

# Curriculum Vitae

Work experience

## Personal information Kerstin Elisabeth Sollerbrant Melefors

- 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
   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
   S. 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 the representation of the second secon 4195\_4204. 3: Soliebrant, K., AkuSjarvi , G. Linder, S and Svensson C. The DNA binding domains of the yeast Gala 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., Akusjävi, 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 if fibroblasts stably transformed by {Val12}Ras: The activities of extracefluter signal regulated kingen and Jun N. terminal kingen are only in depending interactive fibre. extracellular\_signal\_regulated kinase and Jun N\_terminal kinase are only moderately increased, and the activity of the a\_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 EIA 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, (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 corrected the used of Mumb Petterin, X3 (MX2). Exp. Cell Bac, 200 (2005), 110, 120, 144 Mirza, M. 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 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 Coxsackierus 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 denleted of the coxsackievirus and adenovirus receptor display normal spermatogenesis and an 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 Sävendahl 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 Signalosme 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 I am a patient representative