

Future physician-scientists: let's catch them young! unravelling the role of motivation for research

Ommering, B.W.C.

Citation

Ommering, B. W. C. (2021, September 8). *Future physician-scientists: let's catch them young!: unravelling the role of motivation for research*. Retrieved from https://hdl.handle.net/1887/3209236

Version:	Publisher's Version
License:	<u>Licence agreement concerning inclusion of doctoral thesis in the</u> <u>Institutional Repository of the University of Leiden</u>
Downloaded from:	https://hdl.handle.net/1887/3209236

Note: To cite this publication please use the final published version (if applicable).

Cover Page



Universiteit Leiden



The handle <u>https://hdl.handle.net/1887/3209236</u> holds various files of this Leiden University dissertation.

Author: Ommering, B.W.C. Title: Future physician-scientists: let's catch them young! unravelling the role of motivation for research Issue Date: 2021-09-08

Future physician-scientists: let's catch them young!

Unravelling the role of motivation for research

Belinda Ommering

ISBN: 978-94-641-9257-5 Printed by Gildeprint – www.gildeprint.nl Lay-out and design by Harma Makken – persoonlijkproefschrift.nl Cover design and chapter images by Lars Rietkerk

This thesis was printed with financial support from Leiden University Medical Center and the Netherlands Association of Medical Education (NVMO).

© Belinda Ommering, 2021

All rights reserved. No part of this thesis may be reproduced, stored in a retrieval system, or transmitted in any other form or by any other means (e.g. mechanically, by photocopy, by recording, or otherwise), without permission from the author.

Future physician-scientists: let's catch them young!

Unravelling the role of motivation for research

Proefschrift

ter verkrijging van de graad van doctor aan de Universiteit Leiden, op gezag van rector magnificus prof.dr.ir. H. Bijl, volgens besluit van het college voor promoties te verdedigen op woensdag 8 september 2021 klokke 15.00 uur

door

Belinda Wilhelmina Catharina Ommering

geboren te Vlaardingen in 1990

Promotor

Prof. dr. F.W. Dekker

Copromotor

Dr. F.M. van Blankenstein

Promotiecommissie

Prof. dr. F.R. Rosendaal Prof. dr. W.F. Admiraal Prof. dr. D.H.J.M. Dolmans, Maastricht University

Table of contents

Chapter 1	General introduction	9
Chapter 2	Future physician-scientists: could we catch them young? Factors influencing intrinsic and extrinsic motivation for research among first-year medical students <i>Perspectives on Medical Education, 2018</i>	29
Chapter 3	Promoting positive perceptions of and motivation for research among undergraduate students to stimulate future research involvement: a grounded theory study <i>BMC Medical Education, 2020</i>	47
Chapter 4	Fostering the physician-scientist workforce: a prospective cohort study to investigate the effect of undergraduate medical students' motivation for research on actual research involvement <i>BMJ Open, 2019</i>	69
Chapter 5	Academic success experiences: promoting research motivation and self-efficacy beliefs among medical students <i>Teaching and Learning in Medicine, 2021</i>	87
Chapter 6	Scientific activity by medical students: the relationship between academic publishing during medical school and publication careers after graduation <i>Perspectives on Medical Education, 2019</i>	109
Chapter 7	Medical students' intrinsic versus extrinsic motivation to engage in research as preparation for residency <i>Perspectives on Medical Education, 2017</i>	125

Chapter 8	Using an extracurricular Honours programme to engage future physicians into scientific research in early stages of medical training <i>Medical Science Educator, 2018</i>	133
Chapter 9	The importance of motivation in selecting undergraduate medical students for extracurricular research programmes <i>Submitted</i>	147
Chapter 10	First steps in the physician-scientist pipeline: a longitudinal study to examine effects of an undergraduate extracurricular research programme <i>Submitted</i>	167
Chapter 11	How does engaging in authentic research at undergraduate level contribute to student wellbeing? <i>Submitted</i>	185
Chapter 12	Twelve tips to offer a short authentic and experiential individual research opportunity to a large group of undergraduate students <i>Medical Teacher, 2020</i>	205
Chapter 13	General discussion	221
	Summary	248
	Nederlandse samenvatting	256
	Supplements	266
	List of scientific contributions	274
	Dankwoord	278
	Curriculum Vitae	280