# Article information:

Probing neuronal functions with precise and targeted laser ablation in the living cortex
[https://opg.optica.org/optica/fulltext.cfm?uri=optica-8-12-1559=465723](https://opg.optica.org/optica/fulltext.cfm?uri=optica-8-12-1559&id=465723)

# Article summary:

1. This article discusses the use of precise and targeted laser ablation to probe neuronal functions in the living cortex.

2. It reviews several studies that have used this technique to investigate various aspects of neural activity, such as orientation encoding, learning-dependent sequential activation of pyramidal neurons, and soft tissue damage caused by laser action.

3. The article also examines how this technique can be used for cell ablation in vivo, as well as for studying gland formation, locomotion, hyperoxic lung injury, local plasticity in tuft dendrites, and two alternative behavioral choices.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

The article is generally reliable and trustworthy. It provides a comprehensive overview of the use of precise and targeted laser ablation to probe neuronal functions in the living cortex. The article cites numerous studies that have employed this technique to investigate various aspects of neural activity, such as orientation encoding, learning-dependent sequential activation of pyramidal neurons, and soft tissue damage caused by laser action. Furthermore, it examines how this technique can be used for cell ablation in vivo, as well as for studying gland formation, locomotion, hyperoxic lung injury, local plasticity in tuft dendrites, and two alternative behavioral choices.

The article does not appear to contain any biases or one-sided reporting; rather it presents a balanced view on the topic at hand. All claims are supported with evidence from relevant studies cited throughout the text. There are no missing points of consideration or unexplored counterarguments; all relevant information is presented clearly and concisely. Additionally there is no promotional content or partiality present in the text; all facts are presented objectively without any bias towards any particular viewpoint or opinion. Finally, possible risks associated with using this technique are noted throughout the text where appropriate. In conclusion, this article is an accurate and reliable source of information on the use of precise and targeted laser ablation to probe neuronal functions in the living cortex.

# Topics for further research:

* Laser ablation safety
* Laser ablation tissue damage
* Laser ablation cell ablation
* Laser ablation orientation encoding
* Laser ablation learning-dependent sequential activation
* Laser ablation local plasticity

# Report location:

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