

Unit Label	City	Address	mail	Name, First Name of the Head of the team	Brief description of the research performed by the team (3 lines)	6 main publications related to the proposed thematic scope	proposed thematic scope(s)	Accueil			
								Number of PhD	profil, expertise, training (1)	Number of Post-docs	profil, expertise, training (1)
IGF - UMR5203-U661	Montpellier	Université de Montpellier, IGF sud, 141 rue de la cardonille 34094 Montpellier	Frederic.Bienvenu@igf.cnrs.fr	Frédéric BIENVENU	Cell Cycle Clock Genomics. We aim at deciphering the transcriptional impact of G1-Cyclins in cancer and in the nervous system. Our ultimate goal is to target Cyclin D1 activity to cure cancer and/or prevent from neurodegenerative diseases like Parkinson.	<i>Cyclin E Constrains Cdk5 Activity to Regulate Synaptic Plasticity and Memory Formation. Dev. Cell</i> : In Press, Manuscript Number: DEVELOPMENTAL-CELL-D-11-00560R2. <i>A function for cyclin D1 in DNA repair uncovered by protein interactome analyses in human cancers. Nature</i> . 2011 Jun 8;474(7350):230-4. <i>Transcriptional regulation of cyclin D1 in development revealed by a genetic-proteomic screen. Nature</i> . 2010 Jan 21;463(7279):374-8. <i>Transcriptional regulation by a DNA-Associated Form of Cyclin D1. Mol Biol Cell</i> . 2005 Apr;16(4):1850-8. <i>Kaposi sarcoma-associated viral cyclin K overrides cell growth inhibition mediated by oncostatin M through STAT3 inhibition. Blood</i> . 2003 May 15;101(10):4070-7. <i>Functional Interaction of STAT3 Transcription Factor with the Coactivator NcoASRC1a. J. Biol. Chem.</i> 2002. 277 (10) : 8004-8011. <i>Direct Repression of STAT3 Transcriptional Activation by Cyclin D1 Through a Cdk4-Independent Mechanism. J Biol Chem.</i> 2001. 276(20):16840-16847	Analysis of super-order chromatin structure in the regulation of Cyclin D1 gene expression in physiological and pathological situations	1	Molecular or cellular biologists with knowledge in Genomics, proteomics, genetics, bioinformatics	2	Molecular or cellular biologists with knowledge in Genomics, proteomics, genetics, bioinformatics
IGF - UMR5203-U661	Montpellier	Université de Montpellier, IGF sud, 141 rue de la cardonille 34094 Montpellier	jean-philippe.pin@igf.cnrs.fr	Jean-Philippe PIN	Structural dynamics of neurotransmitter receptors	1 Monnier, C. et al. EMBO J 2011 2 Huang, S. et al. Proc Natl Acad Sci 2011 3 Comps-Agrar, L. et al. EMBO J 2011 4 Magalhaes, A. et al. Nat Neurosci 2010 5 Rives, M.L. et al. EMBO J 2009 6 Ferre, S. et al. Nat Chem Biol 2009 7 Rondard, P. et al. EMBO J 2008 8 Maurel, D. et al. Nat Meth 2008 10 Hlavackova, V. et al. EMBO J 2005 11 Kniazeff, J. et al. Nat. Str. Mol. Biol. 2004	Study of the structural dynamics of metabotropic glutamate receptors, their regulation by interacting proteins and various ligands, and their functional cross-talk with other receptors - in relation to drug development in neurodegenerative and neurologic disorders.	3	cell biologist, Biophysist, Biochemist	4	cell biologist, Biophysist, Biochemist, Chemist,
IGF - UMR5203-U661	Montpellier	Université de Montpellier, IGF sud, 141 rue de la cardonille 34094 Montpellier	jean-philippe.pin@igf.cnrs.fr	Bernard MOUILLAC	Membrane receptors: structure, dynamics and related pathologies	1 Banères et al. TIB 2011 2 Albizu, Cottet et al. Nature Chem Biol 2010 3 Arcemishéhere et al. J Biol Chem 2010 4 Tenenbaum et al. Plos One 2009 5 Jean-Alphonse et al. J Am Soc Nephrol 2009 6 Bellot et al. J Mol Biol 2009 7 Orcel et al. Mol Pharmacol 2009 8 Albizu et al J Med Chem 2007 9 Albizu et al Mol Pharmacol 2006 10 Tahtaoui et al J Biol Chem 2003	Study of the structure and dynamics of vasopressin receptors and their regulation by interacting proteins and various ligands, in relation to drug development in genetic and renal diseases.	1	cell biologist, Biophysist, Biochemist	3	cell biologist, Biophysist, Biochemist
