

Alireza Salami

Working Addresses: Department of Psychology, Florida State University, 1107 W. Call St, Tallahassee

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Aging Research Center (ARC), Tomtebovägen 18A, Department of Neurobiology, Care Sciences and Society, Karolinska Institutet, Stockholm, Sweden

Phone: +1(448)213-0370

Email: asalami@fsu.edu

EDUCATION

2008 – 2012. Ph.D. in Cognitive Neuroscience, UFBI, Umeå University, Umeå, Sweden

2006 – 2008. MSC in Biomedical engineering, Department of Electrical Engineering, Kalmar University, Kalmar, Sweden.

CURRENT POSITIONS

2025 – pres. Professor, Department of Psychology and Neuroscience (70%), Florida State University, Tallahassee, United States.

2018 – pres. Principal Researcher (30%), Department of Neurobiology, Care Sciences and Society, Karolinska Institute, Stockholm, Sweden

2018 – 2025 (Leave of absence) Group leader (Associate Professor) at Umeå Center for Functional Brain Imaging (UFBI) & Wallenberg Centre for Molecular Medicine (80%), Department of Integrative Medical Biology, Umeå University, Umeå, Sweden.

PAST POSITIONS

2014 – 2018. Assistant Professor, Department of Neurobiology, Care Sciences and Society, Karolinska Institute, Stockholm, Sweden

2012 – 2014. Post-doctoral Research Fellow, NVS, Karolinska Institute, Stockholm, Sweden

RESEARCH INTERESTS

My research focuses on understanding the neural correlates of cognitive decline in normal and pathological aging using cutting-edge state-of-the-art neuroimaging tools. The ultimate goal of my research is to inform effective intervention strategies to mitigate cognitive decline in older age. To pursue this vision, my research is built around three key components: a) acknowledging profound inter-individual differences in brain and cognition across the adult lifespan, particularly among older adults; b) examining large-scale longitudinal multimodal imaging data which gives us access

to the multiple compartments of the aging brain; c) targeting modifiable brain factors, such as dopamine and noradrenaline, which could serve as targets for pharmacological interventions.

RESEARCH GRANTS

2025-2030	European Research Council (Consolidation) Salami (PI) <i>DOPAGE: Balancing Pre- and Post-synaptic Mechanisms for Optimal Brain Function across the Adult Lifespan</i>	\$ 2,370,000
2025-2028	Swedish Research Council P24-01391 Salami (PI) <i>Unlocking the Dynamics of Dopamine and noradrenaline in Aging</i>	\$ 630,000
2022-2024	Swedish Research Council P21-02558 Salami (PI) <i>DyNAMiC: A Longitudinal Lifespan Study of Functional and Molecular Correlates of Cognitive Decline in Aging</i>	\$ 500,000
2021-2023	Bank of Sweden P20-0515 Salami (PI) <i>Can reduced dopamine availability and disrupted functional brain connectome serve as biomarkers for cognitive decline in aging?</i>	\$ 682,000
2023-2025	Kempe Foundation JCSMK22-0142 Salami (PI) <i>Gradients of macroscale cortical functional organization in relation to dopamine organization and cognitive decline in aging (a grant to support salary of a postdoc)</i>	\$ 70,000
2019-2022	Swedish Research Council 2019-00916 Salami (co-PI) <i>Determinants of age-related brain iron accumulation and links to neurocognitive functions</i>	\$ 155,000
2019-2022	Swedish Research Council 2019-02804 Salami (co-PI) <i>Mechanisms of cognitive aging: The role of brain iron accumulation and neuroinflammation</i>	\$ 694,400
2018-2024	Knut and Alice Wallenberg foundation Salami (PI) <i>DyNAMiC: a prospective longitudinal study of dopamine and brain connectomes: a new window into cognitive aging</i>	\$ 1,388,800
2017-2018	StratNeuro at Karolinska Institute Salami (PI) <i>Does cognitive state modulate age-related differences in functional connectivity?</i>	\$ 115,700
2017-2020	Swedish Research Council 2019-01936 Salami (PI) <i>Brain functional connectome across the human lifespan: links to white matter degeneration and cognitive decline</i>	\$ 695,000

2016-2016	Karolinska Institute Research foundation	Salami (PI)	\$ 7000
	<i>Age-related differences in dynamic interactions of large scale networks during rest and interference resolution</i>		
2015-2018	Swedish Research Council 2015-0132	Salami (co-PI)	\$347000
	<i>The impact of genetic, biological, and lifestyle factors on brain iron load: consequences for motor and cognitive functions in adulthood and aging</i>		
2014-2018	Karolinska Institute KID grant	Salami (PI)	\$ 60200
	<i>Structural, functional and molecular signatures of cognitive decline in aging (This grant supported %50 salary of a Ph.D. student)</i>		
2013-2013	Advokat Byrån grant	Salami (PI)	\$ 5700
	<i>Structural and functional substrates of interference resolution in aging</i>		
2013-2013	Stohnes grant	Salami (PI)	\$ 3750
	<i>Brain dark energy in aging: effect of age on resting-state networks</i>		

