#### **Curriculum Vitae**

## Dr. Valentina Di Biase, PhD

Education

28.11.2008 Ph.D. in Medical Sciences, advisor Prof. Bernhard E. Flucher, Medical University of

Innsbruck, AT

24.10.2001 Master degree (Laurea vecchio ordinamento) in Pharmacy, University G. D'Annunzio of

Chieti-Pescara, I

**Professional career** 

Dates 01.2020 – current

Role and Institution Principal Investigator, Institute of Pharmacology, Medical University of Innsbruck, AT

Research Topic Regulation of neuronal structural and synaptic plasticity

Tasks/Responsibilities Planning and coordination of the research and management of budget, personnel, and

infrastructures. Design and performing of experiments. Supervision of PhD students and

Master Theses.

Associated Faculty Member of the "CaVx PhD, Program Calcium channel in excitable

cells" https://cavx.at/

Main techniques: Banker's style primary culture of neurons; Single particle tracking; FRAP; advanced quantitative fluorescence imaging; molecular cloning; calcium imaging

using genetically encoded calcium indicators (cytoplasmic or synapse targeted)

Teaching Lecturer and organizer of the workshop o1n Synaptogenesis WS2020/2021, 0.67

semester hours, for undergraduate students of the Molecular Medicine Master degree Lecturer of the "Ca<sub>V</sub>X II: Ion Channel Physiology" for the Ca<sub>V</sub>X PhD program, Summer

Semester 2020, 2 hours

Dates From 21.03.2022 to 8.04.2022

Role and Institution Guest researcher in the laboratory of Dr. M. E. Mangoni, Institute of Functional

Genomics (IGF, CNRS), Montpellier, F

Research Topic Molecular physiology of the pacemaker mechanism

Main techniques: Electrophysiology of neurons and fluorescence imaging of ion channel

and G-protein coupled receptors in pacemaker cells

Dates April and May 2019

Role and Institution Lecturer, Department of Physiology, Karl Landsteiner Private University for Health,

Krems an der Donau, AT

Taught course Physiology (Neurophysiology)

Tasks/Responsibilities Lecturer of the workshop in Neurophysiology, 2 semester hours, for undergraduate

students

Dates 10.2016 – 04.2017

Role and Institution Teaching assignment and Guest Researcher, Institute of Biophysics, Medical University

of Graz, AT

Research Topic Neurobiology of ion channels and calcium signaling

Tasks/Responsibilities Designed and performed research

Teaching Co-organizer and lecturer for the Seminars and Workshops in the course of

Neurophysiology and Signal transduction, 1.3 semester hours duration, for

undergraduate students of the Medical University

Dates 17.3.2014 – 28.4.2014

Role and Institution Guest scientist, in the research group of Molecular Physiology led by Dr. M. Heine,

Leibniz Institute for Neurobiology, Magdeburg, DE

Research Topic Physiology of Synapses

Tasks/Responsibilities Planned, designed, and performed research

Main techniques: Single particle tracking, e.g. real-time high spatial and temporal

resolution of ion channels and membrane receptors

Dates 17.09.2012 – 30.09.2016

Role and Institution University Assistant and Principal Investigator, Institute of Biophysics, Medical University

of Graz, AT

Research Topic Trafficking and neurobiology of L-type calcium channels in neurons

Tasks/Responsibilities Planning and coordination of the research and management of budget, personnel and

infrastructures. Design and performing of experiments. Supervision of two early Post-

Docs and one technical assistant.

Main techniques: Banker's style primary culture of neurons; Single particle tracking; FRAP; advanced quantitative fluorescence imaging; molecular cloning; western blot

protocols

Teaching Co-organizer and lecturer for the Seminars and Workshops in the course

"Neurophysiology and Signal transduction", from WS2013/14 to SS2016 each semester, 1.3 semester hours duration, for undergraduate students of the Medical University of

Graz.

