

PERSONAL INFORMATION Frida Hasslung Wikström**WORK EXPERIENCE**

May 2018–Present **CVMP member**
Medical Products Agency (Sweden)

December 2013–April 2018 **CVMP alternate member**
Medical Products Agency (Sweden)

September 2008–Present **Clinical Assessor**
Medical Products Agency (Sweden)
Clinical assessor of veterinary medicinal products; efficacy of pharmaceuticals and safety and efficacy of immunologicals with focus on Immunological products and novel therapies.
EU-activities: Member of CVMP from May 2018, alternate member of CVMP from Dec 2013 to April 2018, member of SAWP-v since December 2014, chair of SAWP-v since May 2019, vice chair of SAWP-v October 2016 - May 2019, member of CVMP IWP January 2013 - November 2019

February 2003–August 2008 **PhD Student**
Swedish University of Agricultural Sciences (Sweden)
Research and teaching in Veterinary immunology and infection biology. Laboratory work (biotechnological and immunological techniques, cell culture)

June 2001–December 2010 **Veterinary surgeon**
Hallands Djursjukhus; Mälaren Smådjursklinik; Lundabygdens Djursjukhus (Sweden)
Small animal practitioner (part time)

EDUCATION AND TRAINING

February 2003–June 2008 **PhD**
Swedish University of Agricultural Sciences, Dept of Biomedical Sciences and Veterinary Public Health, Immunology (Sweden)
Veterinary immunology, infection biology, virology. Research education, laboratory work and teaching

August 1997–February 2003 **DVM (BSc and MSc in Veterinary Medicine)**
Swedish University of Agricultural Sciences (Sweden)
Veterinary Medicine

ADDITIONAL INFORMATION

Expertise Veterinary medicine
Immunology
Novel therapies

Publications Doctoral thesis:
Hasslung Wikström, F. (2008) Interaction between Porcine Circovirus type 2 and the immune system of the pig with special reference to immunomodulatory sequences in the viral genome. Doctoral Thesis No. 2008:29, Faculty of Veterinary Medicine and Animal Science, Swedish University of

Agricultural Sciences. ISSN 1652-6880, ISBN 978-91-85913-62-6.

Peer reviewed articles:

Wikström FH, Fossum C, Fuxler L, Kruse R, Lövgren T. Cytokine induction by immunostimulatory DNA in porcine PBMC is impaired by a hairpin forming sequence motif from the genome of Porcine Circovirus type 2 (PCV2). *Vet Immunol Immunopathol.* 2011 Feb 15;139(2-4):156-66. Epub 2010 Oct 7.

Wallgren P, Brunborg IM, Blomqvist G, Bergström G, Wikström F, Allan G, Fossum C, Jonassen CM. (2009) The index herd with PMWS in Sweden: presence of serum amyloid A, circovirus 2 viral load and antibody levels in healthy and PMWS-affected pigs. *Acta Vet Scand.* 2009 Mar 27;51:13

Timmusk S, Wallgren P, Brunborg IM, Wikström FH, Allan G, Meehan B, McMenamy M, McNeilly F, Fuxler L, Belák K, Pödersoo D, Saar T, Berg M, Fossum C. Phylogenetic analysis of porcine circovirus type 2 (PCV2) pre- and post-epizootic postweaning multisystemic wasting syndrome (PMWS). *Virus Genes.* 2008 Jun;36(3):509-20. Epub 2008 Mar 15.

Wikström FH, Meehan BM, Berg M, Timmusk S, Elving J, Fuxler L, Magnusson M, Allan GM, McNeilly F, Fossum C. Structure-dependent modulation of alpha interferon production by porcine circovirus 2 oligodeoxyribonucleotide and CpG DNAs in porcine peripheral blood mononuclear cells. *J Virol.* 2007 May;81(10):4919-27. Epub 2007 Feb 28.

Hasslung F, Wallgren P, Ladekjaer-Hansen AS, Bøtner A, Nielsen J, Watrang E, Allan GM, McNeilly F, Ellis J, Timmusk S, Belák K, Segall T, Melin L, Berg M, Fossum C.

