BIOGRAPHICAL SKETCH

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NAME	POSITION TITLE
Christian Jobin	Associate Professor Medicine, Pharmacology (Tenure)
eRA COMMONS USER NAME (credential, e.g., agency login) CHRISTIAN JOBIN	

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	YEAR(s)	FIELD OF STUDY
Université Laval, Quebec, Canada	BS	1989	Microbiology Immunol./Microbiology
Université Laval, Quebec, Canada	Ph.D	1994	Immunology, Microbiology

A. Positions and Honors.

Positions and Employment

1993-1997 Postdoctoral Research Fellowship, Dept. Med, U. North Carolina Chapel Hill
1998-2002 Research Assistant Professor, Dept. Med, U. North Carolina Chapel Hill
2002-2008 Assistant Professor, Dept. Med, U. North Carolina Chapel Hill
2008-present Associate Professor, Dept. Med, U. North Carolina Chapel Hill
2008-present Associate Professor, Dept. Pharmacology, U. North Carolina Chapel Hill
2001-present: Editorial Board, American Journal of Physiology
2005-present: Editorial board: Gastroenterology
2007-2008: Section Editor: IBD (Cell Biology/Biochemistry/Molecular Biology)
2008- present: Associate Editor: IBD (Cell Biology/Biochemistry/Molecular Biology)

Other Experience and Professional Memberships

2009- Crohn's and Colitis Foundation of America: Study section reviewer: Fellowship Awards
2007-2009 NIH Tumor Microenvironment (TME) Study Section: Ad Hoc
2002- NIH Special Emphasis Panel NIDDK (2002, 2004, 2005, 2006, 2008)
2004-2007 Canadian Institutes of Health Research. Study section reviewer for Experimental Medicine

American Gastroenterology Association, Mucosal Immunology Association, American Society for Biochemistry and Molecular Biology, American Association of Immunologists

Awards & Honors

CCFA Young IBD investigator award 1998, University Research Council Award 1998, Mucosal Immunology Young investigator travel award 1999, CCFA Research Career Award 1999, Mucosal Immunology Anne Ferguson Award 1999, University Research Council Award 2004, American Gastroenterological Association Fiterman Basic Research Award 2005

Patents

2008 "Transgenic zebrafish model expressing NF-κB responsive green fluorescent protein and uses thereof" United States Patent 61127952. Jobin & Rawls.

