



Villa Borromeo, Rubano (PD)

# DSB RETREAT

26-27 ottobre 2023



DIPARTIMENTO DI  
SCIENZE BIOMEDICHE



UNIVERSITÀ  
DEGLI STUDI  
DI PADOVA

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SARTORIUS

# 26/10

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Welcome from the former  
**director Marco Sandri**

**TALKs!** New faces at the DSB

**VIDEO CONTEST!** PhD and Postdocs

**TALKs!** CNR Researchers

**TALKs!** DSB groups

**DSB IN THE CITY**

Selected short talks

**ROUND TABLE**

*NUTRIZIONE E MOVIMENTO*

Live @YouTube

DSB APERITIF

# 27/10

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**TALKs!** DSB groups

**KEYNOTE LECTURE**

Silvia G. Priori

**TALK!** Third Mission

**POSTER SESSION and beer**

POSTER and DSB IN THE CITY

**AWARDS**

Concluding remarks from the new  
**director Prof. Rosario Rizzuto**

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THURSDAY

26/10

9:30 – 10:00

Welcome from the former Director - MARCO SANDRI

First Session  
**New faces at the DSB**

**Chair:**  
**Paloma Garcia Casas**

10:00

**The mitochondrial sites of contact with the nucleus**

Michelangelo Campanella

*Mitochondrial Cell Biology and Pharmacology lab*

10:20

**What genetic variations tell us: the case of neurodevelopmental disorders**

Emanuela Leonardi

*BioComputing UP lab*

10:40

**Impact of perinatal and adult stroke on brain network and function**

Gabriele Deidda

*Neuron-glia signaling in brain function and dysfunction lab*

**Contest**

[click here to vote](#)

11:00

**"DSB IN THE CITY AWARD" CONTEST**

PhD students (4 x 3' videos for scientific divulgation)



11:20

*Coffee break & Poster View*

Second Session  
**New faces at the DSB**

**Chair: Alex Rizzato**

11:50

**Human neuromuscular plasticity studied in vivo by HD-EMG**

Giuseppe De Vito

*Muscle Contractility And Neuromuscular Plasticity lab*

12:10

**Structural rather than catalytic role for mitochondrial respiratory chain supercomplexes**

Erika Fernandez-Vizarra

*Mitochondrial medicine lab*

**Contest**

[click here to vote](#)

12:30

**"DSB IN THE CITY AWARD" CONTEST**

Post-doc researchers (4 x 3' videos for scientific divulgation)



12:50

*Lunch*

# 26/10

THURSDAY

Third Session  
**CNR Researchers**

**Chair: Jacopo Agrimi**

**14:10**  
**Function and dysfunction of brain neuronal circuits**  
Claudia Lodovichi  
*Circuit formation and function in the brain lab*

**14:30**  
**Dynamic chemogenetic reporters to decipher membrane contacts**  
Riccardo Filadi  
*Ca<sup>2+</sup> and cAMP signaling in physiology and pathology lab*

**14:50**  
**Seeking for metabolic opportunities in peripheral nerve tumors associated to Neurofibromatosis type 1**  
Ionica Masgras  
*Mitochondria in Cell Death and Cancer lab*



**15:10**  
*Coffee break & Poster View*

Fourth Session  
**DSB groups**

**Chair:**  
**Caterina Marchioretti**

**15:40**  
**Mechanisms of initiation of cortical spreading depression, the earliest measurable feature of the migraine attack**  
Daniela Pietrobon  
*Migraine Pathophysiology lab*

**16:00**  
**Myc and mitochondria: is it all plain sailing?**  
Gyorgy Szabadkai  
*Regulation of the Mitochondrial Proteome lab*

**16:20**  
**Arrhythmogenic cardiomyopathy: a sniper attacking the heart from multiple sides.**  
Tania Zaglia  
*Autonomic Control of Cardiac Function lab*



