CURRICULUM VITAE

Massimo MICARONI, PhD

Present work address
Centre for Cellular Imaging,
the Sahlgrenska Academy,
University of Gothenburg,
Medicinaregatan 7A
Box 413, 40530 – Gothenburg
Sweden
Web:http://www.cf.gu.se/english/Centre_for_Cellular_Imaging/
Tel: +46 (0)72 941 7425
Mobile: +46 (0)76 622 9804
Email: massimo.micaroni@gu.se
Skype: massimo.micaroni

Home address
Mandolingatan 46, LGH1401
42154 – Gothenburg
Sweden

Nationality: Italian
Date of birth: 6 February 1973
Place of birth: Pescara, Italy
Languages: Italian (mother tongue)
English (excellent written and oral expression)

DEGREEs / QUALIFICATIONs

Dec 2003	Awarded Dottorato (PhD) in 'Molecular Pathology and Tumor Morphology', University "G. d'Annunzio" of Chieti and Pescara, Chieti, Italy.
May 1999	Gained Teachers' Certificate (Biology), University of L'Aquila, L'Aquila, Italy.
Oct 1997	Awarded Biological Science Degree (107/110), University of L'Aquila, L'Aquila, Italy.
Jul 1991	Bachelor of Science, Liceo "G. Galilei", Pescara, Italy.

PRESENT JOB POSITION

Apr 2016 – to present Electron Microscopy (EM) staff scientist at the 'Centre for Cellular Imaging' (CCI), University of Gothenburg, Sweden, coordinated by Dr. Julia Fernandez-Rodriguez. As member of the imaging facility I provide the EM service for users at the University. I am also involed in setting new protocols and combining the electron and light microscopy technologies for correlative methodology (CLEM) working with both mammalian cell and tissue samples.

PREVIOUS EXPERIENCEs

Nov 2015 – Mar 2016. Researcher/consultant in EM at the School of Pharmaceutical Science and Technology, Dalian University of Technology, Dalian, China. I supported the local research/ers, mostly in life sciences, focusing on the use of the EM technology in the nascent imaging facility.

Aug 2015 – Nov 2015. Visiting lab of Prof. Feliciano Protasi, University "G. d'Annunzio" of Chieti and Pescara, Chieti, Italy. I supported the research program of the Protasi's lab members using 3D electron tomography and cryo-imuno EM on murine muscle samples to elucidate the ultra-structural organization of T tubule in muscle cells using murine models to study degenerative muscle disorders.

Apr 2015 – Jun 2015. Visiting lab of Prof. Gerry Melino, University of 'Tor Vergata', Rome, Italy, where I was implementing my biological molecular skills in particular in analysis of mRNA and miRNA. I was involved in being active part of projects focused on establishing the cell signaling drifting the cell to apoptosis by using molecular biology techniques (e.g. miRNA, RT-PCR).

Mar 2014. **I quit from the EM staff scientist position I was running in Exeter, UK (see below). Together with my wife (she was also in science) we decided to focus full time on our older boy diagnosed in the ASD (autistic spectrum disorder). I had this one year break before to look for a new job position once our boy's improvements encouraged us to go on.**

Jan 2013 – Mar 2014. Experimental Officer for EM in the Bioimaging Centre, School of Biosciences, College of Life and Environmental Sciences, University of Exeter, Exeter, United Kingdom. The position entailed provision of electron microscopy services for the Institute. My position as member of the Biomedical Informatics Hub was supported by the Wellcome Trust. I was responsible for maintaining the EM lab offering the microscopy services to the school, other universities and commercial interests. I established the new laboratory and begun to spread the knowledge of the most modern EM applications that have been developed during the last two decades. I was involved in morphological analysis in several projects, mostly focused on membrane trafficking in fungi, and investigating how fungi strands infect plants (e.g. rice). I also supervised staff and I managed machineries present in the Bioimaging Centre, which features a JEOL TEM 1400 transmission microscope, and the JEOL JSM-6390LV scanning electron microscope.

Aug 2011 – Dec 2012. Research officer, Division of Molecular and Cell Biology, Institute for Molecular Bioscience, The University of Queensland, Brisbane, QLD, Australia, in the laboratory of Prof. Jennifer L. Stow. My research focused on characterization of the roles of Rab6, p230 and golgin97 in the regulation of protein trafficking (i.e. TNF) in inflammatory macrophage and natural killer cells.

Mar 2009 – Aug 2011. Research officer, Division of Molecular and Cell Biology, Institute for Molecular Bioscience, The University of Queensland, Brisbane, QLD, Australia, in the laboratory of Dr. Brad J. Marsh. The main project was the investigation of membrane trafficking and secretion of

proteins in HeLa cells and insulin in immortalised pancreatic β-cell lines (i.e. MIN6). The experimental approach had a heavy emphasis on expression of tagged proteins, RNAi, confocal indirect immuno-fluorescence microscopy, live cell imaging and 2D/3D correlative electron microscopy/tomography.

Apr 2004 – Feb 2009. Member of the **Te**lethon **E**lectron **M**icroscopy **Co**re **F**acility (TeEMCoF), "Consorzio Mario Negri Sud" Research Institute, Santa Maria Imbaro (Chieti), Italy, directed by Dr. Roman S. Polishchuk.