AWARDS

2022 Docent in Cognitive Neuroscience (Umeå University)

2018 Wallenberg academy fellow (success rate is less than %5)

TEACHING AND PEDAGOGICAL TRAINING

Group Leadership

SUPERVISION OF POSTDOCTORAL FELLOWS

2025-Pres Robin Pedersen (Main supervisor, Florida State University)

2025-Pres Filip Grill (Main supervisor, Karolinska Institute)

2023-Pres Liucija Vaisvilaite (Main supervisor, Umeå University)

2023-2025 Robin Pedersen (Main supervisor, Umeå University)

2022-2025 Saana Korkki (Main supervisor, Karolinska Institute and Umeå University)

2019- 2025 Kristin Nordin (Main supervisor, Karolinska Institute and Umeå University)

2019 - 2025. Jarkko Johansson (Main supervisor, Umeå University)

2023-2024. Lars Stiernman (Main supervisor, Umeå University)

2021-2022. Justinas Narbutas (Co-supervisor, Karolinska Institute)

2019 - 2021 Tetiana Gorbach (Main supervisor, Umeå University)

SUPERVISION OF Ph.D. STUDENTS

2022-Pres Shuer Ye (Co-supervisor, Norwegian University of Science and Technology)

2020 – 2022 Charlotte McNulty (Main supervisor (incomplete education), Umeå University)
2020 – 2024 Jonatan Gustavsson (Co-supervisor, Karolinska Institute)
2019 – 2023 Robin Pedersen (Main supervisor, Umeå University)
2015 – 2018 Neda Kaboodvand (Main supervisor until midtime, Karolinska Institute)
2015 – 2019 Bárbara Avelar Pereira (co-supervisor, Karolinska Institute)

SUPERVISION OF SELECTED MASTER STUDENTS

2023-2023 Triphose Khonde (Main supervisor, Umeå University)
2023-2023 Anton Degerfält (Main supervisor, Umeå University)
2022-2022 Philip Bahrd (Main supervisor, Umeå University)
2020-2020 Jonatan Gustavsson (Main supervisor, Umeå University)
2018-2018 Liucija Vaisvilaite (Main supervisor, Umeå University)
2018-2018 Robin Pedersen (Main supervisor, Umeå University)
2012-2013 Carl Henrik Ehrenkrona (Co-supervisor, ARC, Karolinska Institute)

Didactic courses

2022 5-week course ‘EMBO Leadership course’, Umeå University
2021 5-week course ‘Basic course in higher education pedagogy’, Karolinska Institute
2017 2-week course ‘Postgraduate Supervision in Practice’, Karolinska Institute
2009 3-week course ‘Basic Education for University Teachers’, Karolinska Institute

Selective Teaching

2021-pres. Central topics in cognitive neuroscience (UMU-39703; graduate level, course organizer, Umeå University)

- The course covers 6 modules including *neuroanatomy*, *attention*, *executive function*, *episodic memory*, *emotion*, and *artificial intelligence*. Each module consists of a lecture and a seminar. During the seminars students team up and each group presents one scientific paper related to the module in question. I serve as a moderator during seminars and evaluate the students via their final essay report and presentation.

2020- pres. Cognitive neuroscience I & II (UMU-3kO000, undergraduate level, Umeå university)

- During cognitive neuroscience I, I have a 3h lecture about *sleep & wakefulness* and a 3h lecture about *associative cortex*. 2*45 min seminars were designated during which students can ask questions related to the lectures.
- During cognitive neuroscience II, I have a 2h lecture about *language & hemispheric asymmetry*, a 4h lecture about *ontogeny & plasticity*, and 2h lecture about *visual perception*. 3*45 min seminars were also designated during which students can ask questions related to the lectures.

2017-pres. Advanced cognitive psychology (postgraduate level, Örebro university)

- During this course, I have 2*2h lectures about *individual differences and brain correlates*.

2016-pres. Frontiers of cognitive neuroscience (KI-2616, postgraduate level, Karolinska Institute)

- I have a 2h lecture about *long-term memory*.

2015-pres. Integration of neuroimaging and cognition in normal aging and dementia at graduate level (KI-2846, graduate level, Course co-organizer at Karolinska Institute)

- I have 3*2h lectures about *diffusion tensor imaging, resting-state functional connectivity and multivariate analysis in the context of aging*.
- I have 3h seminar during which students present their research project and I serve as a moderator

2010-pres. Brain imaging courses (UMU-39702, graduate level, Umeå University)

- I have 4h lecture about *fMRI image processing* and 6h *lab for hands on fMRI* analysis

2018-2023 Knowledge and Memory undergraduate level (1kG005, undergraduate level, Umeå University)

- I have a 2h lecture about *emotion*.
- I have a 2h lecture about *long-term memory*.

