



Curriculum Vitae

Personal information **Kerstin Elisabeth Sollerbrant Melefors**

Work experience

1. Employer: The Swedish Childhood Cancer Fund
 - Start date: 042020
 - End date:
 - Position: Senior expert, research
 - Activities: Participate in developing a new research strategy for the Swedish Childhood Cancer Fund, external monitoring and horizon scanning within the area of childhood cancer, involve childhood cancer patients and their parents in discussions about patient perspectives important for the development of new treatments including ATMPs. I'm also the spokesperson in areas related to research and care of patients at hospitals.
 - Country: Sweden
2. Employer: The Swedish Childhood Cancer Fund
 - Start date: 092008
 - End date: 032020
 - Position: Head of the department for Research and Education
 - Activities: Responsible for personnel, budget, strategic planning and development of the department. Member of the management team. Responsible for the allocation of grants to world class projects in basic_ and clinical research including advanced therapies, and to national and international research infrastructures such as biobanks, registries and clinical trial units. Our organization has the ambition to increase our activities in the Nordic countries, and to expand to a European level in the coming years, which also is my responsibility. I'm also the spokesperson in areas related to research and care of patients at hospitals.
 - Country: Sweden
3. Employer: Karolinska Institutet
 - Start date: 012008
 - End date: 062014
 - Position: Researcher, Group leader, Principal Investigator
 - Activities: Basic research in the area of cell and molecular biology. Research was focused on "Barriology" _ epithelial and endothelial barriers and cell adhesion molecules with implications in cancer and other diseases. From september 2008 part time.
 - Country: Sweden
4. Employer: Ludwig Institute for Cancer Research
 - Start date: 122006
 - End date: 012008
 - Position: Assistant Investigator
 - Activities: Basic research in the area of cell and molecular biology. Research was focused on "Barriology" _ epithelial and endothelial barriers and cell adhesion molecules with implications in cancer and other diseases.
 - Country: Sweden
5. Employer: Ludwig Institute for Cancer Research
 - Start date: 112000
 - End date: 122006
 - Position: Postdoctoral fellow
 - Activities: Basic research in the area of cell and molecular biology. Research was focused on "Barriology" _ epithelial and endothelial barriers and cell adhesion molecules with implications in cancer and other diseases.
 - Country: Sweden
6. Employer: Center for Genomics Research, Karolinska Institutet
 - Start date: 011998
 - End date: 112000
 - Position: Postdoctoral fellow
 - Activities: Basic research in the area of viral vectors for gene therapy. Research was focused on viral vectors based on adeno_associated virus, adenovirus and Baculovirus and their use in functional genomics and gene therapy.
 - Country: Sweden
7. Employer: Institut Gustave Roussy
 - Start date: 011997
 - End date: 121997
 - Position: Postdoctoral fellow
 - Activities: Basic research in the area of viral vectors for gene therapy. Research was focused on viral vectors based on adeno_associated virus, adenovirus and Baculovirus and their use in functional genomics and gene therapy.
 - Country: France
8. Employer: Kabi Pharmacia (KabiGen)
 - Start date: 121989
 - End date: 011991
 - Position: Laboratory engineer
 - Activities: Research and development in the area of cloning and gene expression in eukaryotic and prokaryotic expression systems. I also analysed Bovine Papilloma Virus_based vectors and the stability and regulation of plasmid copy numbers.
 - Country: Sweden
9. Employer: Sangtec Medical (diagnostic company)
 - Start date: 011984
 - End date: 121989

- Position: Medical Laboratory Technologist
- Activities: Bacteriological control of diagnostic and medical technology products. Leave of absence due to university studies 1987_1989.
- Country: Sweden

Education and training

1. Subject: Department of Women's and Children's Health, Karolinska Institutet
 - Start date: 032008
 - End date:
 - Qualification: Appointed Associate Professor (Docent)
 - Organisation: Cell and Molecular Biology
 - Country: Sweden
2. Subject: Department, Karolinska Institutet of Cell and Molecular Biology
 - Start date: 021991
 - End date: 111996
 - Qualification: Doctor of Philosophy (PhD)
 - Organisation: Cell and molecular biology, animal model systems, genetic engineering, virology, expression systems, gene expression, microscopy (fluorescence, light and electron microscopy), cell culture, protein analyses, monoclonal antibodies, PCR, sequencing
 - Country: Sweden
3. Subject: Stockholm University
 - Start date: 081987
 - End date: 121989
 - Qualification: Bachelor of Science (B.Sc)
 - Organisation: Chemistry and Microbiology
 - Country: Sweden
4. Subject: College of health sciences (Vårdhögskolan) in Stockholm
 - Start date: 081981
 - End date: 121983
 - Qualification: University Certificate (U.C) in Medical Laboratory Technology
 - Organisation: Microbiology and microbiological analyses of patient samples for diagnostic purposes.
 - Country: Sweden
5. Subject: Röllingbyskolan, Åkersberga
 - Start date: 081978
 - End date: 061981
 - Qualification: High school
 - Organisation: Natural Sciences
 - Country: Sweden

