

Scientific Program

Thursday, 14.10.2010

09.00 – 09.30 h			
	Silbersaal	Opening / Welcome	
	Silbersaal (Behavioral studies)	Saal 9 (Neural Mechanisms)	Saal 10 (Interventions/Applications/Dementia)
09.30 – 10.00 h	Chair: Maurits van der Molen Development of cognitive behavior and brain structure from midlife to old age: The Seattle longitudinal study Schaie, K.W., Willis, S.L.	Chair: Venkata Mattay Performance-related differences in brain activation patterns: Older brains are not all alike Lindenberger, U.	Chair: Robert M. Chapman Physical activity, cognitive training, and cognitive functioning in older adults: The seniors health and activity research program Katula, J.A.
10.00 – 10.30 h	Part-set cuing in older adults: Further evidence of intact forgetting in aging Andrés, P., Howard, C.	Life-Span differences in the neural underpinnings of performance improvements in episodic memory Brehmer, Y., Shing, Y.L., Heekeren, H.R., Bäckman, L., Lindenberger, U.	Changes of some oxidative stress markers in the serum of patients with mild cognitive impairment and Alzheimer's disease Ciobica, A., Padurariu, M., Cristinel, S., Lucian, H.
10.30 – 11.00 h	Lifespan changes in stopping and performance adjustments van de Laar, M., van den Wildenberg, W., van Boxtel, G., van der Molen, M.	Imaging genetic influences in normal cognitive aging Mattay, V.	Predicting Alzheimer's disease in individuals with mild cognitive impairment using brain ERP components Chapman, R.M.
11.00 – 11.30 h			
	Panoramaforum	Coffee break	
11.30 – 12.00 h	Chair: Raoul Bell Adult age differences in the effects of irrelevant speech on memory Bell, R., Buchner, A., Mund, I.	Chair: Andreas Fallgatter The role of white matter in cognitive aging Charlton, R.	Chair: David Kennedy Herbal extracts, phytochemicals and brain function: mechanisms relevant to cognition and ageing Kennedy, D.O.
12.00 – 12.30 h	Age-related increase of dual-task costs in walking: now you see it, now you don't Bock, O., Beurskens, R.	Age-associated changes in brain function as assessed with near-infrared spectroscopy (NIRS) Fallgatter, A.J., Ernst, L., Ehlis, A.-C.	Physical exercise and cognitive training for attentional control in older adults Bherer, L.
12.30 – 13.00 h	Understanding the aging decision maker Mata, R.	Diagnostic and prognostic power of multivariate neuroimaging markers for Alzheimer's disease Habeck, C.	Focus-switching training in younger and older adults Dorbarth, L., Titz, C., Hasselhorn, M.

