

## ABOUT ME

Biologist, proficient in Neurobiology, expert in electrophysiology and recently interested in Nutraceuticals. My scientific experience was shaped in Public and Private Biomedical Sciences' Sectors.  
I'm serious, organized and patient at work, skilled in precision tasks (e.g. biological dissections, Molec biology experiments), In-vitro cell-culture/maintenance and electrophysiology performance. Skilled in Food Supplement Production and QC. Good social interactions, respect and cordiality at work.  
Hobbies: Jogging, play guitar and ashtanga yoga

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## WORK'S EXPERIENCE

Work Order Preparation  
Cesenatico Frutta S.R.L. [ 05/2022 - 31/07/2022 ]  
City: Cesenatico  
Country: Italy  
Work orders completion  
Storage/ Warehouse area

Intern Master Nutraceuticals  
Bec Natural S.r.L [ 09/2021 - 01/2022 ]  
City: Forlì  
Country: Italy  
Food Supplements Production  
Food Supplement Phytotherapy for menopause  
Chemistry Analitics (HPLC & LC-MS)  
Microbiology tests

Shop assistant  
A&O [ 05/2021 - 09/2021 ]  
City: Cesenatico  
Country: Italy  
Warehouse

Electrophysiology  
Evotec [ 12/2015 - 07/2018 ]  
City: Verona  
Country: Italy  
Manual Patch Clamp GLP  
Patch electrophysiology Projects  
Clients interactions

PostDoc position  
CNR Istituto di Biofisica Trento Unit [ 02/2014 - 12/2015 ]  
City: Trento  
Country: Italy

Manual Patch Clamp  
Neuromorphic Materials  
SLA Disease  
Electrophysiology Lab. P.I. Carlo Musio.

Neurobiology Lecturer  
Universidad Simon Bolivar (Mexico) [ 08/2013 - 12/2013 ]  
City: Mexico  
Country: Mexico  
Neurobiology course 2013

Research volunteer  
Cinvestav [ 04/2013 - 12/2013 ]  
City: Mexico  
Country: Mexico  
Patch clamp  
DRG neurons  
Pharmacology Lab. P.I. Janet Murbartian.

Electrophysiologist  
International School of Advanced Studies (SISSA, Italy) [ 11/2006 - 03/2011 ]  
City: Trieste  
Country: Italy  
Computational Neurosciences  
In-vivo recording.  
Field Potential.  
Leech CNS  
Vincent Torre's Lab.

Scientist in biomedicine  
Cinvestav [ 08/2003 - 06/2006 ]  
City: Mexico City  
Country: Mexico  
Molecular Biology  
Cellular Biology  
Plasmid Cloning  
Entamoeba histolytica  
P.I. Mario Rodriguez R.

Bachelor internship & Thesis Degree  
Instituto de Fisiologia Celular, Universidad Nacional Autonoma de Mexico [ 12/1999 - 05/2002 ]  
City: Mexico  
Country: Mexico  
Manual Patch Clamp  
Leech CNS  
Electrophysiology Lab. P.I. Francisco Fernandez-De Miguel.

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## EDUCATION AND TRAINING

Master Nutraceuticals, Phytotherapy and Food Supplements

University of Bologna [ 01/2021 - Current ]  
Address: Rimini (Italy)  
<https://scienzequalitavita.unibo.it/it>

Philosophy Doctor Neurosciences  
International School of Advanced Studies [ 11/2006 - 03/2011 ]  
Address: Trieste (Italy)  
<https://www.sissa.it/>

Master in Sciences Experimental Pathology  
Cinvestav [ 08/2003 - 06/2006 ]  
Address: Mexico city (Mexico)  
<https://www.cinvestav.mx/>

Speciality in Prospective  
ISEP Superior Institute of Prospective Studies [ 09/1998 - 08/1999 ]  
Address: Mexico (Mexico)

Biology Degree  
Universidad Simon Bolivar (Mexico) [ 08/1994 - 05/1998 ]  
Address: Mexico City (Mexico)  
<https://usb.edu.mx/>

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## LANGUAGE SKILLS

Mother tongue(s): Spanish

Other language(s):  
Italian

LISTENING C1 READING C1 WRITING C1  
SPOKEN PRODUCTION C1 SPOKEN INTERACTION C2

English  
LISTENING B2 READING C1 WRITING C2  
SPOKEN PRODUCTION B2 SPOKEN INTERACTION C1

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## DIGITAL SKILLS

Matlab Matlab Simulink / Microsoft Office / Microsoft Word /  
Microsoft Excel / Microsoft Powerpoint /  
WhatsApp / Video conferencing experience (Zoom, Skype)

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## PUBLICATIONS

Ion channels and neuronal excitability in polyglutamine  
neurodegenerative diseases.  
[2022]  
<https://www.degruyter.com/document/doi/10.1515/bmc-2022-0018/html>

Martinez-Rojas VA, Juarez-Hernandez LJ, Musio C, 2022  
Martinez-Rojas VA, Juarez-Hernandez LJ, Musio C. Ion channels and neuronal excitability in polyglutamine neurodegenerative diseases. *Biomol Concepts*. 2022 Mar 31;13(1):183-199. doi: 10.1515/bmc-2022-0018. PMID: 35357797.

Increased transcription of transglutaminase 1 mediates neuronal death in in vitro models of neuronal stress and A $\beta$ 1-42-mediated toxicity  
[2020]  
<https://www.sciencedirect.com/science/article/pii/S0969996120301248?via%3Dihub>  
Tripathy et al, 2020  
Debasmita, Tripathy & Migazzi, Alice & Costa, Federica & Roncador, Alessandro & Gatto, Pamela & Fusco, Federica & Boeri, Lucia & Albani, Diego & Juarez-Hernandez, Leon & Musio, Carlo & Colombo, Laura & Salmona, Mario & Wilhelmus, M & Drukarch, Benjamin & Pennuto, Maria & Basso, Manuela. (2020). Increased transcription of transglutaminase 1 mediates neuronal death in in vitro models of neuronal stress and A $\beta$ 1-42-mediated toxicity. *Neurobiology of Disease*. 140.

