



HAL
open science

Unsupervised Feature Selection by a Genetic Algorithm for Mid-Infrared Spectral Data

Warda Boutegrabet, Olivier Piot, Dominique Guenot, Cyril Gobinet

► **To cite this version:**

Warda Boutegrabet, Olivier Piot, Dominique Guenot, Cyril Gobinet. Unsupervised Feature Selection by a Genetic Algorithm for Mid-Infrared Spectral Data. *Analytical Chemistry*, 2022, 94 (46), pp.16050-16059. 10.1021/acs.analchem.2c03118 . hal-04284427

HAL Id: hal-04284427

<https://hal.science/hal-04284427v1>

Submitted on 14 Nov 2023

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Publications dans des revues à comité de lecture

1. **Di Scala-Guenot D**, Strosser MT and Mialhe P. Multiple forms of somatostatin-like immunoreactivity in peripheral and portal blood in the duck. *Diabetologia*, 23(2):164-165, 1982
2. Strosser MT, **Di Scala-Guenot D**, Koch B and Mialhe P. Inhibitory effect and mode of action of somatostatin on lipolysis in chicken adipocytes. *BBA*, 763, 191-196, 1983
3. **Di Scala-Guenot D**, Strosser MT and Mialhe P. Characterization of somatostatin in peripheral and portal plasma in the duck: "in vivo" metabolism of S-14 and S-28. *J. Endocr*, 100, 329-335, 1984
4. **Di Scala-Guenot D**, Strosser MT and Mialhe P. Somatostatin-like-immunoreactivity (SLI) in pancreatic and intestinal tissues of the duck. A possible origin for the portal circulating SLI. *Horm Metab Res*, 11, 566-571, 1985
5. **Di Scala-Guenot D**, Strosser MT and Mialhe P. The biological activity of duck big somatostatin on chicken adipose tissue. *BBA*, 845, 261-264, 1985
6. Fuhrmann G, **Di Scala-Guenot D** and Ebel A. Somatostatin levels in the central nervous system of the snell dwarf mouse: is somatostatin excess the primary molecular defect in the dw/dw dwarfism? *Brain Res*, 328, 161-164, 1985
7. **Di Scala-Guénot D** and McIntosh CHS. Effects of methionine-enkephalin and naloxone on somatostatin and insulin secretions from the isolated, perfused rat pancreas. *Diabetes*, 34, 1283-1288, 1985
8. Ribéreau-Gayon G, Jung ML, **Di Scala D**, Beck JP. Comparison of the effects of fermented and unfermented mistletoe preparations on cultured tumor cells. *Oncology*, 43 Suppl 1:35-41, 1986
9. McIntosh C, Bakich V, Bokenfohr K, **DiScala-Guenot D**, Kwok YN and Brown JC. Cysteamine-induced reduction in gastrointestinal somatostatin: evidence for a region-specific loss in immunoreactivity. *Regulatory Peptides*, 21, 205-218, 1988
10. **Di Scala-Guenot D**, Strosser MT and Richard Ph. Electrical stimulations of perfused magnocellular nuclei in vitro elicit Ca^{2+} -dependent, TTX-insensitive release of oxytocin and vasopressin. *Neurosci. Letters*, 76, 209-214, 1987
11. Moos F, Strosser MT, Poulain D, **Di Scala-Guenot D**, Guerné Y, Rodriguez F, Richard Ph, Vincent JD. Evaluation des techniques de périfusion des noyaux magnocellulaires de l'hypothalamus in vitro. *Annales d'endocrinologie*, 48, 419-423, 1987
12. **Di Scala-Guenot D**, Strosser MT, Sarlieve LL, Legros JJ and Ph Richard. The development of neurophysin-containing neurons in primary cultures of rat hypothalami is related to the age of the embryo. Morphological study and comparison of in vivo and in vitro neurophysins, oxytocin and vasopressin content. *J. Neurosci. Res.*, 25, 94-103, 1990
13. **Di Scala-Guenot D**, Strosser MT, Felix JM and Ph Richard. Expression of vasopressin and opiates but not oxytocin genes studied with in situ hybridization in embryonic rat brain primary cultures. *Dev. Brain Res*. 56, 35-39, 1990
14. **Di Scala-Guenot D**, Strosser MT, Freund-Mercier MJ and Ph Richard. Characterization of oxytocin-binding sites in primary rat brain cell cultures. *Brain Res*. 524, 10-16, 1990
15. Lutz-Bucher B, Hindelang-Gertner C, **Di Scala-Guenot D**, Strosser MT and Koch B. Evidence for the presence of guanylate cyclase-coupled receptors for atrial natriuretic peptide on pituitary cells of the neurohypophysis. *Molecular and Cellular Neurosc.* 2, 363-368, 1991
16. **Di Scala-Guenot D** and Strosser MT. Oxytocin receptors on cultured astroglial cells. I. Kinetic and pharmacological characterization of oxytocin-binding sites on intact hypothalamic and hippocampic cells from foetal rat brain. *Biochem. J.* 284, 491-497, 1992a
17. **Di Scala-Guenot D** and Strosser MT. Oxytocin receptors on cultured astroglial cells. II. Regulation by a guanine-nucleotide binding protein. Effect of Mg^{2+} . *Biochem. J.* 284, 499-506, 1992b
18. **Di Scala-Guenot D**, Mouginot D and Strosser MT. Increase of intracellular calcium induced by oxytocin in hypothalamic cultured astrocytes. *Glia*, 11, 269-276, 1994
19. **Di Scala-Guenot D** and Strosser MT. Down-regulation of the oxytocin receptor on cultured astroglial cells. *Am J Physiol Cell Physiol*, 268, C413-C418, 1995

