PERSONAL INFORMATION

Work Address	Department of Biological Applications and Technology, School of Health Sciences, University of Ioannina (UOI) & Biomedical Research Institute, Foundation of Research and Technology-Hellas (BRI-FORTH), Ioannina, GR
Date of birth	09.07.1982 in Ioannina, GR
Tel / Email	+ 30 26510 0 7334 / mfiliou@uoi.gr
Public Profiles	LinkedIn, Google Scholar
Lab pages	Lab website , The Biochemistry lab, BET

CURRENT POSITION

4/2018 - now	**Assistant Professor of Biochemistry and Head of the Biochemistry lab** Department of Biological Applications and Technology, UOI
2/2020 - now	**Affiliated Member and Group Leader** BRI-FORTH
2/2021 - now	**Member** Institute of Biosciences, UOI

PREVIOUS POSITIONS

4/2018 - 7/2019	**Guest Scientist** Max Planck Institute of Psychiatry (MPIP), Munich, DE
1/2015 - 4/2018	**Staff Scientist** Department of Stress Neurobiology and Neurogenetics, MPIP
9/2012 - 12/2014	**Principal Investigator** Proteomics and Biomarkers Group, MPIP German Research Foundation (DFG) Research Grant: 'Unraveling the role of mitochondria in anxiety disorders'
2/2013 - 5/2013	**Visiting Research Fellow** National Resource for Imaging Mass Spectrometry, Harvard Medical School, Cambridge, MA, Prof. Claude Lechene EMBO Short-Term Fellowship: 'Investigation of psychiatric drug treatment response with multi-isotope imaging mass spectrometry'
8/2010 - 8/2012	**Postdoctoral Research Fellow** Proteomics and Biomarkers Group, MPIP, Prof. Chris Turck Max Planck Society Postdoctoral Fellowship: 'Validation of mitochondrial biomarkers and pathways in a mouse model of anxiety'
10/2009, 8/2008	**Visiting Researcher** Institute of Molecular Psychiatry, University of Bonn, DE

EDUCATION

10/2006 - 7/2010	**PhD** Ludwig Maximilian University (LMU) / International Max Planck Research School Life Sciences (IMPRS-LS) / Proteomics and Biomarkers Group, MPIP
PhD Thesis	'Biomarker discovery for psychiatric disorders: Insights from quantitative proteomics studies in animal models' Prof. Chris Turck / Prof. Rainer Landgraf Grade: Magna cum laude, 0.74
10/2005 - 9/2006	**MSc (Hons)** Human Molecular Genetics, Imperial College, London, UK
10/2000 - 7/2005	**Degree/Integrated Master** Biological Applications and Technology, UOI Grade: Excellent, 8.71/10 *Valedictorian: ranked 1st among all students of the Faculty in July 2005 graduation* *Admission: ranked 2nd based on admission grade (195.2/200) in October 2000*
7/2004- 8/2004	**Internship** Medical Microbiology, Hellenic Pasteur Institute, Athens, GR

AWARDS AND PRIZES (SELECTION)

2022	1st Best Poster Award, 30th Panhellenic Congress of Psychiatry
2021	L' Oréal-UNESCO for Women in Science National Award
2021	Best Poster Award, 1st Interdisciplinary Congress, 'Caring for the brain'
2019, 2018	FAPESP-Baylat fellowships to attend the Workshop on Neural basis of stress, fear and anxiety (Germany 2019 and Brazil 2018)
2017	Young Investigator Award, World Federation of Societies of Biological Psychiatry
2017	Mifek-Kirschner Award, MPIP
2017	Best Poster Award, 13th World Congress of Biological Psychiatry
2017	Best Poster Award, 1st Panhellenic Meeting, Institute of Stress Biology and Medicine
2017	3rd Best Poster Award, 30th AGNP Symposium
2015	Educational grant, World Federation of Societies of Biological Psychiatry
2015	Youth Scholars Program finalist, Bavarian Academy of Sciences
2015	Best poster candidate, 10th World Congress of Biological Psychiatry
2012	Young Investigator Award, European Proteomics Association (EuPA)
2008 - 2014	12 travel grants and awards for participation in international conferences:
2006	Selection to the IMPRS-LS PhD Program (success rate in 2006: 3.4%)
10/2000	State Scholarships Foundation (IKY) award (top 1% students, based on admission grade to the Department of Biological Applications and Technology)
1999, 1997	Distinction from the Hellenic Mathematical Society
1996	2nd Award from the Hellenic Mathematical Society