Experimental reproduction of postweaning multisystemic wasting syndrome (PMWS) in pigs in Sweden and Denmark with a Swedish isolate of porcine circovirus type 2. *Vet Microbiol.* 2005 Mar 20;106(1-2):49-60

Wallgren P, Hasslung F, Bergström G, Linder A, Belak K, Hård af Segerstad C, Stampe M, Molander B, Björnsberg Kallay T, Nörregård E, Ehlorsson CJ, Törnquist M, Fossum C, Allan GM, Robertsson JA. Postweaning multisystemic wasting syndrome--PMWS the first year with the disease in Sweden. *Vet Q.* 2004 Dec;26(4):170-87.

Hasslung FC, Berg M, Allan GM, Meehan BM, McNeilly F, Fossum C. Identification of a sequence from the genome of porcine circovirus type 2 with an inhibitory effect on IFN-alpha production by porcine PBMCs. *J Gen Virol.* 2003 Nov;84(Pt 11):2937-45.

Conference presentations:

Merlot, E., Hasslung Wikström, F., Timmusk, S., Fuxler, S., Fossum, C. (2007). Norepinephrine modulates proliferation and IFN- α production by porcine immune cells. Proceedings from 8th International Veterinary Immunology Symposium, Ouro Preto, Brasilien, 15-19 Augusti, 2007. Poster.

Lövgren, T., Hasslung Wikström, F., Fuxler, L., Timmusk, S., Watrang, E., Fossum, C. (2007) Inhibition of IFN- α production by Porcine circovirus-derived DNA motifs. Proceedings from 8th International Veterinary Immunology Symposium, Ouro Preto, Brasilien, 15-19 Augusti, 2007. Poster.

Hasslung Wikström, F. (2006). PCV2 och PMWS – Nya forskningsrön. Veterinärmötet, Uppsala, 8-9 November 2006. Oral Presentation

Hasslung Wikström, F., Elving, J., Berg, M., and Fossum, C. (2006). Importance of secondary structures of ODNs for the induction of interferon-alpha by porcine PBMCs. Proceedings from 2nd European Veterinary Immunology Workshop, Paris, Frankrike, 4-6 September 2005. Poster

Hasslung, F. (2006). Nyheter rörande PCV2. Svenska Djurhälsövårdens Fortbildningskonferens, Tylösand, 22-23 mars 2006. Oral Presentation

Hasslung, F., Berg, M., Fuxler, L. and Fossum, C. (2005). Structure dependent regulatory effect of an oligonucleotide from the genome of PCV2 on interferon-alpha production in vitro. Proceedings from International conference on animal circoviruses and associated diseases, Belfast, Nordirland, Storbritannien 11-13 September 2005. Poster

Hasslung, F., Wallgren, P. och Fossum, C. (2004). PMWS (Postweaning multisystemic wasting syndrome) hos gris – ny sjukdom i Sverige. Jordbrukskonferensen, Uppsala, 23-24 November 2004. Oral Presentation.

Hasslung, F. (2004). Interaktion mellan PCV2 och immunsystemet – varför blir grisar sjuka? Veterinärmötet, Uppsala, 11-12 November 2004. Oral Presentation.

Hasslung, F., Wallgren, P., Allan, G.M., McNeilly, F., Fuxler, L., Watrang, E. and Fossum, C. (2004). Serum interferon-alpha and interleukin-10 during experimental reproduction of postweaning multisystemic wasting syndrome in pigs. Proceedings from 7th International Veterinary Immunology Symposium, Quebec City, Canada, 25-30 Juli, 2004. Oral presentation and poster.

Hasslung, F., Wallgren, P., Watrang, E., McNeilly, F., Allan, G.M., Ellis, J., Segall, T., Belák, K., Melin, L., Berg, M. and Fossum, C (2004). Experimental reproduction of PMWS in Swedish pigs with two

strains of porcine circovirus type 2. Proceedings from 4th International Geminivirus Symposium and 2nd International ssDNA Comparative Virology Workshop, Cape Town, South Africa, 15-20 Februari, 2004. Oral presentation.

Hasslung, F., Berg, M. and Fossum, C. (2003). Interferon-alpha modulatory sequences from the genome of porcine circovirus type 2. Proceedings from 6th International Congress of Veterinary Virology, Virus Persistence and evolution, Saint-Malo, France, 24-27 Augusti, 2003. Oral presentation.

Projects

Memberships

CVMP member (May 2018-present)

CVMP alternate member (December 2013-April 2018)

CVMP IWP member (January 2013-November 2019)

CVMP SAWP-v chair (May 2019-present), vice chair (October 2016-May 2019), member (December 2014-present)

Other Relevant Information