

# VEGF and NOTCH in blood vessels, an intricate and fascinating interplay

## Citation for published version (APA):

Caolo, V. (2011). *VEGF and NOTCH in blood vessels, an intricate and fascinating interplay*. *Datawyse / Universitaire Pers Maastricht*. <https://doi.org/10.26481/dis.20110511vc>

## Document status and date:

Published: 01/01/2011

## DOI:

[10.26481/dis.20110511vc](https://doi.org/10.26481/dis.20110511vc)

## Document Version:

Publisher's PDF, also known as Version of record

## Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

[Link to publication](#)

## General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

[www.umlib.nl/taverne-license](http://www.umlib.nl/taverne-license)

## Take down policy

If you believe that this document breaches copyright please contact us at:

[repository@maastrichtuniversity.nl](mailto:repository@maastrichtuniversity.nl)

providing details and we will investigate your claim.

Stellingen behorende bij het proefschrift

**“VEGF and NOTCH in BLOOD VESSELS,  
an INTRICATE and FASCINATING INTERPLAY”**

1. VEGFR-2, not VEGFR-1, mediates VEGF induced Notch activation in endothelial cells. *(This thesis)*
2. The ability of activated NOTCH to specifically induce the expression of its own ligand Dll4 provides endothelial cells with a mechanism to propagate Notch signaling. *(This thesis)*
3. VEGF induced ADAM10 expression and activity provides an alternative mechanism by which VEGF can potentiate Notch receptor prior to and possibly independent of ligand overexpression. *(This thesis)*
4. VEGF-signaling in ECs can upregulate the expression of members of the Notch-signaling family, which instruct ephrinB2 expression and define arterial differentiation. *(This thesis)*
5. The NOTCH signaling pathway, as regulator of SMC proliferation and migration, is involved in neointima formation. *(This thesis)*
6. VEGF and NOTCH induced Dll4 expression is independent of FOXC transcription factors in endothelium. *(This thesis)*
7. Notch signaling is an ancient intercellular signaling mechanism that plays myriad roles during vascular development and physiology in vertebrates. *(Roca and Adams, Genes Dev. 2007)*
8. Differential *Vegfr* levels affect tip cells selection only in the presence of a functional Notch system by modulating the expression of the ligand Dll4. *(Jakobsson et al, Nature Cell Biology, 2010)*
9. Experience is the name everyone gives to their mistakes. *(Oscar Wilde)*
10. If you steal from one author, it's plagiarism; if you steal from many, it's research. *(Wilson Mizner)*
11. Research is what I'm doing when I don't know what I'm doing. *(von Braun)*

Vincenza Caolo, the 11<sup>th</sup> of May 2011