FELLOWSHIPS AND SCHOLARSHIPS

2013	EMBO Short-Term Fellowship for research at Harvard Medical School
2010 - 2012	Max Planck Society Postdoctoral Fellowship
2007 - 2010	Max Planck Society Scholarship for PhD studies
2006	IMPRS-LS Scholarship for PhD studies
2005 - 2006	Georgios Stavros Foundation Scholarship for MSc studies
2005, 2004, 2003	Onassis Foundation Scholarships to attend the 2005, 2004 and 2003 Lectures in Biology
2000 - 2002	State Scholarships Foundation (IKY) scholarship for the academic years 2000 -2001 and 2001-2002 (top 1% students of each year, based on academic excellence)

FUNDING

As Principal Investigator

2020 - 2023 **Fondation Santé** **50.000 €**
'Stress resilience: Mind the mitochondria'

2020 - 2021 **Supporting researchers with emphasis on young researchers (NSRF)** **45.546 €**
'How do mitochondria regulate stress? Lets ask metabolomics'

2018 - 2021 **Hellenic Foundation of Research and Innovation (ELIDEK)** **180.000 €**
'The bioenergetic dimension of stress: focus on mitochondria' (ENERGEIA)
ENERGEIA website

2015 - 2017 **IKYDA Program (IKY-DAAD)** **20.000 €**
'Depression: Can a cancer drug be used for rapid antidepressant treatment?'
Head of German Team. Collaboration with Athens Medical School (Ass. Prof. C. Dalla)

2012 - 2015 **German Research Foundation (DFG) Research Grant** **99.025 €**
'Unraveling the role of mitochondria in anxiety disorders'

As Work Package Leader

2020 - 2023 **Regional Excellence Program (NSRF)** **3.000.000 €**
'BIOMED-20', Scientific Responsible for Work Package 3.1 'The role of mitochondria in psychological stress' (Work Package budget: **~120.000 €)** PI: Prof. Spyridon Georgatos

As Research Team Member

2008 - 2013 **Federal Ministry of Education and Research (BMBF), NGFN Plus** **166.500 €**
'Systematic investigation of the molecular causes of major mood disorders and schizophrenia (MooDS), functional studies using transgenic mouse models and proteome analyses' PIs: Prof. Markus Nöthen, Prof. Chris Turck

2006 - 2011 **Federal Ministry of Education and Research (BMBF)** **1.884.596 €**
'QuantPro - Quantitative analysis of dynamic processes in living systems, biomarker discovery and pathway analysis via quantitative proteomics in mouse models for human disease' PI: Prof. Chris Turck

TEACHING

I. Greece

UOI, Department of Biological Applications and Technology

2017/18 - now Undergraduate courses Biochemistry I and II (3rd and 4th semester)

Contribution το MSc Programs in Greek Universities

2015/16 - now MSc 'Medicinal Chemistry', UOI (Interdepartmental)
MSc 'Molecular Cellular Biology and Biotechnology', UOI (Interdepartmental)
MSc 'Basic Biomedical Sciences', UOI (Interdepartmental)
MSc 'Translational Research in Biomedicine', Department Molecular Biology and Genetics, Democritus University of Thrace
MSc 'Pharmaceutical Analysis - Quality Control', Department of Pharmacy, National and Kapodistrian University of Athens

II. Germany

LMU, Faculty of Biology

2015/16-17/18 Seminar: Animal models for psychiatric disorders
2015/16 Advanced Seminar: Neurochemistry - The chemical language of the brain

LMU, Faculty of Chemistry and Pharmacy

2010/11 Coordinator of Biochemistry Laboratory Practical Course, 4th semester

MPIP, International Max Planck Research School Translational Psychiatry (IMPRS-TP)

2016/17-17/18 Seminar: 'Biomarkers in Psychiatry: biochemical and clinical approaches'
2017/18 Special Seminar Series: 'The dilemma of treating psychiatric disorders: Mechanistic understanding and applied methodology of treatment response'