Nov 2003 – Feb 2009. Post-doctoral research fellow in the Unit of Intracellular Traffic in the Department of Cell Biology and Oncology, "Consorzio Mario Negri Sud" Research Institute, Santa Maria Imbaro (Chieti), Italy, coordinated by Dr. Alberto Luini, under supervision of Dr. Alexandre A. Mironov. The main project was focused on the characterisation of Ca^{2+} signalling during intra-Golgi trafficking. Molecular and cell biology approaches were used, supported by morphological analyses using immunolabelling techniques at light and electron microscopy levels.

Jan 2000 – Oct 2003. PhD Fellow in 'Molecular Pathology and Tumor Morphology' in the Department of Oncology and Neuroscience, University "G. d'Annunzio" of Chieti and Pescara, Chieti, Italy, coordinated by Prof. Piero Musiani. The project was focused on the morphological characterisation of surgically obtained human prostate tumour tissues.

Dec 1998 – Dec 1999. Italian Telethon Fellow as postgraduate position in the Department of Experimental Medicine, University of L'Aquila, Italy, coordinated by Prof. Anna Teti. The project focused on the characterisation of molecular mechanisms of bone metastatic processes of human melanoma and breast cancer using an *in vivo* Balb-c mouse model, examining the role of selected oncogenes (mainly c-myc and c-src) on the proliferation and invasion of cancer cells in bone marrow tissue.

Nov 1997 – Nov 1998. Mandatory postgraduate training, Department of Experimental Medicine, University of L'Aquila, Italy, coordinated by Prof. Edoardo Alesse.

Jun 1996 – Oct 1997. Pregraduate training, Department of Experimental Medicine, University of L'Aquila, Italy, coordinated by Prof. Edoardo Alesse.

EDITORIAL BOARD member

Present

Biochemistry and Molecular Biology Letters (*Trade Science Inc.*)	(2013-present)
BMC Cell Biology (*BioMedCentral*)	(2014-present)
Cell Biology (*SciencePG*)	(2018-present)
Communicative & Integrative Biology (*Taylor & Francis*)	(2014-present)
International Journal of Cancer & Therapeutics (*Helics Group*)	(2018-present)
Journal of Microscopy and Ultrastructure (*Elsevier*)	(2014-present)
New Journal of Science (*Hindawi*)	(2013-present)
Tissue & Cell (*Elsevier*)	(2014-present)

Former

Biochemistry & Molecular Biology (*Sciknow*)	(2013-2015)
Biohelikon Cell Biology (*Biohelikon*)	(2013-2015)
Frontiers of Biological and Life Sciences (*Sciknow*)	(2013-2015)
Immunity & Diseases (*Biohelikon*)	(2013-2015)

REVIEWIER for

Anti-Cancer Agents in Medicinal Chemistry (*Bentham*)	(2015)
BioEssays (*Wiley*)	(2014)
Cell Communication and Adhesion (*Informa Helthcare*)	(2011-2012)
Journal of Histochemistry and Cytochemistry (*Sage*)	(2014)
Journal of Microscopy (*Wiley*)	(2014)
Experimental Dermatology (*Wiley*)	(2017)
Proteome Science (*BioMed Central*)	(2017)
Ultrastructural Pathology (*Taylor & Francis*)	(2017)

SCIENTIFIC ASSOCIATION

Aug 2010 – Nov 2013. Associate faculty member (Cell Biology, Membranes and Sorting) of the "Faculty of 1000 Biology. http://f1000.com/thefaculty/member/1247126512471944

Jun 2018 – present. Core Technologies for Life Sciences (CTLS)

GUEST EDITOR

2023 – BMC Mol Cell Biol – Special Issue: "Membrane and Protein Trafficking"

2021 – **Biomolecules** – Special Issue: "Natural and Synthetic Compounds in Neurodegenerative Disorders"

2017 – **Tissue & Cell** – Special Issue: "Golgi-related human disorders"

GRANT application

2012 – Australian Research Council (ARC) Developmental Project – *Secretory pathway Ca^{2+}-ATPase pump type 1 (SPCA1) isoforms and their role in membrane trafficking.* **not granted**

SKILLs

I got an advanced level of understanding and skills in the operation of electron microscopes, and the interpretation of data from microscopy and related techniques. Preparation, imuno-labeling (Tokuyasu, gold-enhancement, HRP-DAB), cutting, examination and tomograpgy/3D reconstruction (using software including IMOD, Inspect-3D, eTomo and Amira) and analysis of plastic and cryo-samples using transmission electron microscopy (using FEI (Morgagni, Tecnai 12, Tecnai 20, Talos 120), JEOL 1011, and Zeiss Leo electron microscopes) were routine since my PhD training, and especially during postdoctoral experiences in the laboratory of Dr. Alexandre A. Mironov (5 years in Italy) and Dr. Brad J. Marsh (3 years in Australia).

I have acquired a high level of experience in cellular- and immune-EM, cryo-fixation (using BalTec HPM010, Leica EM PACT and EM PACT2, CryoCapCell high pressure freezing systems) and freeze substitution (Leica AFS) methods were extensively used since my postdoctoral positions. Preparation of purified protein for Cryo-EM (Vitrobot). I also acquired knowledge on Scanning Electron Microscopy (SEM) and cryo-SEM on organic and inorganic samples. My knowledge of light microscopy approaches has also been useful for the development of the projects with which I have been involved, such as confocal live cell imaging techniques (such as FRET, FRAP, FLIP), correlative light-electron microscopy (CLEM). I'm also familiar with the transmission electron tomography on chemical- or HPF-fixed samples, and microinjection in living cells of DNA, proteins and drugs.

