Accepted Manuscript

Phosphene perception and pupillary responses to sinusoidal electrostimulation - For an objective measurement of retinal function

Carina Kelbsch, Archana Jalligampala, Torsten Strasser, Paul Richter, Katarina Stingl, Christoph Braun, Daniel L. Rathbun, Eberhart Zrenner, Helmut Wilhelm, Barbara Wilhelm, Tobias Peters, Krunoslav Stingl

PII: S0014-4835(18)30265-3

DOI: 10.1016/j.exer.2018.07.010

Reference: YEXER 7432

To appear in: Experimental Eye Research

Received Date: 4 April 2018

Revised Date: 18 June 2018

Accepted Date: 7 July 2018

Please cite this article as: Kelbsch, C., Jalligampala, A., Strasser, T., Richter, P., Stingl, K., Braun, C., Rathbun, D.L., Zrenner, E., Wilhelm, H., Wilhelm, B., Peters, T., Stingl, K., Phosphene perception and pupillary responses to sinusoidal electrostimulation - For an objective measurement of retinal function, *Experimental Eye Research* (2018), doi: 10.1016/j.exer.2018.07.010.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



1 **Title:**

- Phosphene perception and pupillary responses to sinusoidal electrostimulation for an
 objective measurement of retinal function
- 4

5 Author affiliation:

- 6 Carina Kelbsch¹, Archana Jalligampala^{1,2,6}, Torsten Strasser^{1,2}, Paul Richter¹, Katarina
 7 Stingl², Christoph Braun³⁻⁵, Daniel L. Rathbun², Eberhart Zrenner^{2,4}, Helmut Wilhelm¹,
 8 Parbara Wilhelm¹ Tobias Patars¹ Krunoslav Stingl¹
- 8 Barbara Wilhelm¹, Tobias Peters¹, Krunoslav Stingl¹
- 9
- Pupil Research Group at the Centre for Ophthalmology, University of Tübingen,
 72076 Tübingen, Germany
- Institute for Ophthalmic Research, Centre for Ophthalmology, University of Tübingen,
 72076 Tübingen, Germany
- 14 3 MEG-Center, University of Tübingen, 72076 Tübingen, Germany
- 4 CIN, Werner Reichardt Centre for Integrative Neuroscience, University of Tübingen,
 72076 Tübingen, Germany
- 17 5 CIMeC, Center for Mind/Brain Sciences, University of Trento, Rovereto, 38068, Italy
- 6 Graduate Training Center of Neuroscience/International Max Planck Research School,
 72074 Tübingen, Germany
- 20
- 21 **Corresponding author:**
- 22 Dr. Torsten Strasser, Institute for Ophthalmic Research, Centre for Ophthalmology,
- 23 University of Tübingen Elfriede-Aulhorn-Straße 7, 72076 Tübingen, Germany
- Email: torsten.strasser@uni-tuebingen.de; phone: (0049) (0)7071-2987793
- 25

26 **Declaration of interest:**

27 Grant information:

- 28 This study was supported by the Egon Schumacher-Stiftung, Barnstorf, Germany, a private
- foundation without commercial interest. DLR and AJ were supported by the German Federal
 Ministry of Education and Research (BMBF; 031 A 308). Additional support to EZ was
- 30 Ministry of Education and Research (BMBF; 031 A 508). Additional support to EZ was 31 received from the Werner Reichardt Centre for Integrative Neuroscience (CIN), an Excellence
- 32 Cluster funded by the German Research Foundation (EXC 307).
- 33 The funding organization had no role in the design or conduct of this research.
- 34

35 Disclosures:

- 36 Disclosures for EZ: Retina Implant AG: Stockholder, Inventor, Honoraria as Advisor, Board
- 37 member
- 38
- 39 Keywords: pupil, sinusoidal electrical stimulation, phosphenes, micro-electrode-array
- 40

Download English Version:

https://daneshyari.com/en/article/8791889

Download Persian Version:

https://daneshyari.com/article/8791889

Daneshyari.com