

Viljar Jaks, M.D. Ph.D Date of birth 05/12/1967 Phone +372 737 4069, +372 585 45394 Email viljar.jaks@ut.ee	
<i>Career</i> Institution and position held	2011 - ... University of Tartu, , Estonia, IMCB, Senior Researcher 2011 – 2015 Competence Center for Cancer Research, Tallinn, Estonia, project leader. 2008 - 2010 Karolinska Institute, Sweden, research scientist 2004 – 2007 Karolinska Institute, Sweden, Postdoctoral student 1997 - 2004 University of Tartu, Estonia, IMCB; Senior technical asssistant/laboratory manager 1995 - 1996 University of Tartu, Estnia Institute of Molecular and Cell Biology (IMCB), Techical assistant (0.50)
Education	1998 - 2003 University of Tartu, Ph. D. student 1996 - 1998 University of Tartu, M. Sc. student 1994 - 1996 University of Tartu, B.Sc. student 1986 - 1994 University of Tartu, Department of Medicine
<i>Research activity</i> Degree information	Medical Doctor (MD) Doctor's Degree (PhD in Cell Biology) Master's Degree (MSc in Biomedicine)
Field of research	1. The role of extracellular matrix in organ regeneration, liver stem cells niche and its regulation during liver repair. 2. Regenerative medicine, artificial liver equivalents. 3. Novel antitumor agents for combatting liver cancer.
Past research interests	1. The activation mechanisms of tumour suppressor protein p53; 2. Regulation of the activity of Hedgehog signalling pathway in vivo; 3. Basal cell carcinoma, 4. Epidermal stem cells, 5. Lgr5 as a stem cell marker
Dissertations supervised	Main supervisor for 2 PhD degrees, co-supervisor for 3 PhD degrees Supervisor for 10 MSc degrees and 10 BSc degrees
Selected publications	• Jaks V, Barker N, Kasper M, van Es JH, Snippert HJ, Clevers H and Toftgård R. 2008. Lgr5 marks cycling, yet long-lived, hair follicle stem cells. Nat Genet, 2008; 40:1291-9. • Snippert HJ, Haegebarth A, Kasper M, Jaks V, van Es JH, Barker N, van de Wetering M, van den Born M, Begthel H, Vries RG, Stange DE, Toftgård R, Clevers H. Lgr6 marks stem cells in the hair follicle that generate all cell lineages of the skin. Science. 2010;

	327(5971):1385-9 • Kasper M*, Jaks V*, Are A, Bergström Å, Schwäger A, Barker N, Toftgård R. Wounding enhances epidermal tumorigenesis by recruiting hair follicle keratinocytes. <i>Proc Natl Acad Sci U S A</i>. 2011; 108(10):4099-104. • Kasper M*, Jaks V*, Hohl D, Toftgård R. Basal cell carcinoma - molecular biology and potential new therapies. <i>J Clin Invest</i>. 2012 Feb;122(2):455-63. • Reemann P, Kangur T, Pook M, Paalo M, Nurmis L, Kink I, Porosaar O, Kingo K, Vasar E, Kõks S, Jaks V, Järvekülg M. Fibroblast growth on micro- and nanopatterned surfaces prepared by a novel sol-gel phase separation method. <i>J Mater Sci Mater Med</i>. 2013 Mar;24(3):783-92 • Mäemets-Allas, K.; Viil, J.; Jaks, V. A novel inhibitor of AKT1-PDPK1 interaction efficiently suppresses the activity of AKT pathway and restricts tumor growth in vivo. <i>Mol Cancer Ther</i>. 2015 Nov;14(11):2486-96 • Viil J, Maasalu K, Mäemets-Allas K, Tamming L, Lõhmussaar K, Tooming M, Ingerpuu S, Märtson A, Jaks V. Laminin-rich blood vessels display activated growth factor signaling and act as the proliferation centers in Dupuytren's contracture. <i>Arthritis Res Ther</i>. 2015 May 28;17:144. • Pook M, Teino I, Kallas A, Maimets T, Ingerpuu S, Jaks V. Changes in Laminin Expression Pattern during Early Differentiation of Human Embryonic Stem Cells. <i>PLoS One</i>. 2015 Sep 17;10(9):e0138346 • Mäemets-Allas K, Belitškin D, Jaks V. The inhibition of Akt-Pdpk1 interaction efficiently suppresses the growth of murine primary liver tumor cells. <i>Biochem Biophys Res Commun</i>. 2016 May 20;474(1):118-25 • Klaas M, Kangur T, Viil J, Mäemets-Allas K, Minajeva A, Vadi K, Antsov M, Lapidus N, Järvekülg M, Jaks V. The alterations in the extracellular matrix composition guide the repair of damaged liver tissue. <i>Sci Rep</i>. 2016 Jun 6;6:27398 • Viil J, Klaas M, Vlater K, Belitškin D, Ilmjärv S, Jaks V. A label-retaining but unipotent cell population resides in biliary compartment of mammalian liver. <i>Sci Rep</i>. 2017 Jan 13;7:40322.
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