

The research described in this thesis was primarily carried out at the Department of Genetics, Faculty of Medical Sciences (currently, Department of Genetics, Oncology and Human Toxicology, NOVA Medical School), Universidade NOVA de Lisboa, Campo dos Mártires da Pátria, 130, 18 1169-056 Lisboa, Portugal. Part of it was carried out in the Division of Molecular Toxicology, Department of Chemistry and Pharmaceutical Sciences, Faculty of Sciences, Vrije Universiteit Amsterdam, currently AIMMS, De Boelelaan 1108, 1081 HZ Amsterdam, The Netherlands.

The work on this thesis was supported by a PhD-grant (SFRH/BD/23038/2005) of the Fundação para a Ciência e Tecnologia (Portugal).

Printed by IpsKamp Drukkers B.V.

Cover Design: by Bernardo J.E. de Brito Palma

ISBN:

Copyright © 2017 Bernardo J.E. de Brito Palma

VRIJE UNIVERSITEIT

**Development of human Cytochrome P450 competent genotoxicity
tester bacterial systems for high throughput screening**

**Functional characterization of human Cytochrome P450 1A2 polymorphic
variants**

ACADEMISCH PROEFSCHRIFT

ter verkijging van de graad Doctor aan
de Vrije Universiteit Amsterdam,
op gezag van de rector magnificus
prof.dr. V. Subramaniam,
in het openbaar te verdedigen
ten overstaan van de promotiecommissie
van de Faculteit der Bètawetenschappen
op maandag 16 oktober 2017 om 13.45 uur
in de aula van de universiteit,
De Boelelaan 1105

door

Bernardo José Espadinha de Brito Palma
geboren te Lissabon, Portugal

promotoren: prof.dr. N.P.E. Vermeulen

prof.dr. J. Rueff

copromotor: dr. M. Kranendonk

Reading Committee: prof. dr. M.J. Smit
prof. dr. P. Leonards
prof. dr. I.M.C.M. Rietjens
dr. B.M.A. van Vugt-Lussenburg
dr. R. van der Oost