OTHER SCIENTIFIC ACTIVITIES (SELECTION)

Evaluator for European and National Funding bodies:

- European Commission, 2021 Horizon Europe Health Call
- European Commission, Marie Skłodowska-Curie Actions H2020, Individual Fellowships
- Icelandic Research Fund
- Health Research Board, Ireland
- Bulgaria Research Fund
- National Science Center (Poland)
- La Caixa Foundation (Spain)

Editorial Board *Frontiers in Molecular Neuroscience*, Section Neuroplasticity and Development, Review Editor (2021 - now)
Frontiers in Psychiatry, Section Molecular Psychiatry, Review Editor (2020 - now)
Current Proteomics, Advisory Board Member (2018 - now)
Molecular Neuropsychiatry, Editorial Board (2017 - 2019)

Guest editor *Journal of Chromatography B*

Special Issue 'Advances in mass spectrometry-based applications' Vol 1047, 2017

Reviewer for 52 peer-reviewed international scientific journals (incl. *Neuropsychopharmacology*, *Redox Biology, Translational Psychiatry, Scientific Reports*)

Organizer conferences / workshops:

- 21st Congress of Medicinal Chemistry, 22-23 October 2021, Ioannina
- Online Workshop: Bioenergetics, Multiomics and the Brain, 16 June 2021
- 20th Congress of Medicinal Chemistry, 28-29 November 2019, Ioannina
- Cost-CliniMark Training School: 'Approaches for biomarker discovery and validation', 23-27 September 2019, Spetses
- Mediterranean Sea Region Countries Mass Spectrometry Workshop (MEDMS III) 28 June - 2 July 2015, Athens
- 1st Postdoc Workshop, 17 July 2013 MPI of Psychiatry, Munich, Germany

conference symposia:

- 'Multi-omics and psychiatry: The missing molecular link', 13th World Congress of Biological Psychiatry, 18-22 June 2017, Copenhagen, Denmark
- 'Innovative technologies for biomarker discovery in neuroscience', Regional FENS Meeting, FFRM 2015, 7-10 October 2015, Thessaloniki

Chair in conference symposia:

- 'Multi-omics and psychiatry: The molecular link', 13th World Congress of Biological Psychiatry
- 'Innovative technologies for biomarker discovery in neuroscience', FFRM 2015
- 'Imaging', MEDMS III

Translator Lodish, Molecular Cell Biology, Chapter 12, Utopia Publishing (English to Greek)

Mentor UOI Mentoring Programme

Mentoring Programme FemmeNet, Max Planck Society

Member Max Planck Alumni Association (2018 - now)
Hellenic Society for Biochemistry and Molecular Biology (HSBMB) (2018 - now)
Hellenic Society for Neuroscience (HSfN) (2018 - now)
Institute of Stress Biology and Medicine (IBIΣ) (2017 - now)
European Brain and Behavior Society (EBBS) (2011 - 2016)
German Society for Proteome Research (2008 - 2011)

LANGUAGE SKILLS

English Excellent (Certificate of Proficiency, University of Cambridge)
German Excellent (Kleines Deutsches Sprachdiplom, Goethe Institut)
French Excellent (Diplôme Approfondi de Langue Française, Institut Français)
Spanish Good (Certificado Inicial, Instituto Cervantes)
Greek Mother tongue