IGF - UMR5203-U661	Montpellier	Université de Montpellier, IGF sud, 141 rue de la cardonille 34094 Montpellier	jean-philippe.pin@igf.cnrs.fr	Fabrice ANGO	Development of GABAergic circuitry in cerebellar cortex	1 Ango F, et al. PLoS Biol 6(4): e103. 2008 2-Huang ZJ, et al Nat Rev Neurosci. 2007 3-Ango, F., et al. Cell. 2004 4- Cristo GD, et al. Nat Neurosci. 2004	Our current thematic scope is to study the early events of interneuron neurites outgrowth and branching. Identify the molecules involved during this process using state-of-the-art "transcriptomic approaches". The ultimate goal is to describe how environmental signals specifically shape and build functional neuronal circuit in relation to their gene expression profile.	2	Neurobiologist, cell biologist, molecular biologist, biochemist		Neurobiologist, cell biologist, molecular biologist, biochemist
IGF - UMR5203-U661	Montpellier	Université de Montpellier, IGF sud, 141 rue de la cardonille 34094 Montpellier	jean-philippe.pin@igf.cnrs.fr	Frédéric HOLLANDE	Role of signaling pathway alterations in tumor initiation, metastasis development and relapse after treatment	1. Raynal C, Molecular Cancer, 2010 2. Hollande F, Drug Resistance Updates 2010 3. Buchert M, Proc Nat Acad Sci 2010 4. Pannequin J, Cancer Res 2009 5. Diouf B, J Biol Chem. 2009 6. Buchert M et al., Gastroenterology 2009 7. arido C et al., Cancer Res 2008 8. Pannequin J et al. Gastroenterology 2007 9. Boireau S et al., Carcinogenesis 2007 10. Collazos A et al, Mol Cell Biol 2006	Analysis of molecular mechanisms and signalling pathways that underlie the capacity of "cancer stem cells" (tumor-initiating cells) to adapt to their new microenvironment during metastasis development and to resist conventional therapy	4	cell biologist, biochemist, pharmacologist-pharmacogenomics	2	cell biologist, biochemist
IGF - UMR5203-U661	Montpellier	Université de Montpellier, IGF sud, 141 rue de la cardonille 34094 Montpellier	jean-philippe.pin@igf.cnrs.fr	Patrice MOLLARD	In situ processes that govern hormone pulsatility	1. Budry, L. et al. Proc Natl Acad Sci 2011 2. Sanchez-Cardenas, C. et al. Proc Natl Acad Sci 2010 3. Lafont, C. et al. Proc Natl Acad Sci 2010 4. Bur, I. et al. JBC 2009 5. Baccam, N. et al. J. Neurosci. 2008 6. Bonnefont, X. et al. Proc Natl Acad Sci 2005	Study of the role of pericytes and cell network organization in the build-up of pituitary hormone pulses	3	Cellular in vivo imaging, cell biologist, molecular biologist, bioinformatician, electrophysiologist	4	Cellular in vivo imaging, cell biologist, molecular biologist, bioinformatician, electrophysiologist

IGF - UMR5203-U661	Montpellier	Université de Montpellier, IGF sud, 141 rue de la cardonille 34094 Montpellier	jean-philippe.pin@igf.cnrs.fr	Philippe JAY	stem cells and cancer	<p>1 Gerbe F. et al. JCB 2011</p> <p>2 Escobar M. et al. Nat. Commun. 2011</p> <p>3 Legraverend C. et al. Cell stem Cell 2010</p> <p>4 Gerbe F. et al. Gastroenterology 2009</p> <p>5 Dupasquier S. et al. J. Cell Science 2009</p> <p>6 Zalzal H. et al. Oncogene 2008</p> <p>7 Bastide P. et al. JCB 2007</p> <p>8 van Es J. et al. Nat Cell Biol. 2005</p> <p>9 Jay P. et al. Cancer Research 2005</p> <p>10 Blache P. et al. JCB 2004</p>	Aim: understand the relationship between stem cells of the intestinal epithelium and their niche, in the healthy context and in diseases, including chronic inflammatory diseases and cancer. The study is performed mainly in animal models, then validated in human biopsies.				