Organizer and lecturer of the Lectures in Neurobiology in the Summer Semesters 2014-2015 and Winter Semester 2014/15, 2 semester hours duration for undergraduate

students

Co-organizer and lecturer for the course of Analysis of signal transduction and targeting of proteins in single cells, from SS2013 to SS2015 each semester, 0.9 semester hours

for the PhD students of the Program "Metabolic & Cardiovascular Disease"

Dates 10.2010 & 11.2011

Role and Institution Guest scientist, in the research group of Molecular Physiology lead by Dr. M. Heine,

Leibniz Institute for Neurobiology, Magdeburg, DE

Research Topic Physiology of Synapses

Tasks/Responsibilities Planned, designed, and performed research

Main techniques: Single particle tracking, e.g. real-time high spatial and temporal

resolution of ion channels and membrane receptors dynamics in neurons

Dates 12.2008 – 07.2012

Role and Institution Post-Doc, Department of Physiology and Medical Physics, Medical University of

Innsbruck, AT; Advisor Prof. B. E. Flucher

Research Topic Cellular neurophysiology of ion channels

Tasks/Responsibilities Planned, designed, and performed research. Experimental supervision of two PhD

students and training of newly employed technical assistants in the laboratory of Prof.

B. E. Flucher

Main techniques: High resolution and quantitative fluorescence microscopy, molecular

cloning, Banker's style primary culture of neurons

Dates 03.2005 – 11.2008

Role and Institution Ph.D. student in Medical Sciences, Department of Physiology and Medical Physics,

Medical University of Innsbruck, AT; Advisor Prof. B. E. Flucher

Research Topic Physiology of ion channels in neurons and other excitable cells

Main techniques: High-resolution fluorescence microscopy, molecular cloning, Banker's

style primary culture of neurons

Dates 01.2002 – 12.2003

Role and Institution Visiting scholar, Department of Cell and Developmental Biology, University of

Pennsylvania, Philadelphia, USA; Advisor Prof. C. Franzini-Armstrong

Research Topic Neuromuscular transmission and excitation-contraction coupling

Tasks/Responsibilities Designed and performed research

Main techniques: Freeze fracture and thin sectioning electron microscopy

## **Obtained research grants**

Duration 13.01.2020- 30.06.2024 Role Principal Investigator

Title Dendritic complexity regulation by phospho-S1928 of Cav1.2

Budget € 399,976.50

Funding agency FWF (Austrian Funding Agency) via competitive international peer-review process,

Project contract: P 33225

Host Institution Institute of Pharmacology, Medical University of Innsbruck, AT

Duration 01.11.2012-30.09.2016 Role Principal Investigator

Title Adrenergic regulation of Ca<sub>V</sub>1.2 L-type calcium channels dynamics in neurons

Budget € 362,458.95

Funding agency FWF (Austrian Funding Agency) via competitive international peer-review process,

Project contract: P 25085

Host Institution Institute of Biophysics, Medical University of Graz, AT

Duration 01.08.2009-31.07.2012 Role Principal Investigator

Title Ca<sub>V</sub>1.2 calcium channel dynamics in neuronal modulation

Budget € 192,330.00

Funding agency FWF (Austrian Funding Agency) via competitive international peer-review process,

Project contract: T 443

Host Institution Department of Physiology and Medical Physics, Medical University of Innsbruck, AT

### Research grant proposal under review

Duration 4 years

Type Transdisciplinary network project including 4 Principal Investigators.

Role Co-Principal Investigator

Title The role of high voltage-gated calcium channel  $\beta 2$  subunit in health and disease

Budget Share ~ € 350,000.00 of total € 1,500,000.00

Funding agency FWF (Austrian Funding Agency) via competitive international peer-review process,

Protocol Number KFG98 - B

Evaluation step Passed the first evaluation step of the project proposal letter of intent. Invited for second

phase evaluation by submission of extended version and second cycle international

peer-review evaluation

## Peer review activities

Dates 11.2019

Type & Institution Member of the Scientific Panel for the evaluation of the Research Projects of the

Department of Pharmaceutical and Pharmacological Sciences, University of Padova, I

