

BIOGRAPHICAL SKETCH

NAME Salas, Azucena	POSITION TITLE Investigator, Dept. of Experimental Gastroenterology, IDIBAPS, Barcelona (Spain)		
eRA COMMONS USER NAME (credential, e.g., agency login)	Associate Professor of Immunology, Dept. of Immunology, University of Barcelona, Barcelona (Spain)		
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Barcelona, Barcelona (Spain)	B.S.	1995	Biochemistry
University of Barcelona, Barcelona (Spain)	Ph.D.	1999	Inflammation
Immune Disease Institute (formerly the Center for Blood Research), Harvard Medical School, Boston, MA (USA)	postdoctoral	2000-2003	Integrin regulation
Brigham and Women's Hospital, Boston, MA (USA)	postdoctoral	2003-2004	CD1d regulation

A. Personal Statement

As a researcher I have been devoted to biomedical science and in particular to the study of inflammatory mechanisms for over 15 years. I spent 5 years as a postdoctoral fellow at Harvard Medical School and I have been an independent researcher since early 2005. I obtained a permanent position at IDIBAPS, Hospital Clinic in November 2009. My team is part of the IBD unit directed by Dr. Julian Panes at the Department of Gastroenterology, Hospital Clinic, Barcelona. During the past few years we have focused on understanding the immune regulation as it is disrupted in patients suffering from IBD.

As a scientist I am deeply committed to the academic aspects of my work and, apart from teaching graduate students, I have served as an Associate Professor of Immunology at the University of Barcelona since September 2009. Nonetheless, I am ultimately interested in carrying out research that can directly impact patients' lives.

B. Positions, Honors, Memberships/Committees

Positions

2004-2009	Ramón y Cajal Investigator, Instituto de Investigaciones Biomédicas de Barcelona (IIBB)-CSIC, Barcelona (Spain)
2009-	Investigator, Dept. of Experimental Gastroenterology, IDIBAPS, Barcelona (Spain)
2009-	Associate Professor of Immunology, Dept. of Immunology, University of Barcelona, Barcelona (Spain)

Honors

2000	Award for Scientists Abroad, Catalan Society of Digestology
2001-2003	Postdoctoral Fellowship from the Spanish Department of Science and Technology
2004-2009	Ramón y Cajal Fellowship Grant from the Spanish Department of Science and Technology
2009	Outstanding Researcher, Favorable Evaluation Program I3, Ministry of Science and Innovation
2013	Visiting scholar at the University of Washington, School of Medicine

Editorial activities

Member of the editorial board of GUT (May 2015-May 2018).

Professional Membership/Committees

Member of the Advisory Committee to the Director of the Instituto de Investigaciones Biomédicas August Pi i Sunyer (IDIBAPS) (2016).

Member of the Scientific Committee of the Basic Grants of the Spanish Working Group on Crohn's Disease and Ulcerative Colitis (GETECCU) (2016).

Member of the American Association of Immunologists (2001).

