

Angelo Demuro, Ph.D.

Curriculum Vitae

Address

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Education

- 06/92:** **Master`s Degree in Biological Science** - University of Pisa, Italy - Thesis title: Binding of chiral benzodiazepines to GABA_A receptors
- 07/97** **Doctor of Philosophy (PhD)** - University of Pisa, Italy - Thesis title: Stereochemistry and benzodiazepine activity: Electrophysiological study of GABA_A receptors expressed by mRNA from rat brain or human cDNA in *Xenopus Laevis* Oocytes

Professional experience

- 07/12-present** Associate Researcher, Dept. of Neurobiology and Behavior, **University of California Irvine (UCI)**, Irvine, CA.
- 07/04 – 07/12:** Assistant Project Scientist, Dept. of Neurobiology and Behavior, **University of California Irvine (UCI)**, Irvine, CA.
- 01/97 – 07/04:** Post Graduate Fellow, Dept. of Neurobiology and Behavior, **UCI**, Irvine, CA.
- 02/96 – 11/96:** Visiting Fellow, Dept. of Neurobiology and Behavior, **UCI**, CA
- 01/93 – 02/96:** Department of Physiology and Biochemistry “G. Moruzzi” **University of Pisa**, Pisa, Italy.
- 10/92 – 02/93:** Post Graduate fellow at the University of Pisa, Dept. of Chemistry, Center for Optically Active Macromolecules, (**CNR**), Pisa, Italy.
- 02/92 – 09/93:** Research assistant, Institute of Biological Sciences, **University of Pisa**, Pisa, Italy.
- 12/89 – 01/92:** University of Pisa, Department of Chemistry, Center for Optically Active Macromolecules, (**CNR**), Pisa, Italy.

Teaching Experience

School of Biological Science, University of Pisa, Italy. Laboratory of General Physiology (1993; 1994; 1995)

School of Biological Science, University of California Irvine, USA. Introduction to electrophysiology for undergraduate students (2000; 2001; 2002; 2003).

School of Biological Science (2004 to present) University of California Irvine, USA. Cellular Neuroscience Laboratory Class (207L). Introduction to calcium imaging and electrophysiology techniques in *Xenopus Laevis* oocytes for graduate students.

Supervision of undergraduate trainees.

Martin Smith-undergraduate students (University of California Irvine)
Caroline Nguyen - undergraduate student (University of California Irvine)

Mohammad M. Kassir - undergraduate student (University of California Irvine) (Poster Award finalist, Excellence in Research, School of Biological Science, UCI)
Mia Sidu - undergraduate student (University of California Irvine)
Vi Quach - undergraduate student (University of California Irvine)
Marina Burgio – undergraduate and graduate student (University of Pisa)

Research Support

Current

A multi-scale data-driven model of the Abeta pore function and Ca²⁺ toxicity in Alzheimer`s disease NIH, R011AG053988. (multi P.I. award together with Ghanim Ullah (University of South Florida) 2016-2021 (\$ 1,309,935.00)

Past grant

Imaging the mechanism of Abeta-amyloid cytotoxicity. PI: Angelo Demuro NIH, P50 AG16573

Awards/Honors

4th Neurological Disorder Summit (2018) (Los Angeles, CA) Chaired panel on Autism and Neurodevelopment Disorders

Common Threads Workshop II: a roundtable discussion on “ Calcium in Neurodegeneration” Las Vegas (2008) (supporting travel and accommodation fees: Host Dr. Khachaturian Zaven)

Synaptic Transmission 100 years after L. Luciani. (2001) Symposium in honor of Ricardo Miledi. *Rome, Italy.*(Supporting accommodation fees)

Grass Fellow (1997) *Campus Juriquilla, Queretaro, Mexico* (supporting travel, accommodation fees of period of work)

Visiting Exchange Program Fellowship University of Pisa (1996) *Irvine, California.* (Supporting period of work at the University of California Irvine from February 1996 to November 1996)