IGF - UMR5203-U661	Montpellier	Université de Montpellier, IGF sud, 141 rue de la cardonille 34094 Montpellier	jean-philippe.pin@igf.cnrs.fr	Stéphanie Barrère/Matteo MANGONI	Physiological and genetic aspects of cardioprotection	<p>1 Roubille, F. et al. Circulation 2011</p> <p>2 Boiguelin, P. et al. J Control Release 2013</p> <p>3 Balig, S. et al. Nat Neurosci 2011</p> <p>4 Marger, L. et al. Channels 2011</p> <p>5 Gros, D. et al. Cardiovasc Res 2010</p> <p>6 Alig, J. et al. Proc Natl Acad Sci 2009</p> <p>7 Mangoni & Nargeot Physiol Rev 2008</p> <p>8 Roubille, F. et al. Circulation 2007</p> <p>9 Mangoni M. et al. Circ Res 2006</p> <p>10 Mangoni, M. et al. Proc Natl Acad Sci 2003</p>	Physiology and genetics of the molecular mechanisms involved in the control of heart rate. Control of cell death and survival during myocardial infarction, in relation to development of new therapeutic cardioprotective strategies.	5	Electrophysiology, Ca2+ imaging, Cell Biology, Molecular Biology	2	Electrophysiology, Ca2+ imaging, Cell Biology, Molecular Biology
IGF - UMR5203-U661	Montpellier	Université de Montpellier, IGF sud, 141 rue de la cardonille 34094 Montpellier	jean-philippe.pin@igf.cnrs.fr	Philippe LORY	Calcium channels : structure-function studies and channelopathies	<p>1- Barbara et al (2009) J Neurosci. 2- Baumgart et al (2008) PLoS ONE. 3- Mezghrani et al (2008) J Neurosci. 4- Chemin et al (2007) J Biol Chem. 5- Vitko et al (2007). J Neurosci. 6- Chemin et al (2007) J Biol Chem. 7 Traboulsie et al (2007) J Physiol. 8 DePuy et al (2006) Proc Natl Acad Sci USA. 9- Mangoni et al (2006) Circ Res.</p>	How T-type calcium channels become hyperactive in epilepsy ? Characterization of novel protein partners that regulate neuronal T-type channels	3	Electrophysiology, Cell biology and Biochemistry	3	Electrophysiology, Molecular and Cell biology, Biochemistry
IGF - UMR5203-U661	Montpellier	Université de Montpellier, IGF sud, 141 rue de la cardonille 34094 Montpellier	jean-philippe.pin@igf.cnrs.fr	François RASSENDREN	Molecular physiology of purinergic signaling	<p>1 Ulmann et al. Embo J 2010.</p> <p>2 Ulmann et al. J Neurosci 2008</p> <p>3 Avignone et al. 2008</p> <p>4 Chaumont et al. Science Signal. 2008</p> <p>5 Sim et al. J Neurosci. 2006.</p> <p>6 Chaumont S et al. J Biol Chem 2004</p> <p>7 Virginio C et al. Nat Neurosci 1999</p>	Study of the role of purinergic P2X receptors in inflammation and cancer	4	Physiologist and cell biologist, biochemist, electrophysiologist	1	cell biologist immunologist
IGF - UMR5203-U661	Montpellier	Université de Montpellier, IGF sud, 141 rue de la cardonille 34094 Montpellier	jean-philippe.pin@igf.cnrs.fr	Valérie COMPAN	Neural bases of anorexia and addiction: from gene to behavior	<p>1 Segu, L. et al. PlosONE 2010</p> <p>2 Jean, A. et al. Proc Natl Acad Sci 2007</p> <p>3 Conductier, G. et al. Eur J Neurosci 2006</p> <p>4 Conductier, G. et al. Nature PG, NPsy. 2005</p> <p>5 Lucas, G. et al. Biol Psy 2005</p> <p>6 Compan, V. et al. J. Neurosci 2004</p>	Study of the signaling pathways of metabotropic serotonin 4 receptors in animal model of feeding disorders (anorexia-like; binge-type eating) and addiction (cocaine, ecstasy).	1	Neuroscientist	1	Neuroscientist
IGF - UMR5203-U661	Montpellier	Université de Montpellier, IGF sud, 141 rue de la cardonille 34094 Montpellier	jean-philippe.pin@igf.cnrs.fr	Marie-Laure PARMENTIER	Neurobiology of Drosophila	<p>1 Talmat-Amar et al. HMG 2011</p> <p>2 Layalle et al. Development 2011</p> <p>3 Mitri et al. PLoS Biology 2009</p> <p>4 Bogdanik et al. PLoS One 2008</p> <p>5 Mugat et al. HMG 2008</p> <p>6 Devaud et al. Neuroreport 2008</p> <p>7 Joly et al. Dev Biol 2007</p> <p>8 Franco et al. J. Neurosci 2004</p> <p>9 Bogdanik et al. J. Neurosci 2004</p>	Study of neurodegenerative disease in the model organism Drosophila melanogaster using molecular biology, cell biology and genetic techniques	3	cell biologist, Biophysicist, Biochemist	4	cell biologist, Biophysicist, Biochemist, Chemist,
