

University of Groningen

Epithelial and subepithelial players in chronic intestinal disease

Cui, Yingying

DOI:
[10.33612/diss.127963656](https://doi.org/10.33612/diss.127963656)

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2020

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):
Cui, Y. (2020). *Epithelial and subepithelial players in chronic intestinal disease*. University of Groningen. <https://doi.org/10.33612/diss.127963656>

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

Epithelial and subepithelial players in chronic intestinal disease

Yingying Cui

The research presented in this thesis was performed in the Department of Gastroenterology and Hepatology, Faculty of Medical Sciences, University Medical Center Groningen (UMCG), University of Groningen, The Netherlands. The work is supported by Graduate School of Medical Sciences (GSMS), UMCG, University of Groningen, Groningen, The Netherlands.

The printing of this thesis was financially supported by the University of Groningen and GSMS.

Cover Design & Layout: Yingying Cui

Printed by: Ridderprint B.V., Ridderkerk, the Netherlands

ISBN (printed version): 978-94-034-2737-9

ISBN (electronic version): 978-94-034-2738-6

© copyright Y. Cui, Groningen, the Netherlands, 2020

All rights reserved. No part of this thesis may be reproduced in any form or by any means without prior permission of the author.



university of
 groningen

Epithelial and subepithelial players in chronic intestinal disease

PhD thesis

to obtain the degree of PhD at the
University of Groningen
on the authority of the
Rector Magnificus Prof. C. Wijmenga
and in accordance with
the decision by the College of Deans.

This thesis will be defended in public on

Wednesday 1 July 2020 at 9:00 hours

by

Yingying Cui

born on 21 November 1989
in Henan, China

Supervisors

Prof. K.N. Faber

Prof. G. Dijkstra

Assessment Committee

Prof. G. Rogler

Prof. W. Timens

Prof. B.N. Melgert

Paranimfen:

Zongmei Wu

Johanna C Arroyave Ospina

Table of contents

Chapter 1:	Introduction and aim of the thesis	9
Chapter 2:	Cigarette smoke irreversibly decreases stemness, proliferation, differentiation and polarization of the human colonic epithelium <i>Cui Y, Klunder LJ, Blokzijl T, Leng C, van IJzendoorn SCD, Dijkstra G, Faber KN. Submitted</i>	27
Chapter 3:	Cigarette smoke increases AOC3/VAP-1 expression in human intestinal fibroblasts, which correlates with fibrogenesis in inflammatory bowel disease. <i>Cui Y, Hu S, Blokzijl T, Jansen BH, Dijkstra G, Faber KN. In preparation</i>	61
Chapter 4:	A subfraction of human intestinal enteroendocrine cells is characterized by high expression of vascular adhesion protein-1. <i>Cui Y, Bigaeva E, Blokzijl T, Dijkstra G, Faber KN. In preparation</i>	91
Chapter 5:	Pirfenidone inhibits cell proliferation and collagen I production of primary human intestinal fibroblasts. <i>Cui Y, Zhang M, Leng C, Blokzijl T, Jansen BH, Dijkstra G, Faber KN. Cells. 2020 Mar 22;9(3). pii: E775. doi: 10.3390/cells9030775.</i>	115
Chapter 6:	General discussion & Future perspectives	149
	Summary	171
	Acknowledgements	185
	Curriculum Vitae & publications	191