Young Scientist Travel Award (1995), *Cagliari, Italy.* (Supporting travel, registration and accommodation fees for the 5th Sardinian conference in Neuroscience)

Peer-Review Assignments (since 2012)

Nature	2012
Scientific report	2013
Journal Physiology	2013
Journal of Alzheimer`s Disease.	2011, 2012, 2013
Neurobiology of Disease	2012 2013
Plos One	2013, 2015
Scientific report	2014
Austin ADPD	2014
eBook	2015
British Journal of Pharmacology	2015
Nanomedicine: Nanotechnology	2016
The Scientific Page of Alzheimer`s Disease and Dementia	2016
Austin Journal of Cerebrovascular Disease & Stroke	2017
Integrative Biology	2017

Professional Memberships

Society for Neuroscience
Biophysical Society
Physiological Society

Recent Attended Meetings

2013 Gordon Research Conference in Calcium Signaling (Il Ciocco, Barga, Italy)
2017 Gordon Research Conference in Calcium Signaling (Il Ciocco, Barga, Italy)
2018- 4th Neurological Disorder Summit (Los Angeles, CA)


Invited Talks

4th Neurological Disorder Summit: 2018 Los Angeles July 23-25 (Host Prof Rajendra Badgaiyan).
Department of Neurobiology and Behavior 2017 Retreat. *Exploring the Brain: From Molecules to Mind*
Palm Spring August 8-9 2017
Institute for Memory Impairments and Neurobiological Disorders (UCI MIND): 2013 seminar series
November 21st (Host Prof. K. Green)
Department of Neurobiology and Behavior 2013 Retreat. *Exploring the Brain: From Molecules to Mind*
Palm Spring August 8-9 2013
Annual World Congress of Nanomedicine: nanotechnology in Bio Imaging Technologies in Qingdao,
China
Shanghai International Forum on Neuroscience in Shanghai, China (May 2012-Host Prof. Xu Chen)
Montreal International Biochemistry & Biophysics Forum in Montreal, Quebec, Canada (November 2011-
Host Yao Lu)
American Chemical Society 234th meeting in Boston (Aug. 2007- Host Prof M. Kurnicova)
Creighton University, Nebraska Center for Cell Biology Frontiers in Imaging Technologies for Cell Biology
and Neuroscience. (Nov. 2006-Host: Prof. R. Hallworth).
University of California Irvine. Bio-imaging Interest Group (BIG) "Optical Patch-clamp" Imaging calcium
flux through single ion channels (march 2006)

Refereed Publications

*Citation Statistics.

Numbers in blue indicate the citation count of each article (Google Scholar) as of September 10 2018. Total citations to date >2800: 'h' index = 19 (number of articles that have each been cited at least h times)