C. Selected Peer-reviewed Publications

1. Effects of steroid treatment on activation of nuclear factor kappaB in patients with inflammatory bowel disease. Ardite E, Panes J, Miranda M, Salas A, Elizalde JI, Sans M, Arce Y, Bordas JM, Fernandez-Checa JC, Pique JM. *Br. J. Pharmacol.* 124(3): 431-3, 1998.
2. Mechanisms responsible for enhanced inflammatory response to ischemia-reperfusion in diabetes. Salas A, Panes J, Elizalde JI, Casadevall M, Anderson DC, Granger DN, Pique JM. *Am. J. Physiol.* 275(5 Pt 2): H1773-81, 1998.
3. Mechanisms underlying the anti-inflammatory actions of central corticotropin-releasing factor. Casadevall M, Saperas E, Panes J, Salas A, Anderson DC, Malagelada JR, Pique JM. *Am. J. Physiol.* 276(4 Pt 1): G1016-26, 1999.
4. Reperfusion-induced oxidative stress in diabetes: cellular and enzymatic sources. Salas A, Panes J, Elizalde JI, Granger DN, Pique JM. 1999. *J. Leukoc. Biol.* 66(1): 59-66, 1999.
5. Impaired mesenteric leukocyte recruitment in experimental portal hypertension in the rat. Panes J, Perez-del-Pulgar S, Casadevall M, Salas A, Pizcueta P, Bosch J, Anderson DC, Granger DN, Pique JM. *Hepatology* 30(2): 445-53, 1999.
6. Dexamethasone inhibition of leukocyte adhesion to rat mesenteric postcapillary venules: role of intercellular adhesion molecule 1 and KC. Taylor A, Tomlinson A, Salas A, Panes J, Granger DN, Flower RJ, Perretti M. *Gut* 45(5): 705-12, 1999.
7. Differential effects of a nitric oxide donor on reperfusion-induced microvascular dysfunction in diabetic and non-diabetic rats. Salas A, Panes J, Rosenbloom CL, Elizalde JI, Anderson DC, Granger DN, Pique JM. *Diabetologia* 42(11): 1350-8, 1999.
8. Influence of dose-rate on inflammatory damage and adhesion molecule expression after abdominal radiation in the rat. Molla M, Panes J, Casadevall M, Salas A, Conill C, Biete A, Anderson DC, Granger DN, Pique JM. *Int. J. Radiat. Oncol. Biol. Phys.* 45(4): 1011-8, 1999.
9. Role of P-selectin and ICAM-1 in pancreatitis-induced lung inflammation in rats: significance of oxidative stress. Folch E, Salas A, Panes J, Gelpi E, Rosello-Catafau J, Anderson DC, Navarro S, Pique JM, Fernandez-Cruz L, Closa D. *Ann. Surg.* 230(6): 792-8; discussion 798-9, 1999.
10. Tepoxalin inhibits inflammation and microvascular dysfunction induced by abdominal irradiation in rats. Panes J, Molla M, Casadevall M, Salas A, Sans M, Conill C, Anderson DC, Rosello-Catafau J, Granger DN, Pique JM. *Aliment. Pharmacol. Ther.* 14(6): 841-50, 2000.
11. Heparin attenuates TNF-alpha induced inflammatory response through a CD11b dependent mechanism. Salas A, Sans M, Soriano A, Reverter JC, Anderson DC, Pique JM, Panes J. *Gut* 47(1): 88-96, 2000.
12. H₂O₂ and PARS mediate lung P-selectin upregulation in acute pancreatitis. Folch E, Salas A, Prats N, Panes J, Pique JM, Gelpi E, Rosello-Catafau J, Closa D. *Free Radic. Biol. Med.* 28(8): 1286-94, 2000.
13. VCAM-1, but not ICAM-1 or MAdCAM-1, immunoblockade ameliorates DSS-induced colitis in mice. Soriano A, Salas A, Salas A, Sans M, Gironella M, Elena M, Anderson DC, Pique JM, Panes J. *Lab. Invest.* 80(10): 1541-51, 2000.
14. Differential role of selectins in experimental colitis. Sans M, Salas A, Soriano A, Prats N, Gironella M, Pizcueta P, Elena M, Anderson DC, Pique JM, Panes J. *Gastroenterology* 120(5): 1162-72, 2001.
15. Role of P-selectin in radiation-induced intestinal inflammatory damage. Molla M, Gironella M, Salas A, Miquel R, Perez-del-Pulgar S, Conill C, Engel P, Biete A, Pique JM, Panes J. *Int. J. Cancer* 96(2): 99-109, 2001.
16. Kinetic and mechanical basis of rolling through an integrin and novel Ca²⁺-dependent rolling and Mg²⁺-dependent firm adhesion modalities for the alpha 4 beta 7-MAdCAM-1 interaction. DeChateau M, Chen S, Salas A, Springer TA. *Biochemistry* 40(46): 13972-9, 2001.
17. Nitric oxide supplementation ameliorates DSS-induced colitis in mice. Salas A, Gironella M, Salas A, Soriano A, Sans M, Pique JM., Panes J. *Lab. Invest.* 82: 597-608, 2002.