COMMISSIONS OF TRUST

EVALUATION OF OTHER WORK

- **June 14th, 2024.** Committee member of mid-term Ph.D. seminar of Tugce Yildiz-Ahola, Karolinska Institute, Stockholm, Sweden
- **February 18th, 2022.** Committee member of Ph.D. defense for Marika Strindberg, Karolinska Institute, Stockholm, Sweden
- **May 29th, 2019.** Committee member of Ph.D. half-time control for Marika Strindberg, Karolinska Institute, Stockholm, Sweden
- **March 20th, 2019.** Committee member of Ph.D. pre-defense for Sara Stillesjö, Umeå University, Umeå, Sweden
- **June 8th, 2018.** Committee member of Ph.D. defense for Kristin Nordin, Uppsala University, Uppsala, Sweden
- **November 30th, 2017.** Committee member of mid-term Ph.D. seminar of David Bäckström, Umeå University, Umeå, Sweden
- **September 14th, 2016.** Opponent for a Ph.D. defense of Aimee Goldstone, University of Birmingham, United Kingdom
- **November 4th, 2015.** Committee member of mid-term Ph.D. seminar of William Hedley Thompson, Karolinska Institutet, Stockholm, Sweden

REVIEWER

- The European Commission, 2020
- The German Research council, 2021

- The French Research Council, 2024
- The Austrian Research Council, 2024

Journals: Human Brain Mapping, NeuroImage, Cerebral Cortex, The Journal of Neuroscience, PNAS, Nature Communication, Nature Neuroscience, Neuron, Neurobiology of Aging, Aging Neuropsychology and Cognition, Journal of Gerontology, Frontiers in Aging, The journal of Cognitive Neuroscience, Acta Psychology, Brain Connectivity, Aging Neuropsychology and cognition, Brain imaging and behavior, eLife, Journal of Alzheimer's disease

Editor for journals

- **2024.** Handling editor for the Neurobiology of Aging journal
- **2022.** Associated Editor for The Journal of Alzheimer Disease

ADDITIONAL ACTIVITIES

2025-2026 A member of Search Committee for a faculty recruitment at Florida State University, Tallahassee, United States

2019-2021 Organizer monthly seminars, WCMM, Umeå University, Sweden

2016- 2019 Board member for doctoral education, Karolinska Institute, Stockholm, Sweden

PUBLICATIONS

Overview

Total number of peer-reviewed articles = 73; h-index = 35; Sum of citations = 5978

Data from Google Scholar, December 2025. <https://orcid.org/0000-0002-4675-8437>

Link to the full publication list: [Alireza Salami - Google Scholar](#)

Peer-reviewed original articles

- 1) Shuer, Y., Rahel Bätz, L., Jain, A., **Salami, A.**, and Ziaei, M. "Resilience-related neural similarity during naturalistic movie watching." *Imaging Neuroscience* (2026).
- 2) Korkki, S.M., Johansson, J., Nordin, K., Pedersen, R., Bäckman, L., Rieckmann, A., **Salami, A.**, (2025). Dedifferentiation of caudate functional organization is linked to reduced D1 dopamine receptor availability and poorer memory function in aging. *Imaging Neurosci*, 3 *imag_a_00462*.
- 3) Mooraj, Z., **Salami, A.**, Campbell, K.L., Dahl, M.J., Kosciessa, J.Q., Nassar, M.R., Werkle-Bergner, M., Craik, F.I.M., Lindenberger, U., Mayr, U., Rajah, M.N., Raz, N., Nyberg, L., Garrett, D.D., (2025). Toward a functional future for the cognitive neuroscience of human aging. *Neuron* 113, 154-183.
- 4) Jansen, M., **Salami, A.**, Ruiz Martínez, F., J. Mitchell, D., Oosterman, J. M., Geerligs, L., (2025); Multiple brain activation patterns underlying successful visual short-term memory across the adult lifespan. *Imaging Neuroscience*

