List of Publications and Patents

Publications

1. **Voulhoux, R., Bos, M. P., Geurtsen, J., Mols, M., and Tommassen, J.** (2003) Role of a highly conserved bacterial protein in outer membrane protein assembly. *Science* **299:** 262-265.

2. **Bos, M. P., Tefsen, B., Geurtsen, J., and Tommassen, J.** (2004) Identification of an outer membrane protein required for the transport of lipopolysaccharide to the bacterial cell surface. *Proc. Natl. Acad. Sci. U S A* **101:** 9417-9422.

3. **Tefsen, B., Geurtsen, J., Beckers, F., Tommassen, J., and de Cock, H.** (2005) Lipopolysaccharide transport to the bacterial outer membrane in spheroplasts. *J. Biol. Chem.* **280:** 4504-4509.

4. **Geurtsen, J., Steeghs, L., ten Hove, J., van der Ley, P., and Tommassen, J.** (2005) Dissemination of lipid A deacylases (pagL) among gram-negative bacteria: identification of active-site histidine and serine residues. *J. Biol. Chem.* **280:** 8248-8259.

5. **Rutten, L.*, Geurtsen, J.*, Lambert, W., Smolenaers, J. J., Bonvin, A. M., de Haan, A., van der Ley, P., Egmond, M. R., Gros, P., and Tommassen, J.** (2006) Crystal structure and catalytic mechanism of the LPS 3-*O*-deacylase PagL from *Pseudomonas aeruginosa*. *Proc. Natl. Acad. Sci. U S A* **103:** 7071-7076.
   *L.R. and J.G. equally centributed to this work

6. **Geurtsen, J., Steeghs, L., Hamstra, H-J., ten Hove, J., de Haan, A., Kuipers, B., Tommassen, J., and van der Ley, P.** (2006) Expression of LPS-modifying enzymes PagP and PagL modulates the endotoxic activity of *Bordetella pertussis*. *Infect. Immun.* **74:** 5574-5585.

7. **Geurtsen, J., Vandebriel, R. J., Gremmer, E. R., Kuipers, B., Tommassen, J., and van der Ley, P.** (2007) Consequences of the expression of lipopolysaccharide-modifying enzymes for the efficacy and reactogenicity of whole-cell pertussis vaccines. *Submitted for publication*.

8. **Geurtsen, J., Dzieciatkowska, M., Steeghs, L., Boleij, A., Broen, K., Hamstra, H-J., Li, J., Richards, J., Tommassen, J., and van der Ley, P.** (2007) Gene cluster involved in lipopolysaccharide-core biosynthesis and identification of a novel lipid A modification in *Bordetella pertussis*. *Submitted for publication.*

9. **Geurtsen, J., Banus, S. A., Gremmer, E. R., Ferguson, H., Vermeulen, J. P., Dormans, J. A. M. A., Tommassen, J., van der Ley, P., Mooi, F. R., and Vandebriel, R. J.** (2007) Lipopolysaccharide analogs improve efficacy of acellular pertussis vaccines and reduce type-I hypersensitivity. *Submitted for publication.*

10. **Geurtsen, J., Fransen, F., Vandebriel, R. J., Gremmer, E. R., de la Fonteyne-Blankestijn, L. J. J., Kuipers, B., Tommassen, J., and van der Ley, P.** (2007) Supplementation of whole-cell pertussis vaccines with lipopolysaccharide analogs: a novel strategy for modulating vaccine efficacy and reactogenicity. *Submitted for publication.*

11. **Geurtsen, J., Angevaare, E., Janssen, M., Hamstra, H-J., ten Hove, J., de Haan, A., Kuipers, B., Tommassen, J., and van der Ley, P.** (2007) Identification and functional characterization of *Bordetella pertussis lpxL* homologues. *Submitted for publication*.

Patents

1. **Geurtsen, J., van der Ley, P., and Tommassen, J.** Deacylation of lipopolysaccharide in Gram-negative bacteria. Patent no.: *P218195EP*.

2. **Geurtsen, J., van der Ley, P., and Tommassen, J.** Improved vaccines against *Bordetella pertussis* based on lipopolysaccharide-glycosyltransferase mutants. Patent no.: *P6014031EP.*