20. **Di Scala-Guenot D** and Strosser MT. Neurone-astrocyte interaction: inhibitory influence of neurones on astrocytic oxytocin receptor expression. *Adv Exp Med Biol*, 395: 349-350, 1995
21. Evrard ME, Strosser MT. and **Di Scala-Guenot D**. Pharmacological characterization of oxytocin binding sites in rat spinal cord membranes. Comparison with spinal cultured neurones and astrocytes. *J. Neuroendocri.*, 9, 553-560, 1997
22. Breton Ch, **Di Scala-Guenot D** and Zingg HH. Oxytocin receptor gene expression in rat mammary gland: structural characterization and regulation. *J. Mol. Endocrin.* 27, 175-189, 2001
23. Strosser MTh, Evrard ME, Breton Ch and **Guenot-Di Scala D**. Phorbol ester differentially regulates oxytocin receptor binding activity in hypothalamic cultured neurones and astrocytes. *Peptides*. 22, 677-683, 2001
24. Mittaud P, Labourdette G, Zingg HH and **Guenot-Di Scala D**. Neurones modulate oxytocin receptor expression in rat cultured astrocytes: involvement of TGF-beta and membrane components. *Glia*, 37, 169-177, 2002
25. Domon-Dell C, Schneider A, Mouchadel V, Guerin E, **Guenot D**, Aguillon S, Duluc I, Martin E, Iovanna J, Launay JF, Duclos B, Chenard MP, Meyer C, Oudet P, Kedinger M, Gaub MP and Freund JN. The Cdx-1 homeobox gene during human colon cancer progression. *Oncogene*, 22, 5969-5977, 2003
26. **Guenot D**, Guérin E, Aguillon-Romain S, Pencreach E, Schneider A, Neuville A, Chenard MP, Duluc I, Du Manoir S, Brigand C, Oudet P, Kedinger M and Gaub MP. Primary tumour genetic alterations and intra-tumoral heterogeneity are maintained in xenografts of human colon cancers showing chromosome instability. *J Pathol*, 208(5), 643-652, 2006
27. Weber JC, Meyer N, Pencreach E, Schneider A, Guerin E, Neuville A, Brigand C, Stemmer C, Bachellier P, Chenard M-P, Rohr S, Kedinger M, Meyer C, **Guenot D**, Oudet P, Jaeck D and Gaub M-P. Allelotyping analyses of synchronous primary and metastases CIN colon cancers identified different subtypes. *Int J Cancer*, 120, 524-532, 2007
28. Benhamed F, Gross I, **Guenot D**, Jehan F, Martin E, Brabletz T, Domon-Dell C, Kedinger M, Freund JN and Duluc I. The microenvironment controls Cdx-2 homeobox gene expression in colorectal cancer cells. *Am J Pathol*, 170:733-744, 2007
29. Wolthuis R, Travo A, Nicolet C, Neuville A, Gaub MP, **Guenot D**, Ly E, Manfait M, Jeannesson P and Piot O. Spectral Imaging for Histopathological Characterization of Xenografted Human Colon Carcinomas". *Analytical Chemistry*, 80 (22), 8461-8469, 2008
30. Pencreach E, Guérin E, Nicolet C, Lelong-Rebel I, Voegeli AC, Oudet P, Larsen AK, Gaub MP and **Guenot D**. Marked activity of irinotecan and rapamycin combination toward colon cancer cells in vivo and in vitro is mediated through cooperative modulation of the mTOR - HIF-1alpha axis. *Clin Can Res* 15, 1297-1307, 2009
31. Nicolet C, Guérin E, Neuville A, Kerckaert JP, Wicker N, Bergmann E, Brigand C, Kedinger M, Gaub MP and **Guenot D**. Evidence of several pathways for distal CIN colon carcinogenesis involving chromosome 20q. Studies using allelotyping, CGH arrays, and quantitative PCR. *Cancer Letters*, 282, 195-204, 2009
32. Entz-Werlé N, Choquet P, Neuville A, Kuchler-Bopp S, Clauss F, Danse JM, Simo-Noumbissie P, Guérin E, Gaub MP, Freund JN, Boehm N, Constantinesco A, Lutz P, **Guenot D**, Perrin-Schmitt F. Targeted APC;Twist double-mutant mice: a new model of spontaneous osteosarcoma that mimics the human disease. *Transl Oncol*. 3(6):344-53, 2010
33. Romain B, Neuville A, Meyer N, Brigand C, Rohr S, Schneider A, Gaub MP, **Guenot D**. Allelotyping identification of genomic alterations in rectal chromosomally unstable tumors without preoperative treatment. *BMC Cancer*. 10:561-574, 2010
34. Neuville A, Nicolet C, Meyer N, Schneider A, Legrain M, Brigand C, Duclos B, Bachellier Ph, Oudet P, Bellocq JP, Kedinger M, Gaub MP, **Guenot D**. Histological characteristics of non-MSI colon adenomas correlate with distinct molecular patterns. *Human Pathology*, 42, 244-253, 2011
35. Hinkel I, Duluc I, Martin E, **Guenot D**, Freund JN, Gross I. Cdx2 controls expression of the protocadherin Mucdhl, an inhibitor of growth and β -catenin activity in colon cancer cells. *Gastroenterology*. 2012, 142(4):875-885

36. Cosset E, Godet J, Entz-Werlé N, Guérin E, **Guenot D**, Froelich S, Bonnet D, Pinel S, Plénat F, Chastagner P, Dontenwill M, Martin S. Involvement of TGF β pathway in the regulation of $\alpha 5\beta 1$ integrins by caveolin-1 in human glioblastoma. *Int J Cancer*, 131(3), 601-11, 2012
37. Guérin E, Raffelsberger W, Pencreach E, Maier A, Neuville A, Schneider A, Bachellier Ph, Rohr S, Petitprez A, Poch O, Moras D, Oudet P, Larsen AK, Gaub MP, **Guenot D**. *In vivo* use of topoisomerase I inhibitor attenuates Hypoxia Inducible Factor 1 alpha-target gene expression and decreases tumor angiogenesis. *Molecular Medicine*, 18(1), 83-89, 2012
38. Janouskova H, Maglott A, Leger DY, Bossert C, Noulet F, Guérin E, **Guenot D**, Pinel S, Chastagner P, Plénat F, Entz-Werle N, Lehmann-Che J, Godet J, Martin S, Teisinger J, Dontenwill M. Integrin $\alpha 5\beta 1$ plays a critical role in resistance to temozolomide by interfering with the p53 pathway in high grade glioma. *Cancer Res*, 72(14):3463-3470, 2012
39. Schmitt C, Voegelin M, Marin A, Schmitt M, Schegg F, Hénon Ph, **Guenot D**, Tarnus C. Selective aminopeptidase-N (CD13) inhibitors of relevance to cancer chemotherapy. *Biorg Med Chem*, 21(7):2135-2144, 2013
40. Marisa L, de Reyniès A, Duval A, Selves J, Gaub MP, Vescovo L, Etienne-Grimaldi MC, Schiappa R, **Guenot D**, Ayadi M, Kirzin S, Chazal M, Fléjou JF, Benchimol D, Berger A, Lagarde A, Pencreach E, Piard F, Elias D, Parc Y, Olschwang S, Milano G, Laurent-Puig P, Boige V. Gene expression Classification of Colon Cancer defines six molecular subtypes with distinct clinical, molecular and survival characteristics. *Plos Medicine*, 10(5): e1001453, 2013
41. Nguyen A, Lasthaus C, Guérin E, Marcellin L, Pencreach E, Gaub MP, **Guenot D**, Entz-Werlé N. Role of topoisomerases in pediatric high grade osteosarcomas: TOP2A gene is one of the unique molecular biomarkers of chemoresponse. *Cancers*, 5(2):662-675, 2013
42. Romain B, Hachet-Haas M, Rohr S, Brigand C, Glazi JL, Gaub MP, Pencreach E, **Guenot D**. Hypoxia differentially regulated CXCR4 and CXCR7 signaling in colon cancer. *Molecular cancer*, 13:58-69, 2014
43. Prim N, Legrain M, Guerin E, Menecier B, Weingertner N, Voegeli AC, **Guenot D**, Maugard CM, Quoix AE, Beau-Faller M. Germ-line exon 21 EGFR mutations, V843I and P848L, in nonsmall cell lung cancer patients. *Eur Respir Rev*, 23(133):390-392, 2014
44. Romain B, Meyer N, Brigand C, Schneider A, Chenard MP, Gaub MP, **Guenot D**. Molecular markers for recurrence and sensitivity to preoperative chemoradiotherapy in locally advanced rectal tumours. *Digestive Surgery*, 2014
45. Spenlé C, Gasser I, Saupe F, Janssen KP, Arnold C, Klein A, van der Heyden M, Mutterer J, Neuville-Méchine A, Chenard MP, **Guenot D**, Esposito, I, Slotta-Huspenina, Ambartsumian N, Simon-Assmann S, Orend G. Spatial organization of the tenascin-C microenvironment in experimental and human cancer. *Cell adhesion and migration*, 9(1-2):4-13, 2015
46. Nguyen TNQ, Jeannesson P, Groh A, **Guenot D**, Gobinet C. Development of a hierarchical double application of crisp cluster validity indices: a proof-of-concept study for an automated FTIR spectral histology. *Analyst*, 140(7):2439-48, 2015
47. Manceau G, Marisa L, Boige V, Duval A, Gaub MP, Milano G, Selves J, Olschwang S, Jooste V, Legrain M, Lecorre D, **Guenot D**, Etienne-Grimaldi MC, Kirzin S, Martin L, Lepage C, Bouvier AM, Laurent-Puyg P. PIK3CA mutations predict recurrence in localized microsatellite stable colon cancer. *Cancer Medicine*, 4(3):371-382, 2015
48. Weingertner N, Meyer N, Legrain M, Voegeli AC, **Guenot D**, Renaud S, Massard G, Falcoz PE, Olland A, Menecier B, Gaub MP, Lindner V, Ghnassia JP, Quoix E, Chenard MP, Beau-Faller M. Correlation between MET protein expression and MET Gene Copy Number in a Caucasian cohort of Non-Small cell Lung Cancers according to the New IASLC/ATS/ERS classification. *Pathology*, 47(4):320-328, 2015
49. Lasthaus C, Mitlzer M, Marcellin L, Chenard MP, Marec-Berard P, Tabone MD, Pacquement H, Brugières L, **Guenot D**, Entz-Werlé N. Molecular reclassification in Pediatric Osteosarcomas at Surgical Resection is a Potential Helpful Prognostic Marker. *J Mol Biomark Diagn*, 6:2, 2015
50. Nguyen A, Legrain M, Noel G, Coca A, Meyer N, Schott R, Lasthaus C, Chenard MP, Gaub MP, Lessinger JM, **Guenot D**, Entz-Werle N. An Innovative Fluorescent Semi-quantitative Methylation-