Dates Since 2020

Role Reviewing Editor for "Frontiers in Pharmacology" Member of the Editorial Board of the

section "Pharmacology of Ion Channels and Channelopathies" of "Frontiers in

Pharmacology"

Journals Cerebral Cortex, Archives of Biochemistry and Biophysics, Plos One, Channels

#### Awards and distinction

Dates 2012

Type "Prize of the city of Innsbruck for scientific research", Innsbruck, AT

Dates 2.9.2007-22.9.2007

Type Selected for "European Synapse Summer School – Mechanisms and plasticity of

synaptic transmission: from Receptors to Behaviour ", PENS Training Center,

University of Bordeaux, Bordeaux, F

# **Short-listing for Academic Positions**

Dates 09.2019

Types Shortlisted for the Tenure Track position at the Institute for Biomedical Ageing

Research, University of Innsbruck, AT

### Attended specialization courses

Date May 2016

Title Dealing with Challenging people situations

Speaker Dr. Indi Seehra, Director of Human Resources of the London School of Economics and

previously of the University of Cambridge, UK

Host Institution Medical University of Graz AT

Date May 2015

Title The accelerated Leadership journey

Speaker Dr. Indi Seehra, Director of Human Resources of the London School of Economics and

previously of the University of Cambridge, UK

Host Institution Medical University of Graz AT

Date Winter Semester 2014/2015

Title Teaching in English - Starting Content and Language Integrated Learning (CLIL)

Host Institution organizer Medical University of Graz AT

Date 15.05.2014

Title Gender & Diversity – Impulse

Speaker Dr. V. C. Kuckenberger, Head of the Gender Unit department of the Medical University

of Graz, AT

Host Institution Medical University of Graz, AT

Date 24-26.09.2009

Title Advanced Scientific Writing

Speaker Dr. Ruth Willmott, Bioscript International, Vienna, AT

Host Institution Medical University of Innsbruck, AT

## **Supervised Master Theses**

Date 04/2022-current

Title Effect of L-type voltage-gated calcium channels (L-VGCCs) activation on the synaptic

content of AMPAR isoforms

Student & Institution Lukas Bauer, Master of Science in Engineering, Study Program in Biotechnology,

Management Center Innsbruck, a private business school, Innsbruck, AT

Type of thesis Experimental Thesis

Role Main supervisor

Financial support FWF project contract number P 33225 to V. Di Biase

Date 03/2021-11.2021, final exam on 18.01.2022

Title Regulation of dendritic development and expression of synaptic markers by L-type

voltage-gated calcium channels

Student Institution Rosina Maier, Master of Science in Engineering, Study Program in Biotechnology,

Management Center Innsbruck, a private business school, Innsbruck, AT

Type of thesis Experimental Thesis

Thesis' institution Institute of Molecular and Cellular Pharmacology (currently Institute of Pharmacology),

Medical University of Innsbruck

Role Main supervisor

Financial support FWF project contract number P 33225 to V. Di Biase

# **Supervised PhD Theses**

Date From October 2021- current

Title The role of L-type calcium channels in regulation of dendritic growth

Student Stefano Lanzetti, PhD student of the "CaVx in excitable cells" PhD program

Student's institution Institute of Pharmacology, Medical University of Innsbruck, AT

Role Main supervisor

Financial support FWF project contract number P 33225 to V. Di Biase

Date From March 2020 to May 2021

Title Calcium channel phosphorylation in regulation of dendritic complexity
Student Martina Mari, PhD student of the "CaVx in excitable cells" PhD program

Student's institution Institute of Molecular and Cellular Pharmacology (currently Institute of Pharmacology),

Medical University of Innsbruck, AT

Role Main supervisor

Financial support FWF project contract number P 33225 to V. Di Biase

Date From December 2009 to November 2014

Title Isoform-specific reversibility and disruption of the CaVα1/β subunit interaction in

functional voltage-gated calcium channel complexes

Student Marta Campiglio, PhD student of the "MCBO" PhD program

Affiliation Department of Physiology and Medical Physics, Medical University of Innsbruck, AT

Role Experimental supervisor (Main supervisor: Prof. B. E. Flucher)

