



Prof. Dr. ir. Stefan Magez

Department of Molecular Biotechnology
Center for Biomedical Research



Office #830, Ghent University Building, Incheon Global Campus, 119-5 Songdomunhwa-Ro, Yeonsu-Gu, Incheon, Korea



Phone +82 32 626 4207



Email Stefan.magez@ghent.ac.kr

Short Biographie

Professor Stefan Magez received his Engineering degree in Chemistry and Agriculture Industries from the Vrije Universiteit Brussel (VUB) in 1991, with a specialization in the field of Biotechnology and Immunology. In 1997, he received a PhD degree in Applied Biological Sciences at the same university. Subsequently, 9 years of post-doctoral research focused on various aspects of infection-associated inflammation and B-cell activation, working in Belgium, the USA and South Africa.

In 2007 he was also appointed at the VUB as Full-time Research Professor, and from 2009 till 2013 he coordinated the European research consortium NANOTRYP that focused on the use of nanobodies for diagnostic development. In 2016, his group was awarded a Bill & Melinda Gates Foundation sponsored vaccine research program, together with USA-based partners – the University of Maddison-Wisconsin and the University of Massachusetts, and Makerere University, Uganda.

In October 2015 Prof. Magez joined the Ghent University Global Campus in South Korea, where he is appointed as Full Professor for Biochemistry and Immunology, a position that was extended with an appointment as Full Professor at the UGent home campus, faculty of sciences, in 2016.

Research Area

Prof. Magez is currently the head of the research unit for Structural and Functional Immuno-parasitology at the Laboratory for Cellular and Molecular Immunology of the Vrije Universiteit Brussels, Belgium. Together with the laboratory at GUGC, the research

involves a group of 4 post-doctoral researchers, 5 PhD fellows and 2 MSc students all focusing on various aspects of host-parasite interactions, combining immunology and structural biology approaches. In the past, 17 PhD fellows and 54 MSc students obtained their research degree at the laboratory. At GUGC the research focusses mainly on molecular immunology aspects of parasitic infections, vaccine related research, and image-based semi-automated parasite detection. The laboratory regularly hosts GUGC internship participants (16 in the last 3 years) and is heavily involved in the guidance of BSc thesis projects. For 2019-2019 the groups has welcomed 9 GUGC students for their thesis work and 3 other students have been involved in collaboration research projects.

Education

(1997) PhD in Applied Biological Sciences, Vrije Universiteit Brussel

(1991) Engineering degree in Chemistry and Agriculture Industries – Vrije Universiteit Brussel

Experience

(2016 – To date) Full Professor, Ghent University, Ghent, Belgium

(2015 – To date) Research Director Biomedical Research, Ghent University Global Campus, Songdo, South Korea

(2010 - To date) Associate Professor Vrije Universiteit Brussel (VUB) - Dept. Science and Bioengineering Sciences

(2010 - To date) Group Leader Structural and Functional Immuno-parasitology - Dept. Structural Biology, Flanders Institute for Biotechnology (VIB), Brussels, Belgium

(2005 - To date) Adjunct Associate Professor - Dept. Veterinary Sciences UMASS, Amherst, USA

(2006-2010) Associate Research Professor VUB

(1997-2006) FWO postdoctoral researcher (Foundation for Scientific Research) – Assistant Professor Vrije Universiteit Brussel (VUB), Belgium

International post-doctoral research positons:

(2005) University of Massachusetts, USA

(2002-2004) University Cape Town, South Africa

Top 5 Selected Publications

Magez S, Pinto Torres JE, Obishakin E, Radwanska M. Infection with extracellular trypanosomes requires control by efficient innate immune mechanisms and can result in the destruction of the mammalian humoral immune system. **Front Immunol** 2020. doi:10.3389/fimmu.2020.00382

Li Z, Pinto Torres JE, Goossens J, Stijlemans B, Sterckx YG, Magez S. Development of a recombinase polymerase amplification lateral flow assay for the detection of active *Trypanosoma evansi* infections. **PLoS Negl Trop Dis**. 2020. doi:10.1371/journal.pntd.0008044.

Pinto Torres JE, Goossens J, Ding J, Li Z, Lu S, Vertommen D, Naniima P, Chen R, Muyldermans S, Sterckx YG, Magez S. Development of a Nanobody-based lateral flow assay to detect active *Trypanosoma congolense* infections. **Sci Rep – Nature publications**. 2018 doi:10.1038/s41598-018-26732-7.

Cnops J, De Trez C, Stijlemans B, Keirsse J, Kauffmann F, Barkhuizen M, Keeton R, Boon L, Brombacher F, Magez S. NK-, NKT- and CD8-Derived IFN γ Drives Myeloid Cell Activation and Erythrophagocytosis, Resulting in Trypanosomosis-Associated Acute Anemia. **PLoS Pathog**. 2015 Jun 12;11(6) doi: 10.1371/journal.ppat.1004964.

Salmon D, Vanwalleghem G, Morias Y, Denoëud J, Krumbholz C, Lhommé F, Bachmaier S, Kador M, Gossmann J, Dias FB, De Muylder G, Uzureau P, Magez S, Moser M, De Baetselier P, Van Den Abbeele J, Beschin A, Boshart M, Pays E. Adenylate cyclases of *Trypanosoma brucei* inhibit the innate immune response of the host. **Science**. 2012 Jul 27;337(6093):463-6.

**Full
Bibliography
URL Link**

<https://biblio.ugent.be/person/802002072095>

**Patent /
Projects**

African Trypanosomiasis therapy with a nanobody-conjugated human trypanolytic factor. WO-2007039645-A1

**Research
Field of
Interests**

Infectious Disease Immunology
Insect vector transmitted parasite infections
B cell biology
Vaccinology

**Organization
of Interests
visiting, research
collaboration,
networking, etc.**

Research collaborations leading to improved access to protein purification capacity and immunological cell identification.
Networking on parasitic disease diagnosis and vector identification data.