- specific PCR Method for the Determination of MGMT Promoter Methylation is Reflecting Intra-tumor Heterogeneity. *Curr Cancer Drug Targets*. 15(7):624-640, 2015
51. Renaud S, Romain B, Falcoz PE, Olland A, Santelmo N, Brigand C, Rohr S, **Guenot D**, Massard G. KRAS and BRAF mutations are prognostic biomarkers in patients undergoing lung metastasectomy of colorectal cancer. *Br J Cancer*. 112(4):720-728, 2015
 52. Renaud S, Falcoz PE, Schaëffer M, **Guenot D**, Romain B, Olland A, Reeb J, Santelmo N, Chenard MP, Legrain M, Voegeli AC, Beau-Faller M, Massard G. Prognostic value of the KRAS G12V mutation in 841 surgically resected Caucasian lung adenocarcinoma cases. *Br J Cancer*. 113(8):1206-15, 2015
 53. Renaud S, Falcoz PE, Romain B, Olland A, Santelmo N, Brigand C, Rohr S, **Guenot D**, Massard G. Comment on 'KRAS and BRAF mutations are prognostic biomarkers in patients undergoing lung metastasectomy of colo-rectal cancer. *Br J Cancer*, 113(11):1637-1638, 2015
 54. Renaud S, Schaeffer M, Voegeli AC, Legrain M, Guérin E, Meyer N, Mennequier B, Quoix E, Falcoz PE, **Guenot D**, Massard G, Noël G, Beau-Faller M. Impact of EGFR mutations and KRAS amino acid substitution on the response to radiotherapy for brain metastasis of non-small-cell lung cancer. *Future Oncol*. 12(1):59-70, 2016
 55. Nguyen TNQ, Jeannesson P, Groh A, Piot O, **Guenot D**, Gobinet C. Fully unsupervised inter-individual IR spectral histology of paraffinized tissue sections of normal colon. *J Biophotonics*, 9(5):521-32, 2016
 56. Farah I, Nguyen TN, Groh A, **Guenot D**, Jeannesson P, Gobinet C. Development of a memetic clustering algorithm for optimal spectral histology: application to FTIR images of normal human colon. *Analyst*. 141(11):3296-304, 2016
 57. Renaud S, Schaeffer M, Falcoz PE, Seitlinger J, Romain B, Voegeli AC, Legrain M, Reeb J, Santelmo N, Rohr S, Brigand C, Olland A, **Guenot D**, Massard G. Perioperative bevacizumab improves survival following lung metastasectomy for colorectal cancer in patients harbouring v-Ki-ras2 Kirsten rat sarcoma viral oncogene homologue exon 2 codon 12 mutations. *Eur J Cardio-thoracic Surgery*, 51(2):255-262, 2017
 58. Romain B*, Benbrika-Nehmar R*, Marisa L, Legrain M, Lobstein V, Oravec A, Poidevin L, Bour C, Freund JN, Duluc I, **Guenot D**, Pencreach E. Histone hypoacetylation contributes to CXCL12 downregulation in colon cancer. Impact on tumor growth and cell migration. *Oncotarget*, 8(24):38351-38366, 2017 - * First coauthorship
 59. Nguyen A, Moussalieh FM, MacKay AI, Cicek A, Coca A, Chenard MP, Weingertner N, Letouz E, Guerin E, Pencreach E, Lasthaus Ch, Jannier S, **Guenot D**, Namer I, Jones Ch, Entz-Werlé N. Characterization of the transcriptional and metabolic responses of pediatric high grade gliomas to mTOR-HIF-1 α axis inhibition. *Oncotarget*, 8(42):71597-71617, 2017
 60. Romain B, Rohmer O, Schimchowitsch S, Hübner M, Delhorme Jb, Brigand C, Rohr S, **Guenot D**. Influence of preoperative life satisfaction on recovery and outcomes after colorectal cancer surgery – A prospective pilot study. *Health and Quality of Life Outcomes*, 16(1):16 -22, 2018
 61. Marisa L, Svrcek M, Collura A, Becht E, Cervera P, Wanherdrick K, Buhard O, Goloudina A, Jonchère V, Selves J, Milano G, **Guenot D**, Cohen R, Colas C, Laurent-Puig P, Olschwang S, Lefèvre JH, Parc Y, Boige V, Lepage C, André T, Fléjou JF, Dérangère V, Ghiringhelli F, de Reynies A, Duval A. The Balance Between Cytotoxic T-cell Lymphocytes and Immune Checkpoint Expression in the Prognosis of Colon Tumors. *J Natl Cancer Inst*. 110(1); 2018.
 62. Emprou C, Le Van Quyen P, Jegu Jérémie, Prim N, Weingertner N, Guérin E, Pencreach E, Legrain M, Falcoz PE, Olland A, Santelmo N, Quoix E, Massard G, **Guenot D**, Chenard MP, Beau-Faller M. SNAI2 and TWIST1 in lymph node progression in early stages of NSCLC patients. *Cancer Medicine*, 2018
 63. Mammadova-Bach E, Rupp T, Spénlé C, Jivkov I, Shankaranarayanan P, Klein A, Pisarsky L, Méchine-Neuville A, Cremel G, Keding M, De Wever O, Ambartsumian N, Robine S, Pencreach E, **Guenot D**, Goetz JG, Simon-Assmann P, Orend G and Lefebvre O. Laminin α 1 is overexpressed and orchestrates VEGFA functions in the ecosystem of colorectal carcinoma. *Biol of the Cell*, 110(8), 178-195, 2018

64. Lounis M, Leconte S, Rousselle Ch, Belzunces L, Desauziers V, Lopez Cuesta JM, Julien JM, **Guenot D**, Bourgeois D. Fireproofing Of Domestic Upholstered Furniture: uncertain benefits and potential risks. *Environmental Science & Technology*, J Hazard Mater. 366:556-562, 2019
65. Vidimar V, Licona C, Cerón-Camacho R, Guerin E, Coliat P, Venkatasamy A, Ali M, **Guenot D**, Le Lagadec R, Jung AC, Freund JN, Pfeffer M, Mellitzer G, Sava G, Gaidon C. A redox ruthenium compound directly targets PHD2 and inhibits the HIF1 pathway to reduce tumor angiogenesis independently of p53. *Cancer Lett.*, 440-441:145-155, 2019
66. Fechter P, Cruz Da Silva E, Mercier MC, Noulet F, Etienne-Seloum N, **Guenot D**, Lehmann M, Vauchelles R, Martin S, Lelong-Rebel I, Ray AM, Seguin C, Dontenwill M, Choulier L. RNA aptamers targeting integrin $\alpha 5\beta 1$ as probes for cyto- and histo-fluorescence in glioblastoma. *Mol. Ther. Nucleic acids*, 17:63-77, 2019
67. Reita D, Bour C, Benbrika R, Groh A, Pencreach E, Guérin E, **Guenot D**. Synergistic anti-tumor effect of mTOR inhibitors with irinotecan on colon cancer cells. *Cancers* 11(10):1581-1596, 2019
68. Blandin AF, Durand A, Litzler M, Tripp A, Guérin E, Ruhland E, Obrecht A, Keime C Fuchs Q, Reita D, Lhermitte B, Andres Coca H, Jones C, Lelong Rebel I, Villa P, Namer IJ, Dontenwill M, **Guenot D**, Entz-Werle N. Hypoxic environment and paired hierarchical 3D and 2D models of pediatric H3.3 mutated gliomas recreate the patient tumor complexity. *Cancers* 11(12):1875-1895, 2019
69. Pensec C, Gillaizeau F, **Guenot D**, Bessard A, Carton T, Leuillet S, Campone M, Neunlist M, Blottière HM, Le Vacon F. Impact of pemetrexed chemotherapy on the gut microbiota and intestinal inflammation of patient-lung-derived tumor xenograft (PDX) mouse models. *Sci Rep.* 10(1):9094, 2020
70. Boutegrabet W, Guenot D, Bouché O, Boulagnon-Rombi C, Marchal Bressenot A, Piot O, Gobinet C. Automatic identification of paraffin pixels on FTIR images acquired on FFPE human samples. *Analytical Chemistry*, 93(8):3750-3761, 2021
71. Goita AA; Guenot D. Colorectal Cancer: The Contribution of CXCL12 and Its Receptors CXCR4 and CXCR7. *Cancers*, 14(7), 1810, 2022
72. Boutegrabet W, Piot O, Guenot D, Gobinet C. Unsupervised feature selection by a genetic algorithm for mid-infrared spectral data. *Analytical Chemistry*, 94(46):16050-16059, 2022

