol.* 131 : 157-166.
36. Rousseau K., Huang Y.-S., Le Belle N., Vidal B., Marchelidon J., Epelbaum J., Dufour S. (1998)- Long-term inhibitory effects of somatostatin and insulin-like growth factor 1 on growth hormone release by serum-free primary culture of pituitary cells from European eel (*Anguilla anguilla*). *Neuroendocrinology* 67 : 301-309.
37. Chartrel N., Collin F., Montero M., Dufour S., Vandesande F., Vaudry H. (1998) - Biochemical characterization and regional distribution of mGnRH and cGnRH-II in the spinal cord of the frog, *Rana ridibunda*. *Ann. N.Y. Acad. Sci.* 839 : 458-459.
38. Huang. Y.-S., Le Belle N., Schmitz M., Chang C.-F., Vernier P., Querat B., Dufour S. (1998) - *In vivo* and *in vitro* effects of sex steroids on gonadotropin (GtH-II) synthesis in the female European eel. *Ann. N.Y. Acad. Sci.* 839 : 348-350.
39. Pradet-Balade B., Schmitz M., Salmon C., Dufour S., Qu erat B. (1998) – T3 and T4 downregulate TSH subunit mRNAs in a teleost, the European eel. *Ann. N.Y. Acad. Sci.* 839 : 458-459.
40. Schmitz M., Pradet-Balade B., Le Belle N., Dufour S., Querat B. (1998) - *In vitro* study of the TSH subunit mRNA regulation in primary culture of pituitary cells of the European eel, *Anguilla anguilla*. *Ann. N.Y. Acad. Sci.* 839 : 466-468.
41. Chartrel N., Collin F., Huang Y.-S., Montero M., Tonon M.-C., Goos H.J. Th., Dufour S., Vaudry H. (1998) - Characterization and localization of two forms of gonadotropin-releasing hormone (GnRH) in the spinal cord of the frog *Rana Ridibunda*. *Cell Tissue Res.* 293 : 235-243.
42. Montero M., Yon L., Rousseau K., Arimura A., Fournier A., Dufour S., Vaudry H. (1998) – Localization of pituitary adenylate cyclase-activating polypeptide in the central nervous sstem of the European eel *Anguilla anguilla*: Stimulatory effect of PACAP on GH secretion. *Ann. N.Y. Acad. Sci.* 865 : 475-477.
43. Boularand S., Faucon-Biguet N., Vidal B., Veron M., Mallet J., Vincent J.-D., Dufour S., Vernier P. (1998) - Tyrosine hydroxylase in the European eel (*Anguilla anguilla*): cDNA cloning, brain distribution and phylogenetic analysis. *J. Neurochem.* 71 : 460-470.
44. Huang Y.-S., Rousseau K., Le Belle N., Vidal B., Burzawa-Gerard E., Marchelidon J., Dufour S. (1998) - Insulin-like growth factor 1 (IGF1) stimulates gonadotrophin production from eel pituitary cells: a possible metabolic signal for induction of puberty. *J. Endocrinol.* 159 : 43-52.
45. Montero M., Yon L., Rousseau K., Arimura A., Fournier A., Dufour S., Vaudry H. (1998) - Distribution, characterization, and growth hormone-releasing activity of pituitary adenylate cyclase-activating polypeptide in the European eel, *Anguilla anguilla*. *Endocrinology* 139 : 4300-4310.

46. Huang Y.-S., Rousseau K., Le Belle N., Vidal B., Burzawa-Gerard E., Marchelidon J., Dufour S. (1999) - Opposite effects of insulin-like growth factors (IGFs) on gonadotropin (GtH-II) and growth hormone (GH) production by primary culture of European eel (*Anguilla anguilla*) pituitary cells. *Aquaculture* 177 : 73-83.
47. Huang Y.S., Rousseau K., Sbaihi M., Le Belle N., Schmitz M., Dufour S. (1999) - Cortisol selectively stimulates pituitary gonadotropin (GtH-II) b subunit, in a primitive teleost, *Anguilla anguilla*. *Endocrinology* 140 : 1228-1235.
