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Mechanistic insights in the antibiotic tolerance of *Pseudomonas aeruginosa* biofilms

Valentin, Jules

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**Mechanistic insights in the antibiotic tolerance
of *Pseudomonas aeruginosa* biofilms**

Jules D. P. Valentin

Mechanistic insights in the antibiotic tolerance of Pseudomonas aeruginosa biofilms

University Medical Center Groningen, University of Groningen

Groningen, The Netherlands

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Cover: (top left) Swimming of *P. aeruginosa* flagellar mutant on agar plate (40 x 38 mm), (top right) Lysed bacteria upon adhesion on antimicrobial surface (3 x 2.8 μm), (bottom left) Biofilm formed by *P. aeruginosa* (22 x 19 μm), (bottom right) Top view of living (green) and dead (red) bacteria within biofilms after antibiotic treatment (390 x 360 μm).

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PhD thesis

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Rector Magnificus Prof. C. Wijmenga
and in accordance with
the decision by the College of Deans.

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Monday 29 March, 2021 at 11:00 hours

by

Jules Denis Pierre Valentin

born on 10 October 1991
in Noisy-le-Grand, France

Supervisor

Prof. H.C. van der Mei

Co-supervisor

Dr. Q. Ren Zulian

Assessment Committee

Prof. J.M. van Dijl

Prof. A.J.M. Driessen

Prof. S. Panke

Paranimfen

Dr. N. Zurlinden

M. Jaquier

Table of Contents

Chapter 1	General introduction	1
	Aim of the thesis	8
Chapter 2	An integrated model system to gain mechanistic insights into biofilm-associated antimicrobial resistance in <i>Pseudomonas aeruginosa</i> MPAO1	13
	<u>A. R. Varadarajan, R. N. Allan, J. D. P. Valentin, O. E. Castañeda Ocampo, V. Somerville, F. Pietsch, M. T. Buhmann, J. West, P. J. Skipp, H. C. van der Mei, Q. Ren, F. Schreiber, J. S. Webb, C. H. Ahrens</u>	
	<i>npj Biofilms and Microbiomes</i> 6 , 46 (2020)	
Chapter 3	Involvement of <i>Pseudomonas aeruginosa</i> biofilm-associated genes in antibiotic tolerance	71
	<u>J. D. P. Valentin, S. Altenried, A. R. Varadarajan, C. H. Ahrens, F. Schreiber, J. S. Webb, H. C. van der Mei, Q. Ren</u>	
	<i>Under revision in npj Biofilms and Microbiomes</i>	
Chapter 4	Role of the flagellar hook in the structural development and antibiotic tolerance of <i>Pseudomonas aeruginosa</i> biofilms	99
	<u>J. D. P. Valentin, H. Straub, F. Pietsch, M. Lemare, C. H. Ahrens, F. Schreiber, J. S. Webb, H. C. van der Mei, Q. Ren</u>	
	<i>Under revision in ISME Journal</i>	
Chapter 5	General discussion	129
	Summary	145
	Samenvatting	149
	Acknowledgments	155