I also have an extensive experience in biochemistry, and cell and molecular biology techniques; purification of proteins and nucleic acids; mutagenesis, making constructs, cloning, recombinant DNA and protein expression; protein and DNA purification, and analysis using biophysical techniques, including molecular cloning and targeted mutagenesis, SDS-PAGE, immune-blotting, immune-precipitation, Western, Northern and Southern blotting, EMSA, PCR, RT-PCR, RNAi, ELISA; basic mammalian cell culture and extract preparation, *in vivo* and *in vitro* work with radio-label tracers.

Managing experiments with live animals (mainly mice and rats) and virus handling (i.e. ts045- VSV).

Experience with laboratory duties from ordering to stock management, and plus computer literacy with Word, Excel, Illustrator, PowerPoint, Prism, Photoshop, FiJi/ImageJ softwares.

Keen attitude for interactions with colleagues, maintaining awareness of the new scientific literature and ability to conduct and develop parallel collaborations. I also have significant experience in managing staff and supervising students (pre- and post-graduate), as well as collaborative and servicing project mainly since I got the position as EM staff scientist.

I also have undertaken a teaching course for a semester at the "G. d'Annunzio" University of Chieti (Cell and Molecular Biology) during my last year of PhD fellow. I also have had opportunities to supervise undergraduate and graduate students during laboratory-based projects and I'm fully aware of the kind of projects that students, who often start with little practical experience, can undertake.

TEACHING EXPERIENCE

2017-to present – Lecturer in "Electron microscopy: principle and applications in life sciences". Annual PhD course at the University of Gothenburg, Sweden.

PUBLICATIONs

P30 Bagge Olofsson R, Berndtsson J, Urzí O, Lötvall J, **Micaroni M**, Crescitelli R. *Three-dimensional reconstruction of interstitial extracellular vesicles in human liver as illustrated by electron tomography.*
J. Extracell. Vesicles 2023; **XX**(X): xxx-xxx. SJR: 3.525 IF:14.930

P29 Barreto Henriksson HK, Hellström A, Hesse C, Nilsson AK, Dagerås M, Falk M, Ingvarsson E, **Micaroni M,** Hård AL. *Morphology and biological data in cord blood eryhtrocyte units resembles adult units after processing and storage.*
Transf. Apheresis Sci. 2022; **61**(3): 103356. SJR: 0.490 IF: 1.900

P28 **Micaroni M**. *Looking for a treatment for Hailey-Hailey Disease: the importance of being consistent in case report*.
J. Cutan. Med. Sur. 2018; **22**(6): 660. SJR: 0.584 IF: 1.409

P27 Monterisi S, Lobo MJ, Livie C, Brescia M, Castle JC, Weinberger M, Baillie G, Musheshe N, Stangherlin A, Maizel R, Bortolozzi M, **Micaroni M**, Zaccolo M. *Phosphodiesterase 2A2 regulates mithocondria morphology and apoptotic cell death via local modulation of cAMP/PKA signaling.*
eLife 2017; **6**: e21374. SJR: 7.121 IF: 7.725

P26 Lampis S, Zonaro E, Bertolini C, Cecconi D, Monti F, **Micaroni M**, Turner RJ, Butler CS, Vallini G. *Selenite biotransformation and detoxification by Stenotrophomonas maltophilia SelTE02: novel clues on the route to bacterial biogenesis of selenium nanoparticles.*
J. Hazard Mat. 2017; **324** (part A): 3-14. SJR: 1.787 IF: 6.434

P25 **Micaroni M**, Giacchetti G, Plebani R, Xiao GG, Federici L. *ATP2C1 gene mutations in Hailey-Hailey disease and possible roles of SPCA1 isoforms in membrane trafficking.*
Cell Death Dis. 2016; **7** (6): e2259. Review SJR: 2.737 IF: 5.965

P24 **Micaroni M.** *Misinterpretation of ATP2C1 gene mutations.*
Indian J. Dermatol. Venereol. Leprol. 2016; **82** (3): 306-307. SJR: 0.589 IF: 1.948

P23 **Micaroni M.** *Correct reading frame helps to properly identify ATP2C1 gene mutations vs. polymorphisms.*
Clin. Exper. Dermatol. 2016; **41** (5): 558-559. SJR: 0.558 IF: 1.589

P22 Yu CH, **Micaroni M**, Puyskens A, Schultz TE, Yeo JC, Stanley AC, Lucas M, Kurihara J, Dobos KM, Stow JL, Blumenthal A. *RP105 engages phosphatidylinositol 3-kinase p110δ to facilitate the trafficking and secretion of cytokines in macrophages during mycobacterial infection.*
J. Immunol. 2015; **195** (8): 3890-3900. SJR: 3.571 IF: 4.985

P21 Soro V, Dutton LC, Sprague SV, Nobbs AH, Ireland AJ, Sandy JR, Jepson MA, **Micaroni M**, Splatt PR, Dymock D, Jenkinson HF. *Axenic culture of a candidate division TM7 bacterium from the human oral cavity and biofilm interactions with other oral bacteria*.
Appl. Environ. Microbiol. 2014; **80** (20): 6480-6489. SJR: 1.872 IF: 3.668