**16:40**  
*Fast Break*

Fifth Session  
**Live streaming @YouTube DSB**

**Moderator:**  
**Anna De Roberto**

**17:10**  
**Young DSB members - Scientific divulgation (7' selected talks / 2 PhD students + 2 Post-doc researchers)**

**17:45**  
**ROUND TABLE "NUTRIZIONE E MOVIMENTO"**



**19:00**  
*Aperitif*

# 27/10

FRIDAY

First Session  
**DSB groups**

**Chair: Davide Steffan**

**9:30**

**Targeting mitochondria to dampen inflammatory responses**

Antonella Viola

*Inflammation and Immunity lab*

**9:50**

**Fam20C, the (neglected) master kinase of the cell secretory pathway**

Mauro Salvi

*Phosphorylation Signaling in Health and Disease lab*

**10:10**

**Toxic affairs at the neuromuscular junction: degeneration, regeneration and remodelling**

Ornella Rossetto

*Neuroparalysis and Neuroregeneration lab*



**10:30**

*Coffee break & Poster View*

Second Session  
**DSB groups**

**Chair: Laura Fusco**

**11:00**

**Monitoring organelle contact sites dynamics in vitro and in vivo**

Tito Cali

*Protein crystallography and cryoEM lab*

**11:20**

**Diving and hyperbaric medicine: oxinflammation at depth**

Gerardo Bosco

*Nutrition and Exercise Lab (NUTEXlab) lab*

**11:40**

**Muscle atrophy, the costamere and the molecular chaperones Grp94 and melusin**

Luisa Gorza

*Chaperones in Muscle Differentiation and Disease lab*



**12:00**

*Lunch*

**Keynote lecture**

**Chair: Rosario Rizzuto**

**13:20**

**The fascinating journey of gene therapy for the heart**

Silvia G. Priori

Third Session  
**DSB groups**

**Chair: Samuele Negro**

**14:20**

**Mitochondrial calcium signalling in skeletal muscle**

Cristina Mammucari

*Mitochondrial Calcium Signaling lab*

FRIDAY

27/10

**14:40**

**MicroRNAs in HTLV-1 infection and T-cell transformation**

Donna Mia D'Agostino

*Post-transcriptional gene regulation in cancer cells lab*

**15:00**

**40 years of inositol 1,4,5-trisphosphate in skeletal muscle: dreams and facts**

Pompeo Volpe

*Pathophysiology of Striated Muscles lab*

**Third Mission**

**15:20**

**Third Mission @DSB: we share, we patent, we teach**

Giorgia Pallafacchina / Regina Tavano



**15:40**

*Poster Session & Beer*

**17:30**

**"DSB IN THE CITY" AWARDS AND POSTER AWARDS**

("M. Caleo" prize for the PhD student poster / "T. Pozzan" prize for the Post-doc researcher poster)

**17:45**

**Concluding remarks by the new Director - ROSARIO RIZZUTO**

**Sponsor**

**SERENA TEDESCO - Cliniscience**

s.tedesco@cliniscience.com

**MASSIMILIANO DI MATTEO - Sartorius**

massimiliano.dimatteo@sartorius.com

**ALFONSO FERONE - Starlab**

Alfonso.Ferone@starlab.it

**MASSIMO RUGGERO - Elettrofor**

ruggero@elettrofor.it

**ADONELLA BRUSON - Euroclone**

adonella.bruson@gmail.com

**STEFANO DRAGO - Biosigma**

sdrago@biosigmaeu.com

## POSTER LIST

Posters are always on display during the retreat.