- 5) Ye, S., Dave, A., **Salami, A.**, Ziaei, M. (2025) Frontoparietal functional dedifferentiation during naturalistic movie watching among older adults at risk of emotional vulnerability, *Neurobiology of Aging* 156, 150-162
- 6) Lundgren, E., Lindenberger, U., Lövdén, M., Andersson, M., Axelsson, J., Bäckman, L., Johansson, J., Papenberg, G., Riklund, K., **Salami, A.**, Wåhlin, A., Nyberg, L., Karalija, N. (2025) 10-year longitudinal dopamine D2-receptor losses are associated with cognitive decline in healthy aging, *Cerebral Cortex*, Volume 35, Issue 11, bhaf293,
- 7) Nordin, K., Pedersen, R., Falahati, F., Johansson, J., Grill, F., Andersson, M., Korkki, S.M., Bäckman, L., Zalesky, A., Rieckmann, A., Nyberg, L., **Salami, A.** (2025). Two long-axis dimensions of hippocampal-cortical integration support memory function across the adult lifespan. *eLife*, 97658.1.
- 8) Papenberg, G., Karalija, N., **Salami, A.**, Johansson, J., Wåhlin, A., Andersson, M., Axelsson, J., Garrett, D.D., Riklund, K., Lindenberger, U., Nyberg, L., Backman, L., (2025). Aging-related losses in dopamine D2/3 receptor availability are linked to working-memory decline across five years. *Cerebral cortex*.
- 9) Wang, J., Xu, W., Dove, A., **Salami, A.**, Yang, W., Ma, X., Bennett, D.A., Xu, W., (2025). Influence of lung function on macro- and micro-structural brain changes in mid- and late life. *Int J Surg*.
- 10) Pedersen R, Johansson J, Nordin K, Rieckmann A, Wåhlin A, Nyberg L, Bäckman L, **Salami A.** (2024) Dopamine D1-receptor Organization Contributes to Functional Brain Architecture. *The Journal of Neuroscience*; e0621232024.
- 11) Stålnacke, M., Eriksson, J., **Salami, A.**, Andersson, M., Nyberg, L., Sjöberg, R.L., 2024. Functional connectivity of sensorimotor network before and after surgery in the supplementary motor area. *Neuropsychologia* 204.
- 12) Karalija, N., Papenberg, G., Johansson, J., Wåhlin, A., **Salami, A.**, Andersson, M., Axelsson, J., Kuznetsov, D., Riklund, K., Lovden, M., Lindenberger, U., Backman, L., Nyberg, L., (2024). Longitudinal support for the correlative triad among aging, dopamine D2-like receptor loss, and memory decline. *Neurobiology of aging* 136, 125-132.
- 13) Johansson, J., Nordin, K., Pedersen, R., Karalija, N., Papenberg, G., Andersson, M., Korkki, S.M., Riklund, K., Guitart-Masip, M., Rieckmann, A., Bäckman, L., Nyberg, L., **Salami, A.** (2023). Bi-phasic patterns of age-related differences in dopamine D1 receptors across the adult lifespan. *Cell Reports* 42, 113107
- 14) Johansson, J., Karalija, N., L., **Salami, A.** (2023). Cerebrovascular integrity affects gradients of age-related dopamine D1 differences in the striatum. *Aging brain*, 4, 100094
- 15) Gustavsson, J., Johansson, J., Falahati, F., Andersson, M., Papenberg, G., Avelar-Pereira, B., Bäckman, L., Kalpouzos, G., **Salami, A.** (2023). The iron-dopamine D1 coupling modulates neural signatures of working memory across adult lifespan. *NeuroImage* (23) 00474-3
- 16) Pedersen R., Johansson J., **Salami A.** (2023) Dopamine D1-signaling modulates maintenance of functional network segregation in aging. *Aging brain*, 3, 100079

