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Dr Serge Muyldermans obtained his PhD at the Vrije Universiteit Brussel in 1982 and is currently heading the laboratory of 'Cellular and Molecular Immunology' at the same university. This laboratory is part of the VIB (Vlaams Interuniversitair Instituut voor Biotechnologie) department of 'Molecular and Cellular Interactions'. Within this department he developed the technology to select Nanobodies, the antigen-binding fragment (single domain) of camel-specific Heavy-chain antibodies that were discovered at the university of Brussels in 1993. The Nanobody selection technology is a proven approach whereby over 600 Nbs against more than 100 targets have been identified in the past few years. These nanobodies are employed in numerous applications in medical and research fields. The research group is involved in several international programs (bilateral programs, NATO, NHGRI, USDA & EU) and performs contract research for major industrial partners. His group published more than 70 articles (of which >10 in journals with Impact Factor >10), and co-founded the spin-off company Ablynx that counts currently some 130 employees. Ablynx aims at utilising their Nanobodies as therapeutics to treat various human diseases.

Publications Related to Camelid (Last ten years)

1. Saerens D., Pellis M., Vincke C., Pardon E., Conrath K., **Muyldermans S. (2006)** Contribution of camelids in functional genomics. *Encyclopedic Reference of Genomics and Proteomics* in Molecular Medicine (Ed. K. Ruckpaul & D. Ganten) Springer-Verlag Gmbh & Co. KG Berlin Heidelberg., ISBN: 3-540-44244-8

2. Kacskovics I, Mayer B, Kis Z, Frenyo L, Zhao Y, **Muyldermans S**, Hammarström L. **(2006)** Cloning and characterization of the dromedary (*Camelus dromedarius*) neonatal Fc receptor (drFcRn). *Dev. Comp. Immunol*. **30**, 1203-1215.

3. Baral T.N., Magez S., Stijlemans B., Conrath K., Vanhollebeke B., Pays E., **Muyldermans S**., and De Baetselier P. **(2006)** African trypanosomiasis therapy with nanobody conjugated human trypanolytic factor. *Nature Med.*, **12**, 580-584.

4. De Genst E, Silence K, Decanniere K, Conrath K, Loris R, Kinne J, **Muyldermans S**, and Wyns L. **(2006)** Molecular basis for the unique epitope specificity of camelid heavy-chain antibodies. *Proc.Natl.Acad.Sci*., 103, 4586-4591.

5. Marquardt A., **Muyldermans S**., Przybylski M. **(2006)**. A synthetic camel anti-lysozyme peptide antibody (peptibody) with flexible loop structure identified by high resolution affinity-mass spectrometry. *Chemistry – A European Journal*, **12**, 1915-1923.

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