

Neural Influence on Colorectal Carcinogenesis

Citation for published version (APA):

Idris, M. A. (2024). *Neural Influence on Colorectal Carcinogenesis: Unraveling Neural Signatures and Tumor-Neural Crosstalk*. [Doctoral Thesis, Maastricht University]. <https://doi.org/10.26481/dis.20241210mi>

Document status and date:

Published: 01/01/2024

DOI:

[10.26481/dis.20241210mi](https://doi.org/10.26481/dis.20241210mi)

Document Version:

Publisher's PDF, also known as Version of record

Please check the document version of this publication:

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Propositions belonging to the Thesis

Neural Influence on Colorectal Carcinogenesis

Unraveling Neural Signatures and Tumor-Neural Crosstalk

- 1. *In vitro* models of colorectal cancer that incorporate an enteric nervous system are better models to simulate this disease in a dish. [this thesis]**
- 2. DNA hypermethylation neural signature in colorectal cancer correlates with neural stemness of cancer cells. [this thesis]**
- 3. The tumor microenvironment of colorectal cancer includes contributions from both enteric neurons and enteric glia. [this thesis]**
- 4. Reduced intestinal innervation in colon cancer leads to decreased numbers of germinal center B cells. [this thesis]**
- 5. Single-cell RNA sequencing reveals distinct subtypes of enteric glial cells in human adults with more antigen-presenting glia in colorectal cancers. [this thesis]**
- 6. Deciphering molecular signaling pathways involved in neural-influenced immune modulation could provide new therapeutic targets for colorectal cancer.**
- 7. Artificial intelligence will revolutionize omics analysis by uncovering patterns shared across different biological layers, such as genetics, epigenetics, and proteomics, that are beyond human perception.**
- 8. In biomedical research, failure isn't the opposite of success; it's a crucial step in the path to discovery.**
- 9. In a complex global environment, researchers are tasked with the dual responsibility of addressing health concerns and advocating for diversity, academic freedom, and human rights.**