Publications d'expertises :

1. Effets sanitaires du bisphénol A Rapport d'expertise collective Connaissances relatives aux usages du bisphénol A. Rapport d'études, Sept 2011
2. Valeur toxicologique de référence par inhalation pour le naphthalène Avis de l'Anses - Rapport d'expertise collective octobre 2013
3. Valeur toxicologique de référence par voie respiratoire pour le benzène. RAPPORT d'expertise collective. Novembre 2013
4. Valeur toxicologique de référence chronique par voie respiratoire pour le n-hexane Avis de l'Anses Rapport d'expertise collective, Juillet 2014
5. Connaissances relatives aux données de toxicité sur les composés de la famille des phtalates (Tome 3) Note d'accompagnement Rapport d'étude – mars 2015
6. Évaluation des risques liés à l'exposition aux retardateurs de flamme dans les meubles rembourrés Partie 2 - Evaluation des effets sur la santé et sur l'environnement, et estimation qualitative du rapport bénéfices/risques Avis de l'Anses Rapport d'expertise collective – Septembre 2015
7. Avis de l'Anses Rapport d'expertise collective, Octobre 2017. Edition révisée de l'avis de 2010 et du rapport de 2009
8. Belzunces L, Bourgeois D, Guenot D, and 22 auteurs, Rousselle C. Risques liés à l'exposition aux retardateurs de flamme dans les meubles rembourrés Partie 2 : Evaluation des effets sur la santé et sur l'environnement, et estimation qualitative du rapport bénéfices/risques, sept 2015

- 9.Élaboration de VTR cancérogène par voie inhalée pour le chloroforme. Avis de l'Anses Rapport d'expertise collective – Décembre 2017 Édition scientifique
- 10.Évaluation des risques des professionnels exposés aux produits utilisés dans les activités de soin et de décoration de l'ongle. Avis de l'Anses - Rapport d'expertise collective Octobre 2017
- 11.Priorisation des substances chimiques dans les émissions des produits du vapotage. Avis de l'Anses – Rapport d'expertise collective Novembre 2021
- 12.Priorisation des substances chimiques à rechercher dans les émissions des produits du vapotage en vue de l'évaluation des risques sanitaires. Production scientifique de l'Anses, 2021
- 13.Surveillance et contrôle réglementaires des produits du tabac et produits du vapotage sur le marché français. Avis de l'Anses - Rapport d'expertise collective Mars 2022
- 14.Étude sur les pratiques de consommation des usagers de cigarettes électroniques en France - Appui à la caractérisation des expositions – RAPPORT d'appui scientifique et technique. Décembre 2022
- 15.Critères, échantillonnage et méthodes analytiques pour la surveillance et le contrôle de la conformité réglementaire des produits du tabac et produits du vapotage sur le marché français. Guerbet M, Boyer L, Caillé-Garnier S, Casabianca H, Concha Lozano N, Guenot D, Kinouani S, Melchior M, Menetrier M, Nguyen Thanh V, Pourchez J, Tornoy D, Zervas E, Anthérieu S, Marcou G, Mary-Krause M, Orset C, Sleiman M, Solinas M, Yon J, Mouchet A, Labarbe B, Achille J, Mansuy T, Lozachmeur J, Leroux C. Rapport d'expertise collective. Saisine n° 2020-SA-0015, Anses. 2022, 120 p

Chapîtres d'ouvrages

1. **Di Scala-Guenot D**, Strosser MT, Stoeckel ME, Freund-Mercier MJ. Oxytocin receptors on hypothalamic oxytocin neurons and astrocytes. In "Neurohypophysis, recent progress of vasopressin and oxytocin research", eds Saito T., Kurokawa K., Yoshida S, 363-375, 1995
2. Rammal A, Gobinet C, Nguyen TNQ, Jeannesson P, Guenot D. Histologie spectrale par imagerie moyen-infrarouge et sélection de variables. *Morphologie* 101(335):249, December 2017

Conférences invitées

1. **Di Scala-Guenot D**, Strosser MTh. Oxytocin receptors expressed on hypothalamic neurons and astrocytes in culture. Satellite symposium of the N.I.C.E. 92, *Oral communication as invited speaker*, "The Neurohypophyseal peptide systems", Spa 1992
2. Strosser M.Th. et **Di Scala-Guenot D**. La régulation de l'expression du récepteur de l'ocytocine par les protéines kinases C est différente dans les neurones et les astrocytes. Société de Neuroendocrinologie Expérimentale, *Oral communication as invited speaker*, Québec 1995
3. **Guenot D**. Développement d'un modèle de xénogreffe pour l'étude de la carcinogenèse colique humaine. Journée d'animation scientifique CSCRI Alsace : Cancer : de l'épidémiologie à la thérapie. *Oral communication as invited speaker*, Strasbourg, 2003
4. **Guenot D**, Gaub MP, Nicolet C. Recherche de gènes localisés sur le chromosome 20 impliqués dans le mécanisme de progression tumorale de cancers CIN du côlon. Journée Agilent, *Oral communication as invited speaker*, Strasbourg 2006
5. **Guenot D**, Weber JC, Meyer N, Guérin E, Schneider A, Pencreach E, Brigand C, Neuville A, Keding M, Gaub MP. Clustering Analysis of Primary Colon Tumors and Paired Synchronous Liver Metastases: Identification of Genetic Profiles Involved in Colon Carcinogenesis. Upper Rhine Oncology Meeting, *Oral communication as invited speaker*, Luxembourg 2006
6. **Guenot D**. Cancer du côlon chez l'homme: ce que l'on savait, ce qui a changé. 40^{ème} anniversaire du comité du Bas-Rhin de la Ligue contre le cancer, *Oral communication as invited speaker*, Strasbourg, 2007
7. Pencreach E, Guérin E, Raffelsberger W, Kurtz JE, Nicolet C, Lelong-Rebel I, Gaub MP, **Guenot D**. Intérêt et limites du ciblage de l'axe mTOR/HIF-1 alpha dans le cancer colorectal métastatique.

Colloque Inter-Régional Grand-Est de Recherche Translationnelle en Oncologie, ONCOTRANS, *Oral communication as invited speaker*, Nancy 2009

8. Guérin E, Pencreach E, Nicolet C, Ruck L, Hamelin N, Jaillet M, Entz-Werlé N, Gaub MP, **Guenot D**. Xenograft platform for colon cancers and brain tumors. Colloque Inter-Régional Grand-Est de Recherche Translationnelle en Oncologie, ONCOTRANS, *Oral communication as invited speaker*, Nancy 2009
9. **Guenot D**. Comprendre la perte d'expression de CXCL12 dans les cancers coliques humains. 17^{ème} journée de la Ligue contre le Cancer, Strasbourg, Nov 2016
10. **Guenot D**. CXCL12-CXCR4/CXCR7 axis and colon cancer metastases. 4th World Cancer Research Conference – Amsterdam March 2020

