

List of publications, R Melki's team

Liste des publications, équipe Melki

2021

[Crucial Role of FABP3 in \$\alpha\$ Syn-Induced Reduction of Septal GABAergic Neurons and Cognitive Decline in Mice.](#) Matsuo K, Yabuki Y, **Melki R**, **Bousset L**, Owada Y, Fukunaga K. Int J Mol Sci. 2021;22(1):400. doi: 10.3390/ijms22010400.PMID: 33401521

2020

[Novel antibodies detect additional \$\alpha\$ -synuclein pathology in synucleinopathies: potential development for immunotherapy.](#) Nimmo JT, Verma A, Dodart JC, Wang CY, **Savistchenko J**, **Melki R**, Carare RO, Nicoll JAR. Alzheimers Res Ther. 2020 Nov 30;12(1):159. doi: 10.1186/s13195-020-00727-x. PMID: 33256825

[Atomic Force Microscopy Imaging and Nanomechanical Properties of Six Tau Isoform Assemblies.](#) Makky A, **Bousset L**, **Madiona K**, **Melki R**. Biophys J. 2020 Nov 18;S0006-3495(20)30893-6. doi: 10.1016/j.bpj.2020.10.045. PMID: 33217380

[Distinct alpha-Synuclein species induced by seeding are selectively cleared by the Lysosome or the Proteasome in neuronally differentiated SH-SY5Y cells.](#) Pantazopoulou M, Brembati V, Kanellidi A, **Bousset L**, **Melki R**, Stefanis LJ Neurochem. 2020 Aug 31. doi: 10.1111/jnc.15174. PMID: 32869336

[Prion Amyloid Polymorphs - The Tag Might Change It All.](#) **Bousset L**, Luckgei N, **Kabani M**, Gardiennet C, Schütz AK, **Melki R**, Meier BH, Böckmann A. Front Mol Biosci. 2020 Aug 6;7:190. doi: 10.3389/fmolb.2020.00190. PMID: 32850974

[Probing amyloid fibril secondary structures by infrared nanospectroscopy: experimental and theoretical considerations.](#) Waeytens J, Mathurin J, Deniset-Besseau A, Arluison V, **Bousset L**, Rezaei H, Raussens V, Dazzi A. Analyst. 2020 Oct 27. doi: 10.1039/d0an01545h. PMID: 33107501

[Polypeptides derived from \$\alpha\$ -Synuclein binding partners to prevent \$\alpha\$ -Synuclein fibrils interaction with and take-up by cells.](#) **Monsellier E**, **Bendifallah M**, **Redeker V**, **Melki R**. PLoS One. 2020 Aug 13;15(8):e0237328. doi: 10.1371/journal.pone.0237328. PMID: 32790707

[The Yarrowia lipolytica orthologs of Sup35p assemble into thioflavin T-negative amyloid fibrils.](#) **Kabani M**, **Melki R**. Biochem Biophys Res Commun. 2020 Aug 27;529(3):533-539. doi: 10.1016/j.bbrc.2020.06.024. PMID: 32736670

[Glucose availability dictates the export of the soluble and prion forms of Sup35p via periplasmic or extracellular vesicles.](#) **Kabani M**, **Pilard M**, **Melki R**. Mol Microbiol. 2020 Aug;114(2):322-332. doi: 10.1111/mmi.14515. PMID: 32339313

[The Amphipathic GM1 Molecule Stabilizes Amyloid Aggregates, Preventing their Cytotoxicity.](#) Bucciantini M, Leri M, Stefani M, **Melki R**, Zecchi-Orlandini S, Nosi D. Biophys J. 2020 Jul 21;119(2):326-336. doi: 10.1016/j.bpj.2020.06.005. PMID: 32579964

[Disassembly of Tau fibrils by the human Hsp70 disaggregation machinery generates small seeding-](#)

[competent species](#). Nachman E, Wentink AS, **Madiona K**, **Bousset L**, Katsinelos T, Allinson K, Kampinga H, McEwan WA, Jahn TR, **Melki R**, Mogk A, Bukau B, Nussbaum-Krammer C. J Biol Chem. 2020 Jul 10;295(28):9676-9690. doi: 10.1074/jbc.RA120.013478.PMID: 32467226

[Interaction of the chaperones alpha B-crystallin and CHIP with fibrillar alpha-synuclein: Effects on internalization by cells and identification of interacting interfaces](#). **Bendifallah M**, **Redeker V**, **Monsellier E**, **Bousset L**, **Bellande T**, **Melki R**. Biochem Biophys Res Commun. 2020 Jun 30;527(3):760-769. doi: 10.1016/j.bbrc.2020.04.091. PMID: 32430178