B. Selected peer-reviewed publications (from the past 5 years, 33/60 articles total).

1. Kim, J-S., **Jobin, C**., 2004 Role of NF-κB in inflammatory disorders: Just when you thought you knew everything! J. Ped. Gastro. Nut. 38 (1): 109-10.
2. Laprise, P., Langlois, M-J., Boucher, M-J**., Jobin, C**., Rivard, N. 2004 Down-regulation of MEK-Erk signaling by E-cadherin-dependent PI-3K/Akt pathway in differentiating enterocytes. J. Cell. Physiol. 199: 32-39
3. Jijon, H., Allard, B., **Jobin, C**., 2004 NF-κB inducing kinase (NIK) activates NF-κB transcriptional activity independently of IκB kinase γ (IKKγ) through a p38 MAPK dependent RelA phosphorylation pathway. Cell. Signal. 16(9):1023-32
4. Magness S.T., Jijon, H., Van Houten Fisher, N., Sharpless, N.E., Brenner D.A**., Jobin C.** 2004 In vivo pattern of LPS and Anti-CD3-induced NF-κB activation using a novel gene targeted responsive EGFP reporter gene mouse. J. Immunol. 173: 1561-1570
5. Haller, D., **Jobin, C**., 2004 Interaction between resident luminal bacteria and the host: Can a healthy relationship turn sour? J. Ped. Gastro. Nut. 38 (2): 123-136.
6. Mühlbauer, M., Allard, B., Bosserhoff, A.K., Kiessling, S., Herfarth, H., Rogler, G., Schölmerich, J., **Jobin, C.,** Hellerbrand, C. 2004 Differential Effects of Deoxycholic Acid and Taurodeoxycholic Acid on NF-κB Signal Transduction and IL-8 Gene Expression in Colonic Epithelial Cells. Am. J. Physiol. Gastroenterology. 286 (6):G1000-G1006
7. Haller, D., Holt, L., Sartor, R.B., **Jobin, C**. 2004 Differential impact of immune cells on non-pathogenic commensal bacteria-induced NF-κB activation and pro-inflammatory gene expression in intestinal epithelial cells. Immunology 112 (2): 310-320
8. Russo MP, Schwabe RF, Sartor RB, **Jobin C.** 2004 NF-κB-inducing kinase restores defective IκB kinase activity and NF-κ Ḃsignaling in intestinal epithelial cells. Cell. Signal. 16(6):741-750
9. Kuphal, S., Poser, I., **Jobin, C.,** Hellerbrand, C., Bosserhoff, A.K. 2004, Loss of E-cadherin leads to upregulation of NF-κB activity in malignant melanoma. Oncogene. 23:8509-19
10. Hoentjen, F., Sartor, R.B., Ozaki, M., **Jobin, C.** 2005 STAT3 regulates NF-□B recruitment to the IL-12p40 promoter in dendritic cells. Blood. 105 (2):689-696
11. Kim, J.S., **Jobin, C.** 2005 The Flavonoid Luteolin Prevents LPS-Induced NF-κB Signaling and Gene Expression by Blocking IκB Kinase Activity in Intestinal Epithelial Cells and Bone Marrow-derived Dendritic Cells. Immunology. 115(3):375-87.
12. Jijon, H., Madsen, K.L., Walker, J.W., Allard, B., Jia, H.P., McCray, P., **Jobin, C.** 2005 Serum Amyloid A activates NF-κB and proinflammatory gene expression in human and murine intestinal epithelial cells**.** Eur. J. Immunol. 35(3):718-726
13. Kim, J.S., Narula, A., **Jobin, C.** 2005 *Salvia miltiorrhiza* Water-Soluble Extract, But Not Its Constituent Salvianolic Acid B, Abrogates LPS-Induced NF-κB Signaling in Intestinal Epithelial Cells. Clin. Exp. Immunol. 141(2):288-97.
14. Yan, S.R., Joseph, R.R. Rosen, K., Reginato, M.J., Allaire, N. Brugge, J.S., **Jobin, C.,** Stadnyk, A.W. 2005 Activation of NF-κB following detachment delays apoptosis in intestinal epithelial cells. Oncogene 24(43):6482-91
15. Ou D., Wang X., Metzger D.L., Robbins M, Huang J, **Jobin C**., Chantler J.K., James R.F., Pozzilli P., Tingle A.J. 2005 Regulation of TNF-Related Apoptosis-Inducing Ligand-Mediated Death Signal Pathway in Human beta Cells by Fas-Associated Death Domain and Nuclear Factor kappaB. Hum Immunol. 66(7):799-809
16. Wilson H.M., Chettibi S., **Jobin C**., Walbaum D., Rees A.J., Kluth D.C. 2005 Inhibition of macrophage nuclear factor-kappaB leads to a dominant anti-inflammatory phenotype that attenuates glomerular inflammation in vivo. Am J Pathol. 167(1):27-37
17. Theiss, A.L., Simmons, J.G., **Jobin, C.,** Lund, P.K. 2005 Tumor necrosis factor-a increases collagen accumulation and proliferation in intestinal myofibroblasts via TNF receptor 2. J. Biol. Chem. 280(43):36099-109
18. Taylor, C., **Jobin, C.** 2005 Ubiquitin Protein modification and signal transduction: implications for inflammatory bowel diseases. Inflamm. Bowel. Dis. 11(12):1097-110
19. Karrasch T, Steinbrecher K, Allard B, Baldwin, A.S. **Jobin C.** 2006 Critical role for H3 phosphorylation and p38-MAPK pathway in intestinal wound-healing response J. Cell. Physiol. 207(3):809-15.

