

Cristina Lo Celso

CURRICULUM VITAE

Work Address: Center for Regenerative Medicine
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RESEARCH EXPERIENCE AND EDUCATION

January 2009 - present	Instructor in the MGH Center for Regenerative Medicine (Prof DT Scadden).
October 2008 - present: Imperial College, London	Honorary Lecturer, Division of Cell and Molecular Biology.
February 2006 - December 2008: Massachusetts General Hospital, Harvard Medical School and Harvard Stem Cell Institute, Boston, USA	Postdoctoral fellow in the MGH Center for Regenerative Medicine (Prof DT Scadden). Project: Identification of dynamic interactions between hematopoietic stem cells and their niche. Techniques used: bone marrow purification and transplant, intravital confocal and two-photon microscopy, immunofluorescence, FACS analysis.
October 2005 - December 2005: Cancer Research UK, London, UK	Postdoctoral fellow in the Keratinocyte Laboratory (Dr F.M.Watt). Project: Effects of beta-catenin and c-Myc on lineage commitment of epidermal cultured cells. Techniques used: molecular and cellular biology, culture and retroviral infection of sebaceous cells, confocal microscopy and time-lapse video microscopy.
September 2001 - September 2005: Cancer Research UK (formerly ICRF) and University College London, UK	PhD studentship in the Keratinocyte Laboratory (Dr F.M.Watt). Project: Lineage commitment by the progeny of adult epidermal stem cells. Techniques used: transgenic mice, immuno-histochemistry, culture and retroviral infection of primary human and mouse keratinocytes, molecular and cellular biology techniques, genomic techniques (Affymetrix microarrays). PhD awarded 30 th November 2005.
October 1998 - July 2001: Institute for Cancer Research and Treatment, Candiolo, Torino, Italy	Internship in the IRCC Division of Molecular Oncology (Prof P.M. Comoglio) Project: Genome-wide analysis of transcriptional response to HGF and functional characterization of regulated genes. Techniques used: molecular and cellular biology techniques, lentiviral vectors (trained to work in P3 level of containment), FACS analysis, Serial Analysis of Gene Expression.
March 1997 - September 1998: University of Torino Medical School	Internship in the Department of Biology and Genetics (Prof L. Silengo) Project: Search for proteins interacting with beta1D integrin. Techniques used: molecular and cellular biology techniques.
September 1996 - July 2001: University of Torino Medical School	MSc (Italian 5 yrs "Corso di Laurea") Biotechnology in Medicine. Grade: 110/110 cum laude, menzione d'onore e dignita' di stampa. <u>Title of Thesis</u> : A post-genomic approach for identification and functional characterization of genes transcriptionally regulated in epithelial cells.
September 1991- August 1996:	Liceo classico "V. Alfieri", Torino, Italy (classical studies high school). <u>Qualification achieved</u> : Italian "Maturita' Classica", grade 60 (out of 60).

PUBLICATIONS

Adams GB, Alley IR, Chabner KT, Chung U, Lo Celso C, Marsters ES, Jeanson NT, Weinstein LS, Lin CP, Kronenberg HM, Scadden DT (2009): G_sα mediated signalling determines the success of stem cell engraftment in bone marrow. *Nature*, AOP March 25.

Lo Celso C, Fleming HE, Wu JW, Zhao CX, Miake-Lye S, Fujisaki J, Côté D, Rowe DW, Lin CP and Scadden DT (2009, AOP December 3rd, 2008): Live-animal tracking of individual hematopoietic stem cells in their niche. *Nature*, 457(7225):92-96.

Szotek PP, Chang HL, Brennand K, Fujino A, Pieretti-Vanmarcke R, Lo Celso C, Dombkowski D, Preffer F, Cohen KS, Teixeira J, Donahoe PK. (2008): Normal ovarian surface epithelial label-retaining cells exhibit stem/progenitor cell characteristics. *PNAS* 105(48):19024

Janzen V, Fleming HE, Riedt T, Karlsson G, Riese MJ, Lo Celso C, Reynolds G, Milne CD, Paige CJ, Karlsson S, Woo M, Scadden DT (2008). Hematopoietic stem cell responsiveness to exogenous signals is limited by caspase-3. *Cell Stem Cell* 2(6):584-94.

Fleming HE, Janzen V, Lo Celso C, Guo J, Leahy KM, Kronenberg HM, Scadden DT (2008). Wnt Signaling in the niche enforces hematopoietic stem cell quiescence and is necessary to preserve self-renewal in vivo. *Cell Stem Cell* 2(3): 274-283.

Lo Celso C, Berta MA, Braun KM, Frye M, Lyle S, Zouboulis CC, Watt FM (2008) Characterization of bipotential epidermal progenitors derived from human sebaceous gland: contrasting roles of c-Myc and beta-catenin. *Stem Cells* 26(5):1241-52.