13.00 – 14.30 h		Postersession	
13.00 – 14.30 h		Lunch / Coffee break	
Panoramaforum			
14.30 – 15.00 h	<p>Chair: Richard Ridderinkhof</p> <p>Age-related changes in the ERP correlates of episodic retrieval: impact of executive functioning Angel, L., Fay, S., Bouazzaoui, B., Isingrini, M.</p>	<p>Chair: Monica Fabiani</p> <p>On the role of the cerebellum in ageing cognition Hogan, M.</p>	<p>Chair: Ralf Krampe</p> <p>The relation of physical activity to cognitive function across the adult lifespan Kamijo, K., Hillman, C.H.</p>
15.00 – 15.30 h	<p>Motivational modulation of action control: How inter-individual variability may shed light on the motivation-control interface (and its surprisingly elusive neurocognitive mechanisms Ridderinkhof, K.R.</p>	<p>Age differences in reliance on corpus callosum: Behavioral implications Seidler, R.D., Fling, B., Bernard, J., Langan, J., Reuter-Lorenz, P.</p>	<p>Expertise, age, and training in rhythmic timing: an fMRI study Krampe, R., Lavrysen, A., Wenderoth, N., Swinnen, S.</p>
15.30 – 16.00 h	<p>Analyzes of the associations between blood pressure and cognitive function in old age: Report from the Gothenburg H70 study Thorvaldsson, V., Hofer, S.M., Skoog, I., Johansson, B.</p>	<p>A multimodal approach to the investigation of executive function in aging Fabiani, M.</p>	<p>Auditory cortical activity measures identify those individual mild cognitive impairment (MCI) subjects who will covert to Alzheimers dementia (AD) Golob, E., Rex, C.S., Lynch, G., Starr, A.</p>
16.00 – 16.30 h	<p>Word retrieval in aging: First-syllable frequency influences tip-of-the-Tongue States Abrams, L., Farrell, M.T.</p>	<p>Conflict- and distraction processing in young and middle-aged people: An ERP study Mager, R.</p>	<p>The spatial arrangement of task networks and its effects on memorability and cognition of elderly computer users Jochems, N., Vetter, S., Schlick, C.M.</p>
16.30 – 17.00 h		Coffee break	
Panoramaforum			
17.00 – 17.30 h	<p>Chair: Patrick Lemaire</p> <p>When inhibition fails: Ageing and individual differences. Geerligs, L., Saliassi, E., Maurits, N.M., Lorist, M.M.</p>	<p>Chair: Nele Wild-Wall</p> <p>Lifespan differences in electrophysiological correlates of early monitoring and late evaluative processes during reinforcement learning Hämmerer, D., Biele, G., Philiastides, M., Schroeder, S., Müller, V., Heekeren, H., Lindenberger, U., Li, S.-C.</p>	<p>Chair: Kristy Nielson</p> <p>How can cognitive control functioning be improved in old age? Kray, J.</p>
17.30 – 18.00 h	<p>Age-related differences in strategy repertoire and selection: Role of inhibition and shifting capacities Lemaire, P., Hodzik, S.</p>	<p>Compensation of age-related impairments in working memory Schapkin, S.A., Freude, G.</p>	<p>Preclinical detection of Alzheimer's disease using neuroimaging: the influence of risk and reserve Nielson, K.A.</p>

18.00 – 18.30 h	On the Specificity of Face Cognition Compared to General Cognitive Functioning and Object Cognition Across Adult Age Hildebrandt, A., Wilhelm, O., Schmiedek, F., Herzmann, G., Sommer, W.	Age-related differences in neurocognitive processing during high working memory load Wild-Wall, N., Gajewski, P., Falkenstein, M.	Cognitive benefits from mental and physical activity in older women: Results from the Berlin Stays Fit study Klusmann, V., Evers, A., Heuser, I.
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Friday, 15.10.2010

	Silbersaal (Behavioral studies)	Saal 9 (Neural Mechanisms)	Saal 10 (Interventions/Applications/Dementia)
09.00 – 09.30 h	Chair: Oliver Wolf Stress, memory and aging Wolf, O.T.	Chair: Francisco Barceló Age-related modulations of neurocognitive correlates of visual search Amenedo, E., Lorenzo, L.	Chair: Christian Stamov Roßnagel Can working memory be improved in younger and older adults using a strategy-based intervention? Zinke, K., Bronder, P., Kliegel, M.
09.30 – 10.00 h	Implicit memory and aging: Behavioral and neural findings Ballesteros, S., Sebastián, M., Osorio, A., Mayas, J., Reales, J.M.	Ageing and the perceptual organization of sounds Alain, C.	Enhancing older people's self-regulated learning: A metacomprehension approach Stamov Roßnagel, C.
10.00 – 10.30 h	Cognitive performance in a UK cohort of 85 year olds: the Newcastle 85+ study Collerton, D., Collerton, J., Jagger, J., Bond, J., Saxby, B.K., Brooker, H., McKeith, I.G., Kirkwood, T.	Additive effects of age and cognitive control during the preparatory and execution stages of a task-switching paradigm Barceló, F.	The intersection of hearing loss and cognitive decline in aging Pichora-Fuller, M.K., Murphy, K., Reed, M., Lemke, U.
10.30 – 11.00 h	Panoramaforum	Coffee break	
11.00 – 11.30 h	Chair: Matthias Kliegel Prospective memory in healthy aging: Dismantling the "age-prospective memory paradox" Kliegel, M.	Chair: Edward Golob Age-related changes in the neural correlates of intertemporal decision-making and reward-based learning Eppinger, B., Nystrom, L., Cohen, J.D.	Chair: Guy Potter The contribution of job demands to cognitive and emotional health in older adults Potter, G., Hybels, C., Pieper, C., Plassman, B.
11.30 – 12.00 h	Age-related deficits in low-level inhibitory motor control Maylor, E.A., Schlaghecken, F.	Probability learning in young and elderly adults - An electrophysiological study Gaál, Zs.A., Boha, R., Molnár, M.	Cognitive slowing (CS) and desynchronisation in healthy aging, MCI and early stages of AD Schecker, M.
12.00 – 12.30 h	Variability within and between individuals in old age Rabbitt, P.	Top-down influences on sensory processing in normal aging Golob, E.	Deep Brain Stimulation in Parkinson's disease: Effects on cognition Fimm, B.
12.30 – 13.00 h	Directed forgetting and aging Titz, C.	Event-related brain oscillations and aging Kopp, B., Howe, J., Wessel, K.	Can we enhance memory functions in the elderly with lifestyle interventions? Flöel, A.
13.00 – 14.30 h		Postersession	Poster award
13.00 – 14.30 h	Panoramaforum	Lunch / Coffee break	