1. **Demuro, A.**, Francesconi, W., Bertucci, C., Berton, F., Salvadori, P. and Brunelli, M. (1995). Modulation of GABA_A gated channel in *Xenopus* oocytes by single enantiomers of 3-substituted-1-4-benzodiazepin-2-ones. *Behav. Pharmacol.* 6, 48-49.
2. Bertucci, C., **Demuro, A.** and Giannaccini, G. (1997). HPLC resolution of chiral 4,5-dihydro-1,4-benzodiazepines: stereochemical characterization and enantioselective GABA_A receptor binding. *J. Phar. Biomed. Anal.*,15, 803-809. Times Cited: **3**
3. Francesconi, W., Berton, F., **Demuro, A.**, Madamba, S.G. and Siggins, G.R. (1997). Naloxone blocks long-term depression of excitatory transmission in rat CA1 hippocampus in vitro. *Arch. Ital. Biol.*, 135, 37-48. Times Cited: **7**
4. **Demuro, A.**, Burgio, M., Berton, F., Francesconi, W. and Bertucci C. (1997). Allosteric modulation by single enantiomer of a C3-chiral 1,4-benzodiazepine of the gamma aminobutyric acid type A receptor channel expressed in *Xenopus* oocytes. *Chirality*, 9, 286-290. Times Cited: **3**
5. Berton, F., Brancucci, A., Beghe, F., Cammalleri, M., **Demuro, A.**, Francesconi, W. and Gessa, G.L. (1999). γ -Hydroxybutyrate inhibits excitatory post-synaptic potentials in rat hippocampal slices. *Eur. J. Pharmacol.* 380, 109-116. Times Cited: **42**
6. **Demuro, A.**, Martinez-Torres, A., Francesconi, W. and Miledi, R. (1999). Antagonistic action of pirtazepin on human and rat GABA_A receptors. *Brit. J. Pharmacol.* 127, 57-64. Times Cited: **10**
7. Martinez-Torres, A., **Demuro, A.** and Miledi, R. (2000). GABA ρ 1/GABA α 1 receptor chimeras to study receptor desensitization. *Proc.Natl. Acad Sci.* 7, 3562-3566. Times Cited: **8**
8. **Demuro, A.**, Martinez-Torres, A. and Miledi, R. (2000). Functional and pharmacological properties of GABA ρ 1 Δ 51 receptors. *Neurosci. Res.* 36, 141-146. Times Cited: **10**
9. **Demuro, A.**, Palma, E., Eusebi, F. and Miledi, R. (2001). Inhibition of nicotinic acetylcholine receptors by bicuculline. *Neuropharmacology* 41, 854-861. Times Cited: **44**
10. Halliwell, R., Su, J., **Demuro, A.**, Martinez-Torres, A. and Miledi R. (2002) Characterization of the interaction between a novel convulsant agent, norbiphen, and GABA(A) and other ligand-gated ion channels. *Neuropharmacology* 43, 778-787. Times Cited: **6**
11. **Demuro, A** and Parker, I. (2003) Optical single-channel recording: imaging Ca²⁺ flux through individual N-type voltage-gated channels expressed in *Xenopus* oocytes. *Cell Calcium.* 34, 499-509. Times Cited: **37**: Evaluated as 'exceptional' by the Faculty of 1000
12. **Demuro, A** and Parker, I. (2004) Imaging the activity and localization of single voltage-gated Ca²⁺ channels by total internal reflection fluorescence microscopy. *Biophys. J.* 86, 3250-3259. Times Cited: **90**.
13. **Demuro, A.**, Mina, E., Kaye, R., Milton, S.C., Parker, I. and Glabe, C.G. (2005) Calcium dysregulation and membrane disruption as ubiquitous neurotoxic mechanism of soluble amyloid oligomers. *J.Biol. Chem* 280, 17294-17300. Times Cited: **934**: Paper of the Week' Announcement by JBC
14.  **Demuro, A.** and Parker, I. (2005) Optical patch-clamping: single-channel recording by imaging Ca²⁺ flux through individual muscle acetylcholine receptor channels. *J.Gen.Physiol.* 126, 179-192. Times Cited: **96**: Reviewed by J. Physiology "Highlights from the Literature"