48. Marchelidon J., Le Belle N., Hardy A., Vidal B., Sbaihi M., Burzawa-Gerard E., Schmitz M., Dufour S. (1999) - Etude des variations de paramètres anatomiques et endocrines chez l'anguille européenne (*Anguilla anguilla*) femelle, sédentaire et d'avalaison: application à la caractérisation du stade argenté. *Bull. Fr. Pêche Piscic.* 355: 349-368.
49. Pradet-Balade B., Burel C., Dufour S., Boujard T, Kaushik S.J., Querat B., Boeuf G. (1999) - Thyroid hormones down-regulate thyrotropin β mRNA level in vivo in the turbot (*Psetta maxima*). *Fish Physiol. Biochem.* 20 : 193-199.
50. Rousseau K., Le Belle N., Marchelidon J., Dufour S. (1999) - Evidence that corticotropin-releasing hormone (CRH) acts as a growth hormone-releasing factor in a primitive teleost, the European eel (*Anguilla anguilla*). *J. Neuroendocrinol.* 11 : 385-392.
51. Durif C., Elie P., Dufour S., Marchelidon J., Vidal B. (2000). Analyse des paramètres morphologiques et physiologiques lors de la préparation à la migration de dévalaison chez l'anguille européenne (*Anguilla anguilla*) du lac de Grand-Lieu (Loire-Atlantique). *Cybiurn* 24 (3 suppl.) 63-74.
52. Kapsimali M., Vidal B., Gonzalez A., Dufour S., Vernier P. (2000) - Distribution of the mRNA encoding the four dopamine D1 receptor subtypes in the brain of the European eel (*Anguilla anguilla*): comparative approach to the function of D1 receptors in vertebrates. *J. Comp. Neurol.* 419: 320-343.
53. Montero M., Yon L., Kikuyama S., Dufour S., Vaudry H. (2000) - (Review) Molecular evolution of the growth hormone-releasing hormone/pituitary adenylate cyclase-activating polypeptide gene family. Functional implication in the regulation of growth hormone secretion. *J. Mol Endocrinol.* 25: 157-168.
54. Du J.L., Lee C.Y., Tacon Ph., Lee Y.H., Yen F.P., Tanaka H., Dufour S, Chang C.F. (2001) - Estradiol-17 b stimulates gonadotropin II expression and release in the protandrous male black porgy, *Acanthopagrus schegeli* Bleeker: a possible role in sex-change. *Gen. Comp. Endocrinol.* 121: 135-145.
55. Dufour S., Rousseau K., Sbaihi M., Le Belle N., Vidal B., Marchelidon J., Schmitz M. (2001) – Multiple neuroendocrine regulation of growth hormone in the European eel *Anguilla anguilla*. (Review Article) In « Sustainability of Ressources and Aquaculture of Eels » *The Journal of Taiwan Fisheries Research*, 9 :77-92.
56. Jeng S.-R., Chen G.-R, Lai J.-Y., Huang Y.-S., Dufour S., Chang C.-F. (2001) – Sex steroid and pituitary extract increase gonadotropin II content in the pituitary of aquacultured Japanese eel *Anguilla japonica*. In « Sustainability of Ressources and Aquaculture of Eels » *The Journal of Taiwan Fisheries Research*, 9 :109-117.
57. Law W.Y., Chen W.H., Song Y.L., Dufour S., Chang CF (2001) - Differential *in vitro* suppressive effects of steroids on the leucocyte phagocytosis in two teleosts, tilapia and common carp. *Gen. Comp. Endocrinol.* 121: 163-172.

58. Lee Y.-H., Du J.-L., Yen F.-P., Lee C.-Y., Dufour S., Huang J.-D., Sun L.-T., Chang C.-F. (2001) - Regulation of plasma gonadotropin II secretion by sex steroids, aromatase inhibitors, and antiestrogens in the protandrous black porgy, *Acanthopagrus schlegeli* Bleeker. *Comp. Biochem. Physiol. Part B*, 129: 399-406.
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