<p>14.30 – 15.00 h</p> <p>15.00 – 15.30 h</p> <p>15.30 – 16.00 h</p> <p>16.00 – 16.30 h</p>	<p>Chair: Robert West</p> <p>Divided attention in 3D space: Age related differences Grosjean, M., Rinkenauer, G.</p> <p>The influence of ageing on regulating cognition and emotion: Evidence from event-related brain potentials West, R., Johnson, B.N., Perry, S.J.</p> <p>Cognitive functions and heart failure in older age Karbach, J., Fischer, D., Kindermann, I., Köllner, V., Kindermann, M., Böhm, M.</p> <p>Performance monitoring in aging Endrass, T., Schreiber, M., Kathmann, N.</p>	<p>Chair: Juliana Yordanova</p> <p>Age-dependent electrophysiological correlates of emotional go-nogo task Molnár, M., Boha, R., Tóth, B., Gaál, Zs.A.</p> <p>Brain white matter integrity and lifetime cognitive ageing Penke, L., Muñoz Maniega, S., Valdes Hernandez, M.C., Bastin, M.E., Gow, A.J., Murray, C., Wardlaw, J.M., Deary, I.J.</p> <p>Synchronization of neuroelectric theta oscillations plays an important role for error processing during aging Kolev, V., Falkenstein, M., Yordanova, J.</p> <p>Auditory communication and aging: The role of the brain interface between sensation and perception Ross, B.</p>	<p>Chair: Jerome Yesavage</p> <p>Cortical neural synchronization across Alzheimer's disease progression as revealed by resting state EEG rhythms: new findings Babiloni, C., Vecchio, F., Frisoni, G.B., Ferri, R., Rodriguez, G., Rossign, P.M.</p> <p>Effects of different exercise interventions on cognitive functioning in older adults Völcker-Rehage, C., Godde, B., Staudinger, U.M.</p> <p>Electrophysiological correlates of improvement in visual search task after a broad cognitive training in aging Gajewski, P.D., Wild-Wall, N., Falkenstein, M.</p> <p>On the use of medications with cognitive training Yesavage, J.</p>
<p>Social event</p>			

Saturday, 16.10.2010

	Silbersaal (Behavioral studies)	Saal 9 (Neural Mechanisms)	Saal 10 (Interventions/Applications/Dementia)
09.00 – 09.30 h	Chair: Otmar Bock Adult age differences in dual-task visuomotor adaptation Grigороva, V., Bock, O., Ilieva, M.	Chair: Richard Jennings Novelty-related motivation of anticipation and exploration by Dopamine: Implications for slowing memory decline in old age Düzel, S.	Chair: Gillian Rowe Determinants of working memory performance Rowe, G., Hasher, L.
09.30 – 10.00 h	Memory across the life span Markowitsch, H.J.	How essential to brain aging is hypertension? Jennings, J.R.	Light-induced adaptation to night work: Effects on cognitive performance in elderly persons Kretschmer, V., Griefahn, B., Schmidt, K.-H.
10.00 – 10.30 h	Genetic factors affecting cognitive aging Reinvang, I.	Response-related theta oscillations reflect differences in error production during aging Yordanova, J., Falkenstein, M., Kolev, V.	Motor and cognitive performance in healthy and demented subjects Eichberg, S.
10.30 – 11.00 h	Prefrontal cortex mediation of age-related changes in processing efficiency Rypma, B.	Age-related performance differences in driving-like dual tasks: A neurophysiological investigation Hahn, M.	Cognitive changes in assembly line workers: Implications for future work design – A study in the German automotive industry Kotzab, D., Frieling, E., Enriquez, A., Sytch, A.
11.00 – 11.30 h	Panoramaforum Coffee break		
11.30 – 12.00 h	Chair: Bernhard Hommel Feature integration across the Lifespan: Stickler stimulus-response bindings in children and older adults Hommel, B., Kray J., Lindenberger, U.	Chair: Kirk Daffner What goes up must come down: the fate of compensatory neural activity in very old age Daffner, K.R., Sun, X., Tarbi, E., Rentz, D.M., Holcomb, P.J., Riis, J.L.	Chair: Jerri Edwards Supporting older adults technology use through universal design and instruction Sengpiel, M.
12.00 – 12.30 h	Visuo-motor adaptation at older working age Hegele, M.	More automation and less cognitive control of imagined walking movements in high- versus low-fit older adults Godde, B., Voelcker-Rehage, C.	Cognitive speed of processing training transfers to improved functional performance Edwards, J.D.