Current student's position University assistant and Principal Investigator at the Institute of Physiology, Medical

University of Innsbruck, AT

Date From February 2009 to December 2013

Title Differential neuronal and nuclear targeting properties of calcium channel β4 splice

variants and their involvement in gene regulation

Student Solmaz Ahari Etemad, PhD student of the "MCB" PhD program

Affiliation Department of Physiology and Medical Physics, Medical University of Innsbruck, AT

Role Experimental supervisor (Main supervisor: Prof. B. E. Flucher)
Current student's position Post-Doc, Institute for Biomedical Ageing, University of Innsbruck, AT

# Supervision of early Post-Docs and training of technical assistants

Date From July 2014 to September 2016

Post-Doc fellow Dr. Alessandra Folci

Affiliation Institute of Biophysics, Medical University of Graz, AT Financial support FWF project contract number P 25085 to V. Di Biase

Post-Doc later position Post-doc at the IPMC, Nice, F

Post-Doc at Humanitas (awarded with a Marie Curie EU Fellowship), Milan, I

Post-Doc later position Researcher at the CNR, I

Date From March 2013 to February 2014

Post-Doc Fellow Dr. Claudia Ramprecht

Affiliation Institute of Biophysics, Medical University of Graz, AT

Financial support FWF project contract number P 25085 to V. Di Biase

Post-Doc current position Quality operation and Release, Fresenius Kabi, Graz, AT

Date From 2013 September 2016
Post-Doc Fellow Mag. Angela Steinberger

Affiliation Institute of Biophysics, Medical University of Graz, AT Financial support FWF project contract number P 25085 to V. Di Biase

Current working place Jungbunzlauer, Pernhofen, AT

#### Speaker and chair activities at international conferences

Date and Conference The 4th European Calcium Channel Conference, May 24-28, Alpbach, AT

Role Chair of one guided poster tour

Organizers G. Obermair, Karl Landsteiner University, Krems, AT; T. Gudermann, LMU Munich, DE;

V. Flockerzi, Saarland University, DE; B. E. Flucher, Medical University of Innsbruck,

AT; M. Biel, LMU Munich, DE; J. Striessnig, University of Innsbruck, AT

Date and Conference Postranslational modifications in neuronal physiology and brain disorders, Webinar,

Milan. I. 5-6.7.2021

Role Invited speaker

Title of the contribution L-type voltage gated calcium channels in regulation of dendritic growth

Organizers A. Folci, Humanitas & Institute of Neuroscience CNR, Milan, I; M. Fossati, Humanitas,

Milan, I

Date and Conference FASEB on Ion channel regulation, Steamboat Springs, Colorado, USA, 12.07.2017

Role Invited speaker

Title of the contribution Imaging surface trafficking of Ca<sub>V</sub>1.2 Ca<sup>2+</sup> channels in neurons

Organizers M. Dell'Acqua, University of Colorado, USA; J. Trimmer, UC Davis, USA

Date and Conference Meeting of the Austrian Neuroscience Association, Salzburg, AT, 25.09.2015

Role Contributed talk

Title of the contribution Molecular mimicking of phosphorylation at S1928 and S1700-T1704 confers modified

surface traffic properties to Ca<sub>V</sub>1.2 voltage gated calcium channels in cultured

hippocampal neurons

Organizers Austrian Neuroscience Association

Date and Conference Meeting of the Austrian Neuroscience Association, Alpbach, AT, 20.09.2011

Role Contributed talk

Title of the contribution Surface traffic of dendritic Ca<sub>V</sub>1.2 calcium channels in hippocampal neurons

Organizers Austrian Neuroscience Association

Date and Conference Meeting of the Austrian Neuroscience Association, Salzburg, AT, 09.2009

Role Contributed talk

Title of the contribution Stable membrane expression of CaV1.2 calcium channels is independent of activity

related rearrangement of post-synaptic scaffold proteins

Organizers Austrian Neuroscience Association

**Invited Seminars** 

Date & Institution Universitá G. d'Annunzio, Chieti, I, within the PhD School of Biomolecular and