P20 Stanley AC, Wong CX, **Micaroni M**, Venturato J, Khromykh T, Stow JL, Lacy P. *The Rho GTPase Rac1 is required for recycling endosome-mediated secretion of TNF in macrophages.*

Immunol. Cell Biol. 2014; **92** (3): 275-286. SJR: 2.415 IF: 4.147

P19 **Micaroni M**, Stanley AC, Khromykh T, Venturato J, Wong CX, Lim JP, Marsh BJ, Storrie B, Gleeson PA, Stow JL. *Rab6a/a' are important Golgi regulators of pro-inflammatory TNF secretion in macrophages*.
PLoS One 2013; **8** (2): e57034. SJR: 1.772 IF: 3.534

P18 Fusella A*, **Micaroni M***, Di Giandomenico D, Mironov AA, Beznoussenko GV. *Segregation of Qb-SNAREs GS27 and GS28 in Golgi vesicles regulates intra-Golgi transport.*
Traffic 2013; **14** (5): 568-584. SJR: 3.802 IF: 4.714

P17 **Micaroni M**, Malquori L. *Overlapping ATP2C1 and ASTE1 genes in human genome: implications for SPCA1 isoforms expression?*
Int. J. Mol. Sci. 2013; **14** (1): 674-683. SJR: 0.769 IF: 2.339

P16 Di Paola S, **Micaroni M**, Di Tullio G, Buccione R, Di Girolamo M. *PARP16/ARTD15 is a novel endoplasmic-reticulum-associated mono-ADP-ribosyltransferase that interacts with, and modifies karyopherin-β1*.
PLoS One 2012; **7** (6): e37352. SJR: 1.982 IF: 3.730

P15 **Micaroni M**. *Calcium around the Golgi apparatus: implications for intracellular membrane trafficking*.
Adv. Exp. Med. Biol. 2012; **740** (18): 439-460. Review SJR: 0.792 IF: 1.825

P14 Storrie B, **Micaroni M**, Morgan GP, Jones N, Kamykowski JA, Wilkins N, Pan TH, Marsh BJ. *Electron tomography reveals Rab6 is essential to the trafficking of trans-Golgi clathrin and COPI- coated vesicles and the maintenance of Golgi cisternal number.*
Traffic 2012; **13** (5): 727-744. SJR: 3.954 IF: 4.652

P13 Frezza C, Zheng L, Folger O, Rajagopalan KN, MacKenzie ED, Jerby L, **Micaroni M**, Chaneton B, Adam J, Hedley A, Kalna G, Tomlinson IPM, Pollard PJ, Watson DG, Deberardinis RJ, Shlomi T, Ruppin E, Gottlieb E. *Haem oxygenase is synthetically lethal with the tumour suppressor fumarate hydratase*.
Nature 2011; **477** (7363): 225-228. SJR: 17.598 IF: 36.280

P12 **Micaroni M**. *The role of calcium in intracellular trafficking*.
Curr. Mol. Med. 2010; **10** (8): 763- 773. Review SJR: 2.553 IF: 5.212

P11# **Micaroni M**, Mironov AA. *Roles of Ca^{2+} and secretory pathway Ca^{2+}-ATPase pump type 1 (SPCA1) in intra-Golgi trafficking*.
Commun. Integr. Biol. 2010; **3** (6): 504-507. mini-Review SJR: 0.749

P10 **Micaroni M**, Perinetti G, Berrie CP, Mironov AA. *The SPCA1 Ca^{2+}-pump and intracellular membrane trafficking*.
Traffic 2010; **11** (10): 1315-1333. SJR: 4.549 IF: 5.278

P9 **Micaroni M**, Perinetti G, Di Giandomenico D, Bianchi K, Spaar A, Mironov AA. *Synchronous intra-Golgi transport induces release of Ca^{2+}-from the Golgi apparatus*.
Exp. Cell Res. 2010; **316** (13): 2071-2086. SJR: 2.425 IF: 3.609

P8 Weller SG, Capitani M, Cao H, **Micaroni M**, Luini A, Sallese M, McNiven MA. *Src kinase regulates the integrity and function of the Golgi apparatus via activation of dynamin 2*.
Proc. Natl. Acad. Sci. USA 2010; **107** (13): 5863-5868. SJR: 6.898 IF: 9.771

P7 Boncompagni S, Rossi AE, **Micaroni M**, Hamilton SL, Dirksen RT, Franzini-Armstrong C, Protasi F. *Characterization and temporal development of cores in a mouse model of a malignant hyperthermia*.
Proc. Natl. Acad. Sci. USA 2009; **106** (51): 21996-22001. SJR: 7.025 IF 9.432

P6 # Orso G, Pendin D, Liu S, Tosetto J, Moss TJ, Faust JE, **Micaroni M**, Egorova A, Martinuzzi A, McNew JA, Daga A. *Homotypic fusion of ER membranes requires the dynamin-like GTPase atlastin*.
Nature 2009; **460** (7258): 978-983. FFa:12 SJR: 15.185 IF: 34.480

P5 Boncompagni S, Rossi AE, **Micaroni M**, Beznoussenko GV, Polishchuk RS, Dirksen RT, Protasi F. *Mitochondria are linked to calcium stores in striated muscle by developmentally regulated tethering structures*.
Mol. Biol. Cell 2009; **20** (3): 1058-1067. SJR: 5.862 IF: 5.979