15. Ventura, C.A., Bruno, L., **Demuro, A.**, Parker, I. and Ponce-Dawson, S. (2005) A model-independent algorithm to derive Ca²⁺ fluxes underlying local cytosolic Ca²⁺ transients. *Biophys. J.* PMID: 15709697. Times Cited: [19](#)
16. **Demuro, A.** and Parker, I. (2008) Multi-dimensional resolution of elementary Ca²⁺ signals by simultaneous multi-focal imaging. *Cell Calcium.* 43, 367-74. Times Cited: [33](#).
17. Green, K.N., **Demuro, A.**, Akbari, Y., Hitt, B.D., Smith, I.F., Parker, I., LaFerla, F.M. (2008) SERCA pump activity is physiologically regulated by presenilin and regulates amyloid beta production. *J.Cell Biol.*181, 1107-16. Times Cited:[240](#): [Commentary in J.C.B. "Alzheimer's protein controls calcium's ins and outs](#)
18. Penna, A., **Demuro, A.**, Yeromin, A.V., Zhang, S.L., Safrina, O., Parker, I., Cahalan, M.D. (2008) The CRAC channel consists of a tetramer formed by Stim-induced dimerization of Orai dimmers. *Nature.* 456, 116-20. Times Cited: [366](#): [Selected as "Editor's Choice" by Science Signaling; Sci. Signal, 1:45, p ec382.](#)
19. Yamasaki-Mann, M., **Demuro, A.**, Parker, I. (2009) cADPR stimulates SERCA activity in *Xenopus* oocytes. *Cell Calcium.* 45, 293-9. Times Cited: [22](#).
20. Yamasaki-Mann, M., **Demuro, A.**, Parker, I.(2010) Modulation of endoplasmic reticulum ca²⁺ store filling by cyclic ADP-ribose promotes inositol trisphosphateIP₃-evoked Ca²⁺ signaling *J.Biol. Chem.* 285, 25053-25061. Times Cited: [24](#)
21. **Demuro A.**, Penna A., Safrina O., Yeromin A.V., Amcheslavsky A., Cahalan M.D. and Parker I. (2011) Subunit stoichiometry of human Orai1 and Orai3 channels in closed and open states. . *Proc.Natl. Acad Sci.* 43:17832-37. Times Cited:[62](#)
22. **Demuro A.**, Smith M. and Parker I. (2011) Single-channel Ca²⁺ imaging implicates Aβ₁₋₄₂ amyloid pores in Alzheimer's disease pathology. *J.Cell.Biol.* Oct 24 PMID 22024165. Times Cited: [134](#): [JCB 'Focal Point' by Ben Short; Alzforum commentaries by Bezprozvanny, Kagan](#)
23. Siebert AP, Ma Z, Grevet JD, **Demuro A.**, Parker I, Foskett JK.(2013) Structural and functional similarities of calcium homeostasis modulator 1 (CALHM1) ion channel with connexins, pannexins, and innexins. *J Biol. Chem.* Mar 1;288(9).Times Cited: [62](#)
24. Yamasaki-Mann M, **Demuro A.**, Parker I. (2013) Cytosolic [Ca²⁺] regulation of InsP₃-evoked puffs *Biochem. J.* Jan 1;449(1):167-73 Time Cited [5](#)
25. **Demuro A.**, Parker I. (2013) Cytotoxicity of intracellular Aβ₄₂ amyloid oligomers involves Ca²⁺ release from the endoplasmic reticulum by stimulated production of inositol trisphosphate. *J Neurosci.* Feb 27; 33(9). Time Cited: [64](#): [Commentary on Alzforum by Bezprozvanny. Recommended as "New finding" by Faculty of 1000.](#)
26. Ullah G, **Demuro A.**, Parker I, Pearson JE.(2015) Analyzing and modeling the kinetics of amyloid beta pores associated with Alzheimer's disease pathology. PloS one 10 (9), e0137357 Time Cited [14](#)
27. Tan Z, Dai W, van Erp TGM, Overman J, **Demuro A.**, Digman MA, Hatami A. (2015) Huntington's disease cerebrospinal fluid seeds aggregation of mutant huntingtin. *Molecular psychiatry* 20 (11), 1286-1293 Time Cited [28](#)
28. **Demuro A.**, Parker I. (2015) Picomolar sensitivity to inositol trisphosphate in *Xenopus* oocytes. *Cell calcium* 58 (5), 511-517
29. Ma Z, Taruno A, Ohmoto M, Jyotaki M, Lim JC, Miyazaki H, Niisato N, Marunaka Y, Lee RJ, Hoff H, Payne R, **Demuro A.**, Parker I, Mitchell CH, Henao-Mejia J, Tanis JE, Matsumoto I, Tordoff MG, Foskett JK. (2018) CALHM3 Is Essential for Rapid Ion Channel-Mediated Purinergic Neurotransmission of GPCR-Mediated Tastes. *Neuron* 98 (3), 547-561 -[Commentary](#) by Yuki Oka in *Neuron*- Time Cited [1](#)
30. Shah SI, **Demuro A.**, Mak DD, Parker I, Pearson JE, Ullah G (2018) TraceSpecks: A Software for Automated Idealization of Noisy Patch-Clamp and Imaging Data. *Biophys J.* 115(1), 9-21
31. Toglia P, **Demuro A.**, Mak DD, and Ullah G (2018) Data-driven modeling of mitochondrial dysfunction in Alzheimer's diseases. *Cell Calcium* 72 (2018) 23-35.