- 17) Vaisvilaite, L., Andersson, M., **Salami, A.**, Specht, K., (2023). Time of day dependent longitudinal changes in resting-state fMRI. *Front Neurol* 14, 1166200.
- 18) Li, X., **Salami, A.**, Persson, J., (2023). Hub architecture of the human structural connectome: Links to aging and processing speed. *NeuroImage* 278, 120270.
- 19) Stiernman L., Grill F., McNulty Ch., Bahrd Ph., Lundmark V.P., Axelsson Y., **Salami A.**, Rieckmann A., (2023) Widespread fMRI BOLD signal overactivations during cognitive control in older adults are not matched by corresponding increases in fPET glucose metabolism, *Journal of Neuroscience*, 43 (14), 2527-2536.
- 20) Korkki, S.M., Papenberg, G., Guitart-Masip, M., **Salami, A.**, Karalija, N., Nyberg, L., Bäckman, L. (2023). Dopamine systems and cognitive functioning across the adult life span. SAGE Publications Ltd. 12 (1).
- 21) Nyberg, L., Karalija, N., Papenberg, G., **Salami, A.**, Andersson, M., Pedersen, R., Vikner, T., Garrett, D.D., Riklund, K., Wahlin, A., Lovden, M., Lindenberger, U., Backman, L., (2022). Longitudinal stability in working memory and frontal activity in relation to general brain maintenance. *Sci Rep* 12, 20957.
- 22) Karalija N., Johansson J., Papenberg G., Wahlin A., **Salami A.**, Kohncke Y., Brandmaier A.M., Andersson M., Axelsson J., Riklund K., Lövdén M., Lindenberger U., Backman L., Nyberg L. (2022) Longitudinal Dopamine D2 Receptor Changes and Cerebrovascular Health in Aging. *Neurology*.
- 23) Nordin K., Gorbach T., Pedersen R., Panes Lundmark V., Johansson J., Andersson M., McNulty C., Riklund K., Wahlin A., Papenberg G., Kalpouzos G., Backman L., **Salami A.** (2022) DyNAMiC: A prospective longitudinal study of dopamine and brain connectomes: A new window into cognitive aging. *J Neurosci Res*.
- 24) Li X., **Salami A.**, Avelar-Pereira B., Backman L., Persson J. (2022) White-Matter Integrity and Working Memory: Links to Aging and Dopamine-Related Genes. *eNeuro* 9.
- 25) **Salami A.**, Adolfsson R., Andersson M., Blennow K., Lundquist A., Adolfsson A.N., Scholl M., Zetterberg H., Nyberg L. (2022) Association of APOE varepsilon4 and Plasma p-tau181 with Preclinical Alzheimer's Disease and Longitudinal Change in Hippocampus Function. *J Alzheimers Dis* 85, 1309-1320.
- 26) Pedersen, R., Geerligs, L., Andersson, M., Gorbach, T., Avelar-Pereira, B., Wahlin, A., Rieckmann, A., Nyberg, L., **Salami, A.** (2021). When functional blurring becomes deleterious: Reduced system segregation is associated with less white matter integrity and cognitive decline in aging. *NeuroImage* 242, 118449.
- 27) **Salami, A.**, Papenberg, G., Sitnikov, R., Laukka, E. j., Persson, J., Kalpouzos, G. (2021) Elevated neuroinflammation contributes to the deleterious impact of iron overload on brain function in aging. *Neuroimage*, 117792.

- 28) Nordin, k., Nyberg, L., Andersson, M., Karalija, N., Riklund, K., Bäckman, L., **Salami, A.** (2021) Distinct and common large-scale networks of the hippocampus long-axis in older age: Links to episodic memory and dopamine D2 receptor availability. *Cerebral Cortex*
- 29) Pereira, B., Bäckman, L., Wåhlin, A., Nyberg, L., **Salami, A.** (2020) Increased functional homotopy of the prefrontal cortex is associated with corpus callosum degeneration and working memory decline. *Neurobiology of Aging*, doi.org/10.1016/j.neurobiolaging.2020.08.008
- 30) Gorbach T, Lundquist A, de Luna X, Nyberg L, **Salami A.** (2020) A Hierarchical Bayesian Mixture Modeling Approach for Analysis of Resting-State Functional Brain Connectivity: An Alternative to Thresholding. *Brain Connect.* doi 10.1089/brain.2020.0740
- 31) Johansson, J., **Salami, A.**, Lundquist, A., Wåhlin, A., Andersson, M., Nyberg, L. (2020) longitudinal evidence that reduced hemispheric encoding/retrieval asymmetry predicts episodic memory impairment in aging. *Neuropsychologia*, 137, 107329
- 32) Zuo, N. [†], **Salami, A.** [†], Liu, H., Yang, Z., Jiang, T. (2020) Functional maintenance in the multiple demand network characterizes superior fluid intelligence in aging. *Neurobiology of aging*, 85, 145-153
[†] equal contribution
- 33) Karalija, N., Wåhlin, A., Ek, J., Rieckmann, A., Papenberg, G., **Salami, A.**, Brandmaier, A.M., Köhncke, Y., Johansson, J., Andersson, M., Axelsson, J., Orädd, G., Riklund, K., Lövdén, M., Lindenberger, U., Bäckman, L Nyberg, L. (2019) Cardiovascular factors are related to dopamine integrity and cognition in aging. *Journal of Cerebral blood flow and Metabolism*.
- 34) Nyberg, L., Andersson, M., Lundquist, A., **Salami, A.**, Wåhlin, A. (2019) Frontal contribution to hippocampal hyperactivity during memory encoding in aging. *Frontiers in molecular neuroscience*, 12, 229
- 35) Papenberg, G., Jonasson, L., Karalija, N., Johansson, J., Köhncke, Y., **Salami, A.**, Andersson, M., Axelsson, J., Wålin, A., Riklund, K., Lindenberger, U., Lövdén, M., Nyberg, L., Backman, L. (2019). Mapping the landscape of human dopamine D2/3 receptors with [¹¹C]raclopride. *Brain Structure and function*, 224 (8), 2871-2882.
- 36) Walton, E., Hiber, D., Yilmaz, Z., et al. (2019) Exploration of shared genetic architecture between subcortical brain volumes and anorexia nervosa. *Molecular neurobiology*, 56 (7), 5146-5156.
- 37) Karalija, N., Jonasson, L., Johansson, J., Papenberg, G., **Salami, A.**, Andersson, M., Riklund, K., Nyberg, L., Boraxbekk, C.J. (2019) High long-term test-retest reliability for extrastriatal [¹¹C]raclopride binding in healthy older adults. *Journal of Cerebral blood flow and Metabolism*, 0271678X19874770.
- 38) Becker, N., Kalpouzos, G., **Salami, A.**, Laukka, E. J., Brehmer, Y. (2019) Structure-function associations of successful associative encoding. *Neuroimage*, 201, 116020
- 39) Papenberg, G., Karalija, N., **Salami, A.**, Rieckmann, A., Andersson, M., Axelsson, J., Riklund, K., Lindenberger, U., Lövdén, M., Nyberg, L., Backman, L. (2019). Balance between transmitter