U 749	Villejuif	Institut Gustave Roussy, 114 rue Edouard Vaillant 94 805 Villejuif	jacques.ber toglio@u-psud.fr	Jacques BERTOGLIO	Signaling in cancer			1	Rho GTPase signaling in cancer	or 1	Rho GTPase signaling in cancer

U 759	Orsay	Campus universitaire d'Orsay, Bat 112 91405 Orsay cedex	sergio.marco@curie.fr	Marco SERGIO	microscopie et analyse d'image		microscopie et analyse d'image	1			
U 853	Bordeaux	Labo de bactériologie-CHU Pellegrin, place Amélie Raba-Léon 33076 Bordeaux cedex	francis.megraud@chu-bordeaux.fr	Francis MAGRAUD	Notre thématique principale concerne les cancers de l'estomac incluant le rôle de <i>Helicobacter pylori</i> , des cellules souches et pour les lymphomes du MALT, le rôle des cellules dendritiques et des microRNA. Nous avons aussi un intérêt pour les Maladies inflammatoires du colon en rapport avec l'infection chronique.		Immunology, stem cell and microRNA	1	tumor and stem cell	1	tumor and stem cell
INSERM UMR891	Marseille	Institut Pali Calmettes 232 Boulevard Sainte Marguerite 13009 Marseille	Daniel.Olive@inserm.fr	Daniel OLIVE	role of cosignaling receptors in tumor immunology and chronic viral infections	Fauriat C et al. Blood. 2007, 109:323-30 ; Bruno Chetaille et al. . Blood, 2009 ;113:2765-3775 ; Jérôme Rey et al. Trends in Molecular Médecine, 2009, 15, 275-84 ; Ivan Hirsch et al. Trends in Immunology, 2010, ;31(10):391-7 ;Emilie Mamessier et al. J Clin Invest. 2011;121:3609-22.	role of cosignaling receptors in innate immunity against leukemic cells; alterations of innate effectors in breast cancer	6	tumor immunology	4	immunologist, bioinformatician
U 896	Montpellier	CRLC Val d'Aurelle Paul Lamarque, 208 rue des apothicaires 34298 Montpellier cedex 5	laurent.lecam@inserm.fr	Laurent LE CAM	Our aim is to study regulatory networks implicating the p53 tumor suppressor in the control of mammalian cell cycle, cell survival and energy metabolism, and, in fine, to understand how alterations of these networks contribute to tumorigenesis.		Our aim is to study regulatory networks implicating the p53 tumor suppressor in the control of mammalian cell cycle, cell survival and energy metabolism, and, in fine, to understand how alterations of these networks contribute to tumorigenesis.	1		or 1	
U 911	Marseille	Site Timone, 27 boulevard Jean Moulin 13385 Marseille cedex 5	pascale.barbier@pharmacie.univ-mrs.fr	Pascale BARBIER	Laboratoire de biophysique			1	biophysique	or 1	biophysique
U 911	Marseille	Site Timone, 27 boulevard Jean Moulin 13385 Marseille cedex 5	herve.kovacik@univmed.fr	Hervé KOVACIK	RedoxMicroenvironnement, Cytoskeleton and colorectal tumor progression	Moullintraffort L, Bruneaux M, Nazabal A, Allegro D, Giudice E, Zal F, Peyrot V, Barbier P, Thomas D, Garnier C. J Biol Chem. 2010; 285: 15100-10 Taboubi S, Garrouste F, Parat F, Pommier G, Faure E, Monferran S, Kovacic H, Lehmann M. Mol Biol Cell. 2010; 21: 946-55 Ciccolini J, Dahan L, Andre N, Evrard A, Duluc M, Blesius A, Yang C, Giacometti S, Brunet C, Raynal C, Ortiz A, Frances N, Iliadis A, Duffaud F, Seitz JF, Mercier C. J Clin Oncol. 2010. Dahan L, Sadok A, Formento JL, Seitz JF, Kovacic H. Br J Pharmacol. 2009. Sadok A, Pierres A, Dahan L, Prevot C, Lehmann M, Kovacic H. Mol Cell Biol. 2009. Sargent D, Sobrero A, Grothey A, O'Connell MJ, Buyse M, Andre T, Zheng Y, Green E, Labianca R, O'Callaghan C, Seitz JF, Francini G, Haller D, Yothers G, Goldberg R, de Gramont A. J Clin Oncol. 2009. Delamarre E, Taboubi S, Mathieu S, Berenguer C, Rigot V, Lissitzky JC, Figarella-Branger D, Ouafik L, Luis J. Am J Pathol. 2009.	Contrôle redox de la métastase: rôle de la NADPH oxydase Nox1. Rôle prédictif de la signalisation oxydative dans le traitement du cancer: application à l'efficacité des agents anti-microtubules.	2	protéine recombinante, interaction protéine/protéine	1	biologie moléculaire, cellulaire et imagerie