N°	First Author	Title
1	Agostini L et al.	Guide connectivity between cortical organoids and host brain via intravital 3D bioprinting
2	Agrimi J et al.	Male violence disrupts protective estrogen receptor $\beta$ signaling in the female hippocampus
3	Albanesi M et al.	Impact of visual experience manipulation on neuronal circuit activity and behaviour in zebrafish larvae
4	Amoretti S et al.	Identification of a novel factor promoting acetylcholine receptors clustering at the neuromuscular junction
5	Arnst N et al.	Role of extracellular ATP/P2X7 receptor signaling axis in Alzheimer's disease-linked neuroinflammation
6	Arusei RJ et al.	Cardioprotective effects of monoamine oxidase inhibitors against Duchenne-associated cardiomyopathy
7	Barazzuol L et al.	Untangling inter organelle contact dynamics <i>in vivo</i>
8	Benetollo A et al.	LGMDR3 and CFTR corrector C17: characterization of pharmacological properties and <i>in vivo</i> efficacy
9	Boschelle C et al.	The role of androgen receptor in renal cancer
10	Bregolin E et al.	Dissecting the role of androgen receptor in the central nervous system
11	Brondi M et al.	Alterations in olfactory-motor behaviour and neuronal activity in a mouse model of Parkinson's disease
12	Cigalotto L et al.	Inter-organelle communication in cancer: the role of ER-mitochondria contacts in glioblastoma
13	Cuboni G et al.	Impact of perinatal stroke on motor and cognitive functions
14	Čunátová et al.	Pathological molecular mechanisms underlying <i>COA8</i> loss of function
15	D'Angelo D et al.	Unravelling the role of CLPB in mitochondrial calcium homeostasis
16	Del Conte A et al.	RING-PyMOL: residue interaction networks of structural ensembles and molecular dynamics
17	D'Este G et al.	Boosting nerve regeneration in ALS by targeting the neuromuscular junction
18	Di Palma M et al.	A structural biology approach to fight antimicrobial resistance: X-ray crystallographic investigation of the antibiotic resistance factor AlbA in complex with pyrrolo[2,1-c][1,4]benzodiazepines
19	Di Spiezio A et al.	Analysis of astrocyte calcium activity mediated by $\alpha 7$ nicotinic receptor in a novel Alzheimer's disease model
20	Dumitras AG et al.	Identification of new biomarkers monitoring dmd pathology and response to treatment
21	Esposito M et al.	MUSA1 is a novel critical regulatory element for Z-line homeostasis and skeletal muscle function
22	Fontecha-Cuenca C et al.	Building the blocks for a nanoparticle-protein bioconjugation technology
23	Friego E et al.	Effects of downregulation of subunits e and g of <i>Drosophila melanogaster</i> ATP synthase <i>in vivo</i>
24	Fusco L et al.	MXene detection in cells and tissues: an alternative cell labeling system in mass cytometry
25	Giacchin G et al.	A high-content in vitro screening to identify new mitophagy-activating compounds
26	Giro L et al.	Immune impact and detection of nanoplastics in human blood at the single-cell level
27	Granuzzo S et al.	Development of a yeast-based system to remove and recover heavy metals
28	Greco N et al.	Heparanase as key regulator of epithelial to mesenchymal transition (EMT) in breast cancer
29	Gregoris F et al.	In silico investigation of the interplay: VHL syndrome's influence on AHR activity and its implications in clear cell renal cell carcinoma (ccRCC)
30	Laquatra C et al.	A glimpse on TRAP1
31	Marin A et al.	Exploring macrophage mitochondrial (dys)function in tissue-specific and systemic aging
32	Morbideilli M et al.	The importance of nanoparticle coating structural design in the development of nanovaccines
33	Moro N et al.	Muscle RING finger-1 is required to prevent age-related myocardial hypertrophy and interstitial remodeling
34	Pezzini C et al.	Understanding BMP signature in cancer cachexia
35	Quezada Meza C et al.	Characterization of <i>CSNK2B</i> mutants related to Poirier-Bienvenu neurodevelopmental syndrome (POBINDS)
36	Rahhali K et al.	Mitochondrial ATP-sensitive potassium channel in cardiac pathophysiology
37	Righetto F et al.	CRISPR-assisted hybrids generation enables faster evaluation of fruitful breeding in winery yeast strains
38	Ronfini M et al.	Circulating muscle-derived miR-206 links skeletal muscle dysfunction-to-heart autonomic denervation
39	Sánchez-Rodríguez R et al.	Longitudinal single-cell analysis reveals SARS-CoV-2 monocyte infection: a new route defining COVID-19 severity
40	Santalla M et al.	Endoplasmic reticulum as key player in hereditary spastic paraplegia pathogenesis: unravelling the mechanisms to recover cell function
41	Sarto F et al.	Age-related alterations in human motor units properties and in muscle innervation profile
42	Spinelli F et al.	The role of mitochondrial cations homeostasis in the control of the inflammatory response
43	Tambaro M et al.	Induced spindles in the barrel cortex of anesthetized rats constitute macroscopic active (self-sustained) oscillators
44	Veloso PM et al.	Maturation of dendritic cells by poli(oxazoline)-coated nanoparticles: a potential vaccine formulation?
45	Vitale M et al.	Mechanisms of initiation of cortical spreading depression
46	Caccin P, Commissione Terza Missione	DSB public engagement



## **DSB RETREAT WEBSITE**



### **LOCATION**

**Villa Borromeo**  
Via della Provvidenza, 61,  
35030 Sarmeola (PD)

Organized by *Christian Borgo, Francesco Campa, Leonardo Nogara, Vanina Romanello*  
with the support of *Silvia Pertegato, Roxana M. Florea, Edilia Meneghini, Eleonora Cosmi, Sabrina Geron*