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[The structural differences between patient-derived alpha-synuclein strains dictate characteristics of Parkinson's disease, multiple system atrophy and dementia with Lewy bodies](#). Van der Perren A, Gelders G, **Fenyi A**, **Bousset L**, Brito F, Peelaerts W, Van den Haute C, Gentleman S, **Melki R**, Baekelandt V. Acta Neuropathol. 2020 Jun;139(6):977-1000. doi: 10.1007/s00401-020-02157-3. PMID: 32356200

[Cell biology and dynamics of Neuronal Na⁺/K⁺-ATPase in health and diseases](#). **Shrivastava AN**, Triller A, **Melki R**. Neuropharmacology. 2020 Jun 1;169:107461. doi: 10.1016/j.neuropharm.2018.12.008. PMID: 30550795

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[alpha-Synuclein conformational strains spread, seed and target neuronal cells differentially after injection into the olfactory bulb](#). **Rey NL**, **Bousset L**, George S, Madaj Z, Meyerdirk L, Schulz E, Steiner JA, **Melki R**, Brundin P. Acta Neuropathol Commun. 2019 Dec 30;7(1):221. doi: 10.1186/s40478-019-0859-3.PMID: 31888771

[Two new polymorphic structures of human full-length alpha-synuclein fibrils solved by cryo-electron microscopy](#). Guerrero-Ferreira R, Taylor NM, Arteni AA, Kumari P, Mona D, Ringler P, Britschgi M, Lauer ME, Makky A, Verasdonck J, Riek R, **Melki R**, Meier BH, Böckmann A, **Bousset L**, Stahlberg H. Elife. 2019 Dec 9;8:e48907. doi: 10.7554/eLife.48907.PMID: 31815671

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[Fatty Acid-Binding Protein 3 is Critical for \$\alpha\$ -Synuclein Uptake and MPP⁺-Induced Mitochondrial Dysfunction in Cultured Dopaminergic Neurons.](#) Kawahata I, **Bousset L**, **Melki R**, Fukunaga K. *Int J Mol Sci*. 2019 Oct 28;20(21):5358. doi: 10.3390/ijms20215358.PMID: 31661838

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[Growth phase-dependent changes in the size and infectivity of SDS-resistant Sup35p assemblies associated with the \[PSI⁺\] prion in yeast.](#) **Wang K**, **Melki R**, **Kabani M**. *Mol Microbiol*. 2019 Sep;112(3):932-943. doi: 10.1111/mmi.14329. PMID: 31206803

[\$\alpha\$ -synuclein oligomers and fibrils: a spectrum of species, a spectrum of toxicities.](#) Alam P, **Bousset L**, **Melki R**, Otzen DE. *J Neurochem*. 2019 Sep;150(5):522-534. doi: 10.1111/jnc.14808. PMID: 31254394

[Detection of alpha-synuclein aggregates in gastrointestinal biopsies by protein misfolding cyclic amplification.](#) **Fenyi A**, Leclair-Visonneau L, Clairembault T, Coron E, Neunlist M, **Melki R**, Derkinderen P, **Bousset L**. *Neurobiol Dis*. 2019 Sep;129:38-43. doi: 10.1016/j.nbd.2019.05.002. PMID: 31078683

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[Demonstration of prion-like properties of mutant huntingtin fibrils in both in vitro and in vivo paradigms.](#) Masnata M, Sciacca G, Maxan A, **Bousset L**, Denis HL, Lauruol F, David L, Saint-Pierre M, Kordower JH, **Melki R**, Alpaugh M, Cicchetti F. *Acta Neuropathol*. 2019 Jun;137(6):981-1001. doi: 10.1007/s00401-019-01973-6. PMID: 30788585

[Effect of tolytoxin on tunneling nanotube formation and function.](#) Dilsizoglu Senol A, Pepe A, Grudina C, Sassoon N, Reiko U, **Bousset L**, **Melki R**, Piel J, Gugger M, Zurzolo C. *Sci Rep*. 2019 Apr 5;9(1):5741. doi: 10.1038/s41598-019-42161-6.PMID: 3095290

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[Clustering of Tau fibrils impairs the synaptic composition of \$\alpha\$ 3-Na⁺/K⁺-ATPase and AMPA receptors.](#) **Shrivastava AN**, **Redeker V**, **Pieri L**, **Bousset L**, Renner M, **Madiona K**, Mailhes-Hamon C, **Coens A**, Buée L, Hantraye P, Triller A, **Melki R**. *EMBO J*. 2019 Feb 1;38(3):e99871. doi: 10.15252/embj.201899871. PMID: 30630857

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