Pharmaceutical Sciences, 6.06.2022

Inviting person A. Mollica & L. Giampietro

Title of the contribution Fluorescence imaging of cultured neurons

Date & Institution Universitá G. d'Annunzio, Chieti, I, within the PhD School of Biomolecular and

Pharmaceutical Sciences, 7.06.2022

Inviting person A. Mollica & L. Giampietro

Title of the contribution Voltage-gated calcium channels post-synaptic signaling in hippocampal neurons

Date & Institution 26.09.2019, University Hospital Regensburg, DE

Inviting person LS Maier & K. Hammer

Title of the contribution Trafficking of L-type voltage gated calcium channels in excitable cells

Date & Institution 07.03.2016, Cornell University, New York, USA

Inviting person A. Rajadhyaksha

Title of the contribution Molecular mimicking of C-terminal phosphorylation tunes the surface dynamics of

CaV1.2 calcium channels in hippocampal neurons

Date & Institution UC Davis, Davis, California, USA, 25.01.2016

Inviting person J.W. Hell

Title of the contribution Molecular mimicking of C-terminal phosphorylation tunes the surface dynamics of

CaV1.2 calcium channels in hippocampal neurons

Date & Institution University of Innsbruck, Innsbruck, AT, 20.04.2015

Inviting person J. Striessnig

Title of the contribution Trafficking of phosphorylated CaV1.2 calcium channels in neurons

Date & Institution Medical University of Graz, Graz, AT, 17.01.2012

Inviting person K. Groschner

Title of the contribution Surface traffic of dendritic CaV1.2 calcium channels in hippocampal neurons

Date & Institution University of Iowa, Iowa City, Iowa, USA, 22.11.2010 Inviting person A. Lee, currently at The University of Texas at Austin

Title of the contribution Dynamics of CaV1.2 voltage gated calcium channels in cultured hippocampal neurons

Date & Institution University of Pennsylvania, Philadelphia, Pennsylvania, USA 29.11.2010

Inviting person C. Franzini-Armstrong, currently Emeritus

Title of the contribution Dynamics of CaV1.2 voltage gated calcium channels in cultured hippocampal neurons

Date & Institution [Imperial College, London, Great Britain, 17.12.2010

Inviting person A. Dolphin

Title of the contribution Dynamics of CaV1.2 voltage gated calcium channels in cultured hippocampal neurons

#### LATEST ABSTRACTS AT CONGRESSES

- [1]. Molecular mimicking of phosphorylation at S1928 and S1700-T1704 confers modified surface traffic properties to  $Ca_V1.2$  voltage gated calcium channels in cultured hippocampal neurons. Folci A, Steinberger A, Stanika R, Campiglio M, Ramprecht C, Obermair GJ, Heine M, Di Biase V. Ion Channel Regulation, FASEB, June 28- July 3 2015, Big Sky, Montana, USA
- [2]. Molecular mimicking of phosphorylation at S1928 and S1700-T1704 confers modified surface traffic properties to Ca<sub>V</sub>1.2 voltage gated calcium channels in cultured hippocampal neurons Folci A., Steinberger A., Stanika R., Campiglio M., Ramprecht C., Obermair G. J., Heine M., Di Biase Biophysics, Los Angeles, March 7-11 2016.
- [3]. Activity of L-type voltage gated calcium channels regulates trafficking of GluA2-containing AMPARs. Folci A, Steinberger A, Di Biase V. FENS Forum of Neuroscience, July 2-6 2016, Copenhagen, Denmark.
- [4]. The developmental impact of calcium channel α2δ subunits on formation of neuronal network conenctivity. Bikbaev A, Ciuraszkiewicz A, Hecka J, Klatt O, Freund R, Mitlöhnerc J, Obermair GJ, Di Biase V and Heine M. European Calcium Channel Conference, May 2–12 2018, Alpbach, Austria.
- [5]. Distinct impact of auxiliary alpha2delta subunits of calcium channels in developing neuronal networks. Bikbaev A, Ciuraszkiewicz A, Heck J, Klatt O, Freund R, Mitlöhner J, Obermair GJ, Di Biase V and Heine M. FENS Forum of Neuroscience, July 7-11 2018, Berlin, Germany.
- [6]. Alternative Splicing of Cav1.2 in ARVC Patients. Bourjau T, Di Biase V, Campiglio M, Giglberger M, Schober B, Stauber T, Pietrzyk G, Baessler A, Fischer M, Wagner S, Maier LS, Hammer KP. Biophysical Society Annual Meeting, February 15-19 2020, San Diego, USA
- [7]. Modulation of L-type calcium currents associates with changes of dendritic growth in hippocampal neurons. Lanzetti S, Mesirca P, Folci A, Maier R, Torre E, Rinner F, Campiglio M, Mangoni ME and Di Biase V. Fourth European Calcium Channel Conference, May 24-28 2022, Alpbach, Austria.