4. Publications dans des actes de congrès

1. **Di Scala-Guenot D**, Strosser MT and Mialhe P. Multiple forms of somatostatin-like immunoreactivity in peripheral and portal blood in the duck. 18^{ème} congrès EASD. *Oral communication*, Diabetologia, 23(2):14, n°78, 1982
2. Ribéreau-Gayon G, Baudino S, Jung ML, **Di Scala D**, Beck JP. Inhibition of cultured-cell growth by mistletoe (*viscum-album* l) preparations - active substances. *Oral communication*, Eur J Cell Biol, 42(15):52, 1986
3. **Di Scala-Guenot D**, Strosser MT. Neurone-astrocyte interaction. Inhibitory influence of neurones on astrocytic oxytocin receptor expression Oxytocin 395 :349-350, Tokyo, Japan, 1995
4. Guérin E, Raffelsberger W, Pencreach E, Neuville A, Schneider A, Lavaux T, Bachellier P, Rohr S, **Guenot D**, Gaub MP. Gene expression profiling of patient-derived colon xenograft tumors following treatment with irinotecan. *Poster*, Eur J Can, suppl, 4(12):134-135, 2006
5. Nicolet C, Guérin E, Schneider A, Neuville A, Kerckaert JP, Kedinger M, Gaub MP, **Guenot D**. Recherche de gènes localisés sur le bras long du chromosome 20 impliqués dans les mécanismes de progression tumorale des cancers coliques humains. CECED, *Oral communication*, Gastroentérologie clinique et biologique, 30(5), 714, 2006.
6. Wolthuis R, Jeannesson P, **Guenot D**, Gaub MP, Abecassis J, Manfait M, Piot O. Infra-red micro spectral imaging of colon tumors. XXVI^{ème} forum cancérologie, Paris, *Oral communication*, Bull Cancer, 93, 557, 2006
7. Pencreach E, Arrive M, Raffelsberger W, Lelong-Rebel I, Larsen AK, Gaub MP, **Guenot D**, Guérin E. Rational design of effective therapy combining irinotecan and rapamycin to target mTOR/HIF-1 alpha axis in colon cancer. 20th EORTC-NCI-AACR, Genève, *Poster*, Eur J Can, suppl, 6(12):185-185, 2008
8. Nicolet C, Neuville A, Flaman J M, Gaub MP, **Guenot D**. E2F2 - a potential new molecular marker for colon carcinogenesis. EACR, Lyon, *Poster*, Eur J Can, suppl, 6(9):51-52, 2008
9. Neuville A, Meyer N, Schneider A, Legrain M, Guerin E, **Guenot D**, Kedinger M, Gaub M P. Molecular subtyping of 159 stable microsatellite colon polyps. EACR, Lyon, *Poster*, Eur J Can, suppl, 6(9):52, 2008
10. Guérin E, Pencreach E, Raffelsberger W, Kurtz JE, Nicolet C, Lelong-Rebel I, Gaub MP, **Guenot D**. Rational design of effective therapy combining irinotecan and rapamycin to target mTOR/HIF-1 alpha axis in colon cancer. 13th Annual Meeting of French Society of Pharmacology and Therapeutics, 76th Annual Meeting of Society of Physiology. Fundamental & Clinical Pharmacology. Vol 23, 49, n°247, *Poster* Marseille 2009
11. Pencreach E, Guérin E, **Guenot D**, Legrain M, Gaub MP, Entz-Werle N. Is irinotecan and rapamycin combination, targeting mTOR/HIF-1 alpha axis, a new effective therapy in high grade brain tumors? AACR Meeting, *Poster*, Abstracts, 156, 2009
12. Entz-Werle N, Lavaux T, Lutz P, **Guenot D**, Gaub MP, Perrin-Schmitt F, Osteosarcoma committee of SFCE (Société Française des Cancers de l'Enfant). Bone development gene deregulation is involved in high grade pediatric osteosarcoma oncogenesis and in their prognostic outcome. AACR Meeting, *Poster*, Abstracts, 4045, 2009

13. Voegelin M, Guérin E, Hammelin N, Nicolet C, Gaub MP, **Guenot D** Impact of altered expression of E2Fs gene family on tumorigenic and phenotypic process in human colon cancer. EACR, Oslo, *Poster*, Eur J Can Suppl, 8(5), 108, 2010
14. Nguyen A, Legrain M, Neuville A, Pencreach E, Guérin E, Lutz P, Gaub, MP, **Guenot D**, Entz-Werlé N. Are the methylation of MGMT (O6-methylguanine-DNA methyltransferase) and the DNA mismatch repair (MMR) mechanism frequently involved in pediatric cancers? *Poster*, 22nd EORTC-NCI-AACR Symposium on Molecular Targets and Cancer Therapeutics, Berlin, Eur J Can, suppl, 8(7):166, 2010
15. Entz-Werle N, Nguyen A, Legrain M, Pencreach E, Guérin E, Gaub MP, Lutz P, **Guenot D**. Are the methylation of MGMT (O6-methylguanine-DNA methyltransferase) and the DNA mismatch repair (MMR) mechanism frequently involved in pediatric cancers? 14th International Symposium on Pediatric Neuro-Oncology, Vienna, Austria, *Neuro-Oncology*, 12(6), 1143, 2010
16. Benabderrahmane S, Devignes MD, Smail-Tabbone M, Poch O, Napoli A, Raffelsberger W, **Guenot D**, Nguyen NH, Guérin E. Benchmarking a new semantic similarity measure using fuzzy clustering and reference sets: Application to cancer expression data. *Oral Communication*, *Revue d'Intelligence Artificielle*, in press, 2011
17. Voegelin M, Guérin E, Hammelin N, Nicolet C, Gaub MP, **Guenot D**. Impact of altered expression of E2Fs gene family on tumourigenic and phenotypic process in human colon cancer. EACR, *Poster*, Eur J Cancer, 47(1):S398-S399, Stockholm 2011
18. Nguyen A, Lasthaus Ch, Jaillet M, Pencreach E, Guérin E, Gaub MP, **Guenot D**, Entz-Werlé. Involvement of DNA mismatch repair (mmr), base excision repair (ber) systems and o6-methylguanine methyltransferase in pediatric high grade glioma resistance to temozolomide. 15th International Symposium on Pediatric Neuro-Oncology (ISPNO), Toronto, Canada, *Neuro-Oncology*, 14, suppl 1, 13, 2012
19. Pencreach E, Nguyen A, Guérin E, Lasthaus C, **Guenot D**, Entz-Werle N. The combination of mTOR and HIF-1 inhibitors is highly efficient in pediatric malignant brain tumors. 15th International Symposium on Pediatric Neuro-Oncology (ISPNO). *Neuro-Oncology Vol 14 Suppl 1*, 10, *Poster Toronto 2012*
20. Janouskova H, Maglott A, **Guenot D**, Pinel S, Chastagner P, Plenat F, Entz-Werle N, Godet J, Martin S, Dontenwill M. Integrin alpha 5 beta 1 plays a critical role in resistance to chemotherapy by interfering with the p53 pathway in high grade glioma. *Poster*, Eur J Cancer 48(5), S67, *Poster Barcelona 2012*
21. Nguyen A, Pencreach E, Lasthaus C, Lobstein V, Guérin E, **Guenot D**, Entz-Werle N. The modulation of mTOR/HIF-1 alpha pathway is efficiently inhibiting pediatric malignant brain tumor cell lines. 2nd Annual Pediatric Neuro-Oncology Basic and Translational Research Conference. *Neuro-Oncology Vol 15 Suppl: 1*, 20, *Poster Fort Lauderdale 2013*
22. **Guenot D**, Romain B, Hachet-Haas M, Galzi JL, Pencreach E. Modulation of CXCR4/CXL12 axis by hypoxia and pharmacological drug combination in colon cancer. 23th Biennial EACR Congress, *Poster*, Eur J Cancer, Vol 50, Suppl 5, pp S142, 9-12 july, München 2014
23. Janouskova H, Maglott A, **Guenot D**, Pinel S, Chastagner P, Plenat F, Entz-Werle N, Godet J, Martin S, Dontenwill M. Integrin $\alpha 5\beta 1$ Plays a Critical Role in Resistance to Chemotherapy by Interfering With the P53 Pathway in High Grade Glioma. 23th Biennial EACR Congress; *Poster*, Eur J Cancer, Vol 48, Suppl 5, pp S67, 9-12 july, München 2014
24. Benbrika R, Romain B, Marisa L, Bour C, Duluc I, Pencreach E, **Guenot D**. Understanding loss of SDF1 expression in colon tumors. 24th Biennial EACR Congress, Eur J Cancer, Vol 61, Supl 1, S26, *Poster*, Manchester, 9-12 July 2016
25. Primary cell lines of pediatric high grade gliomas (PHGGs) with histone h3.3 mutations are mimicking inter and intra-tumor heterogeneity. June 2017, *Neuro-Oncology* 19(suppl_4):iv49-iv49
26. Anne-Florence Blandin Aurelie Durand Marie Litzler Eric Guerin Izzie Jacques Namer Dominique Guenot Natacha Entz-Werle. Hypoxia seems to be frequently upregulated in the pediatric high grade glioma and DIPG. *Neuro-Oncology*, 19,suppl4, 2017, pp iv25

27. Hypoxia seems to be frequently upregulated in the pediatric high grade glioma and DIPG
June 2017, *Neuro-Oncology* 19(suppl_4):iv25-iv25
28.