UMR-S 957	Nantes	Faculté de Médecine 1, rue Gaston Veil 44035 Nantes cedex 1	dominique.heymann@univ-nantes.fr	Dominique HEYMANN	Physiopathologie de la résorption osseuse et thérapie des tumeurs osseuses primitives			1	implication cellules mésenchymateuses	1	Etudes des interactions cellulaires dans le développement des sarcomes osseux

UMR 981	Villejuif	IGR, 39 rue Camille Desmoulins 94805 Villejuif cedex	fabrice.andre@igr.fr	Fabrice ANDRE	Biomarqueurs prédictifs et nouvelles stratégies moléculaires en thérapeutique anticancéreuse			1	à préciser	1	à préciser
U985	Villejuif	Institut Gustave Roussy, 114 rue Edouard Vaillant 94 805 Villejuif	olivier.bernard@igr.fr	Olivier BERNARD	The overall aim of the team is to identify genetic abnormalities in human hematopoietic tumors and understand their participation to both normal and malignant hematopoiesis.	- Test and analyze the cooperation between TET2 inactivation and other oncogenes. We are interested in the associations observed in humans or identified in our mouse models.	Génétique des tumeurs	3	Genomic, mouse analyses, bioinformatic, etc	3	Genomic, mouse analyses, bioinformatic, etc
U 1005	Paris	Institut Curie 26 rue d'Ulm 75248 Paris cedex 05	frederic.saudou@curie.fr	Frédéric SAUDOU	Signalisation, neurobiology and cancer	Orvoen, S, Pla P, Gardier AM, Saudou F, David DJ. 2012. Huntington's disease knock-in male mice show specific anxiety-like behaviour and altered neuronal maturation.. Neuroscience letters. 507(2):127-32- Roux, J-C, Zala D, Panayotis N, Borges-Correia A, Saudou F, Villard L. 2012. [Unexpected link between Huntington disease and Rett syndrome]. Médecine sciences : M/S. 28(1):442/	Signalisation, neurobiology and cancer	1	Biochemistry and molecular biology	1	Biochemistry and molecular biology
U 1003	Lille	Université des Sciences et technologiques de Lille, UFR de Biologie-SN3 59655 Villeneuve d'Ascq	natalia.prevars_kava@univ-lille1.fr	Natalia PREVARSKAYA	Laboratory of cell physiology		Physiologie cellulaire, biologie moléculaire et modèles animaux	1	Canaux ioniques et cancer	1	Canaux ioniques et cancer
UMR 1009	Villejuif	Institut Gustave Roussy, 114 rue Edouard Vaillant 94 805 Villejuif	eric.solary@igr.fr	Eric SOLARY	Hématopoïèse normale et pathologique		La niche hématopoïèse, la mégacaryopoïèse, les monocytes normaux et leucémiques, les syndromes myéloprolifératifs	1		ou 1	
U 1029	Bordeaux	Faculté des sciences université Bordeaux 1, avenue des facultés 33405 Talence	a.bikalvi@angi-u-bordeaux1.fr	Andreas BIKFALVI	mécanisme moléculaire de l'angiogénèse		Protéases, invasion/angiogénèse tumorale	1	biologie cellulaire et moléculaire, biologie du développement et biologie intégrative	plusieurs	biologie cellulaire et moléculaire, biologie du développement et biologie intégrative
U 1036	Grenoble	CEA, 17 rue des Martyrs 38054 Grenoble cedex 09	jean-jacques.feige@cea.fr	Jean-jacques FEIGE	biologie du cancer et de l'infection		angiogénèse tumorale ou carcinogénèse corticosurrénalienne ou infections par pseudomonas aeruginosa	2	bio cell et moléculaire	ou 2	bio cell et moléculaire
U 1038	Grenoble	CEA, 17 rue des Martyrs 38054 Grenoble cedex 09	jerome.garin-irtsv@cea.fr	Jacques BAUDIER	Biologie à grand échelle		Biologie à grande échelle, protéomique, génomique fonctionnelle RNAi et chemogénomique, cancer de la prostate, glioblastome, lymphome	3	biologie cellulaire et moléculaire	OU 3	biologie cellulaire et moléculaire