DISSEMINATION-PUBLIC OUTREACH

2022	'Narratives in Biology: Targeting diverse target audiences in Science Storytelling' , Organizer: Laboratory of Narrative Research, School of English, AUTH
2022	Participation in the Roundtable: 'Women in leadership positions', Organizer: Zosimaia Lyceum of Ioannina
2021	Career talk in the PhD Program IMPRS-LS retreat (Ammersee, Germany)
2021	Online event 'Women in Biosciences' with presentations of Greek women bioscientists, Organizer: DUTH
2021	'The biology of laughing', Podcast for the World Laughter Day invited by bio-logia.gr
2021	Contribution to Brain Awareness Week 2021 with a video explaining research at the Biochemistry lab 'The Mitochondrion and Mr. Mouse'
2021	Seminar at Hellenic Society for Neuroscience virtual series: 'Stress, anxiety and the brain: mind the mitochondria'
2020	Administrator, official Instagram account of the Department of Biological Applications and Technology, @bat_ioannina
2020	12th Conference of the Panhellenic Union of Bioscientists, Talk at the roundtable '-Omics and their role in health'
2020	Contribution to the 1st Ioannina Science Festival with the talk 'Psychological stress and mitochondria'
2020	Presentation and guided tour of highschool students at the Department of Biological Applications and Technology
2019 - now	Member of ALBA Network for promoting diversity and equity in brain sciences
2018 - now	Co-organization of 'Neurotalks', open meetings with a neuroscience focus at UOI
2018	Talk at PharmACon, Conference of the Hellenic Society of Pharmaceutical students: 'Advanced methodologies for identifying novel therapeutic targets'
2017	Science Café, Munich International School: Presentation/Discussion with high school students, teachers and parents on psychiatric research and the life of a scientist
2011	MPIP, Open Door Day: Presentations to families of patients and the public on biomarker discovery in brain disorders and guided tours to the research facilities
2010	Introduction to psychiatric research: Presentations and guided tour to the MPIP research facilities to students from Greek schools in Munich

PRESS RELEASES

2021	L' Oréal-UNESCO for Women in Science National Award UOI , Department of Biological Applications and Technology , FORTH , Panhellenic Union of Bioscientists
2017	Research on molecular pathways of antidepressants Max Planck Society , MPIP
2015	Research on anxiolytic effects of selective mitochondrial targeting Max Planck Society , MPIP

PUBLICATIONS: 44

Full publication list in PubMed

Last author in:	**10**
Corresponding author in:	**21**
First author in:	**15**
Only author in:	**2**
Co-author in:	**17**

Citations: 1454, h-index: 23 (Google Scholar, 6/2022)

1. Turck CW[#], Webhofer C, Reckow S, Moy J, Wang M, Guillermier C, Poczatek JC, **Filiou MD[#]**. Antidepressant treatment effects on hippocampal protein turnover: molecular and spatial insights from mass spectrometry. *Proteomics 2022* Epub ahead of print

2. **Filiou MD[#]**, Teplytska L, Nussbaumer M, Otte DM, Zimmer A, Turck CW. Multi-omics analysis reveals myelin, presynaptic and nicotinate alterations in the hippocampus of G72/G30 transgenic mice. *J Pers Med* 2022 12:244

3. Iliou A*, Vlaikou AM*, Nussbaumer M, Benaki D, Mikros E, Gikas E, **Filiou MD[#]**. Exploring the metabolomic profile of cerebellum after exposure to acute stress. Stress 2021 24:952-964

4. **Filiou MD[#]**, Nussbaumer M, Teplytska L, Turck CW[#]. Behavioral and metabolome differences between C57BL/6 and DBA/2 mouse strains: implications for their use as models for depression- and anxiety-like phenotypes. *Metabolites* 2021 11:128

5. Vlaikou AM, Nussbaumer M, Komini C, Lambrianidou A, Konidaris C, Trangas T[#], **Filiou MD[#]**. Exploring the crosstalk of glycolysis and mitochondrial metabolism in psychiatric disorders and brain tumours. *Eur J Neurosci* 2021 53:3002-3018

6. Chousidis I, Chatzimitakos T, Leonardos D, **Filiou MD**, Stalikas CD, Leonardos ID. Cannabinol in the spotlight: Toxicometabolomic study and behavioral analysis of zebrafish embryos exposed to the unknown cannabinoid. Chemosphere 2020 252:126417

7. Papadopoulou Z, Vlaikou AM, Theodoridou D, Komini C, Chalkiadaki G, Vafeiadi M, Margetaki K, Turck CW, Trangas T, Syrrou M*, Chatzi L*, **Filiou MD*,#**. Unraveling the serum metabolomic profile of post-partum depression. *Front Neurosci* 2019 13:833

8. **Filiou MD#**, Sandi C#. Anxiety and brain mitochondria: A bidirectional crosstalk. *Trends Neurosci* 2019 42:573-88

