

**BIOGRAPHICAL SKETCH**

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NAME: Michele Brischiaglio

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POSITION TITLE: Postdoctoral Research Associate

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
University of Padua, Padua, IT	BSc	09/2014	Biotechnologies
University of Padua, Padua, IT	MSc	09/2016	Industrial Biotechnologies
University of Padua, Padua, IT	PhD	03/2021	Biosciences
University of Padua, Padua, IT	Postdoctoral	01/2023	Mitochondrial Medicine
University of Miami, Miller School of Medicine, Miami, Florida, US	Postdoctoral	-	Mitochondrial Biogenesis

**A. Personal Statement**

I am a Postdoctoral Research Associate at the Department of Neurology of the University of Miami, Miller School of Medicine. My research focuses on different aspects of mitochondrial biology in both physiological and pathological contexts. During my PhD and my Postdoctoral research activities, I gained specific training in biomedical research aiming at defining the molecular mechanisms behind human mitochondrial diseases related to impaired biogenesis of the mitochondrial respiratory chain.

**B. Positions, Scientific Appointments, and Honors**

2023-present Postdoctoral research associate, Department of Neurology, University of Miami Miller School of Medicine, Miami, US

2022-2023 Postdoctoral research fellow, Telethon Foundation, IT

2021-2022 Postdoctoral research associate, Department of Biomedical Sciences, Padua, IT

2021-2022 Postdoctoral research associate, Veneto Institute of Molecular Medicine, Padua, IT

2021 Mention of Honor, Italian Genetics Association

2019 Personal award from the 'Aldo Gini' foundation

2019 Visiting PhD student, MRC Mitochondrial Biology Unit, University of Cambridge, Cambridge, UK

2016-2017 Research assistant, Telethon Foundation, IT

- Member of the European Society for Mitochondrial Research and Medicine
- Member of the Italian Genetics Association

## C. Contributions to Science

### List of peer-reviewed publications:

- **Brischigliaro M**, Cabrera-Orefice A, Arnold S, Viscomi C, Zeviani M, Fernández-Vizarrá E. (2023) Structural rather than catalytic role for mitochondrial respiratory chain supercomplexes. *eLife Reviewed Preprint*. 12:RP88084
- **Brischigliaro M**, Fernandez-Vizarrá E, Viscomi C. (2023) Mitochondrial Neurodegeneration: Lessons from *Drosophila melanogaster* Models. *Biomolecules*. 2023 Feb 16;13(2):378. doi: 10.3390/biom13020378. PMID: 36830747; PMCID: PMC9953451.
- Fernández-Vizarrá E, López-Calcerrada S, Sierra-Magro A, Pérez-Pérez R, Formosa LE, Hock DH, Illescas M, Peñas A, **Brischigliaro M**, et al. (2022) Two independent respiratory chains adapt OXPHOS performance to glycolytic switch. *Cell Metab*. 2022 Nov 1;34(11):1792-1808.e6. doi: 10.1016/j.cmet.2022.09.005. Epub 2022 Oct 4. PMID: 36198313.
- **Brischigliaro M**, Cabrera-Orefice A, Sturlese M, et al. (2022). CG7630 is the *Drosophila melanogaster* homolog of the cytochrome c oxidase subunit COX7B. *EMBO Rep*. e54825. <https://doi.org/10.15252/embr.202254825>.
- **Brischigliaro M**, Badocco D, Costa R, et al. (2022). Mitochondrial Cytochrome c Oxidase Defects Alter Cellular Homeostasis of Transition Metals. *Front. Cell Dev. Biol.* <https://doi.org/10.3389/fcell.2022.892069>.
- **Brischigliaro M**, Frigo E, Fernandez-Vizarrá E, et al. (2022). Measurement of mitochondrial respiratory chain enzymatic activities in *Drosophila melanogaster* samples. *STAR Protoc*. 3, 101322. <https://doi.org/10.1016/J.XPRO.2022.101322>.
- **Brischigliaro M**, Frigo E, Corrà S. et al. Modelling of *BCS1L*-related human mitochondrial disease in *Drosophila melanogaster*. *J Mol Med* (2021). <https://doi.org/10.1007/s00109-021-02110-1>.
- Peruzzo, R, Corrà, S, Costa, R, **Brischigliaro M**, et al. Exploiting pyocyanin to treat mitochondrial disease due to respiratory complex III dysfunction. *Nat Commun* 12, 2103 (2021). <https://doi.org/10.1038/s41467-021-22062-x>.
- **Brischigliaro M**, Zeviani M. (2021) Cytochrome c oxidase deficiency. *Biochimica et Biophysica Acta (BBA) – Bioenergetics*. Volume 1862, Issue 1, 2021, 148335, ISSN 0005-2728. <https://doi.org/10.1016/j.bbabi.2020.148335>.
- Benincá C, Zanette V, **Brischigliaro M**, et al. Mutation in the MICOS subunit gene APOO (MIC26) associated with an X-linked recessive mitochondrial myopathy, lactic acidosis, cognitive impairment and autistic features. *Journal of Medical Genetics* Published Online First: 21 May 2020. doi: 10.1136/jmedgenet-2020-106861.
- **Brischigliaro M**, Corrà S, Tregnago C, et al. Knockdown of *APOPT1/COA8* Causes Cytochrome c Oxidase Deficiency, Neuromuscular Impairment, and Reduced Resistance to Oxidative Stress in *Drosophila melanogaster*. *Front Physiol*. 2019;10:1143. Published 2019 Sep 6. doi:10.3389/fphys.2019.01143.