

## PUBLICATIONS

### Publications

#### Neuroinflammation: A Signature or a Cause of Epilepsy?

Pracucci E., Pillai V., Lamers D., **Parra R.**, Landi S.  
Int J Mol Sci. 2021 Jun 29;22(13):6981.  
PMID: 34209535  
doi: 10.3390/ijms22136981.

#### Modelling genetic mosaicism of neurodevelopmental disorders in vivo by a Cre-amplifying fluorescent reporter

Trovato F.\*, **Parra R.\***, Pracucci E., Landi S., Cozzolino O., Nardi G., Cruciani F., Pillai V., Mosti L., Cwetsch AW., Cancedda L., Gritti L., Sala C., Verpelli C., Maset A., Lodovichi C., Ratto GM.

\* *Equal contributors.*

Nat Commun. 2020 Dec 3;11(1):6194.  
PMID: 33273479  
doi: 10.1038/s41467-020-19864-w

#### A Cre amplifier to generate and detect genetic mosaics in vivo

Trovato F.\*, **Parra R.\***, Pracucci E., Landi S., Cozzolino O., Nardi G., Cruciani F., Mosti L., Cwetsch A., Cancedda L., Gritti L., Sala C., Verpelli C., Maset A., Lodovichi C., Ratto GM.

\* *Equal contributors.*

bioRxiv (Nature Communications accepted)  
doi: <https://doi.org/10.1101/715490>

#### Modulation of ERK1/MAPK3 potentiates ERK nuclear signalling, facilitates neuronal cell survival and improves memory in mouse models of neurodegenerative disorders

Indrigo M., Morella I., Orellana D., d'Isa R., Papale A., **Parra R.**, Gurgone A., Lecca D., Cavaccini A., Tigaret CM., Ratto GM., Carta AR., Giustetto M., Middei S., Tonini R., Hall J., Brooks S., Thomas K., Brambilla R., Fasano S.

bioRxiv

doi: <https://doi.org/10.1101/496141>

#### Simultaneous two-photon imaging of intracellular chloride concentration and pH in mouse pyramidal neurons in vivo

Sulis Sato S., Artoni P., Landi S., Cozzolino O., **Parra R.**, Pracucci E., Trovato F., Szczurkowska J., Luin S., Arosio D., Beltram F., Cancedda L., Kaila K., Ratto GM.

Proc Natl Acad Sci U S A 2017 Oct 10;114(41):E8770-E8779.  
PMID: 28973889  
doi: 10.1073/pnas.1702861114.

#### Trafficking properties of ERK1 and ERK2 in neural cells.

**Parra R.**, Zotter A., Ratto GM.  
ISBN-13:978-3-639-51279-3  
ISBN-10:3639512790  
EAN:9783639512793  
Published on: 2013-03-16

#### Localization and trafficking of fluorescently tagged ERK1 and ERK2.

Marchi M.\*, **Parra R.\***, Costa M., Ratto GM.

\* *Equal contributors.*

Methods Mol Biol. 2010;661:287-301.

**The N-terminal domain of ERK1 accounts for the functional differences with ERK2.**

Marchi M., D'Antoni A., Formentini I., **Parra R.**, Brambilla R., Ratto GM., Costa M.

PLoS One. 2008;3(12):e3873. Epub 2008 Dec 4.

PMID: 19052640

doi: 10.1371/journal.pone.0003873

## ORGANISATIONAL SKILLS

**Organisational skills**

Ability to manage a research project, choosing the experiments to do and the appropriate strategy to solve the problems. Ability to work independently as well as a part of a team.

## JOB-RELATED SKILLS

**Job-related skills**

**Microscopy related skills:**

*In vivo* two-photon imaging of intact mouse brain, Two-photon imaging of brain slices and cell cultures, Confocal Imaging, FLIP, FRAP, StripFRAP, Data analysis with ImageJ.

**Cell culture related skills:**

Cell Culture of cell lines, Primary neurons cell culture, Cell culture Transfection, Immunocytochemistry.

**iPS and organoids related skills:**

iPS expansion, generation of human brain organoids, embedding, cryosectioning and immunostaining of organoids. Longitudinal 2-photon imaging of living human brain organoids.

**Molecular Biology skills:**

Molecular cloning, Production and purification of DNA, RNA and proteins, PAGE, Western Blot.

**Other skills:**

*In vivo* plasmid iontoporation, Micromanipulation, Microinjection of *Xenopus* oocytes and embryos, "whole mount" *in situ* hybridization of *Xenopus* embryos, Brain slice preparation.

## OTHER CERTIFICATES

### Other certificates

Participation to "International Astrocytes School 2013" Bertinoro, Italy (March 17-23, 2013)<http://ias2013.azuleon.org/>

Participation to the course "Tridimensional Microscopy in Fluorescence: methods and applications" Institute for Neuroscience CNR (June 14, 2007).

Participation to the course "Molecular Genetics of Cancer" held by Prof. Martyn Smith of School of Public Health, University of California, Berkeley, (June 3-6, 2002).

Participation to the course "Mindfulness-Based Stress Reduction" held by Anne Dutton, Yale Stress Center (January 27 - March 17, 2017, Retreat March 5, 2017)

Participation to the "Basic Program" (Online) 2018-2022 held by Istituto Lama Tzong Khapa, Pomaia (PI). Courses of the program completed up to now: "Mind and Cognition", "Tenets", "Heart Sutra", "Stages of the Path", "Tathagata Essence".

## POSTERS

### Posters

Poster for Neuroscience 2014 Annual Meeting

TT46 269.07 "*In vivo* measurement of intracellular Chloride and pH during neuronal development by means of 2-photon spectroscopy"