5. Communications orales

1. Wolthuis R, Jeannesson P, **Guenot D**, Gaub MP, Abecassis J, Manfait M, Piot O. IR spectral imaging of xenografted colon tumours. 2nd DASIM (Applications of Synchrotron Infrared Microspectrometry) Workshop, *Oral communication* Frascati, Italie, 2006.
2. Nicolet C, Neuville A, Kerckaert JP, Keding M, Gaub MP, **Guenot D**. Search of genomic markers for invasiveness of human colon carcinomas, with a particular emphasis on the chromosome 20q status. Annual Meeting of the European Cancer Center EuCC, *Oral communication*, Prix Paul Basset, Strasbourg, 2007
3. Nicolet C, Kerckaert JP, Neuville A, Gaub MP, **Guenot D**. Search of genomic markers for human colon tumour invasiveness. 1er Forum Cancéropole Grand Est, *Oral communication* Vittel, 2007
4. **Guenot D**, Nicolet D, Neuville A, Gaub MP. Search of molecular markers for human colon tumor progression. Annual Meeting of the European Cancer Center EuCC, *Oral communication*, Basel, 2008
5. Nicolet C, Guérin E, Neuville A, Keding M, Gaub MP, **Guenot D**. Recherche de marqueurs moléculaires d'initiation et de progression tumorale dans les cancers coliques humains de phenotype CIN. Ceced, *Oral communication* Strasbourg, 2009
6. Romain B, Guérin E, Brigand C, Rohr S, **Guenot D**, Gaub MP, Pencreach E. Intérêt du ciblage de HIF-1alpha dans le traitement du cancer colorectal: effets sur la migration, l'invasion et la formation de métastases. Ceced XXVIII^{ème} réunion, JFOHD, *Oral communication*, Paris 2010
7. Schmitt C, Voegelin M, Alavi S, **Guenot D**, Tarnus Cn Pasquet-Vallejo S, Henon Ph. Etude du mode d'action d'un inhibiteur de l'aminopeptidase N/CD13 dans des modèles in vitro. XVIII^{ème} journée Jeunes chercheurs, *Oral communication*, Paris, 2010
8. Voegelin M, Schmitt C, Guérin E, Jaillat M, Tarnus C, **Guenot D**. Impact d'un inhibiteur de l'aminopeptidase N/CD13 sur la croissance de xénogreffes de tumeurs coliques humaines. 4^{ème} Forum Cancéropole Grand Est, *Oral communication*, Strasbourg 2010
9. Sebiskveradze D, Vrabie V, Gobinet C, **Guenot D**, Neuville A, Manfait M, Jeannesson P, Piot O. Histologie spectrale de tumeurs coliques et de leurs métastases hépatiques : développement des méthodes de classification floue (fuzzy C-means) aux données infrarouge tissulaires. 4^{ème} Forum Cancéropole Grand Est, *oral communication*, Strasbourg 2010
10. Romain B, Pencreach E, Rohr S, Brigand C, Gaub MP, **Guenot D**. Mise en place d'un modèle d'étude de la dissémination métastatique de tumeurs coliques humaines par greffe orthotopique caecale chez la souris nue. AFC, *Oral communication*, Paris, 2011
11. Voegelin M, Guérin E, Schmitt C, Tarnus C, **Guenot D**. Impact of a single treatment by a novel aminopeptidase-N/CD13 inhibitor combined or not with Rapamycin on the growth of human tumours xenografted in nude mice. Annual Meeting of the European Cancer Center EuCC, *Oral communication*, Bâle, 2011
12. Coliat P, Ramolu L, Noel G, Abecassis J, Jung A, Pencreach E, **Guenot D**. Sensibilisation de lignées tumorales des Voies Aériennes Digestives Supérieures (VADS) à la radiothérapie par ciblage chimiothérapique de l'axe EGFR/ mTOR/HIF-1. 6^{ème} Forum CGE, *Oral communication*, Strasbourg, Nov 2012
13. Boige V, Marisa L, de Reyniès A, Duval A, Selves J, Gaub MP, Etienne-Grimaldi MC, **Guenot D**, Kirzin S, Olschwang S, Milano G, Laurent-Puig P. Etablissement d'une nouvelle classification des cancers coliques définissant 6 sous-groupes moléculaires ayant des caractéristiques cliniques, moléculaires et pronostiques distinctes. JFOHD, *Oral communication*, Paris 2013
14. **Guenot D**, Romain B, Bour C, Galzi JL, Hachet-haas, M, Pencreach E. Etat des lieux de l'axe CXCL12/CXCR4/CXCR7 dans le cancer colique humain. Ceced XXXIII^{ème} réunion, *Oral communication*, Nantes, 2015

15. **Guenot D**, Benbrika R, Romain B, Bour C, Pencreach E. L'axe CXCL 12/CXCR4/CXCR7 dans le cancer colique humain. *Communication orale* - 4ème édition Oncotrans, Dijon, 25-26 juin 2015
16. Nguyen TNQ, Jeannesson P, Groh A, **Guenot D**, Gobinet C. Fourier-transform infrared imaging and clustering : toward an automated histology of normal colon. 16th European Conference on the Spectroscopy of Biological Molecules (ECSBM 2015), *Oral communication* Bochum, Germany, 6-10 september 2015
17. Farah I, Nguyen TNQ, Groh A, **Guenot D**, Jeannesson P, Gobinet C. Optimal Spectral Histology of Human Normal Colon by Genetic Algorithm. 16th European Conference on the Spectroscopy of Biological Molecules (ECSBM 2015), *Oral communication*, , Bochum, Germany, 6-10 september 2015
18. Nguyen TNQ, Jeannesson P, Groh A, **Guenot D**, Gobinet C. Imagerie IRTF et classification non-supervisée : vers une histologie spectrale automatisée du colon normal. 21ème Journées du Groupe Français de Spectroscopie Vibrationnelle (GFSV 2015), *Oral communication*, Reims, 17-19 juin 2015
19. Farah I, Nguyen TNQ, Groh A, **Guenot D**, Jeannesson P, Gobinet C. Applications des algorithmes génétiques pour une histologie spectrale optimale du côlon humain. 16ème conférence ROADEF – Société Française de Recherche Opérationnelle et Aide à la Décision (ROADEF 2015), *Oral communication*, Marseille, 25-27 février 2015
20. Benbrika-Nehmar R, Romain B, Marisa L, Duluc I, Bour C, Pencreach E, Guenot D. Understanding loss of sdf1 expression in colon tumors. 23rd Annual Meeting of the European Cancer Center (EuCC), *Oral communication*, Strasbourg, May 13, 2016
21. Benbrika-Nehmar R, Romain B, Marisa L, Duluc I, Bour C, Pencreach E, Guenot D. Understanding loss of sdf1 expression in colon tumors. Fédération de médecine translationnelle, *Oral communication*, Strasbourg, Avril 2016
22. Benbrika-Nehmar R, Romain B, Bour C, Duluc I, Pencreach E, Guenot D. Understanding loss of SDF1 expression in colon tumors. JFHOD, *Oral communication*, Paris March 2017