18. The role of P-selectin in experimental colitis as determined by antibody immunoblockade and genetically deficient mice. Gironella M, Molla M, Salas A, Soriano A, Sans M, Closa D, Engel P, Salas A, Pique JM, Panes J. *J. Leuk. Biol.* 72(1): 56-64, 2002.
19. Transition from rolling to firm adhesion is regulated by the conformation of the I domain of the integrin LFA-1. Salas A, Shimaoka M, Chen S, Carman CV, Springer TA. *J. Biol. Chem.* 277(52): 50255-62, 2002.
20. Stabilizing the integrin α M inserted domain in alternative conformations with a range of engineered disulfide bonds. Shimaoka M, Lu C, Salas A, Xiao T, Takagi J, Springer TA. *Proc. Natl. Acad. Sci. U. S. A.* 99(26): 16737-41, 2002.
21. Small molecule integrin antagonists that bind to the β 2 subunit I-like domain and activate signals in one direction and block them in the other. Shimaoka M, Salas A, Yang W, Lu C, Weitz-Schmidt G, Springer TA. *Immunity*, 19(3): 391-402, 2003.
22. Bipolar regulation of integrin adhesiveness by a linear cluster of three metal ion binding sites. Chen JF, Salas A, Springer TA. *Nat. Struct. Biol.*, 10(12): 995-1001, 2003.
23. Endothelial cells proactively form microvilli-like membrane projections upon ICAM-1 engagement of leukocyte LFA-1. Carman CV, Jun CD, Salas A, Springer TA. *J. Immunol.*, 71(11): 6135-44, 2003.
24. Inter-subunit signal transmission in integrins by a receptor-like interaction with a pull spring. Yang W, Shimaoka M, Salas A, Takagi J, Springer TA. *Proc. Natl. Acad. Sci. U. S. A.*, 101(9): 2906-2911, 2004.
25. Rolling adhesion through an extended conformation of integrin α L β 2 and relation to α I and β I-like domain interaction. Salas A, Shimaoka M, Kogan AN, Harwood C, von Andrian UH., Springer TA. *Immunity* 20: 1-20; 2004.
26. CD1d function is regulated by Microsomal Triglyceride Transfer Protein. Brozovic S, Nagaishi T, Yoshida M, Betz S, Salas A, Chen D, Kaser A, Glickman J, Kuo T, Little A, Corazza N, Kim JY, Colgan S, Young S, Exley M, Blumberg RS. *Nat. Med.* 10(5): 535-539; 2004.
27. The binding sites for competitive antagonistic, allosteric antagonistic, and agonistic antibodies to the I domain of integrin LFA-1. Lu C, Shimaoka M, Salas A, Springer TA. *J. Immunol.* 173(6): 3972-8; 2004.
28. The primacy of affinity over clustering in regulation of adhesiveness of integrin $\{\alpha\}$ L $\{\beta\}$ 2. Kim M, Carman CV, Yang W, Salas A, Springer TA. *J. Cell. Biol.* 167(6): 1241-1253; 2004.
29. Microsomal triglyceride transfer protein lipidation and control of CD1d on antigen-presenting cells. Dougan SK, Salas A, Rava P, Agymang A, Kaser A, Morrison J, Khurana A, Kronenberg M, Johnson C, Exley M, Hussain MM, Blumberg RS. *J. Exp. Med.* 202(4): 529-39; 2005.
30. Transition from rolling to firm adhesion can be mimicked by extension of integrin α L β 2 in an intermediate affinity state. Salas A, Shimaoka M, Phan U, Kim M, Springer TA. *J. Biol. Chem.* 281(16):10876-82; 2006.
31. AL-57, a ligand-mimetic antibody to integrin LFA-1, reveals chemokine-induced affinity up-regulation in lymphocytes. Shimaoka M, Kim M, Cohen EH, Yang W, Astrof N, Peer D, Salas A, Ferrand A, Springer TA. *Proc. Natl. Acad. Sci. U S A.* 103(38):13991-6; 2006.
32. Identification and characterization of a human monoclonal antagonistic antibody AL-57 that preferentially binds the high-affinity form of lymphocyte function-associated antigen-1. Huang L, Shimaoka M, Rondon IJ, Roy I, Chang Q, Po M, Dransfield DT, Ladner RC, Edge AS, Salas A, Wood CR, Springer TA, Cohen EH. *J. Leukoc. Biol.* 80(4):905-14; 2006.
33. A small molecule agonist of an integrin, α L β 2. Yang W, Carman CV, Kim M, Salas A, Shimaoka M, Springer TA. *J. Biol. Chem.* 281(49): 37904-12; 2006.
34. Importance of force linkage in mechanobiology of adhesion receptors. Astrof NS, Salas A, Shimaoka M, Chen JF, Springer TA. *Biochemistry* 45(50): 15020-8; 2006.
35. Efficacy of an inhibitor of adhesion molecule expression (GI270384X) in the treatment of experimental colitis. Panés J, Aceituno M, Gil F, Miquel R, Piqué JM, Salas A, McLean P. *Am J Physiol Gastrointest Liver Physiol.* 2007; 293(4): G739-48.
36. Defective IL-10 production in severe phenotypes of Crohn's disease. Correa I, Veny M, Esteller M, Piqué JM, Yagüe J, Panés J, Salas A. *J Leuk Biol.* 85(5):896-903; 2009.
37. Mechanisms underlying the beneficial effects of stem cell therapies for inflammatory bowel diseases. Panés J and Salas A. *Gut*; 58(7):898-900; 2009.
38. Defects in autophagy induce alterations in the secretory pathways and proinflammatory signals of paneth cells. Salas A, Panés J. *Gastroenterology*; 137(4):1527-9; 2009.
39. Late Crohn's disease patients present an increase in peripheral Th17 cells and cytokine production compared with early patients. Veny M, Esteller M, Ricart E, Piqué JM, Panés J, Salas A. *Aliment Pharmacol Ther*; 31(5):561-572; 2010
40. The 2-phase model of Crohn's disease: from immune response to hyperresponse. Salas A, Panés J. *Gastroenterology*; 138(3):1204-6; 2010.
41. Is lack of "education" a mechanism driving loss of tolerance in Crohn's disease? Veny M, Salas A, Panés J. *Gastroenterology*; 139(3):1056-8; 2010.

