



Short Curriculum Vitae: Katerina Palaiologou

Current Position:	Assistant Professor of Molecular and Cellular Biology with an emphasis on the Nervous System at the Department of Molecular Biology and Genetics
Undergraduate Education:	B.Sc. Hons in Biochemistry with Biomedicine, Biological Sciences, Lancaster University, UK
Post-graduate Education:	M.Sc. (by research) in Biomedicine, Biological Sciences, Lancaster University, UK Ph.D. in Biological Sciences, Biological Sciences, Lancaster University, UK Postdoctoral Research Fellow, Laboratory of Molecular Neurobiology and Neuroproteomics, Swiss Federal Institute of Technology Lausanne (EPFL), Switzerland
Areas of Interest	<ul style="list-style-type: none">• Neurodegenerative diseases (e.g. Parkinson's & Alzheimer's diseases): genetic and molecular basis, biomarkers, novel treatments• Protein misfolding & aggregation of amyloidogenic proteins (α-synuclein, β-amyloid) - design/identification of aggregation inhibitors• Nutritional neuroscience & gut-brain-axis - gut microbiota, probiotics, functional foods and nutritional treatments in neurodegenerative diseases
Distinctions and Bibliometric data	<ul style="list-style-type: none">• Latsis Foundation -Young Investigator Award 2014• Referee in 5 scientific journals• Co-supervisor in 4 Ph.D. theses, supervisor in 7 M.Sc. theses and 6 B.Sc. theses, Advisory committee member in 2 Ph.D. theses• 4 participations in the organization of conferences• 24 publications in peer-reviewed international journals• >3500 citations (Scopus), <i>h-index</i> 23 (Scopus) (Jan 26)
Competitive Funding	<ul style="list-style-type: none">• Participation in 5 funded competitive research projects. Selected funded projects:<ol style="list-style-type: none">1. Application of eDNA technology to monitor fish stocks and genetic resources of the aquatic environment of the Thracian Sea as a tool for sustainable management ECOeDNA. Green Fund. Team-member2. AGRO4+ - Holistic approach to Agriculture 4.0 for new farmers. GSRT. Team-member3. FOODBIOMES - Infrastructure of Microbiome Applications in Food Systems Funding. GSRT. Team-member4. Synthetic biology: from omics technologies to genomic engineering (OMIC-ENGINE). Operational Programme "Competitiveness, Entrepreneurship & Innovation". Team-member
Representative publications	<ol style="list-style-type: none">1. Stylianopoulou E, Daviti A, Giourou V, Gerasimidi E, Nikolaou A, Kourkoutas Y, Grigoriou ME, Paleologou KE*, Skavdis G*. Assessment of the Anti-Amyloidogenic Properties of Essential Oils and Their Constituents in Cells Using a Whole-Cell Recombinant Biosensor (2023) <i>Brain Sci.</i> 14:35.2. Vaikath NN, Majbour NK, Paleologou KE, Ardah MT, van Dam E, van de Berg WD, Forrest SL, Parkkinen L, Gai WP, Hattori N, Takanashi M, Lee SJ, Mann DM, Imai Y, Halliday GM, Li JY, El-Agnaf OM. (2015) Generation and characterization of novel conformation-specific monoclonal antibodies for α-synuclein pathology. <i>Neurobiol Dis.</i> 79:81-99.3. Mbefo MK, Fares MB, Paleologou K, Oueslati A, Yin G, Tenreiro S, Pinto M, Outeiro T, Zweckstetter M, Masliah E, Lashuel HA. (2015) Parkinson disease

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- mutant E46K enhances α -synuclein phosphorylation in mammalian cell lines, in yeast, and in vivo. *J Biol Chem.* **290**:9412-27.
4. Ardah MT, Paleologou KE, Lv G, Menon SA, Abul Khair SB, Lu JH, Safieh-Garabedian B, Al-Hayani AA, Eliezer D, Li M, El-Agnaf OM. (2015) Ginsenoside Rb1 inhibits fibrillation and toxicity of alpha-synuclein and disaggregates preformed fibrils. *Neurobiol Dis.* **74**:89-101.
 5. Aasly JO, Johansen KK, Brønstad G, Warø BJ, Majbour NK, Varghese S, Alzahmi F, Paleologou KE, Amer DA, Al-Hayani A, El-Agnaf OM. (2014) Elevated levels of cerebrospinal fluid α -synuclein oligomers in healthy asymptomatic LRRK2 mutation carriers. *Front Aging Neurosci.* **6**:248.
 6. Ardah MT, Paleologou KE, Lv G, Abul Khair SB, Kazim AS, Minhas ST, Al-Tel TH, Al-Hayani AA, Haque ME, Eliezer D, El-Agnaf OM. (2014) Structure activity relationship of phenolic acid inhibitors of α -synuclein fibril formation and toxicity. *Front Aging Neurosci.* **6**:197.
 7. Oueslati A, Paleologou KE, Schneider BL, Aebischer P, Lashuel HA. (2012) Mimicking phosphorylation at serine 87 inhibits the aggregation of human α -synuclein and protects against its toxicity in a rat model of Parkinson's disease. *J Neurosci.* **32**:1536-44.
 8. Paleologou KE, Oueslati A, Shakked G, Rospigliosi CC, Kim HY, Lamberto GR, Fernandez CO, Schmid A, Chegini F, Gai WP, Chiappe D, Moniatte M, Schneider BL, Aebischer P, Eliezer D, Zweckstetter M, Masliah E, Lashuel HA. (2010) Phosphorylation at S87 is enhanced in synucleinopathies, inhibits alpha-synuclein oligomerization, and influences synuclein-membrane interactions. *J Neurosci.* **30**:3184-98.
 9. Paleologou KE, Mbefo MK, Boucharaba A, Oueslati A, Schell H, Fournier M, Olschewski D, Yin G, Zweckstetter M, Masliah E, Kahle PJ, Hirling H, Lashuel HA. (2010) Phosphorylation of synucleins by members of the Polo-like kinase family. *J Biol Chem.* **285**:2807-22.
 10. Paleologou KE, Kragh CL, Mann DM, Salem SA, Al-Shami R, Allsop D, Hassan AH, Jensen PH, El-Agnaf OM. (2010) Detection of elevated levels of soluble alpha-synuclein oligomers in post-mortem brain extracts from patients with dementia with Lewy bodies. *Brain.* **132**:1093-101.
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