32. Shah SI, Smith M, Swaminathan D, Parker I, Ullah G, **Demuro A** (2018) CellSpecks: A Software for Automated Detection and Analysis of Calcium Channels in Live Cells *Biophys J.* 3495(18)31163-9

Invited Reviews/Book Chapters

1. **Demuro, A.** and Miledi, R. (2000) Pitrazepin: Interaction with transmitter receptors of the central and peripheral nervous systems. *CNS Drug Reviews.* **6**, 290-302
2. **Demuro, A** and Parker, I (2004) Imaging single-channel calcium microdomains by total internal reflection microscopy. *Biol. Res.* **37**:675-679. Times Cited: [16](#)
3. **Demuro, A.** and Parker, I. (2004) Imaging the activity of single calcium channels: `optical patch-clamp recording`. *Physiology News.* **55**:24-26
4. **Demuro, A** and Parker, I (2005) Optical single channel recording: Imaging Ca²⁺ flux through individual ion channels with high temporal and special resolution. *J. Biomed. Opt.* (011002) Time Cited: [29](#)
5. Dargan, S.L., **Demuro, A.** and Parker, I. (2005) Imaging Ca²⁺ signals in *Xenopus* oocytes. *Methods Mol Biol.* **322**:103-119. Times Cited: [17](#)
6. **Demuro, A.** and Parker I. (2006) Imaging single-channel calcium microdomains. *Cell Calcium.* **40**: 413-422. Times Cited:[74](#)
7. **Demuro, A.**, Parker, I. And Stutzmann, G.E., (2010) Calcium signaling and amyloid toxicity in Alzheimer's disease. *J.Biol. Chem.* 17:12463-68. Times Cited: [296](#)

Recent Published Abstracts

- 1 Bertucci, C., **Demuro, A.**, Giannaccini, G. (1993). (in italian) Caratterizzazione del legame di benzodiazepine chirali al complesso recettoriale per il GABA. (V convegno su Recenti Sviluppi ed Applicazioni Nell'Analisi Farmaceutica. Alghero, Italy. 13-16 October) A 39.
- 2 Bertucci, C., **Demuro, A.**, Zsuzanna, T. (1993). (in italian) Risoluzione HPLC, analitica e preparativa, di 1,4-benzodiazepine sostituite al C3. (V convegno su Recenti Sviluppi ed Applicazioni Nell'Analisi Farmaceutica. Alghero, Italy. 13-16 October) A 28
- 3 Mereu, G.P., **Demuro, A.**, Lilliu, V., Francesconi, W., Berton, F., Casula, A., Vicini, S., Gessa, G.L. (1995). Neurophysiological effects of drugs of abuse on dopamine neurons in *vitro* during development. XXth C.I.N.P. Congress
- 4 **Demuro, A.**, Francesconi, W., Bertucci, C., Berton, F., Salvadori, P., Brunelli, M. (1995). Modulation of GABA_A gated channel in *Xenopus* oocytes by single enantiomers of 3-substituted-1,4-benzodiazepin-2-ones. (Eighth Sardinian Conference on Neuroscience: Tanka Village, Villasimius May 24-28th 1995) *Behav. Pharmacol.* V6 Supp.1, A 9.1.
- 5 **Demuro, A.**, Martinez-Torres, A., Francesconi, W., Miledi, R. (1997). Pitrazepin block of human and rat cortex GABA_A receptors expressed in *Xenopus* oocytes. *The Pharmacologist.* Vol 30, p. 225.
- 6 Halliwell, R.F., **Demuro, A.**, Martines-Torres, A., Akahane, K., Miledi, R. (1998). Initial observations on a novel and potent antagonist at human recombinant GABA_A receptors. *Soc. Neurosci.* v.24: 104
- 7 **Demuro, A.** and Miledi, R. (1998). Blockage of muscle nicotinic acetylcholine receptors by benzodiazepine. *Soc. Neurosci.* v.24:p. 87

