

**MYCOBACTERIAL FACTORS INVOLVED  
IN GRANULOMA FORMATION**

Esther Johanna Maria Stoop

Leescommissie:            prof. dr. P.W.M. Hermans  
                                      dr. A.H. Meijer  
                                      prof. dr. T. van der Poll  
                                      prof. dr. R.E. Mebius  
                                      dr. J. Luirink

---

The studies described in this thesis were performed at the Department of Medical Microbiology & Infection prevention of the VU University medical center and supported by the Smart Mix Programme of the Netherlands Ministry of Economic Affairs and the Netherlands Ministry of Education, Culture and Science.

Printing of this thesis was financially supported by the KNCV Tuberculosis Foundation, the Netherlands Society of Medical Microbiology (NVMM) and the Royal Netherlands Society for Microbiology (KNVM).

Cover design, layout and printing by Off Page, Amsterdam.

Copyright © by E.J.M. Stoop, 2013.

ISBN: 978-94-6182-243-7

---

VRIJE UNIVERSITEIT

**MYCOBACTERIAL FACTORS INVOLVED  
IN GRANULOMA FORMATION**

ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad Doctor aan  
de Vrije Universiteit Amsterdam,  
op gezag van de rector magnificus  
prof.dr. L.M. Bouter,  
in het openbaar te verdedigen  
ten overstaan van de promotiecommissie  
van de Faculteit der Geneeskunde  
op vrijdag 22 maart 2013 om 11.45 uur  
in de aula van de universiteit,  
De Boelelaan 1105

door

Esther Johanna Maria Stoop

geboren te Heerhugowaard

Promotoren:            prof.dr. W. Bitter  
                              prof.dr. C.M.J.E. Vandenbroucke-Grauls

Copromotor:            dr. A.M. van der Sar