42. Mesenchymal stem cell therapy of Crohn's disease: are the far-away hills getting closer? Panés J, Benítez-Ribas D, Salas A. *Gut*; 60(6):742-4; 2011.
43. The prolyl hydroxylase PHD3 identifies pro-inflammatory macrophages and its expression is regulated by Activin A Escribese MM, Sierra-Filardi E, Nieto C, Sanchez-Torres C, Matsuyama T, Samaniego R, Calderon-Gomez E, Vega MA, Salas A, Sanchez-Mateos P, Corbi AL. *J Immunol* 189(4):1946-1954; 2012.
44. Evaluation of responsive-gene expression as a sensitive and specific biomarker in patients with ulcerative colitis. Román J, Planell N, Lozano JJ, Aceituno A, Esteller M, Pontes C, Balsa D, Merlos M, Panés J, Salas A. *Inflamm Bowel Dis* 19(2):221-9; 2013.
45. Transcriptional analysis of the intestinal mucosa of patients with ulcerative colitis in remission reveals lasting epithelial cell alterations. Planell N, Lozano JJ, Mora-Buch R, Masamunt MC, Mireya J, Ordás I, Esteller M, Ricart E, Piqué JM, Panés J, Salas A. *Gut* 62(7):967-76; 2013.
Commentary: "Looking beyond histological healing in ulcerative colitis: towards the establishment of a molecular signature for quiescent but progressive disease" Chamaillard M, Chevaux JB, Peyrin-Biroulet L. Gut 2013 in press
46. The IL-33/ST2 axis: yet another therapeutic target in inflammatory bowel disease? Salas A. *Gut* 62(10):1392-3; 2013.
47. TL1A/TNFSF15 directly induces proinflammatory cytokines, including TNF α , from CD3+CD161+ T cells to exacerbate gut inflammation. Jin S, Chin J, Seeber S, Niewoehner J, Weiser B, Beaucamp N, Woods J, Murphy C, Fanning A, Shanahan F, Nally K, Kajekar R, Salas A, Planell N, Lozano J, Panes J, Parmar H, Demartino J, Narula S, Thomas-Karyat DA. *Mucosal Immunol* 6(5):886-99; 2013.
48. Macrophage uptake and accumulation of folates are polarization-dependent in vitro and in vivo and are regulated by activin A. Samaniego R, Palacios BS, Dominguez-Soto A, Vidal C, Salas A, Matsuyama Y, Sanchez-Torres C, de la Torre I, Miranda-Carús ME, Sanchez-Mateos P, Puig-Kröger A. *J Leukoc Biol* 95:797-808; 2014.
49. Identification of inflammatory mediators in Crohn's disease patients unresponsive to anti-TNF- α therapy. Leal RF, Planell N, Kajekar R, Lozano JJ, Ordás I, Dotti I, Esteller M, Masamunt MC, Parmar H, Ricart E, Panés J, Salas A. *Gut* 64(2):233-42; 2014
50. A randomized controlled trial of etrolizumab as induction therapy for ulcerative colitis. Vermeire S, O'Byrne S, Keir M, Williams M, Lu TT, Mansfield JC, Lamb CA, Feagan BG, Panes J, Salas A, Baumgart DC, Schreiber S, Dotan I, Sandborn WJ, Tew GW, Luca D, Tang MT, Diehl L, Eastham-Anderson J, De Hertogh G, Perrier C, Egen JG, Kirby JA, van Assche G, Rutgeerts P. *Lancet* 384(9940):309-18; 2014.
51. CD163L1 and CLEC5A discriminate subsets of human resident and inflammatory macrophages in vivo. González-Domínguez É, Samaniego R, Flores-Sevilla JL, Campos-Campos SF, Gómez-Campos G, Salas A, Campos-Peña V, Corbí ÁL, Sánchez-Mateos P, Sánchez-Torres C *J Leuk Biol* 98(4):453-66; 2015
52. IBD: Regulatory T cells for treatment of Crohn's disease. Salas A, Panés J. *Nat Rev Gastroenterol Hepatol*. Jun;12(6):315-6; 2015.
53. Epithelial IL-1R2 acts as a homeostatic regulator during remission of ulcerative colitis. Mora-Buch R, Dotti I, Planell N, Calderón-Gómez E, Jung P, Masamunt MC, Llach J, Ricart E, Batlle E, Panés J, Salas A. *Mucosal Immunol*. Jul;9(4):950-9; 2015.
54. Improving safety of autologous haematopoietic stem cell transplantation in patients with Crohn's disease. Jauregui-Amezaga A, Rovira M, Marín P, Salas A, Pinó-Donnay S, Feu F, Elizalde JI, Fernández-Avilés F, Martínez C, Gutiérrez G, Rosiñol L, Carreras E, Urbano A, Lozano M, Cid J, Suárez-Lledó M, Mensa J, Rimola J, Rodríguez S, Masamunt MC, Comas D, Ruíz I, Ramírez-Morros A, Gallego M, Ordás I, Panés J, Ricart E. *Gut* Sep;65(9):1456-62; 2015.
55. Commensal-specific CD4⁺ cells from patients with Crohn's disease have a T-helper 17 inflammatory profile. Calderón-Gómez E, Bassolas-Molina H, Mora-Buch R, Dotti I, Planell N, Esteller M, Gallego M, Martí M, Garcia-Martín C, Martínez-Torró C, Ordás I, Singh S, Panés J, Benítez-Ribas D, Salas A. *Gastroenterology* Sep;151(3):489-500; 2016.
56. Alterations in the epithelial stem cell compartment could contribute to permanent changes in the mucosa of patients with ulcerative colitis. Dotti I, Mora-Buch R, Ferrer-Picón E, Planell N, Jung P, Masamunt MC, Leal RF, Martín de Carpi J, Llach J, Ordás I, Batlle E, Panés J, Salas A. *Gut* 2016 (in press).
57. Autologous hematopoietic stem cell transplantation for refractory Crohn's disease: efficacy in a single-centre cohort. López-García A, Rovira M, Jauregui-Amezaga A, Marín P, Barastegui R, Salas A, Ribas V, Feu F, Elizalde JI, Fernandez-Aviles F, Martínez C, Guitierrez G, Rosiñol L, Carreras E, Urbano A, Lozano M, Cid J, Suarez-Lledo M, Masamunt MC, Comas D, Finer A, Gallego M, Alfaro I, Ordas I, Panes J, Ricart E. *J Crohn's Colitis* 2017 (in press)