12.30 – 13.00 h	Age differences in daily variability of cognitive performance Schmiedek, F., Lövdén, M., Riediger, M., Wagner, G.G., Lindenberger, U.	Mild cognitive impairment and healthy ageing: Intra-group heterogeneity in visual search and phasic alerting techniques Tales, A.	Motor imagery as a tool in rehabilitation in older adults Schott, N.
13.00 – 13.45 h	Panoramaforum	Lunch / Coffee break	
13.45 – 14.15 h	Chair: Willem Verwey Cross-modal distraction: Are age-related inhibitory deficits modality dependent? van Gerven, P.W.M., Guerreiro, M.J.S.	Chair: Edmund Wascher Age-related encoding differences in a memory scanning task with aversive and everyday sounds: An event-related potential study Czigler, I., Gyimesy, K., Horváth, J., Gaál, Z.A.	Chair: Hubert Dinse Mental exercising through socializing: What types of social interactions lead to cognitive boosts? Ybarra, O.
14.15 – 14.45 h	The influence of background context on memory in older adults Fernandes, M.	Blood pressure and cognitive function in older adults: Moderators, Mediators, and Prognosis Waldstein, S.R.	Dance therapy for cognitive enhancement in the elderly Kattenstroth, J.C., Kalisch, T., Tegenthoff, M., Dinse, H.R.
14.45 – 15.15 h	Motor skill development in the elderly and middle-aged: evidence for two learning mechanisms Verwey, W.B., Abrahamse, E.L., Ruitenberg, M.F.L., de Kleine, E.	Distraction by irrelevant information in healthy ageing Wascher, E.	The effect of a combined motor and cognitive training on cognitive function, structural and functional MRI and BDNF plasma levels in MCI patients Müller, N.G., Bittner, V., Hausmann, J., Bittner, D.M.
15.15 – 15.45 h	Silbersaal	Outlook and Farewell	

Posterpresentation:

1. **Does postural stability of elderly people improve with the aid of haptic supplementation by a light grip of a mobile support?**
Albertsen, I.M., Temprado, J.-J.
2. **Effect of Short-term nordic walking training on neural correlates of cognitive functioning in patients with amnesic mild cognitive impairment**
Alichniewicz, K.K., Brunner, F., Möhwald, M., Nebl, H., Klünemann, H.H., Greenlee, M.W.
3. **Role of visual processing on age-related dual-task deficits in locomotion**
Beurskens, R., Bock, O.
4. **Working memory plasticity: A training study in younger and older adults**
Bürki, C., Chicherio, C., Ludwig, C., de Ribaupierre, A.
5. **A hierarchical diffusion model account of intra- and inter-individual variability in a speeded two-choice reaction time task across the lifespan**
Chicherio, C., Dirk, J., Vandekerckhove, J., Ghisletta, P., de Ribaupierre, A.
6. **Neural correlates of mental imagery of brisk and comfortable walking in a healthy elderly population: an fMRI study**
Crémers, J., Stamatakis, J., D'Ostilio, K., Garraux, G.
7. **Midlife body mass index and longitudinal trajectories of change for multiple cognitive abilities in late life – findings from the Swedish adoption/Twin study of aging**
Dahl, A.K., Hassing, L.B., Fransson, E.I., Gatz, M., Reynolds, C.A., Pedersen, N.L.
8. **Reduced cognitive flexibility with aging may stem from insufficient suppression of currently irrelevant stimulus dimensions during task switching**
De Sanctis, P., Adler, J., Walkley, S., Foxe, J.J.
9. **Biological brain aging accounts for a reduction in the negativity bias in older adults**
Dolge, K., Staudinger, U.M., Voelcker-Rehage, C., Godde, B.
10. **The feasibility and effectiveness of an intensive process-based spatial memory training in old adults**
Eschen, A., Bischofberger, M., Rast, P., Martin, M.
11. **Intraindividual variability and change in cognitive performances: A two-year longitudinal follow-up in older adults**
Fagot, D., Chicherio, C., de Ribaupierre, A.
12. **Dual process theory of episodic memory: Findings from the Swedish National Study of Aging and Care in Kungsholmen (SNAC-K)**
Ferencz, B., Karlsson, S., Laukka, E.J., Fratiglioni, L., Bäckman, L.
13. **The subjective and objective assessment of everyday retrospective and prospective memory in Alzheimer's disease**
Foley, J.A., Logie, R.H., Laidlaw, K., Law, J.