Additional information

Publications

List of publications 1. Waldenström, M., Schenström, K., Sollerbrant, K and Hansson, L. Replication of bovine papillomavirus vectors in murine cells. *Gene*, 120, (1992), 175_181. 2. Sollerbrant, K., Akusjärvi, G and Svensson, C. Repression of RNA polymerase III transcription by adenovirus E1A. *Journal of Virology*, 67(7), (1993), 4195_4204. 3. Sollerbrant, K., Akusjärvi, G, Linder, S and Svensson C. The DNA binding domains of the yeast Gal4 and human c-Jun transcription factors interact through the zinc_finger and bZIP motifs. *Nucleic Acids Research*, 23(4), (1995), 588_594. 4. Sollerbrant, K., Richnau, A., Akusjärvi, G and Svensson, C. Transcription activation by the transforming domain of adenovirus E1A is efficiently repressed by the last 44 amino acids of E1A *Journal of Cancer Research and Clinical Oncology*, 121 (1), (1995), DOI:10.1007/BF02559858. 5. Sollerbrant, K., Chinnadurai, G and Svensson C. The CtBP binding domain in the adenovirus E1A protein controls CR1_ dependent transactivation. *Nucleic Acids Research*, 24(13), (1996), 2578_2584. 6. Ljungdahl, S., Linder, S., Sollerbrant, K., Svensson, C and Shoshan, M.C. Signal transduction in fibroblasts stably transformed by {Val12}Ras: The activities of extracellular_signal_regulated kinase and Jun N_terminal kinase are only moderately increased, and the activity of the θ _inhibitor of c-Jun is not alleviated. *Eur. J. Biochem*, 249, (1997), 648_656. 7. Sundqvist, A., Sollerbrant, K and Svensson, C. The carboxy_terminal region of adenovirus E1A activates transcription through targeting of a C_terminal binding protein_histone deacetylase complex. *FEBS Letters*, 429, (1998), 183_188. 8. Andersson, B., Tomko, R.P., Edwards, K., Mirza, M., Darban, H., Öncü, D., Sonnhammer, E., Sollerbrant, K and Philipson, L. Putative regulatory domains in the human and mouse CVADR genes. *Gene Funct. Dis*, 2, (2000), 11_15. 9. Sundqvist, A., Bajak, E., Kurup, S.D., Sollerbrant, K and Svensson, C. Functional knockout of the corepressor CtBP by the second exon of adenovirus E1A relieves repression of transcription. *Experimental Cell Research*, 268, (2001), 284_293. 10. Sollerbrant, K., Elmén, J., Wahlestedt, C., Acker, J., Leblois-Prehoud, H., Latta-Mahieu, M, Yeh,P. and Perricaudet, M. A novel method using Baculovirus_mediated gene transfer for production of recombinant Adeno_Associated Virus vectors. *J Gen Virol*, 82(9), (2001), 2051_2060. 11. Sollerbrant, K., Raschperger, E., Mirza, M., Engstrom, U., Philipson, L., Ljungdahl, P.O. and Pettersson, R.F. The Coxsackievirus and adenovirus receptor (CAR) forms a complex with the PDZ domain_containing protein ligand_of_numb protein_X (LNX). *J Biol Chem*, 278(9), (2003), 7439_7444. 12. Shaw, C.A., Holland, P.C., Sinnreich, M., Allen, C., Sollerbrant, K., Karpati, G. and Nalbantoglu, J. Isoform_specific expression of the Coxsackie and Adenovirus receptor (CAR) in neuromuscular junction and cardiac intercalated discs. *BMC Cell Biol*, 5(1), (2004), 42_50. 13. Mirza, M., Raschperger, E., Philipson, L., Pettersson, R.F. and Sollerbrant, K. The cell surface protein Coxsackie_ and Adenovirus Receptor (CAR) directly associates with the Ligand_of_Numb Protein_X2 (LNX2). *Exp. Cell Res*. 309, (2005), 110_120. 14. Mirza, M., Hreinsson, J., Strand, M.L., Hovatta, O., Söder, O., Philipson, L., Pettersson, R.F. and Sollerbrant, K. Coxsackievirus and adenovirus receptor (CAR) is expressed in male germ cells and forms a complex with the differentiation factor Jam_C in mouse testis. *Exp. Cell Res*. 312 (2006), 817_830. 