- 8 **Demuro, A.**, Francesconi, W., Martinez-Torres, A., Miledi, R. (1998). Effect of chiral-benzodiazepine isomers on GABA-A-gated channels expressed in *Xenopus* oocytes. *FASEB J.* v.12: A 440
- 9 Martinez-Torres, A., **Demuro, A.**, Miledi, R. (1998). Modulation of GABA- ρ 1- ρ 51 receptors by polyvalent cations. *FASEB J.* v.12: A 440.
- 10 **Demuro, A.** and Miledi, R. (2000). Antagonism of neuronal and muscle nicotinic acetylcholine receptor by bicuculline. Synaptic transmission 100 years after L. Luciani: in honour of Ricardo Miledi (Rome, Italy, 28-30 September 2000) ISBN 88-86062-55-9 pp 31-32.
- 11 **Demuro, A.** and Miledi, R. (2001). Activity-dependent inhibition of nicotinic acetylcholine receptors in *Xenopus* Oocytes. *Soc. Neurosci.* 918.2.
- 12 **Demuro, A.** and Parker I. (2002). Imaging Ca^{2+} flux through single N-type voltage-gated Ca^{2+} channels expressed in *Xenopus* oocytes. *Soc. Neurosci* 312.2.
- 13 Dargan, S.L., **Demuro, A.**, Callamaras, N., Marchant, J., Schwaller, B. and Parker, I. (2003). Shaping of IP3-mediated Ca^{2+} signals by Ca^{2+} buffers and Ca^{2+} binding protein. *Biophys. Soc.*
- 14 Parker, I. and **Demuro, A.** (2003) Imaging single-channel Ca^{2+} microdomains. International workshop calcium release and cellular calcium signaling domains. (Marbella, Chile, Sept.28-Oct.2, 2003) 31
- 15 **Demuro, A.** and Parker, I. (2003) Imaging activity of individual N-type calcium channels expressed by total internal reflection fluorescence microscopy. *J.Physiol.* 551P C27
- 16 **Demuro, A.** and Parker, I. (2003) Imaging the activity of multiple individual N-type calcium channels by total internal reflection fluorescence microscopy. *Soc Neurosci.* 232.3
- 17 Ponce Dawson, S., Ventura, A.C., Bruno, L., **Demuro, A.** and Parker, I. (2004) Analyzing Fluorescent fluorescence images of intracellular calcium. *Biophys. J.* 1778-Plat
- 18 **Demuro, A.** and Parker, I. (2004) Imaging the activity and localization of single voltage-gated Ca^{2+} channels by total interna reflection fluorescence microscopy. *Biophys. J.* 1728-Plat
- 19 Green, K.N., **Demuro, A.**, Hitt, B.D., Smith, I.F., Parker, I. and LaFerla, F.M. (2004) Presenilin regulates SERCA pump activity. *Soc. Neurosci.* 90.15-Post
- 20 Mina,E.W., **Demuro, A.**, Kayed, R. Milton, S. Parker, I. and Glabe, C.G. (2004) Membrane disruption and elevated intracellular calcium as a common mechanism of amyloid oligomer-mediated neurodegeneration. *Soc. Neurosci.* 449.20-Post
- 21 **Demuro, A.** and Parker, I. (2004) Optical imaging of single-channel activity of muscle nicotinic acetylcholine receptors. *Soc. Neurosci* 707.7-Plat.
- 22 **Demuro, A.** and Parker, I. (2005) Optical patch-clamp recording: imaging single- channel activity of muscle and neuronal nAChRs. *Soc. Neurosci.* 705.11-Plat.
- 23 **Demuro, A.** and Parker, I. (2005) Imaging single channel activity of muscle $\alpha\beta\gamma\delta$ and neuronal $\alpha 4\beta 2$ nicotinic acetylcholine receptors by Total Internal Reflection Fluorescence Microscopy. *Biophys. J.* 1774-Plat
- 24 **Demuro, A.** and Parker, I. (2006) Simultaneous ultra-fast multifocal imaging of localized intracellular calcium transients. *Biophys. J.*329-Pos
- 25 **Demuro, A.** (2007) Optical-patch clamping: A new approach for imaging single ion channels activity. Abstract Of The American Chemical Society. 234: 273PHYS
- 26 **Demuro, A.** and Parker, Ian. (2008) Imaging the mechanisms of $\text{A}\beta$ 1-42 peptide toxicity. *Biophys. J.* 2671-Plat Yamasaki-Mann,M. **Demuro, A.** and Parker, I. (2009) Basal cytosolic Ca^{2+} affects triggering, bu not amplitude of IP(3)R-mediated puffs. *J. Physiol. Sci.* 59: 239