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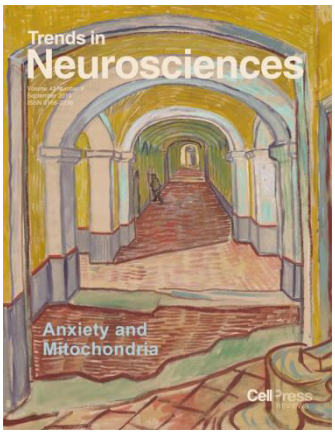


9. Papadopoulou Z, Vlaikou AM, Theodoridou D, Markopoulos GS, Tsoni K, Agakidou E, Drosou-Agakidou V, Turck CW, **Filiou MD#**, Syrrou M#. Stressful newborn memories: pre-conceptual, in utero and postnatal events. *Front Psychiatry* 2019 10:220

10. Weckmann K, Deery MJ, Howard JA, Feret R, Asara JM, Dethloff F, **Filiou MD**, Labermaier C, Maccarrone G, Lilley KS, Müller M, Turck CW. Ketamine's effects on the glutamatergic and GABAergic systems - a proteomics and metabolomics study in mice. *Mol Neuropsychiatry* 2019 5: 42-51

11. Weckmann K, Deery MJ, Howard JA, Feret R, Asara JM, Dethloff F, **Filiou MD**, Lannace J, Labermaier C, Maccarrone G, Webhofer C, Teplytska L, Lilley K, Müller M, Turck CW. Ketamine's antidepressant effect is mediated by energy metabolism and antioxidant defense system. *Sci Rep* 2017 7:15788

9. **Filiou MD#**, Banati RB, Graeber MB#. The mitochondrial 18-kDa translocator protein (TSPO) as a CNS drug target: Finding our way through the neuroinflammation fog. *CNS Neurol Disord Drug Targets* 2017 16:990-999

10. Park DI, Dournes C, Sillaber I, Asara JM, Ising M, Webhofer C, **Filiou MD**, Müller MB, Turck CW. Delineation of molecular pathway activities of the chronic antidepressant treatment response suggests important roles for glutamatergic and ubiquitin-proteasome systems. *Transl Psychiatry* 2017 7:e1078

11. Gikas E#, **Filiou M#**. Mass spectrometry and the Mediterranean. *J Chromatogr B Analyt Technol Biomed Life Sci* 2017 1047:1 (Editorial)

12. Turck CW, Webhofer C, Nussbaumer M, Teplytska L, Chen A, Maccarrone G, **Filiou MD#**. Stable isotope metabolic labeling suggests differential turnover of the DPYSL protein family. *Proteomics Clin Appl* 2016 10:1269-72

13. Lopes S, Teplytska L, Vaz-Silva J, Dioli C, Trindade R, Morais M, Webhofer C, Maccarrone G, Almeida OF, Turck CW, Sousa N, Sotiropoulos I[#], **Filiou MD[#]**. Tau deletion prevents stress-induced dendritic atrophy in prefrontal cortex: Role of synaptic mitochondria. *Cereb Cortex* 2017 27:2580-91

14. Nussbaumer M, Asara JM, Teplytska L, Murphy MP, Logan A, Turck CW, **Filiou MD[#]**. Selective mitochondrial targeting exerts anxiolytic effects *in vivo*. *Neuropsychopharmacology* 2016 41: 1751-8

15. Park DI*, Dournes C*, Sillaber I, Uhr M, Asara JM, Gassen NC, Rein T, Ising M, Webhofer C, **Filiou MD**, Müller MB, Turck CW. Purine and pyrimidine metabolism: Convergent evidence on chronic antidepressant response in mice and humans. *Sci Rep* 2016 6:35317

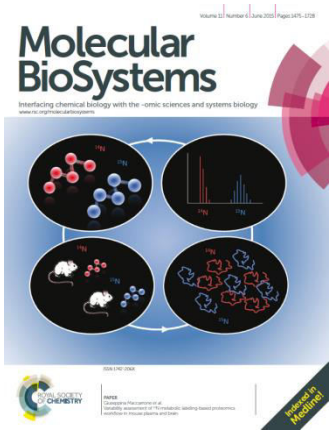
16. Kao CY, He Z, Henes K, Asara JM, Webhofer C, **Filiou MD**, Khaitovich P, Wotjak CT, Turck CW. Fluoxetine treatment rescues energy metabolism pathway alterations in a posttraumatic stress disorder mouse model. *Mol Neuropsychiatry* 2016 2:46-59