Lo Celso C, Klein RJ, Scadden DT (2007). Analysis of the Hematopoietic Stem Cell Niche. *Curr. Protoc. Stem Cell Biol.* 3:2A.5.1-2A.5.31.

Lo Celso C, Scadden DT (2007). Stem cells remember their grade. *Cell Stem Cell* 1, 132-134.

Lo Celso C, Scadden DT (2007). Isolation and transplantation of hematopoietic stem cells (HSCs). *Journal of Visualized Experiments*, 2, <http://www.jove.com/index/Details.stp?ID=157>

Estrach S, Ambler CA, Lo Celso C, Hozumi K, Watt FM (2006). Jagged1 is a beta-catenin target gene required for ectopic hair follicle formation in adult epidermis. *Development* 133 (22), 4427-4438.

Watt FM, Lo Celso C, Silva-Vargas V (2006). Epidermal stem cells: an update. *Curr. Opin. in Genet. And Devel.* 16 (5), 518-524

Morita K, Lo Celso C, Spencer-Dene B, Zouboulis CC, Watt FM (2006). HAN11 binds mDia1 and controls Gli1 transcriptional activity. *J Dermatol Sci* 44(1), 11-20

Lo Celso C, Silva-Vargas V, Giangreco A, Ofstad T, Prowse DM, Braun KM, Watt FM (2005). -catenin and Hedgehog signal strength can specify number and location of hair follicles in adult epidermis without recruitment of bulge stem cells. *Developmental Cell* 9, 121-131.

Lo Celso C, Prowse DM, Watt FM (2004). Transient activation of β-catenin signalling in adult mouse epidermis is sufficient to induce new hair follicles but continuous activation is required to maintain hair follicle tumours. *Development* 131, 1787-1799.

Medico E, Gentile A, Lo Celso C, Williams TA, Gambarotta G, Trusolino L and Comoglio PM (2001). Osteopontin is an autocrine mediator of HGF-induced invasive growth. *Cancer Research* 61, 5861-5868.

FELLOWSHIPS AND AWARDS

February 2009 MGH Scientific Advisory Committee meeting Poster of Distinction award.
November 2008 Harvard Stem Cell Institute Malkin symposium poster prize.
June 2008 Harvard Stem Cell Institute Retreat poster prize.
February 2006 Human Frontiers Science Program long-term postdoctoral fellowship.
December 2005 European Molecular Biology Organization long-term postdoctoral fellowship.
January 2005 Honour Fell Travel Award from the British Society for Cell Biology.
January 2005 Travel award from University College London Student Conference Fund.
April 2004 3rd prize at the CRUK PhD student poster competition.
March 2003 and 2004 Honour Fell Travel Award from the British Society for Cell Biology.
From September 2001 PhD fellowship from ICRF (now Cancer Research UK).

ACTIVITIES

March 2008 to present International Society for Stem Cell Research, abstract reviewer for annual meeting.
May 2008 to present Consultant for Indiana University, Simon Cancer Center in vivo imaging facility.
March 2008 to present Harvard Stem Cell Institute Summer Student Program Selection Committee member.
March 2007 to pres. Reviewer for *Blood* journal.
Sept-Nov 2007 MIT European Career Fair Team member.
June-August 2007 Harvard Stem Cell Institute summer student mentor.
January 2007 to pres. Reviewer for *Stem Cells* journal.
Oct 2006- Sep 2007 Harvard Biochemical Sciences undergraduate student mentor.
2004 5th Joint CRUK-MGC student conference, organizing committee member.

ORAL PRESENTATIONS

November 2008 MGH Wellman Center Faculty meeting, Boston, MA.
November 2008 EMBO fellows meeting, Boston, MA.
September 2008 Broad Institute Cancer Program Meeting, Cambridge, MA.
August 2008 Indiana University Cancer Center, Indianapolis, IN.
July 2008 Imperial College, London, UK.
July 2008 Institute for Cancer Research and Treatment, Candiolo, Torino, Italy.
May 2007 MGH Center for Regenerative Medicine departmental meeting.
January 2007 British Council Stem Cell meeting, Newcastle, UK.
July 2006 MGH Center for Regenerative Medicine departmental meeting.
February 2005 Keystone Meeting Molecular Regulation of Stem Cells, Banff Springs, CA.
November 2004 Cancer Research UK internal seminar, London.
May 2004 5th Joint CRUK-MGC student conference, Leuven, Belgium.
February 2004 First regional meeting of Biotechnology graduates, Turin, Italy.
October 2003 Bursar seminar, Cancer Research UK, London.