P4 Beznoussenko GV, Dolgikh VV, Seliverstova EV, Semenov PB, Tokarev YS, Trucco A, **Micaroni M**, Di Giandomenico D, Auinger P, Senderskiy IV, Skarlato SO, Snigirevskaya ES, Kommissarchik YY, Pavelka M, De Matteis MA, Luini A, Sokolova YY, Mironov AA. *Analogs of the Golgi complex in microsporidia: structure and avesicular mechanisms of function*.
J. Cell Science 2007; **120** (7): 1288-1298. SJR: 5.475 IF: 6.383

P3 # Frezza C, Cipolat S, Martins de Brito O, **Micaroni M**, Beznoussenko GV, Rudka T, Bartoli D, Polishchuk RS, Danial NN, De Strooper B, Scorrano L. *OPA1 controls apoptotic cristae remodelling independently from mitochondrial fusion*.
Cell 2006; **126** (1): 177-189. FFa: 9 SJR: 23.831 IF: 29.194

P2 # Kweon HS, Beznoussenko GV, **Micaroni M**, Polishchuk RS, Trucco A, Martella O, Di Giandomenico D, Marra P, Fusella A, Di Pentima A, Berger EG, Geerts WJC, Koster AJ, Burger KNJ, Luini A, Mironov AA. *Golgi enzymes are enriched in perforated zones of Golgi cisternae but excluded from COP-I vesicles*.
Mol. Biol. Cell 2004; **15** (10): 4710-4724. FFa: 8 SJR: 6.633 IF: 7.517

P1 De Giovanni C, Landuzzi L, Nicoletti G, Astolfi A, Croci S, **Micaroni M**, Nanni P, Lollini PL. *APC10.1: an $APC^{MIN/+}$ intestinal cell line with retention of heterozygosity*.
Int. J. Cancer 2004; **109** (2): 200-206. SJR: 2.078 IF: 4.416

Total Impact Factor (Scopus): 216.706 (231.636) Citations received: 3260 *h* index: 20

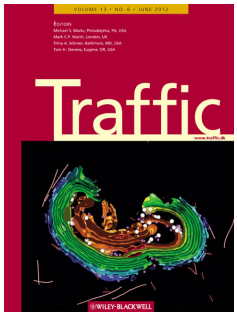
Total SJR (SCImago Ranking): 135.072 (138.597)

* = *These authors contributed equally to this work*

\# = *These works were evaluated in Faculty of 1000 Biology*

COVERs of International Journal

C2 **Traffic**, **13** (6); June, 2012. **Three-dimensional model of the Golgi apparatus in a Rab6-depleted HeLa cell at a resolution of 4 nm**. The model was prepared from electron tomography of a 300 nm thick HeLa cell section. Golgi cisternae are color coded from *cis* to *trans*, blue to tan. Accumulated COPI- and clathrin- coated structures are purple and white, respectively. Microtubules are modeled as linear rods. Bar = 0.5 μm. For a full description, see Storrie B et al. (Traffic 2012; 13 (5): 727-744).



C1 **J. Cell Science**, **120** (7); 1 April, 2007. **Three-dimensional reconstruction of the tubular network in *Paranosema grylli***. The meront tubular network, which contains tubular (brown) and varicose (yellow) parts surrounded by ER (green), was visualized by EM tomography. See article by G. V. Beznoussenko et al. (pp. 1288-1298).

BOOK CHAPTERs

B2 **Micaroni M**, Mironov AA, Rizzuto R. *The role of Ca^{2+} in the regulation of intracellular transport*. **Chapter 2.8**. In: The Golgi apparatus – State of the art 110 years after Camillo Golgi's discovery Mironov-Pavelka Eds. – Springer, Wien-New York, 2008, 143-160.

B1 Mironov AA, **Micaroni M**, Beznoussenko GV. *4D microscopy*. In: EMC 2008 – 14th European Microscopy Congress 1–5 September 2008, Aachen, Germany. Volume 1: Instrumentation and Methods. Luysberg-Tillmann-Weirich Eds. – Springer, Berlin-Heidelberg, 2008, 789-790.

EDITORIALs

E2 **Micaroni M**. *Editorial for the special issue on "Golgi-related human disorders"*.
Tissue Cell 2017; **49** (2A): 131-132.

E1 **Micaroni M**. *Interactions of the calcium modulating and transporting ORAI1 and SPCA2 promote oncogenic activities.*
Biohelikon Cell Biol. 2014; **2**: a11.

ARTICLE RECOMMENDATIONs for F1000 BIOLOGY

Marsh B and **Micaroni M**: F1000 Recommendation of [Miserey-Lenkei S et al., Nat Cell Biol 2010, 12(7): 645-654]. Faculty of 1000, 14 Oct 2010; *DOI: 10.3410/f.4449959.5491063*.

PUBLISHED ABSTRACTs

A12 Boncompagni S, Rossi AE, **Micaroni M**, Hamilton SL, Dirksen RT, Franzini-Armstrong C, Protasi F. *Clues to the formation of cores in a mouse model of malignant hyperthermia*.
Acta Physiologica 2009; **197** (Supplement 672): P23.