15. Fechner, H., Pinkert, S., Wang, X., Sipo, I., Suckau, L., Kurreck, J., Dorner, A., Sollerbrant, K., Zeichhardt, H., Grunert, H.P., Vetter, R., Schultheiss, H.P. and Poller, W. Coxsackievirus B3 and adenovirus infections of cardiac cells are efficiently inhibited by vector_mediated RNA interference targeting their common receptor. *Gene Ther*. 14(12), (2007), 960_971. 16. Mirza, M., Petersen, C., Nordqvist, K. and Sollerbrant, K. Coxsackie_ and adenovirus receptor (CAR) is upregulated in migratory germ cells during passage of the blood_testis barrier. *Endocrinology* 148(11), (2007), 5459_5469. 17. Pazirandeh, A., Sultana, T., Mirza, M., Rozell, B., Hultenby, K., Wallis, K, Vennstrom, B., Davis, B., Arner, A., Heuchel, R., Lohr, M., Philipson, L and Sollerbrant, K. Multiple Phenotypes in Adult Mice following Inactivation of the Coxsackievirus and Adenovirus Receptor (Car) *Gene*. *PLoS One* 6(6), (2011) e20203. Epub 2011 Jun 3. PMID: 21674029. 18. Mirza M, Pang MF, Zaini MA, Haiko P, Tammela T, Alitalo K, Philipson L, Fuxe J and Sollerbrant, K. Essential role of the coxsackie_ and adenovirus receptor (CAR) in development of the lymphatic system in mice *PLoS One* 7(5), (2012) e37523. Epub 2012 May 18. PMID:22624044. 19. Sultana T, Hou M, Stukenborg JB, Töhönen V, Inzunza J, Chagin AS and Sollerbrant K. Mice depleted of the coxsackievirus and adenovirus receptor display normal spermatogenesis and an intact blood_testis barrier. *Reproduction Jun*;147(6), (2014), 875_883, doi: 10.1530/REP_13_0653. Epub 2014 Mar 13. PMID: 24625359 20. eReply to article "Identification of CAR as a novel mediator of erythroid differentiation and migration that is specifically downregulated in erythropoietic progenitor cells in patients with MDS" by Bauer et al published in *Blood* 124 (21) (2014). Farasat Zaman, Momina Mirza, Kerstin Sollerbrant and Lars Sävedahl eLetter reply *Blood* 31 January (2016) 21. Nilchian A., Johansson J., Ghalali A., Asanin ST., Santiago A., Rosencrantz O., Sollerbrant K., Vincent CT., Sund M., Stenius U and Fuxe J. CXADR_Mediated Formation of an AKT Inhibitory Signalosome at Tight Junctions Controls Epithelial_Mesenchymal Plasticity in Breast Cancer. *Cancer Res*. Jan 1;79(1), (2019), 47_60, doi: 10.1158/0008_5472.CAN_18_1742. Epub 2018 Nov 1. PMID:30385615 22. Sultana, T., Zaini, M.A., Pazirandeh, A., Heuchel, R., Lohr, M., Philipson, L. and Sollerbrant, K. Depletion of the Coxsackie_

and Adenovirus Receptor (CAR) gene cause irreversible exocrine pancreas insufficiency in mice. Manuscript

Projects

Basic research in the area of cell and molecular biology. Most recent research focuses on "Barriology" _ epithelial and endothelial barriers and cell adhesion molecules with implications in cancer and other diseases.

Memberships

Other Relevant Information

Training of students: Between 1993 _ 2009 I took part in the training and examination of medical, biomedical and PhD students at the Karolinska Institutet. I also participated in committees at registration seminars as part of the evaluation process of new PhD students and research projects, and in half_time committees when the progress of PhD students was evaluated. I also regularly reviewed manuscripts for international, English_speaking journals. Tutoring experience: Three students for which I have been the supervisor have been awarded doctorates Three postdoctoral researchers have worked in my research group Donation of the mouse strain B6;129S2_Cxadr^{tm1.1Ics/Jm} to The Jackson Laboratory Repository. The mice have loxP sites flanking exon 2 in the Cxadr gene. <http://jaxmice.jax.org/strain/017359.html>