D. Research Support

Ongoing Research Support

European Commission H2020 Dates: 1/2017-12/2020. Principal investigator: Azucena Salas

R+D National Fund from Spanish Ministry of Economy and Innovation (I+D SAF2015-66379). Dates: 1/2016-12/2018
Principal investigator: Azucena Salas and Julian Panes.

Leona and Harry Helmsley Trust. Dates: 8/2014-8/2017 (extended to 2/2019).
Principal investigator: Azucena Salas.

Abbvie. Dates:9/2015-9/2017.
Principal investigator: Azucena Salas and Julian Panés.

Boehringer Ingelheim Pharmaceuticals, Inc. Dates:3/2013-3/2015.
Principal investigator: Azucena Salas.

Boehringer Ingelheim Pharmaceuticals, Inc. Dates:9/2013-9/2014
Principal investigator: Azucena Salas.

Instituto de Salud Carlos III: Proyectos Integrados de Excelencia (PIE13/00033). Dates: 1/2014-12/2016.
Coordinator: Elías Campo. Principal investigator group 5: Azucena Salas.

Fundación Marató TV3. Dates: 1/2013-12/2015
Principal investigator: Azucena Salas and Eduard Batlle

R+D National Fund from Spanish Ministry of Economy and Innovation (I+D BFU2012-35999/BFI). Dates: 1/2013-12/2015
Principal Investigator: Azucena Salas.