A11 Boncompagni S, Rossi AE, **Micaroni M**, Hamilton SL, Dirksen RT, Franzini-Armstrong C, Protasi F. *Clues to the formation of cores in a mouse model of malignant hyperthermia*.
J. Muscle Res. Cell. Motil. 2009; **30** (5-6): P7.2.

A10 Boncompagni S, Rossi AE, **Micaroni M**, Hamilton SL, Dirksen RT, Franzini-Armstrong C, Protasi F. *Clues to the formation of cores in a mouse model of malignant hyperthermia*.
B.A.M. 2009; **19** (4): 198.

A9 Boncompagni S, Rossi AE, **Micaroni M**, Beznoussenko GV, Polishchuk RS, Dirksen RT, Protasi F. *Positioning of mitochondria to Ca^{2+} release units in muscle is developmentally regulated and stabilized by tethers*.
J. Muscle Res. Cell. Motil. 2008; **29** (6-8): 285, P7.07.

A8 Bonconpagni S, **Micaroni M**, Beznoussenko GV, Polishchuk RS, Protasi F. *3D-reconstruction of the structural association between triads and mitochondria in skeletal fibers*.
Biophys. J. 2008; **94** (2): 509, P1499, B475.

A7 Shityakov SW, **Micaroni M**, Mironov AA, Luini A. *Attempts of facilitated trafficking DF508-CFTR to the plasma membrane*.
J. Cystic Fibrosis 2007; **6** (Suppl 1): S7, 29.

A6 **Micaroni M**, Bianchi K, Rizzuto R, Perinetti G, Spaar A, Di Giandomenico D, Luini A, MironovAA. *Cargo passage through the Golgi apparatus induces Golgi lumenal Ca^{2+} fluctuations*.
FEBS J. 2007; **274** (Suppl 1): 102, B1,24.

A5 Boncompagni S, Kern H, **Micaroni M**, Hofer C, Forstner C, Mödlin M, Mayr W, Fanò G, Carraro U, Protasi F. *Effects of long-term denervation and functional electrical stimulation (FES) on the organisation of the skeletal excitation-contraction coupling apparatus*.
Pflug. Arch. 2004; **448**: R49, D23.

A4 Boncompagni S, Kern H, **Micaroni M**, Fanò G, Hofer C, Forstner C, Mödlin M, Mayr M, Carraro U, Protasi F. *Functional electrical stimulation (FES) of long-term denervated and degenerated muscles (DDM) in humans: its effect on the rearrangement of the excitation-contraction coupling apparatus*.
J. Muscle Res. Cell. Motil. 2003; **24** (4-6): 354. V.10.

A3 Perez M, Migliaccio S, Taranta A, Festuccia C, Sciortino G, **Micaroni M**, Bologna M, Faraggiana T, Baron R, Teti A. *Osteoclastogenic potential of melanoma is independent of cell-cell contact, PTHRP and IL-6 synthesis, and determines increased c-src expression*.
Calcif. Tissue Int. 2000; **66** (Suppl 1): S17, O48.

A2 Teti A, Festuccia C, Perez M, Migliaccio S, **Micaroni M**, Bologna M, Faraggiana T. *Characterisation of tumor-induced osteoclastogenesis in vitro*.
J. Bone Min. Res. 1999; **14** (Suppl 1): S321, SA051.

A1 Festuccia C, Perez M, Migliaccio S, Taranta A, **Micaroni M**, Bologna M, Faraggiana T, Baron R, Teti A. *Characterisation of tumor-induced osteoclastogenesis in vitro*. **Tumori** 1999; **85** (5, Suppl 1): 75.

ACKNOWLEDGED in

- Scientific articles:

- Zecchini V *et al.* **Nature** 2023; 615(7952): 499-506. "…for the quantification of the volume of mitochondria from the TEM…".

- Lin L *et al.* **Heliyon** 2022; 8 (12): e12114. "…for his critical revision on the manuscript."

- Shibata A *et al*. **Acta Derm. Venereol.** 2013; 93: 719-720 ERRATUM in **Acta Derm. Venereol.** 2015; 95: 1040 "…The authors greatly appreciate that Dr Massimo Micaroni kindly noticed the mistake."

- Higuchi Y *et al.* **J. Cell Biol.** 2014; **204** (3): 343-357. "...Bioimaging Centre Exeter, for technical help with electron microscopy."

- Stow JL, Murray RZ. **Cytokine Growth Factor Rev.** 2013; **24** (3): 227-239. "...for providing movie frames represented in Figure 3."

- Mironov AA, Beznoussenko GV. **Histol. Histopathol.** 2011; **26** (1): 117-133. "...for help in preparation of Figure 1K."

- Fraldi A *et al.* **EMBO J.** 2010; **29** (21): 3607-3620. "...for technical support with FRAP experiments."

- PhD Thesis:

- Carlotta Dionigi, Ph.D. thesis 2023 "…for the assistance with transmission electron microscopy, sample preparation and image analysis.".

- Michelle Kha, Ph.D. thesis 2023 "…your help has been invaluable and I have learnt so much from you.".

- Stefania Rabasco, Ph.D. thesis 2023 "thank you for genuine commitment and mentoring about all-things TEM and sample preparation".

- Yuki Ichioka, Ph.D. thesis 2023 "…for input and high level of professionalism in the field of microscopy…".

- Jasmine Chebli, Ph.D. thesis 2021 "…for your scientific input and for your advice".

- Mahnaz Nikpour, Ph.D. thesis 2020 "…for the great help in electron microscopy".

