



Oscar Ruben Hernandez Cubero

Postdoctoral Research Fellow, Biology

Bio

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)

STANFORD ADVISORS

- Mark Schnitzer, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **A neural circuit state change underlying skilled movements.** *Cell*
Wagner, M. J., Savall, J., Hernandez, O., Mel, G., Inan, H., Romyantsev, 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.
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- **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*
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- **Quantitative Imaging of Microtubule Alteration as an Early Marker of Axonal Degeneration after Ischemia in Neurons** *BIOPHYSICAL JOURNAL*
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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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