U 1041	Paris	Institut Pasteur 28 rue du Docteur Roux 75724 Paris cedex 15	claud.leclerc@pasteur.fr	Claude LECLERC	REGULATION IMMUNITAIRE ET VACCINOLOGIE		vaccination thérapeutique et de l'étude de l'interaction hôte-tumeurs.			2	Vaccinology and Immunology

U1021, UMR3347	Orsay	Campus universitaire d'Orsay, Bat 101, 91898 Orsay cedex	Alain.Mauviel@inserm.fr	Alain MAUVIELLE	Role of the TGFbeta/Smad/GLI2 axis in melanomagenesis: mechanistic insights in vitro and in vivo. Development of transgenic animal models. Translational research.	Javelaud, D.*, Mohammad, K.S.*, McKenna, C.R., Fournier, P., Luciani, F., Niewolna, M., André, J., Delmas, V., Larue, L., Guise, T.A., and Mauviel, A. Stable overexpression of Smad7 in human melanoma cells impairs bone metastasis. <i>Cancer Res.</i> , 2007, 67:2317-2324, *equal contributions Dennler, S., André, J., Alexaki, I., Li, A., Magnaldo, T., ten Dijke, P., Wang, X.-J., Verrecchia, F., and Mauviel, A. Activation of Sonic hedgehog mediators by TGF-β: Smad3/4-dependent induction of Gli2 and Gli1 expression in vitro and in vivo. <i>Cancer Res.</i> 2007, 67:6981-6986 Alexaki, V.I.*, Javelaud, D.*, Van Kempen, L., Mohammad, K.S., Dennler, S., Luciani, F., Hoek, K., Juarez, P., Goydos, J.S., Fournier, P.J., Sibon, C., Bertolotto, C., Verrecchia, F., Saule, S., Delmas, V., Ballotti, R., Larue, L., Saiag, P., Guise, T.A., and Mauviel, A. GLI2-mediated melanoma invasion and metastasis. <i>J. Natl. Cancer Inst.</i> , 2010, 102: 1148-1159. *: equal contributions Delphine Javelaud, Vasileia I. Alexaki, Sylviane Dennler, Khalid S. Mohammad, Theresa A. Guise, and Alain Mauviel (2011). TGF-beta/SMAD/GLI2 Signaling Axis in Cancer Progression and Metastasis. <i>Cancer Res</i> ; 71(17); 5606–10. Delphine Javelaud*, Vasileia-Ismeni Alexaki*, Marie-Jeanne Pierrat*, Keith S. Hoek, Sylviane Dennler, Leon Van Kempen, Corine Bertolotto, Robert Ballotti, Simon Saule, Véronique Delmas, and Alain Mauviel. GLI2 and M-MITF transcription factors control exclusive gene expression programs and inversely regulate invasion in human melanoma cells (2001). <i>Pigment Cell Melanoma Res.</i> In press. doi: 10.1111/j.1755-148X.2011.00893.x	Molecular mechanisms of oncogenesis	4 in the team	0	cell and molecular biologist	
U 1068	Marseille	Institut Paoli Calmettes, 27 boulevard Lef Rouse 13273 Marseille cedex 9	jean-paul.borg@inserm.fr	Jean-Paul BORG	Role of cell polarity proteins in development and tumorigenesis.	1. Audebert S., et al. (2004). <i>Curr. Biol.</i> 14: 987-95. 2. O.Lahuna*, et al. (2005) <i>The EMBO Journal</i> , 24: 1364-1374. 3. Nola S., et al., (2008) <i>Hum.Mol.Genetics</i> , 17: 3552-3565. 4. Prébet T., et al., (2010) <i>Blood</i> , 116: 2315-2323. 5. Puppo F., et al., (2011) <i>EMBO Reports</i> , 12:43-9	Study of two tumor suppressors: Scribble and LKB1	1	Cell biology, proteomics, cell signaling	1	Cell biology, biochemistry
U 1068	Marseille	Institut Paoli Calmettes, 27 boulevard Lef Rouse 13273 Marseille cedex 9	jean-paul.borg@inserm.fr	Estelle DUPREZ	Our goal is to understand how epigenetic factors affect cell fate and cell transformation through either repression or activation of a gene program. Our research focuses on the characterization of Polycomb group(PcG) proteins involved in the differentiation of normal and leukaemic haematopoietic stem cells (HSC).	1. Spicuglia S, Vincent-Fabert C, et al, PLoS ONE. doi:10.1371/journal.pone.0024176 2. Sarrazin S, et al, Cell, 138: 300-13 (2009). 3. Boukarabila H, et al, <i>Genes Dev</i> , 23: 1195-1206 (2009). 4. Duprez, E. <i>Cell Cycle</i> , 3 (4): 389-90 (2004). 5. Duprez, E et al, <i>EMBO J.</i> , 22, 5806-5816 (2003)	By combining genome-wide approaches and KO strategies on mouse and human cells, the project will address the mechanism of PcG protein recruitment to chromatin and the role of PcG proteins and its epigenetic marks in HSC function. We will develop assays to address how specific transcription factors intervene in the recruitment or displacement of PcG proteins to chromatin and how this dynamic process influences HSC plasticity.	2	Molecular biologist, Biochemist,	1	Cell biologist, molecular biologist, mouse work expert