#### LIST OF PUBLICATIONS IN PEER-REVIEWED INTERNATIONAL JOURNALS

[1] Lanzetti S and **Di Biase V\*.** Small molecules in voltage-gated calcium channel dependent neurological disorders: state-of-the-art and perspectives. Molecules, 27(4), 1312 (2022).

Contribution: Senior and corresponding author. Concept and writing of the manuscript

Affiliation: Institute of Pharmacology, Medical University of Innsbruck, AT Financial contribution: FWF project contract number P 33225 to to V. Di Biase

[2] Bikbaev A, Ciuraszkiewicz-Wojciech A, Heck J, Klatt O, Freund R, Mitlöhner J, Enrile Lacalle S, Sun M, Repetto D, Frischknecht R, Ablinger C, Rohlmann A, Missler M, Obermair GJ, **Di Biase V**, Heine M. *Auxiliary*  $\alpha 2\delta 1$  and  $\alpha 2\delta 3$  Subunits of Calcium Channels Drive Excitatory and Inhibitory Neuronal Network Development. J Neurosci, 40(25):4824-4841 (2020).

Contribution: Editing and writing of the manuscript.

Affiliation: Institute of Pharmacology, Medical University of Innsbruck, AT

Financial contribution: FWF project contract number P 25085 and P 33225 to V. Di Biase

[3] Folci A, Steinberger A, Lee B, Stanika R, Scheruebel S, Campiglio M, Ramprecht C, Pelzmann B, Hell JW, Obermair GJ, Heine M, **Di Biase V\*.** *Molecular mimicking of C-terminal phosphorylation tunes the surface dynamics of Ca<sub>V</sub>1.2 calcium channels in hippocampal neurons*. J Biol Chem, 293:1040-1053 (2018).

Contribution: Senior and corresponding author. Conception of the research. Design, performing, and analysis of experiments. Writing of the manuscript.

Affiliation: Institute of Biophysics, Medical University of Graz, AT

Financial contribution: FWF project contract number P 25085 to V. Di Biase

[4] Patriarchi T, Qian H, **Di Biase V**, Malik ZA, Chowdhury D, Price JL, Hammes EA, Buonarati OR, Westenbroek RE, Catterall WA, Hofmann F, Xiang YK, Murphy GG, Chen CY, Navedo MF, Hell JW. *Phosphorylation of Ca* $_{V}$ 1.2 on S1928 uncouples the L-type Ca2+ channel from the beta(2) adrenergic receptor. EMBO Journal, 35: 1330-1345 (2016).

Recommended "Exceptional" for F1000, see http://f1000.com/prime/726306316?ref=ypp

Contribution: Design and performing of experiments. Data analysis.

Financial contribution: FWF project contract number P 25085 to V. Di Biase

Affiliation: Institute of Biophysics, Medical University of Graz, AT

[5] Etemad S, Obermair GJ, Benedetti A, Stanika R, **Di Biase V**, Burtscher V, Koschak A, Bindreither D, Kofler R, Geley S, Wille A, Lusser A, Flockerzi V, Flucher BE. *Differential Neuronal Targeting of a New and Two Known Calcium Channel*  $\beta_4$  *Subunit Splice Variants Correlates with Their Regulation of Gene Expression*. J Neurosci, 34: 1446-1461, (2014). **Journal Cover Article** 

Contribution: Design/concept of research and experimental data analysis.