17. **Filiou MD[#]**. Can proteomics-based diagnostics aid clinical psychiatry? *Proteomics Clin Appl* 2015 9:885-8

18. Turck CW, **Filiou MD[#]**. What have proteomics and metabolomics (not) taught us about psychiatric disorders? *Mol Neuropsychiatry* 2015 1:69-75

19. **Filiou MD**, Soukupova M, Rewerts C, Webhofer C, Turck CW, Maccarrone G. Variability assessment of ^{15}N metabolic labeling-based proteomics workflow in mouse brain and plasma. *Mol Biosyst* 2015 11:1536-42

Issue Cover, June 2015



20. Wood PL, **Filiou MD**, Otte DM, Zimmer A, Turck CW. Lipidomics reveals dysfunctional glycosynapses in schizophrenia and the G72/G30 transgenic mouse. *Schizophrenia Res* 2014 159:365-9

21. **Filiou MD**, Moy J, Wang M, Guillermier C, Poczatek C, Turck C, Lechene C. Effect of an anti-depressant on mouse hippocampus protein turnover using MIMS. *Surf Interface Anal* 2014 46:S144-6 (Conference paper)

22. **Filiou MD[#]**, Asara JM, Nussbaumer M, Teplytska L, Landgraf R, Turck CW. Behavioral extremes in trait anxiety are characterized by distinct metabolic profiles. *J Psychiatr Res* 2014 58:115-22

23. Iris F, **Filiou M**, Turck CW. Differential proteomics analyses reveal anxiety-associated molecular and cellular mechanisms in cingulate cortex synapses. *AJPN* 2014 2:25-42

24. **Filiou MD**, Arefin AS, Moscato P, Graeber MB. 'Neuroinflammation' differs categorically from inflammation: transcriptomes of Parkinson's disease, Alzheimer's disease, schizophrenia and inflammatory diseases compared. *Neurogenetics* 2014 15:201-12

25. Webhofer C*, Zhang Y*, Brusis J, Reckow S, Landgraf R, Maccarrone G, Turck CW, **Filiou MD#**. ^{15}N metabolic labeling: evidence for a stable isotope effect on plasma protein levels and peptide chromatographic retention times. *J Proteomics* 2013 88:27-33

26. O'Neil SE, Palviainen MJ, Ten Have S, **Filiou M**, Gonzalez A, Hodge K, Surinova S, Penque D, Baker MS. Clinical proteomics stretch goals: EuPA 2012 roundtable report. *J Proteomics* 2013 88:37-40

27. **Filiou MD#**. The potential of ^{15}N metabolic labeling for schizophrenia research. *Arch Clin Psychiatry* 2013 40:51-2

28. **Filiou MD#**, Teplytska L, Otte DM, Zimmer A, Turck CW. Myelination and oxidative stress alterations in the cerebellum of the G72/G30 transgenic schizophrenia mouse model. *J Psychiatr Res* 2012 46:1359-65
29. **Filiou MD***, Webhofer C*, Gormanns P*, Zhang Y, Bisle B, Teplytska L, Frank E, Kessler MS, Maccarrone G, Landgraf R, Turck CW. The ^{15}N isotope effect as a means for correlating phenotypic alterations and affected pathways in a trait anxiety mouse model. *Proteomics* 2012 12:2421-7

30. **Filiou MD**, Varadarajulu J, Teplytska L, Reckow S, Maccarrone G, Turck CW. The ^{15}N isotope effect in *Escherichia coli*: A neutron can make the difference. *Proteomics* 2012 12:3121-8

31. **Filiou MD#**, Martins-de-Souza D, Guest PC, Bahn S, Turck CW. To label or not to label: Applications of quantitative proteomics in neuroscience research. *Proteomics* 2012 12:736-47

32. Zhang Y, **Filiou MD**, Reckow S, Gormanns P, Maccarrone G, Kessler MS, Frank E, Hambsch B, Holsboer F, Landgraf R, Turck CW. Proteomic and metabolomic profiling of a trait anxiety mouse model implicates affected pathways. *Mol Cell Proteomics* 2011 10:M111.008110
    - Paper Highlight in ASBMB today, November 2011