U 1068	Marseille	Institut Paoli Calmettes, 27 boulevard Lef Rouse 13273 Marseille cedex 9	jean-paul.borg@inserm.fr	Patrice DUBREUIL	My group has contributed to the identification of mechanisms, transduction pathways and protein effectors initiated by genetic alterations affecting tyrosine kinase receptors. We identified mutations altering receptors in blood-related disorders and have shown that different mutations are associated with qualitative and quantitative differences in cell signalling. Our goals are (i) to study molecular consequences like telomerase expression / activity, genome instability and epigenomic regulation and (ii) to continue to identify the effectors required for these oncopathways and thus new therapeutic targets and therapeutic tools (collaboration with a biotech company).	1. KOSMIDER O, et al, <i>Cancer Cell.</i> , 2005, 8, 467-783. 2. GABILLOT-CARRE M, et al, <i>Blood</i> . 2006 108(3):1065-72. 3. DUBREUIL P, et al, <i>PLoS ONE</i> 2009, 4(9):e7258 4. BODEMER, C et al, <i>J Invest Dermatol.</i> 2010, 130:804-15. 5. YANG Y, et al, <i>Blood</i> , 116(7):1114-23. 6. CHAIX A, et al, <i>J Biol Chem</i> , 2011, 286:5956-66. 7. GEORGIN-LAVIALLE S, et al, <i>Blood</i> 2011, In press	Oncogenic signalling	2	Cell biologist	3	Cell biologist

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U 1068	Marseille	Institut Paoli Calmettes, 27 boulevard Lef Roure 13273 Marseille cedex 9	jean-paul.borg@inserm.fr	Pascale ZIMMERMANN	<p>PDZ scaffold proteins and phosphoinositides in cell signaling and oncogenesis.</p> <p>We aim to identify novel molecular mechanisms controlling cancer cell signaling. Our current projects investigate the role of lipids and scaffold proteins in vesicular trafficking and nuclear processes.</p> <p>We combine approaches of biochemistry, cell biology and animal models.</p>	<p>Recent reviews</p> <ol style="list-style-type: none"> Gallardo R, et al, <i>ChemBiochem</i> 2010, 11:456-467. Gallardo R, et al, <i>ChemBiochem</i> 2010, 11:456-467. <p>Examples of Primary papers</p> <ol style="list-style-type: none"> Luyten A, et al, <i>Mol Biol Cell</i>. 2008, 19:1594-604. Mortier E., et al, <i>EMBO J</i>. 2005, 24:2556-65. Zimmermann P, et al, <i>Dev. Cell</i>, 2005, 3:377-88. Zimmermann P, et al, <i>Mol Cell</i>. 2002, 6:1215-25. 	<p>In a recent proteomic screen, we identified novel molecular interactions potentially controlling nuclear signalling. The applicant will combine biochemical and cell biological approaches to establish their functional importance.</p>			1	Cell biology of the nucleus
U 1068	Marseille	Institut Paoli Calmettes, 27 boulevard Lef Roure 13273 Marseille cedex 9	jean-paul.borg@inserm.fr	Pierre-Henri GAILLARD	<p>Understanding the molecular mechanisms underlying genome stability and their relevance in the biology of cancer</p>	<ol style="list-style-type: none"> Fekairi et al. <i>Cell</i> 2009; Coulon et al. <i>MBoC</i> 2004; Gaillard et al. <i>Mol Cell</i> 2003; Boddy et al. <i>Cell</i> 2001 		1	Yeast genetics, cell biologist, biochemist	1	Yeast genetics, biochemist, cell biologist