availability and dopamine D2 receptors in prefrontal cortex influences memory functioning. *Cerebral Cortex*, *BHZ* 142.

- 40) Papenberg, G., Karalija, N., **Salami, A.**, Andersson, M., Axelsson, J., Riklund, K., Lindenberger, U., Nyberg, L., Backman, L. (2019). The Influence of Hippocampal Dopamine D2 Receptors on Episodic Memory Is Modulated by BDNF and KIBRA Polymorphisms. *J. Cogn. Neurosci.*, 1-8.
- 41) Zuo N., **Salami, A.** Yang, Y., Yang, Z., Sui, J., Jiang, T. (2019) Activation-based association profiles differentiate network roles across cognitive loads. *Human Brain Mapping*, 40, 2800-2812.
- 42) Stomby, A., **Salami, A.**, Dahlqvist, P., Evang, J. A., Ryberg, M., Bollerslev, J., Olsson, T., Johannsson, G., Ragnarssonand, O. (2019). Elevated resting-state connectivity in the medial lobe and the prefrontal cortex among patients with Cushing's Syndrom in remission. *European Journal of Endocrinology*, 180 (5), 329-338.
- 43) **Salami, A.**, Garrett, D., Wåhlin, A., Rieckmann, A., Papenberg, G., Karalija, N., Jonasson, L., Andersson, M., Karalija, N., Axelsson, J., Johansson, J., Riklund, K., Lövdén, M., Lindenberger, U., Bäckman, L., Nyberg, L (2019). Dopamine D2/3 binding potential modulates neural signatures of working memory in a load-dependent fashion. *Journal of Neuroscience*, 39 (3), 537-547.
- 44) **Salami, A.**, Avelar-Pereira, B., Garzón, B., Sitnikov, R., Kalpouzos, G. (2018) Functional coherence of striatal resting-state networks is modulated by striatal iron content. *Neuroimage*, 183, 495-503.
- 45) Köhncke, Y., Papenberg, G., Jonasson, L., Karalija, N., Wåhlin, A., **Salami, A.**, Andersson, M., Axelsson, J.E., Nyberg, L., Riklund, K., Bäckman, L., Lindenberger, U., Lövdén, M. Self-rated intensity of habitual physical activities is positively associated with dopamine D2/3 receptor availability and cognition. *Neuroimage*, 181, 605-616.
- 46) **Salami, A.**, Rieckmann, A., Andersson, M., Wåhlin, A., Karalija, N., Lövdén, M., Lindenberger, U., Bäckman, L., Nyberg, L. (2018) Neurocognitive Profiles of older adults with working-memory dysfunction. *Cerebral Cortex* 28.7, 2525-2539.
- 47) Kaboodvand, N., Lövdén, M., Lindenberger, U., Bäckman, L., Nyberg, L., **Salami, A.** (2018). The Retrosplenial Cortex: A Memory Gateway between the Cortical Default Mode Network and the Medial Temporal Lobe. *Human Brain Mapping*, 39 (5), 2020-34.
- 48) Pereira, B., Bäckman, L., Wåhlin, A., Nyberg, L., **Salami, A.** 2017. Age-related differences in dynamic interactions among default mode, fronto-parietal control, and dorsal attention networks during resting-state and an interference resolution. *Frontiers in Aging Neuroscience*, 9, 152.
- 49) **Salami, A.**, Wåhlin, A., Kaboodvand, N., Lundquist, A., Nyberg, L., 2016. Longitudinal evidence for dissociation of anterior and posterior MTL resting state connectivity in aging: Links to perfusion and memory. *Cerebral Cortex*, 26 (10), 3953-3963.