33. **Filiou MD**, Zhang Y, Teplytska L, Reckow S, Gormanns P, Maccarrone G, Frank E, Kessler MS, Hambsch B, Nussbaumer M, Bunck M, Ludwig T, Yassouridis A, Holsboer F, Landgraf R, Turck CW. Proteomics and metabolomics analysis of a trait anxiety mouse model reveals divergent mitochondrial pathways. *Biol Psychiatry* 2011 70:1074-82

34. Otte DM, Sommersberg B, Kudin A, Guerrero C, Albayram Ö, **Filiou MD**, Frisch P, Yilmaz Ö, Drews E, Turck CW, Bilkei-Gorzó A, Kunz WS, Beck H, Zimmer A. N-acetyl cysteine treatment rescues cognitive deficits

induced by mitochondrial dysfunction in G72/G30 transgenic mice. *Neuropsychopharmacology* 2011 36:2233-43

35. **Filiou MD#**, Turck CW, Martins-de-Souza D. Quantitative proteomics for investigating psychiatric disorders. *Proteomics Clin Appl* 2011 5:38-49
    - The 3rd most accessed paper of *Proteomics Clin Appl* for 2011
    - Journal Highlight at SpectroscopyNOW.com, March 2011

36. **Filiou MD**, Bisle B, Reckow S, Teplytska L, Maccarrone G, Turck CW. Profiling of mouse synaptosome proteome and phosphoproteome by IEF. Electrophoresis 2010 31:1294-301

37. Zhang Y, Webhofer C, Reckow S, **Filiou MD**, Maccarrone G, Turck CW. A MS data search method for improved ^{15}N-labeled protein identification. *Proteomics* 2009 9:4265-70

38. Frank E, Kessler MS, **Filiou MD**, Zhang Y, Maccarrone G, Reckow S, Bunck M, Heumann H, Turck CW, Landgraf R, Hambsch B. Stable isotope metabolic labeling with a novel ^{15}N-enriched bacteria diet for improved proteomic analyses of mouse models for psychopathologies. *PLoS ONE* 2009 4:e7821

39. Otte DM, Bilkei-Gorzó A, **Filiou MD**, Turck CW, Yilmaz Ö, Holst MI, Schilling K, Abou-Jamra R, Schumacher J, Benzel I, Kunz WS, Beck H, Zimmer A. Behavioral changes in G72/G30 transgenic mice. *Eur Neuropsychopharmacol* 2009 19:339-48

40. Haegler K, Mueller NS, Maccarrone G, Hunyadi-Gulyas E, Webhofer C, **Filiou MD**, Zhang Y, Turck CW. QuantiSpec - Quantitative mass spectrometry data analysis of ^{15}N-metabolically labeled proteins. *J Proteomics* 2009 71:601-8

41. Durrenberger PF, **Filiou MD**, Moran LB, Michael GJ, Novoselov S, Cheetham ME, Clark P, Pearce RK, Graeber MB. DnaJB6 is present in the core of Lewy bodies and is highly up-regulated in parkinsonian astrocytes. *J Neurosci Res* 2009 87:238-45

# corresponding author * equal contribution

BOOK CHAPTERS IN INTERNATIONAL EDITIONS: 4

1. Maccarrone G, Chen A, **Filiou MD#**. Using ^{15}N metabolic labeling for quantitative proteomic analyses. Methods in Molecular Biology, Multiplex Biomarker Techniques, 2017, vol 1546, 235-243, Humana Press, NJ

2. Maccarrone G, **Filiou MD#**. Protein profiling and phosphoprotein analysis by IEF. Methods in Molecular Biology, Analytical Methods and Integrated Workflows for Proteomic Profiling, 2015, vol 1295, 293-303, Humana Press, NJ

3. **Filiou MD#**, Turck CW. Psychiatric disorder biomarker discovery using quantitative proteomics. Methods in Molecular Biology, Psychiatric Disorders Methods and Protocols, 2012, vol 829, 531-539, Humana Press, NJ

4. **Filiou MD#**, Turck CW. General overview: Biomarkers in neuroscience research. International Review of Neurobiology, Biomarkers of Neurological and Psychiatric Disease, 2011, vol 101, 1-17, Academic Press, CA

corresponding author