6. Posters

1. **Di Scala-Guenot D**, Strosser MTh, Mialhe P. Antilipolytic effects of the three forms of circulating somatostatin-like-immunoreactivity on chicken adipose tissue. 15th FEBS Meeting, *Poster*, Bruxelles, 1983
2. Gross R, **Di Scala-Guenot D**, Strosser MTh, Mialhe P. Somatostatin release from the pancreas: the effects of catecholamines, glucose and free fatty acids. International Symposium on Neuropeptides: critical evaluation and concepts, *Poster*, Montpellier 1983
3. Fuhrmann G, **Di Scala-Guenot D**, Ebel A. Hypothalamic and extrahypothalamic somatostatin levels in the snell dwarf mouse ; somatostatin excess as the primary molecular site in the dw/dw mutation. 5th International Meeting ISDN, *Poster*, Chieti 1984
4. Strosser MT, **Di Scala-Guenot D**, Sarlieve LL, Richard Ph. Neurones ≠ neurophysines dans des cultures primaires de cellules dissociées d'hypothalamus d'embryons de rat: évolution morphologique en fonction de l'âge des embryons. 17ème Colloque de la Société de Neuroendocrinologie expérimentale, Annales d'Endocrinologie 48(6) :43 *Poster*, Lyon 1987
5. **Di Scala-Guenot D**, Strosser MTh, Sarlieve LL, Richard Ph. Primary cultures of embryonic rat hypothalamic neuropeptide-containing neurons: morphological development and cell content measurement. 7th meeting of the European Society for Neurochemistry (ESN), *Neurochem Intern* 13 suppl. 1, F269, *Poster*, Göteborg 1988
6. **Di Scala-Guenot D**, Strosser MTh, Freund-Mercier MJ, Richard Ph. Evidence for oxytocin binding in the rat cerebral hemispheres and hypothalamus serum-free primary cultures. 12th Meeting of the International Society for Neurochemistry (ISN). *J of Neurochem* 52 suppl. 1, 5147B, *Poster*, Algarve 1989

7. **Di Scala-Guenot D**, Strosser MTh, Freund-Mercier MJ, Richard Ph. Sites de liaison de l'ocytocine dans des cultures primaires d'hypothalamus et d'hémisphères cérébraux de rat. 18ème Colloque de la Société de Neuroendocrinologie expérimentale, *Poster*, Rouen 1989
8. **Di Scala-Guenot D**, Strosser MTh, Richard Ph. Oxytocin-binding sites on primary embryonic glial cell cultures. 2nd International Congress of Neuroendocrinology, *Poster*, Bordeaux 1990
9. Fuhrmann G, **Di Scala-Guenot D**, Strosser MTh, Kempf E, Kempf J, Ebel A. Neuromodulatory effects of somatostatin on striatal and hippocampal cholinergic activity in mice. Annual Meeting: European brain and behaviour Society, *Poster*, Strasbourg 1984
10. **Di Scala-Guenot D**, Strosser MTh, Richard Ph. Données préliminaires en faveur d'une libération dendritique de l'ocytocine dans les noyaux magnocellulaires. 11ème Colloque de Neurosciences, *Poster*, Bordeaux 1986
11. **Di Scala-Guenot D**, Strosser MTh. Désensibilisation du récepteur de l'ocytocine dans des cellules gliales en culture. 1er Colloque de la Société de Neurosciences, *Poster*, Strasbourg 1992
12. **Di Scala-Guenot D**, Mouginot D, Strosser MTh. Elevation du calcium intracellulaire par l'ocytocine dans des astrocytes en culture. Société de Neuroendocrinologie expérimentale, XXIème colloque, *Poster*, Nancy 1992
13. **Di Scala-Guenot D**, Strosser MTh. Expression of oxytocin receptors on cultured neurones and astrocytes. American Society for Neuroscience, *Poster*, Washington 1993
14. **Di Scala-Guenot D** and Strosser MTh. Phorbol ester modulates iodinated oxytocin antagonist binding on cultured astrocytes. First European Meeting on glial cell function in health and disease. *Poster*, Heidelberg 1994
15. Evrard ME, **Di Scala-Guenot D**, Strosser MTh. Oxytocin-binding sites in rat spinal cord cultured astrocytes. First Meeting on glial cell function in health and disease. *Poster*, Heidelberg 1994.
16. Strosser MTh, **Di Scala-Guenot D**. Down-regulation du récepteur de l'ocytocine: modulation par un ester du phorbol. Société de Neuroendocrinologie expérimentale, *Poster*, Nice 1994
17. **Di Scala-Guenot D**, Kelche Ch. and Strosser M.Th. Astroglial oxytocin receptor down-regulation: modulation by protein(s) kinase(s) C. Society for Neuroscience, *Poster*, Miami 1994
18. Evrard M.E., **Di Scala-Guenot D** et Strosser M.Th. Sites de liaison de l'**ocytocine** sur des neurones de moelle épinière de rat en culture primaire. Société des Neurosciences françaises, *Poster*, Lyon 1995
19. **Di Scala-Guenot D** and Strosser M.Th. Neurone-astrocyte interaction: inhibitory influence of neurones on astrocytic oxytocin receptor expression. Hanseatic Endocrine conference on Oxytocin: cellular and molecular approaches in medicine and research, *Poster*, Hamburg 1995
20. Evrard M., Strosser M.Th. et **Di Scala-Guenot D**. Characterization of oxytocin receptors on rat spinal cord membranes. The 2nd Meeting of European Neuroscience, *Poster*, Strasbourg 1996
21. Evrard M., **Di Scala-Guenot D** et Strosser M.Th. Caractérisation des récepteurs de l'ocytocine dans le moelle épinière de rat. Société de Neuroendocrinologie Expérimentale, *Poster*, Strasbourg 1996
22. **Di Scala-Guenot D**, Mittaud P., Labourdette G. and Freund-Mercier M.J. Involvement of neurone-astrocyte interactions on oxytocin receptor expression in rat primary cultures. European meeting on glial cell function in health and disease - dialogue between glia and neurons, *Poster*, Athens 1998
23. **Di Scala-Guenot D**, Mittaud P., Labourdette G. and Freund-Mercier M.J. Régulation de l'expression du récepteur de l'ocytocine : rôle des interactions neurones-astrocytes. Société des Neurosciences, *Poster*, Marseille 1999
24. **Di Scala-Guenot D**, Strosser MTh. Expression of oxytocin receptors on cultured neurones and astrocytes. American Society for Neuroscience, *Poster*, Washington 1993
25. **Di Scala-Guenot D** and Strosser MTh. Phorbol ester modulates iodinated oxytocin antagonist binding on cultured astrocytes. First European Meeting on glial cell function in health and disease. *Poster*, Heidelberg 1994
26. Evrard ME, **Di Scala-Guenot D**, Strosser MTh. Oxytocin-binding sites in rat spinal cord cultured astrocytes. First Meeting on glial cell function in health and disease. *Poster*, Heidelberg 1994.

