Stanford

Oscar Ruben Hernandez Cubero

Instructor, Neurosurgery

Bio

ACADEMIC APPOINTMENTS

- Instructor, Neurosurgery

PROFESSIONAL EDUCATION

- PhD, Université Paris Descartes - Université Sorbonne Paris Cité , Physics (2016)
- Master of Biomedical Engineering, Télécom ParisTech , Bioimaging (2012)
- Telecommunications Engineering, Universidad de Cantabria , Radio Communications (2011)

Publications

PUBLICATIONS

- **A neural circuit state change underlying skilled movements.** *Cell*
  Wagner, M. J., Savall, J., Hernandez, O., Mel, G., Inan, H., Rumyantsev, O., Lecoq, J., Kim, T. H., Li, J. Z., Ramakrishnan, C., Deisseroth, K., Luo, L., Ganguli, et al
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- **Kilohertz two-photon brain imaging in awake mice.** *Nature methods*
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  2019

- **Optogenetic stimulation of complex spatio-temporal activity patterns by acousto-optic light steering probes cerebellar granular layer integrative properties** *SCIENTIFIC REPORTS*
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- **Three-dimensional spatiotemporal focusing of holographic patterns** *NATURE COMMUNICATIONS*
  Hernandez, O., Papagiakoumou, E., Tanese, D., Fidelin, K., Wyart, C., Emiliani, V.
  2016; 7

- **Zero-order suppression for two-photon holographic excitation** *OPTICS LETTERS*
  Hernandez, O., Guillon, M., Papagiakoumou, E., Emiliani, V.
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- **When can temporally focused excitation be axially shifted by dispersion?** *OPTICS EXPRESS*
  Leshem, B., Hernandez, O., Papagiakoumou, E., Emiliani, V., Oron, D.

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- **Quantitative Imaging of Microtubule Alteration as an Early Marker of Axonal Degeneration after Ischemia in Neurons** *BIOPHYSICAL JOURNAL*

  Psilodimitrakopoulos, S., Petegnief, V., de Vera, N., Hernandez, O., Artigas, D., Planas, A. M., Loza-Alvarez, P.

  2013; 104 (5): 968-975

- **Analysis of optical crosstalk in flexible imaging endoscopes based on multicore fibers** *Conference on Biophotonics - Photonic Solutions for Better Health Care II*

  Ortega-Quijano, N., Fanjul-Velez, F., Salas-Garcia, I., Ruben Hernandez-Cubero, O., Luis Arce-Diego, J.

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