Affiliation: Department of Physiology and Medical Physics, Medical University of Innsbruck, AT. Published while employed at the Institute of Biophysics, Medical University of Graz, AT

[6] Campiglio M, **Di Biase V**, Tuluc P, Flucher BE *Stable incorporation versus dynamic exchange of beta subunits in a native Ca*<sup>2+</sup> *channel complex.* J Cell Science, 126: 2092-2101, (2013).

Contribution: Design of research and experimental data analysis.

Financial contribution: FWF project contract number T-443 to V. Di Biase

Affiliation: Department of Physiology and Medical Physics, Medical University of Innsbruck, AT

[7] **Di Biase V**, Tuluc P, Campiglio M, Obermair GJ, Heine M, Flucher BE. Surface Traffic of Dendritic Ca<sub>V</sub>1.2 Calcium Channels in Hippocampal Neurons. J Neurosci, 38: 13682-13694 (2011). **Featured article** 

Contribution: Concept of research. Design, performing, and analysis of experiments. Data analysis. Writing of the manuscript.

Financial contribution: FWF project contract number T-443 to V. Di Biase

Affiliation: Department of Physiology and Medical Physics, Medical University of Innsbruck, AT

[8] Obermair GJ, Schlick B, **Di Biase V**, Subramanyam P, Gebhart M, Baumgartner S, Flucher BE. *Reciprocal Interactions Regulate Targeting of Calcium Channel beta Subunits and Membrane Expression of alpha1 Subunits in Cultured Hippocampal Neurons*. J Biol Chem, 285: 5776-5791 (2010). **Journal Cover Article** 

Contribution: Design and performing of experiments Data analysis. Writing of the manuscript. Affiliation: Department of Physiology and Medical Physics, Medical University of Innsbruck, AT

[9] **Di Biase V**, Flucher BE, Obermair GJ. Resolving sub-synaptic compartments with double immunofluorescence labeling in hippocampal neurons. J Neurosci Methods, 176: 78-84 (2009).

Contribution: Conception of research. Design, performing, and analysis of experiments. Data analysis. Writing of the manuscript.

Affiliation: Department of Physiology and Medical Physics, Medical University of Innsbruck, AT

[10] **Di Biase V**, Obermair GJ, Szabo Z, Altier C, Sanguesa J, Bourinet E, Flucher BE. *Stable Membrane Expression of Postsynaptic Ca<sub>V</sub>1.2 Calcium Channel Clusters Is Independent of Interactions with AKAP79/150 and PDZ Proteins*, J Neurosci, 51: 13845-13855 (2008).

Contribution: Conception of research. Design, performing, and analysis of experiments. Data analysis. Writing of the manuscript.

Affiliation: Department of Physiology and Medical Physics, Medical University of Innsbruck, AT

[11] **Di Biase** V, Franzini-Armstrong C *Evolution of skeletal type e-c coupling: a novel means of controlling calcium delivery*, J Cell Biol, 171: 695-704, (2005). **Journal Cover Article** 

Contribution: Corresponding Author. Conception of research. Design, performing, and analysis of experiments. Data analysis. Writing of the manuscript.

Affiliations: Department of Cell and Developmental Biology, University of Pennsylvania, Philadelphia, USA Department of Physiology and Medical Physics, Medical University of Innsbruck, AT

[12] Schredelseker J, **Di Biase V**, Obermair GJ, Felder TE, Flucher BE, Franzini-Armstrong C, Grabner M *The beta(1a) subunit is essential for the assembly of dihydropyridine-receptor arrays in skeletal muscle*, PNAS, 47: 17219-17224, (2005).

Contribution: Design and performing of experiments. Data analysis. Writing of the manuscript.

Affiliations: Department of Cell and Developmental Biology, University of Pennsylvania, Philadelphia, USA