# Article information:

Autoregulation of Neurogenesis by GDF11 - ScienceDirect
<https://www.sciencedirect.com/science/article/pii/S0896627302011728?via%3Dihub>

# Article summary:

1. The olfactory epithelium (OE) of the mouse is a model neuroepithelial tissue that retains its ability to generate neurons throughout life.

2. Growth and differentiation factor 11 (GDF11) is expressed by OE neurons and progenitors, and inhibits OE neurogenesis in vitro by inducing p27Kip1 and reversible cell cycle arrest in progenitors.

3. Mice lacking functional GDF11 have more progenitors and neurons in the OE, whereas mice lacking follistatin, a GDF11 antagonist, show dramatically decreased neurogenesis.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article “Autoregulation of Neurogenesis by GDF11” provides an overview of the role of GDF11 in regulating neurogenesis in the olfactory epithelium (OE) of the mouse. The article is well-written and provides a comprehensive review of the current research on this topic. The authors provide evidence for their claims through experiments conducted on model systems as well as on mice lacking functional GDF11 or its antagonist follistatin.

The article does not appear to be biased or one-sided, as it presents both sides of the argument equally. It also does not contain any promotional content or partiality towards any particular viewpoint. Furthermore, all potential risks associated with manipulating GDF11 levels are noted throughout the article.

However, there are some missing points of consideration that should be addressed in future research on this topic. For example, while the authors provide evidence for their claims through experiments conducted on model systems as well as on mice lacking functional GDF11 or its antagonist follistatin, they do not explore any counterarguments or present any evidence for alternative hypotheses that could explain their findings. Additionally, while they discuss how tight regulation of neurogenesis serves to maintain the size of its neuronal population at a particular level, they do not provide any evidence to support this claim or discuss how this regulation might be affected by external factors such as environmental conditions or aging.

In conclusion, “Autoregulation of Neurogenesis by GDF11” is a well-written article that provides an overview of the role of GDF11 in regulating neurogenesis in the olfactory epithelium (OE) of the mouse without appearing biased or one-sided towards any particular viewpoint. However, there are some missing points of consideration that should be

# Topics for further research:

* GDF11 regulation of neurogenesis in aging
* GDF11 regulation of neurogenesis in environmental conditions
* Alternative hypotheses for GDF11 regulation of neurogenesis
* Effects of GDF11 on neuronal population size
* Role of follistatin in GDF11 regulation of neurogenesis
* Mechanisms of GDF11 autoregulation of neurogenesis

# Report location:

<https://www.fullpicture.app/item/a053bce37f0a96579bbe6a85adf04d57>