27. Strosser M.Th, **Di Scala-Guenot, D.** Down-regulation du récepteur de l'ocytocine: modulation par un ester du phorbol. Société de Neuroendocrinologie expérimentale, *Poster*, Nice 1994
28. **Di Scala-Guenot D.**, Kelche Ch. and Strosser M.Th. Astroglial oxytocin receptor down-regulation: modulation by protein(s) kinase(s) C. Society for Neuroscience, *Poster*, Miami 1994
29. Evrard M.E., **Di Scala-Guenot D.** et Strosser M.Th. Sites de liaison de l'**ocytocine** sur des neurones de moelle épinière de rat en culture primaire. Société des Neurosciences françaises, *Poster*, Lyon 1995
30. **Di Scala-Guenot D.** and Strosser M.Th. Neurone-astrocyte interaction: inhibitory influence of neurones on astrocytic oxytocin receptor expression. Hanseatic Endocrine conference on Oxytocin: cellular and molecular approaches in medicine and research, *Poster*, Hamburg 1995
31. Evrard M., Strosser M.Th. et **Di Scala-Guenot D.** Characterization of oxytocin receptors on rat spinal cord membranes. The 2nd Meeting of European Neuroscience, *Poster*, Strasbourg 1996
32. Evrard M., **Di Scala-Guenot D.** et Strosser M.Th. Caractérisation des récepteurs de l'ocytocine dans le moelle épinière de rat. Société de Neuroendocrinologie Expérimentale, *Poster*, Strasbourg 1996
33. **Di Scala-Guenot D.**, Mittaud P., Labourdette G. and Freund-Mercier M.J. Involvement of neurone-astrocyte interactions on oxytocin receptor expression in rat primary cultures. European meeting on glial cell function in health and disease - dialogue between glia and neurons, *Poster*, Athens 1998
34. **Di Scala-Guenot D.**, Mittaud P., Labourdette G. and Freund-Mercier M.J. Régulation de l'expression du récepteur de l'ocytocine : rôle des interactions neurones-astrocytes. Société des Neurosciences, *Poster*, Marseille 1999
35. Guérin E, Pencreach E, **Guenot D**, Schneider A, Rohr S, Bachellier P, Neuville A, Meyer N, Chenard MP, Dufour P, Meyer C, Oudet P, Gaub MP. Déséquilibre allélique en 20q11 et amplification du gène de la topoisomérase I : un marqueur de bon pronostic dans les tumeurs colorectales de stade A/B1-B2. XXIVème Forum de Cancérologie. *Poster*, Paris 2004
36. **Guenot D**, Weber JC, Meyer N, Guérin E, Schneider A, Pencreach E, Brigand C, Neuville A, Kedinger M, Gaub MP. Clustering Analysis of Primary Colon Tumors and Paired Synchronous Liver Metastases: Identification of Genetic Profiles Involved in Colon Carcinogenesis. American Association for Cancer Research – Special Conference: Colorectal Cancer: Molecular Pathways and Therapies. *Poster*, Dana Point 2005
37. Wolthuis R, Jeannesson P, **Guenot D**, Gaub MP, Manfait M, Piot. Molecular histology of xenografted colon tumors by infrared micro-Imaging. AACR annual meeting, *Poster*, Los Angeles, 2007
38. Nicolet C, Kerckaert JP, Neuville A, Gaub MP, **Guenot D.** Search of genomic markers for human colon tumour invasiveness. Cancer genome and epigenome: new technologies for new challenges, *Poster*, Paris, 2007
39. Pencreach E, Arrivé M, Raffelsberger W, Lelong-Rebel I, Larsen AK, Gaub MP, **Guenot D**, Guérin E. mTOR inhibitor rapamycin sensitizes colon cancer to irinotecan in vivo and in vitro through HIF-1 α inhibition. AACR Special Conference in Cancer Research - Advances in Colon Cancer Research, Boston-Cambridge, MA, USA, *Poster*, 2007
40. Pencreach E, Arrive M, Raffelsberger W, Lelong-Rebel I, Larsen AK, Gaub MP, **Guenot D**, Guérin E. Rational design of effective therapy combining irinotecan and rapamycin to target mTOR/HIF-1 α axis in colon cancer. 20th EORTC-NCI-AACR Symposium on Molecular Targets and Cancer Therapeutics. EJC Suppl Vol 6 (12) 185, *Poster* Genève 2008
41. Nicolet C, Kerckaert JP, Neuville A, Gaub MP, **Guenot D.** Omics' approaches in cancer: clinical applications. Société française du cancer, *Poster*, Paris, 2008
42. Gasser I, Spenle C, Janssen KP, Simon-Assmann P, Kedinger M, Mechine-Neuville A, Mutterer J, **Guenot D** and Orend G. Expression and Organization of Tenascins and Laminins in the Microenvironment of Human and Mouse Tumors of Intestinal and Pancreatic Origin. Second joint meeting of the german and French connective tissue societies. *Poster*, Reims, 2009
43. Gasser I, Van der Heyden M, Guenard F, Mechine-Neuville A, Simon-Assmann P, Kedinger M,

- Guenot D**, Orend G. Development of a mouse model for targeting and understanding the role Tenascin C in cancer progression. 4^{ème} Forum Cancéropole Grand Est, *Poster*, Strasbourg 2010
44. Voegelin M, Guérin E, Schmitt C, Tarnus C, **Guenot D**. Intérêt du ciblage thérapeutique de l'aminopeptidase N/CD13 dans le traitement de tumeurs coliques humaines par de nouveaux inhibiteurs dérivés de la benzosubérone. XVIII^{ème} journée Jeunes chercheurs, *Poster*, Paris, 2010
45. Voegelin M, Guérin E, Schmitt C, Tarnus C, **Guenot D**. Intérêt du ciblage thérapeutique de l'aminopeptidase N/CD13 dans le traitement de tumeurs coliques humaines par de nouveaux inhibiteurs. Journées jeunes chercheurs, Paris, *Poster*, 2011
46. Marisa L, Vescovo L, de Reyniès A, Duval A, Etienne-Grimaldi MC, Gaub MP, **Guenot D**, Kirzin S, Milano G, Olschwang S, Selves Y, Laurent-Puig P, Boige V. Gene expression profiling of colon adenocarcinomas reveals six prototypic molecular subtypes with distinct clinical and molecular characteristics. AACR, *Poster*, Chicago, 2012
47. Marin A, Voegelin M, Alavi S, , **Guenot D**, Tarnus C, Hénon P. Selective Aminopeptidase-N (CD13) inhibitors of relevance to cancer chemotherapy. 6^{ème} Forum CGE, *Poster*, Strasbourg, Nov 2012
48. Voegelin M, Guérin E, Nicolet C, Guab MP, **Guenot D**. The role of the E2F2 and ID3 transcription factors in colon tumour growth and cellular dissemination. AACR, Proceedings of the American Association for Cancer Research, n°1915, *Poster* Washington, 2013
49. Nguyen TNQ, Jeannesson P, Groh A, **Guenot D**, Gobinet C. Automatic spectral histology of human colon tissues by infrared microimaging and cluster validity indices. 12th European Congress of Digital Pathology (ECDP 2014), *Poster*, Paris, France, 18-21 June 2014
50. Nguyen TNQ, Jeannesson P, Groh A, **Guenot D**, Gobinet C. Automatic spectral histology of normal human colon tissues by infrared microimaging and cluster validity indices". Shedding New Light on Disease (SPEC 2014), *Poster*, Krakow, Poland, 17-22 August 2014
51. Nguyen TNQ, Jeannesson P, Groh A, **Guenot D**, Gobinet C. Fourier-transform infrared imaging and clustering : toward an automated histology of normal colon. Recherche en Imagerie et Technologies pour la Santé (RiTS 2015), *Poster*, Dourdan, 25-27 mars 2015
52. Farah I, Nguyen TNQ, Groh A, **Guenot D**, Jeannesson P, Gobinet C. Optimal Spectral Histology of Human Normal Colon by Genetic Algorithm. Recherche en Imagerie et Technologies pour la Santé (RiTS 2015), *Poster*, Dourdan, 25-27 mars 2015
53. Le Vacon L, **Guenot D**, Arnould L, Bruno A, Calvet L, Colombel M, Corre J, Cuvillier O, Eckel B, Forraz N, Gonzalez-Jouhanneaud A, Iovanna J, Kuras M, Lautrette Ch, Malavaud B, Merle Ph, Meyer-Losic F, Praz F, Rosmorduc O, Sarry JE, Tabone S, Vaglio Ph, Ysebaert L, Duchamp O. IMODI Initiative: a Novel Holistic and Integrative Approach with Patient-Derived Tumor Models. AACR Annual meeting: Patient-Derived Cancer Models: Present and Future Applications from Basic Science to the Clinic, *Poster*, New Orleans, 2016
54. Mignard C, Arnould L, Bruno A, Calvet L, Colombel M, Corre J, Cuvillier O, Eckel B, Forraz N, Gonzalez-Jouhanneaud A, Goetsch L, **Guenot D**, Iovanna J, Kuras M, Lautrette Ch, Le Vacon F, Malavaud B, Merle Ph, Meyer-Losic F, Praz F, Rosmorduc O, Sarry JE, Tabone S, Vaglio Ph, Ysebaert L, Duchamp Olivier. Innovative and predictive models against cancer: an IMODI integrative approach. AACR Annual meeting: *Poster*, New Orleans, April 2016