20. Karrasch T, Kim J.S., Muhlbauer M., Magness S.T., **Jobin C.** 2007 Gnotobiotic IL-$10^{-/-}$;NF-κB^{EGFP} mice reveal the critical role of TLR/NF-κB signaling in commensal bacteria-induced colitis. J. Immunol. 178 (10): 6622-6532
21. Karrasch T, Kim, J.S., Byunk, I.J. **Jobin C.** 2007 The flavonoid luteolin worsens chemical-induced colitis in NF-κB^{EGFP} transgenic mice through blockade of enterocyte-derived NF-κB-dependent protective molecules. PloS ONE. Jul 4;2(7):e596.
22. Davé, S., Tilstra, J.S, Matsuoka, K., Li' F., Karrasch, T., Uno, J.K., Sepulveda, A.R., **Jobin, C**. Baldwin, A.S., Robbins, P.D., Plevy, S.E. 2007 Amelioration of chronic murine colitis by peptide mediated transduction of the IkB kinase (IKK) inhibitor NEMO binding domain (NBD) peptide. J. Immunol. 179(11):7852-7859
23. Kim S.C., Tonkonogy, S.L., Karrasch, T., **Jobin, C.,** Sartor, R.B 2007 Dual-Association of Gnotobiotic IL-$10^{-/-}$ Mice With Two Non-Pathogenic Commensal Bacteria Induces Aggressive Pancolitis. Inflamm. Bowel. Dis. 13(12):1457-1466
24. Muhlbauer M., Cheely, A., Yenugu, S., **Jobin, C.** 2008 Regulation and functional impact of LPS induced Nod2 gene expression in the epididymal epithelial cells PC-1. Immunology. 2008 124(2):256-64
25. Karrasch, T., **Jobin, C.** 2008 NF-κB in the intestine: Friend or foe? Inflamm. Bowel. Dis. 14 (1):114-24
26. Ivory, C.P.A., Prystajecky, M., **Jobin, C**., Chadee, K. 2008 TLR-9 dependent macrophage activation by *Entamoeba histolytica* DNA. Infect. Immun. 76(1):289-97
27. Mühlbauer M., Chilton P.M., Mitchell T.C., **Jobin C.** 2008 Impaired Bcl3 up-regulation leads to enhanced LPS-induced IL-23p19 gene expression in IL-$10^{-/-}$ mice. J. Biol. Chem. 283(21):14182-9.
28. Kajino-Sakamoto, R., Inagaki, M., Lippert, E., Akira, S., Robine, S., Matsumoto, K., **Jobin, C.,** Ninomiya-Tsuji, J. 2008 Intestinal epithelial-derived TAK1 signaling prevents TNF-dependent intestinal damage and the development of ileitis and colitis. J. Immunol. 181(2):1143-52
29. Chavey, C., Freund, A., Durand, S., **Jobin, C.**, Lazennec, G. 2008 Interleukin-8 expression is regulated by histone deacetylases through NF-kB pathway. Mol. Pharmacol. 74(5):1359-66
30. Larmonier, C.B., Uno, J.K., Lee, K.M., Karrasch, T., Laubitz, D., Thurston, R., Midura-Kiela, M.T., Ghishan, F.K., Sartor, R.B., **Jobin, C.,** Kiela, P.R. 2008 Limited effects of dietary curcumin on Th-1 driven colitis in IL-10 deficient mice suggest an IL-10 dependent mechanism of protection. Am. J. Physiol. 95(5):G1079-91
31. Jobin, C. 2008 The NF-κB signaling cascade and IBD: Turn it down? Inflamm. Bowel. Dis. 4(S2):S108-S109
32. Joo, Y-E., Karrasch, T., Narula, A., Allard, B., Herfarth, H.H., **Jobin, C**. 2009 Tomato lycopene extract prevents lipopolysaccharide-induced NF-kB signaling and gene expression, but worsens dextran sulfate sodium-induced colitis in transgenic NF-kB^{EGFP} mice. PloS ONE. 4(2):e4562
33. Kim, J-Y., Kajino-Sakamoto, R., Omori, E., **Jobin, C**., Ninomiya-Tsuji, J., 2009 intestinal epithelial-derived TAK1 signaling is essential for cytoprotection against chemical-induced colitis. PloS ONE. 4(2):e456

C. Research Support

<u>Ongoing Research Support</u>

USPHS 5 R01 DK73338-03 Jobin (PI) 04/01/07-03/31/11
NIH
Role of bacteria in colitis-associated colon cancer
The major goals of this human project are to study the role of bacteria in colitis associated colon cancer and establish mechanism of action.

USPHS 5 R01 DK47700-13 Jobin (PI) 7/1/03-6/30/09
NIH
Regulation of immunosuppressive molecules in IBD
This study investigates mechanisms regulating intestinal epithelial responsiveness to cytokines and bacterial products.

CGIBD pilot feasibility grant Jobin (PI) 9/01/2008-8/31/2009
NIH

A novel NF-κB reporter system to study host-microbe interactions and inflammation in the zebrafish intestine

USPHS 5 U19 AI 067798-03 Chao (PI) 8/31/05 – 7/31/10
NIH
Centers for medical counter measures against radiation (Project 10): Regulation of radiation-induced enteropathy by innate immune responses to commensal bacteria.

RO1 DK 040249-19 (Sartor) 2/01/89-6/30/2012
NIH
Mechanisms of colitis induced by defined bacterial flora.

Pended Research Support

R21 12/01/09-11/31/11
NIH
Molecular Mechanisms of *Campylobacter Jejuni*-induced Pathogenesis

Completed Research Support

Senior Research Grant: Jobin (PI) 1/1/06-12/31/08
American Institute Cancer Research
Luteolin as dietary chemopreventive agent in colorectal cancer.

Senior Research Grant: Jobin (PI) 1/1/06-04/31/07
Crohn's and Colitis Foundation of America
Role of bacteria in colitis-associated colon cancer

Translational Research Award: Jobin (PI) 1/1/06-12/31/07
NCI UNC GI SPORE grant P50
Luteolin as dietary chemopreventive agent in colitis-associated colon cancer.
Role: Co-investigator

Senior Research Grant: Jobin (PI) 1/14/02-1/13/04
Crohn's and Colitis Foundation of America
Characterization and regulation of the lipopolysaccharide signal transduction in intestinal epithelial cells