Completed Research support

BIBA (ERA-NET, Euro Nano Med). Dates:1/1/2011-12/31/2014
Coordinator: Patrick Boisseau. Coordinated project (6 other groups, PI of Barcelona team: Azucena Salas)

International Organization for the Study of Inflammatory Bowel Disease (IOIBD). Dates: 2012-2013
Principal Investigator: Julian Panés

Genentech Inc. Dates: 12/2014-12/2015.
Principal investigator: Azucena Salas.

Hoffmann-La Roche (NP25564). Dates: 1/1/2011-06/31/2012
Principal investigator: Azucena Salas and Julian Panés

I+D SAF2005-03755 (R+D National Fund from Spanish Department of Science and Technology). Dates:12/2005-12/2008
Principal Investigator: Azucena Salas.

I+D BFU2008-02683/BFI (R+D National Fund from Spanish Department of Innovation and Science). Dates:12/2008-12/2011
Principal Investigator: Azucena Salas.

CR-IBD-8-08 (Palau-Pharma)
Dates: 03/01/2010-03/01-2011
Principal Investigator: Azucena Salas.

E. Invited talks (last 5 years)

- *IBD: what's new in 2017. Fisiopathological discoveries*
Cell therapy. Are we ready to apply to the clinical practice. Hematopoietic stem cell transplantation
XI Workshop GEDIIB 2017
Foz d'Iguazú, Brasil. March 25th 2017.
- *Recreating the intestine ex vivo. Where are we on the way to the artificial gut*
5th SciCom Workshop: Methodology on Research at the 12th Congress of ECCO
Barcelona, February 16th 2017
- *New therapeutic perspective in IBD.* 65th Brazilian Congress of Coloproctology. Pre-congress Workshop:
Inflammatory Bowel Diseases. Sao Paolo, Brazil October 2016.
- *Antigen specific immune responses in human inflammatory bowel disease.* International Organization for the
study of Inflammatory Bowel Disease (IOIBD) Annual General Meeting, 6-8 April, 2016. Tel Aviv, Israel.
- *Hematopoietic stem cell transplantation.* 11th Congress of the European Crohn's and Colitis Organization,
Amsterdam March 16th-19th 2016.
- *Bases fisiopatològiques en el desenvolupament de noves molècules per al tractament de la MII.* Curs formació
continuada de la Societat Catalana de Digestologia. Barcelona, March 10th 2016.
- *Biomarcadores para la monitorización de la enfermedad y para el tratamiento personalizado.* VI Curso
GETECCU-SEGHN sobre Enfermedad Inflamatoria Intestinal pediátrica. Barcelona, November 6th 2015.
- *Bone marrow transplantation in Crohn's patient: Immunological and microbiological reset?* Catalonia-Israel
Symposium in microbiota and IBD. Girona 12th June 2015
- *Inflammatory Bowel Diseases: What's new in 2015? Pathophysiological discoveries"*
- *Underlying mechanisms of cell therapies in IBD*
- *Anti-TNF -alpha: therapeutic drug monitoring in US and in Europe."*
- *Th17 response in Inflammatory Bowel Diseases*
- *Immune and non-immune mediators of Inflammatory Bowel Disease: implications in its pathophysiology and
treatment*
Invited visiting professor at the Department of Surgery at the Medical School, University of Campinas (UNICAM),
Brazil. June 23rd- July 1st 2015.
- *Immune and non-immune mediators of IBD: implications on its pathophysiology and treatment.* IDIBAPS In-house
seminar. Barcelona, January 22nd 2015
- *IL-1 family of cytokines in intestinal inflammation.* United European Gastroenterology Week, Vienna, October 20th
2014
- *IBD: What's new in 2014?* United European Gastroenterology Week, Vienna, October 22nd 2014
- *Underlying mechanisms of cell therapies in IBD.* XIX Curso Miguel Ángel Gassull sobre Enfermedades
Inflamatorias Intestinales. Hospital Universitari Germans Trias i Pujol, January 13-14th 2012
- *Mechanisms of relapse in inflammatory bowel disease: no turning back the clock.* Barcelona BioMed Seminar-
Oncology Programme Seminar. Instituto de Recerca Biomèdica (IRB), October 24th 2011
- *Inflammatory bowel disease: from early innate defect to late up-regulated T cell responses.* Inflammation DTA in
Translational Medicine Conference. Roche Laboratories, Nutley, NJ. May 11th, 2011.