Altered ionic currents and amelioration by IGF-1 and PACAP in motoneuron-derived cells modelling SBMA  
[2017]  
<https://www.sciencedirect.com/science/article/abs/pii/S030462217301515?via%3Dihub>  
Jiménez-Garduño et al, 2017  
Jiménez-Garduño AM\*, Juárez-Hernández LJ\*, Polanco MJ\*, Tosatto L, Michelatti D, Arosio D, Basso M, Pennuto M, Musio C. Altered ionic currents and amelioration by IGF-1 and PACAP in motoneuron-derived cells modelling SBMA. *Biophys Chem*, 2017.

A multidisciplinary approach to study the functional properties of neuron-like cell models constituting a living bio-hybrid system: SH-SY5Y cells adhering to PANI substrate  
[2016]  
<https://aip.scitation.org/doi/10.1063/1.4966587>  
Caponi et al, 2016  
Caponi S, Mattana S, Ricci M, Sagini K, Juarez-Hernandez LJ, Jimenez-Garduño AM, Cornella N, Pasquardini L, Urbanelli L, Sassi P, Morresi A, Emiliani C, Fioretto D, Dalla Serra M, Pederzoli C, Iannotta S, Macchi P and Musio C. A multidisciplinary approach to study the functional properties of neuron-like cell models constituting a living biohybrid system: SH-SY5Y cells adhering to PANI substrate. *AIP Advances*, 2016.

Bio-hybrid interfaces to study neuromorphic functionalities: New

multidisciplinary evidences of cell viability on poly(aniline) (PANI), a semiconductor polymer with memristive properties.

[2015]

<https://www.sciencedirect.com/science/article/abs/pii/S0301462215300260?via%3Dihub>

Juarez-Hernandez et al, 2015

Juarez-Hernandez LJ, Cornella N, Pasquardini L, Battistoni S, Vidalino L, Vanzetti L, Caponi S, Dalla Serra M, Iannotta S, Pederzoli C, Macchi P, Musio C. Bio-hybrid interfaces to study neuromorphic functionalities: New

multidisciplinary evidences of cell viability on poly(aniline) (PANI), a semiconductor polymer with memristive properties. *Biophys Chem.* 2016 Jan;208:40-7. doi:

10.1016/j.bpc.2015.07.008. Epub 2015 Jul 30. PMID: 26263829.

The use of dendrograms to describe the electrical activity of motoneurons underlying behaviors in leeches

[2013]

<https://www.frontiersin.org/articles/10.3389/fnint.2013.00069/full>

Juarez-Hernandez et al, 2013

Juárez-Hernández LJ, Bisson G, Torre V. The use of dendrograms to describe the electrical activity of motoneurons underlying behaviors in leeches. *Front Integr Neurosci.* 2013 Sep

27;7:69. doi: 10.3389/fnint.2013.00069. PMID:

24098274; PMCID: PMC3784775.

*Entamoeba histolytica*: the over expression of a mutated EhRabB protein produces a decrease of in vitro and in vivo virulence

[2013]

<https://www.sciencedirect.com/science/article/abs/pii/S0014489412003797?via%3Dihub>

Juarez-Hernandez et al, 2013

Juárez-Hernández LJ, García-Pérez RM, Salas-Casas A, García-Rivera G, Orozco E, Rodríguez MA. *Entamoeba*

*histolytica*: the over expression of a mutated EhRabB protein produces a decrease of in vitro and in vivo

virulence. *Exp Parasitol.* 2013 Mar;133(3):339-45. doi:

10.1016/j.exppara.2012.12.008. Epub 2012 Dec 22. PMID:

23268174.

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RECOMMENDATIONS

Food Supplements

Name: Elena Lucchi

Email: [integratori@bec-natura.com](mailto:integratori@bec-natura.com)

Bec S.r.l. Forlì, Italy

<https://bec-natura.com>

Principal Investigator CNR-IBF Trento Unit

Name: Carlo Musio

Email: [carlo.musio@cnr.it](mailto:carlo.musio@cnr.it)  
CNR-IBF Trento Unit  
<https://www.ibf.cnr.it/>

Head of Global Preclinical Development Evotec  
Name: Maria Pilla  
Email: [maria.pilla@evotec.com](mailto:maria.pilla@evotec.com)  
Evotec, Verona, Italy  
<https://www.evotec.com>

Head Laboratory Entamoeba histolytica  
Name: Mario Rodriguez  
Email: [marodri@cinvestav.mx](mailto:marodri@cinvestav.mx)  
Cinvestav - IPN, Mexico

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DRIVING:

ITALIAN DRIVING LICENCE  
Driving Licence: AM  
Driving Licence: B

MEXICAN DRIVING LICENCE  
Driving Licence: B

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ORGANISATIONAL SKILLS

Organisational and Job related Skills  
Good performance in task organization and team  
Optimal collaborations with colleagues and superiors  
Interaction Client optimal  
Manual precision during experimental performance  
Analysis and criticism  
Task organization  
Maintenance in laboratory  
Organization in Lab

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NETWORKS AND MEMBERSHIPS

Society for Neurosciences  
[ USA , 2013 - 2016 ]  
<https://www.sfn.org>

Societa Italiana di Biofisica Pura e Applicata  
[ Italy, 2014 - 2015 ]  
<https://www.sibpa.it>