- Pegah Nabavi, Ph.D. thesis 2018 "…for help with the electron microscopy".

- Amin MOttahedin, Ph.D. thesis 2017

MEETINGs AND WORKSHOPs

M29 NMI symposium. Stockholm, Sweden; August 2023.

M28 BNMI 2023 Symposium. Odense, Denmark; August 2023.

M27 SCANDEM 2018 Meeting. Lyngby, Denmark; June 2018.

M26 SCANDEM 2017 Meeting. Reykjavík, Iceland; June 2017.

M25 2nd Bridging Nordic Imaging Convention. Gothenburg, Sweden; April 2016.

M24 JEOL Workshop: TEM and SEM Tomography & Correlative Microscopy Technique. Potters Bar, England, UK; September 2013.

M23 3rd Brisbane Early Career Researcher Poster Symposium. Brisbane, QLD, Australia; November 2012. ***Poster presentation A#21***

M22 3rd Brisbane Cell and Developmental Biology Meeting. Brisbane, QLD, Australia; October 2012. ***Poster presentation P2#3***

M21 Beatson International Cancer Conference – Membrane Dynamics in Cancer. Glasgow, Scotland, UK; July 2012. ***Poster presentation 83*** F1000 Posters 2012, 3: 1352

M20 2nd Brisbane Early Career Researcher Poster Symposium. Brisbane, QLD, Australia; November 2011.

M19 2nd IMB/IMCB Symposium - Cell Organization: from Molecules to Disease. Brisbane, QLD, Australia; October 2011.

M18 1st Brisbane Cell and Developmental Biology Meeting. Brisbane, QLD, Australia; October 2010. ***Oral communication***

M17 1st Inter-Institute Poster Symposium – The University of Queensland. Brisbane, QLD, Australia; October 2010. ***Poster presentation 35***

M16 OzBio2010: "The Molecules of Life – from Discovery to Biotechnology". Melbourne, VIC, Australia; September 2010. ***Poster presentation POS-WED-293*** F1000 Posters 2010, 1:651

M15 Special FEBS Meeting: "The 2008 Golgi Meeting: membrane trafficking in global cellular responses". Pavia, Italy; September 2008. ***Poster presentation 122***

M14 3D-EM NoE Electron Tomography Course. Eindhoven, The Netherlands; October – November 2007.

M13 FEBS Workshop on "Invadopodia, podosomes and focal adhesions in tissue invasion". Santa Maria Imbaro (Chieti), Italy; September 2007.

M12 32nd FEBS Congress on "Molecular Machines". Wien, Austria; July 2007. ***Poster presentation B1- 2***

M11 FEBS Advanced Course on "Lipid Signalling pathways: from cell biology to novel drug discovery". Ortona (Chieti), Italy; June 2007. ***Poster presentation 29***

M10 6th international ELMI Meeting and Workshop on "Advanced Light Microscopy". Ofir, Portugal; May-June 2006. ***Poster presentation 30***

M9 EAMNet Pratical Course on "Imaging Molecular Interactions and Reactions by FRET". Heidelberg, Germany; September 2005.

M8 EMBO Practical Course on "Microinjection and Detection of Probes in Cells". Heidelberg, Germany; June 2005.

M7 2nd EAMNet Calcium Imaging Course for Cell Biologist. Barcelona, Spain; March 2005.

M6 13th European Microscopy Congress. Antwerp, Belgium; August 2004. ***Poster presentation LS3.P3***

M5 Workshop for Cryomethods: Ultramicrotomy and Immunolabelling. Utrecht, The Netherlands; July 2002.

M4 EMBO Practical Course on "Electron Microscopy, Immunocytochemistry and Stereology for Cell Biology". Heidelberg, Germany; May – June 2002.

M3 FEBS Advanced Course on "Lipid-Mediated Signalling in Cellular Functions". Santa Maria Imbaro (Chieti), Italy; June 2001.

M2 29th National Conference – Italian Society of Immunology. Abano Terme (Padova), Italy; June 2001.

M1 Advanced Course on "Neuroendocrin tumors", Chieti, Italy; Jan 2001.

FURTHER POSTERs (as non-attending co-author)

Po16 Gordon Research Conference - Cyclic Nucleotide Phosphodiesterases. Girona, Spain; July 2023. Rasmussen LH, Danielsen B, Elberling B, Kurczy M, Ranjbari E, **Micaroni M**, Andresen LC.

Po15 Gordon Research Conference - Cyclic Nucleotide Phosphodiesterases. Girona, Spain; July 2016. Monterisi S, Lobo M, Livie C, Surdo NC, Castle J, Weinberger M, Bortolozzi M, **Micaroni M**, Zaccolo M.

Po14 Lorne Infection and Immunity. Mantra Lorne, NSW, Australia; February 2014. ***Poster presentation 225***

Po13 6th Interuniversity Institute of Myology Annual Congress. Siena, Italy; October 2009. Boncompagni S, Rossi AE, **Micaroni M**, Hamilton SL, Dirksen RT, Franzini-Armstrong C, Protasi F.