- 50) Lövdén, M., Karalija, N., Kaboodvand, N., Andersson, M., Wåhlin, A., Axelsson, J., Köhncke, Y., Rieckmann, A., Papenberg, G., Garrett, D., **Salami, A.**, Riklund, K., Bäckman, L., Nyberg, L., Lindenberger, U. (2017). Latent-Profile analysis reveals behavior and brain correlates of Dopamine-Cognition associations. *Cerebral Cortex*, 28(11), 3894-3907.
- 51) Kalpouzos, G., Garzon, B., Sitnikov, R., Heiland, C., **Salami, A.**, Persson, J., Bäckman, L. (2017). Higher striatal iron concentration is linked to frontostriatal underactivation and poorer memory in normal aging. *Cerebral Cortex*, 27 (6), 3427-3426
- 52) Ziaei, M., **Salami, A.**, Persson, J., 2017. Age-related alteration in functional connectivity patterns during working memory encoding of emotional items. *Neuropsychologia*, 94,1-12.
- 53) Månsson, K.N.T., **Salami, A.**, Carlbring, P., Boraxbekk, C.J., Andersson, G., Furmark, T., 2016. Structural but not functional neuroplasticity one year after effective cognitive behavior therapy for social anxiety disorders. *Behavioral Brain Research*, 6, e727.
- 54) Nyberg, L., Karalija, N., **Salami, A.**, Andersson, M., Wåhlin, A., Kaboodvand, N., Köhncke, Y., Axelsson, J., Rieckmann, A., Papenberg, G., Garrett, D., Riklund, K., Lövdén, M., Lindenberger, U., Bäckman, L., 2016. Dopamine D2 receptor binding potential is linked to striato-hippocampal functional connectivity and episodic memory. *Proceedings of the National Academy of Science (PNAS)*, 113 (28), 7918-7923.
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[†] Lars Nyberg and Alireza Salami Wrote the paper

PEER-REVIEWED CONFERENCE CONTRIBUTIONS

Oral communications

Salami, A. (2025, June). PET Imaging in Cognitive Neuroscience: Linking Neurochemistry to Brain Activation and Connectivity. *Symposium*, the Organization for Human Brain Mapping (oHBM), Sydney, Australia

Salami, A. (2025, May). Aging pathways: Functional Connectivity Across Species. *Symposium*, Orlando, The Florida Consortium on the Neurobiology of Cognition, Orlando, Florida

Salami, A. (2024, October). Functional and molecular signatures of cognitive decline in aging: Evidence from large-scale longitudinal imaging studies. *Invited speaker*, UTokyo Stockholm Trio Workshop, Stockholm, Sweden

Salami, A. (2023, September). Dopamine Organization contributes to functional brain architecture and network segregation. *Invited speaker*, Resting-state conference, Dallas, US

Salami, A. (2023, April). Two long-axis dimensions of hippocampal cortical integration informs memory function across the adult lifespan. *Symposium*, Learning and memory conference, California, US

Salami, A. (2023, March). Dopamin D1 recetor availability shares organizational principles with brain functional architecture. *Invited Speaker*, Asian conference on Aging and Gerontology, Tokyo, Japan

Salami, A. (2022, November). Neurocognitive profiles of individuals at risk for cognitive decline. *Invited speaker*, Bergen, Norway

Salami, A. (2022, May). Dopamine in the aging brain:Links to cognition, brain integrity, genetic, and lifestyle . *Symposium* , Dopamine conference, Montreal, Canada

Salami, A. (2020, February). Reduced functional segregation is related to less dopamine availability and cognitive decline in aging. *Invited speaker*, Redboud University, Netherland

Salami, A. (2019, November). Functional, structural, and neuromodulatory brain signatures of cognitive aging. *Invited speaker*, University of Liege, Belgium

Salami, A. (2018, July). Analysis of Neuroimaging data with a particular focus on fMRI, *Geust speaker*, University of California in San Diego, United States

Salami, A. (2018, August). Functional, structural, and neuromodulatory brain signatures of cognitive aging and pain, . *Invited speaker*, *Pain Forum*, University of California in San Diego, United States

Salami, A. (2018, January). Dopamine D2 modulates task-related activations during working memory in old age, *WCMM symposium*, Umeå University, Umeå, Sweden

Salami, A. (2017, May). Dopamine D2 binding potential modulates human brain connectome, *Invited speaker*, *Cobrat retreat*, Max Planck Institutes, Berlin, Germany

Salami, A. (2016, April). Neurocognitive profiles of individuals at risk for working memory dysfunction, *Invited speaker*, *Cobrat retreat*, Max Planck Institutes, Berlin, Germany

Salami, A. (2013, May). Dark Energy in brain Aging: Evidence for age-related failure in hippocampal decoupling during rest. *Invited speaker*, *Resting state workshop*, Umeå university, Umeå, Sweden

Salami, A. (2013, March). Network-specific effects of age on level of activations of resting state. *Invited speaker*, *Psychofika*, Aging research center, Karolinska Institute, Stockholm, Sweden

Salami, A. (2011, June). Age-related differences in the functional neuroanatomy of episodic memory: Combining structural and functional data. *Invited speaker* , *1st meeting of the Imaging and Cognition Genetics conference*, Bergen, Norway.