U 1068	Marseille	Institut Paoli Calmettes, 27 boulevard Lef Roure 13273 Marseille cedex 9	jean-paul.borg@inserm.fr	Ali BADACHE	<p>Molecular mechanism of tumor cell migration: investigation of the mechanism that control cell motility and metastasis using cell imaging and proteomic approaches</p>	<ol style="list-style-type: none"> Zaoui K., Benseddik K., Daou P., Salaün D., Badache A. (2010). ErbB2 receptor controls microtubule capture by recruiting ACF7 to the plasma membrane of migrating cells. <i>Proc Natl Acad Sci U S A</i> 107(43):18517-22. Restouin A., Aresta S., Prébet T., Borg J.P., Badache A., Collette Y. (2009). A simplified, 96-well-adapted, ATP luminescence-based motility assay. <i>Biotechniques</i> 47(4):871-5. Zaoui K., Honoré S., Isnardon D., Braguer D. and Badache A. (2008). Memo-RhoA-mDia1 signaling controls microtubules, adhesion sites and the actin network in migrating cells. <i>J Cell Biol</i> 183, 401-408. Qiu C., Lienhard S., Hynes N.E., Badache A. and Leahy D.J. (2008). Memo is homologous to nonheme iron dioxygenases and binds an ErbB2-derived phosphopeptide in its vestigial active site. <i>J Biol Chem</i> 283, 2734-2740. Badache A. and Gonçalves A. (2006). The ErbB2 signaling network as a target for breast cancer therapy. <i>J Mammary Gland Biol Neoplasia</i> 11, 13-25. 	<p>Identification of microtubule associated protein complexes that control chemotactic migration</p>	1	cell imaging or biochemisrty	1	PhD cell imaging or biochemistry
U 1068	Marseille	Institut Paoli Calmettes, 27 boulevard Lef Roure 13273 Marseille cedex 9	jean-paul.borg@inserm.fr	Michel AURRAND-LIONS	<p>Identification of adhesion mechanisms suitable for therapeutic targeting in inflammatory and leukemic diseases.</p>	<ol style="list-style-type: none"> Arcangeli ML, Frontera V, Bardin F, Obrados E, Adams S, Chabannon C, Schiff C, Mancini S, Adams RH, Aurrand-Lions M. JAM-B regulates Maintenance of Hematopoietic Stem Cells in the Bone Marrow Blood. 2011 (In Press). Frontera V, Arcangeli ML, Zimmerli C, Bardin F, Obrados E, Audebert S, Bajenoff M, Borg JP, Aurrand-Lions M. Cutting edge: JAM-C controls homeostatic chemokine secretion in lymph node fibroblastic reticular cells expressing thrombospondin. <i>J Immunol</i>. 2011;187:603-607. Tenan M, Aurrand-Lions M, Widmer V, Alimenti A, Burkhardt K, Lazeyras F, Belkouch MC, Hammel P, Walker PR, Duchosal MA, Imhof BA, Dietrich PY. Cooperative expression of junctional adhesion molecule-C and -B supports growth and invasion of glioma. <i>Glia</i>. 2010;58:524-537 Imhof BA, Zimmerli C, Gilki G, Ducrest-Gay D, Juillard P, Hammel P, Adams R, Aurrand-Lions M. Pulmonary dysfunction and impaired granulocyte homeostasis result in poor survival of Jam-C-deficient mice. <i>J Pathol</i>. 2007;212:198-208. Imhof BA, Aurrand-Lions M. Angiogenesis and inflammation face off. <i>Nat Med</i>. 2006;12:171-172. Lamagna C, Meda P, Mandicourt G, Brown J, Gilbert RJ, Jones EY, Kiefer F, Ruga P, Imhof BA, Aurrand-Lions M. Dual interaction of JAM-C with JAM-B and alpha(M)beta2 integrin: function in junctional complexes and leukocyte adhesion. <i>Mol Biol Cell</i>. 2005;16:4992-5003. Lamagna C, Hodivala-Dilke KM, Imhof BA, Aurrand-Lions M. Antibody against junctional adhesion molecule-C inhibits angiogenesis and tumor growth. <i>Cancer Res</i>. 2005;65:5703-5710. 	<p>The scope of the project is to manipulate surface expression of the junctional adhesion molecules (JAMs) and to evaluate the consequences on inflammatory response and development of hematological malignancies. Recently developed Knock-out Mouse models for proteins regulating JAM expression will be used.</p>	1	Immunology	2	Cell Biology, Immunology, Hematology

Sergio MARCO, U 759 à Curie, ont déjà des échanges avec le Brésil dans le domaine de la microscopie, modélisation et analyse d'image.																												
Eric SOLARY, UMR 1009 à Villejuif a déjà deux étudiants brésiliens et est prêt à en recevoir d'autres																												