Po12 14th European Microscopy Congress. Aachen, Germany; August 2008. Mironov AA, Beznoussenko GV, **Micaroni M**. ***I5.2/L1.2 P162***

Po11 52nd Biophysical Society Annual Meeting & 16th International Biophysics Congress. Long Beach (CA), USA; February 2008. Boncompagni S, **Micaroni M**, Beznoussenko GV, Polishchuk RS, Protasi F. ***B475***

Po10 30th European Cystic Fibrosis Conference (ECFC). Belek, Turkey; June 2007. Shityakov SW, **Micaroni M**, Mironov AA, Luini A. ***A029/S7***

Po9 European Cystic Fibrosis Society (ECFS) Basic Science Conference: "New Frontiers in Basic Science of Cystic Fibrosis". Tariva, Algarve, Portugal; April 2007. Mironov AA, Shityakov S, **Micaroni M**, Beznoussenko G, Parashuraman R, Luini A. ***S6.5 P.4***

Po8 14th Telethon Convention. Salsomaggiore Terme (Parma), Italy; Mar 2007. Polishchuk RS, Beznoussenko GV, **Micaroni M**, Mironov AA. ***Poster 310***

Po7 7th EMBO Annaberg Conference: "Membrane traffic in the secretory pathway". Schloss Goldegg, Austria; January 2007. Mironov AA, **Micaroni M**, Beznoussenko GV, Luini A. ***Poster 27***

Po6 5th Annual Retreat of Venetian Institute of Molecular Medicine (VIMM). Bertinoro (Forlì-Cesena), Italy; December 2006. Frezza C, Cipolat S, Martins de Brito O, **Micaroni M**, Beznoussenko GV, Rudka T, Bartoli D, Polishuck RS, Danial NN, De Strooper B, Scorrano L. ***Poster 3***

Po5 14th ECDO Euro Conference on Apoptosis: "Death or Survival? Fate in Sardinia". Chia (Cagliari), Italy; September – October 2006. Frezza C, Cipolat S, Martins de Brito O, **Micaroni M**, Beznoussenko GV, Rudka T, Bartoli D, Polishuck RS, Danial NN, De Strooper B, Scorrano L. ***Poster P-76, Lecture L-17***

Po4 14th European Bioenergetics Conference. Moscow, Russia; July 2006. Frezza C, Martins de Brito O, **Micaroni M**, Beznoussenko GV, Cipolat S, Bartoli D, Polishuck RS, Scorrano L. ***Poster 1.1.21***

Po3 13th Telethon Convention. Salsomaggiore Terme (Parma), Italy; March 2005. Polishchuk RS,

Beznoussenko GV, **Micaroni M**, Mironov AA, Luini A. ***Poster 322***

Po2 54th National Congress of Italian Society of Physiology. Chieti, Italy; September – October 2003. Boncompagni S, Kern H, **Micaroni M**, Hofer C, Forstner C, Mödlin M, Mayr W, Fanò G, Carraro U, Protasi F. ***Poster O61***

Po1 2nd International Conference on Cancer-Induced Bone Diseases. Davos, Switzerland; March 1999. Teti A, Perez M, Migliaccio S, Taranta A, Festuccia C, Sciortino G, **Micaroni M**, Bologna M, Faraggiana T, Baron R. Induction of osteoclastogenesis by melanoma cell line is independent of cell-cell contact.

ACADEMIC SUPERVISION

2012 Mr. Colin Xuan WONG – Honours student in Biotechnology, The University of Queensland, Australia

2007-2009 Mrs. Anna Lucia DI GUGLIELMO – Honours student in Pharmacy, University of Camerino, Italy

REFEREES

For references, you can contact:

Dr. **Julia FERNANDEZ-RODRIGUEZ** (April 2016-today) Centre for cellular Imaging Head, Univerisyt og Goteborg, Medicinaregatan 5A, Box 413, 405 30, Gothenburg, Sweden. Phone: +46-(0)31-78 6 9719; e-mail: juliafer@cci.sahlgrenska.gu.se

Prof. **Jenny L. STOW** (PostDoc supervisor Aug 2011-Dec 2012) IMB Deputy Director (Research) and Laboratory Head, Molecular Cell Biology Division, Institute for Molecular Biosciences, The University of Queensland, 306 Carmody Rd, 4072 Brisbane, Australia. Phone: +61 7 3346 2110; e-mail: j.stow@imb.uq.edu.au

Dr. **Brad J. MARSH** (PostDoc supervision Mar 2009-Aug 2011) Group leader, Institute for Molecular Biosciences, The University of Queensland, 306 Carmody Rd, 4072 Brisbane, Australia. email: marshbj@me.com

Dr. **Alberto LUINI** (PostDoc supervision Nov 2003-Feb 2009) past Director of the Department of Cell Biology and Oncology, "Consorzio Mario Negri Sud" Institute, S. Maria Imbaro (Chieti), Italy. Present position: Principal Investigator, Institute of Protein Biochemistry, National Research Council, Via Pietro Castellino 111, 80131 Napoli, Italy. Phone: +39 0816132 535; Fax: +39 0816132 277; email: a.luini@ibp.cnr.it

Dr. **Alexandre A. MIRONOV** (PostDoc supervision Nov 2003-Feb 2009) past Group leader, Department of Cell Biology and Oncology, "Consorzio Mario Negri Sud" Institute, S. Maria Imbaro (Chieti), Italy. Present position: Group leader, IFOM-IEO Campus, Via Adamello 16, 20139 Milan, Italy. Phone: +39 02 574303869; Fax: +39 02 57430323; email: alexandre.mironov@ifom.eu