- 27 Penna, A., **Demuro, A.**, Yeromin, A.Y., Safrina, O., Shenyuan L.Z., Parker, I. and Cahalan, M.D. (2009) Stim-regulated Assembly And Stoichiometry Of The CRAC Channel Subunit Orai. *BiophysJ.* 2885-Plat..
- 28 **Demuro, A.**, Penna, A., Safrina, O., Amcheslavsky, A., Cahalan, M.D. and Parker, I. (2011). Subunit stoichiometry of human Orai1 and Orai3 in closed and open states *Biophys. J.* 100 pp 84a
- 29 **Demuro, A.** and Parker, I. (2012) Intracellular A β oligomer evokes Ca²⁺ influx across the plasma membrane and Ca²⁺ release from intracellular stores. *Biophys. J.* LB164-Pos
- 30 Ullah, G., **Demuro, A.**, Parker, I., Pearson, J.E., (2014) Learning the Kinetics of Amyloid β Pore in Alzheimer's Disease Pathology, Italy. 13-16 October) A 39.
- 31 Shah, S.I., Smith, M., Parker, I., Ullah, G., **Demuro, A.**, (2018) CellSpecks: A Software for Automated Detection and Analysis for Calcium Channels in Live Cells *Biophysical Journal* 114 (3), 291a
- 32 Toglia, P.T., **Demuro, A.**, Parker, I., Ullah, G., (2018) Mitochondrial Dysfunction due to Intracellular Beta Amyloid Oligomers. *Biophysical Journal* 114 (3), 660a-661a
- 33 Lioudyn, M.I., Despante, A., Busciglio J., Parker, I., **Demuro, A.**, (2018) Altered IP3R-Mediated Calcium Signaling in Down Syndrome Human Cortical Astrocytes *Biophysical Journal*
- 34 **Demuro, A.** (2018) Intracellular Injection of Brain Extracts from AD Patients into Xenopus Oocytes Evokes Ca²⁺ Release from Intracellular Stores. Proceedings of the 4th Neurological Disorders Summit (NDS-2018). *J Neurol Exp Neurosci* 4(Suppl 1): S1-S50