Selected Posters

Nordin, A., Johansson, J., Grill, F., Falahati, F., Pedersen, R., Andersson, M., Rieckmann, A., **Salami, A.** State-dependent modulation of hippocampal functional topography support memory across the adult lifespan. *Organization Human Brain Mapping 2024, Seoul, South Korea*.

Nordin, A., Pedersen, R., Falahati, F., Johansson, J., Grill, F., Andersson, M., Rieckmann, A., **Salami, A.** Maintained topography of hippocampal connectivity gradients contributes to episodic memory in older age. *Learning and Memory 2023. California, United States*.

Nordin, A., Johansson, J., Grill, F., Falahati, F., Pedersen, R., Andersson, M., Rieckmann, A., **Salami, A.** Topographic organization of hippocampal functional connectivity is linked to the dopamine D1 receptor across the adult lifespan. *Dopamine 2022. Montreal, Canada*.

Esmaeili, M. and **Salami, A.** Brain functional fingerprinting predicts individual differences in cognition: An AI-based approach, ISMRM, 2022, London.

Salami, A., Papenberg, G., Sitnikov, R., Laukka, E., Persson, J., Kalpouzos, G.. Opposing effects of iron on human brain function across the adult lifespan: contribution of neuroinflammation, Society for Neuroscience (SFN), 2019, Chicago, United states

Salami, A., Papenberg, G., Andersson, M., Wåhlin, A., Karalija, N., Lövdén, M., Lindenberger, U., Bäckman, L., Nyberg, L. (2018, June) Dopamine D2 is associated with BOLD in a load-dependent manner during working memory. Annual meeting of the Organization for Human Brain Mapping (OHBM) conference, Singapore, Singapore

Salami, A., Papenberg, G., Andersson, M., Wåhlin, A., Karalija, N., Lövdén, M., Lindenberger, U., Bäckman, L., Nyberg, L. (2018, April) Dopamine D2 is associated with BOLD in a load-dependent manner during working memory. International conference on learning and memory, UC Irvine, California

Becker, N., Kalpouzos, G., **Salami, A.**, Laukka, E., Brehmer, Y. (2017, March). Structure-Function association of successful associative encoding-A multimodal imaging approach. The 24th annual cognitive neuroscience society meeting 2017, San Francisco.

Pereira, B., Bäckman, L., Nyberg, L., **Salami, A.** (2016, September). Age-related differences in dynamic functional connectivity between task-positive networks and the default mode network during rest and an interference task. 5th Biennial conference on resting state and brain connectivity, Vienna

Kaboodvand, N., Bäckman, L., Nyberg, L., **Salami, A.** (2016, September). Intrinsic Functional Connectivity between Hippocampus and Retrosplenial Cortex: Links to Episodic Memory and Striatal Dopamine D2 Receptor Density. 5th Biennial conference on resting state and brain connectivity, Vienna

Salami, A., Nyberg, L. (2013, June). Network-specific effects of age on resting state level of activation. 19th Annual meeting of the Organization for Human Brain Mapping (OHBM) conference, Seattle, WA, USA.

Salami, A., Rieckmann, A., Fischer, H., Bäckman, L. (2013, Feb). The effects of aging on successful conflict resolution: Evidence for functional reorganization of cortical networks. International Neuropsychological Society (INS), Hawaii, USA

Salami, A. (2011, May). Age-related differences in WM integrity and their associations to cognitive decline. JCLL Conference of personalized aging: potential and limits of a new concept, Bremen, Germany.

Salami, A., Eriksson, J., Nyberg, L. (2011, June). Age-related differences in the functional neuroanatomy of episodic memory: Combining structural and functional data. 17th Annual meeting of the Organization for Human Brain Mapping (OHBM) conference, Quebec City, Canada.

Ehrenkrona, C. H., **Salami, A.**, Boucharin, A., Fischer, H., Bäckman, L., Kalpouzos, G (2013, July). Structural connectivity within the Default Mode Network: associations with age and working memory performance. European Congress of Psychology, Stockholm, Sweden.

Salami, A., Kalpouzos, G., Bäckman, L. (2013, November). Dark energy in brain aging: Evidence for network-specific effects of age on resting state functional connectivity. Society for Neuroscience (SFN), San Diego, United states.

Guitar, M., **Salami, A.**, Garrett, D., Lindenberger, U., Nyberg, L., Bäckman, L. (2013, November). Relationship between BOLD variability, dopaminergic transmission and cognitive aging. Society for Neuroscience (SFN), San Diego, United states