- 14. Aging and speech comprehension under natural listening conditions: An EEG study**
Getzmann, S., Falkenstein, M.
- 15. Age-equivalent spatial cueing effects across sensory modalities**
Guerreiro, M.J.S., Adam, J.J., Van Gerven, P.W.M.
- 16. Chemosensory effects of workplace chemicals among elderly people**
Hey, K., van Thriel, C.
- 17. Age related increase in the variability of error-related EEG-activity is not accompanied by increase in response variability**
Hoffmann, S., Falkenstein, M.
- 18. Prospective memory and aging: Formal model-based approaches**
Horn, S.S., Bayen, U.J., Smith, R.E.
- 19. Investigating cognitive dedifferentiation with locally weighted structural equation models**
Hülür, G., Hildebrandt, A., Wilhelm, O., Robitzsch, A., Sommer, W.
- 20. Age differences in visual working memory capacity: A result of reduced filtering efficiency?**
Jost, K., Bryck, R., Vogel, E.K., Mayr, U.
- 21. The relationship between current physical activity levels as measured by accelerometers and current levels of cognitive performance in adults aged 55-65 years**
Joyce J., Smyth P.J., Donnelly A.E.
- 22. Age-related changes in haptic object recognition: Haptic performance in later life**
Kalisch, T., Kattenstroth, J.-C., Kowalewski, R., Tegenthoff, M., Dinse, H.R.
- 23. Patterns of brain activation in younger and older persons during verbal fluency: An fMRI study**
Karlsson, S., Rieckmann, A., Fischer, H., Bäckman, L.
- 24. The temporal contingency of feedback: effects on brain activity**
Kohrs, C., Angenstein, N., Scheich, H., Brechmann, A.
- 25. Individually arranged computer workstation for the generation 40 plus - New methodologies in consulting**
König, M., Jaschinski, W.
- 26. Age-related preparatory deficits in task switching**
Lawo, V., Philipp, A.M., Schuch, S., Koch, I.
- 27. Dementia and hard-of-hearing, the need for a handicap-orientated communicative approach in an neurological out-patient setting: a concept for staff-education**
Lerch, M., Decker-Maruska, M.

- 28. Dementia and hard of hearing a co morbidity often overlooked in geriatrics**
Lerch, M., Decker-Maruska, M.
- 29. The geriatric HearCare service - a new tool in geriatric care –**
Lerch, M., Decker-Maruska, M.
- 30. Adult age differences in information for aging**
Mata, R., Wilke, A., Czienskowski, U.
- 31. Capacity and cognition: divergent or convergent. Practical significance: respecting function and rights or description and abuse**
Myers, J.B.
- 32. Microvascular function and cognition: Nail changes and memory loss**
Myers, J.B.
- 33. Cognitive functions and their associations to demographic factors and aspects of health in young and old adults**
Persson, N., Vitanen, M., Wahlin, Å., Almkvist, O.
- 34. Applied traffic research of the project group “Ageing and CNS alterations”**
Poschadel, S.
- 35. A comparison of the time course of neural facilitation during cued shifts of spatial attention**
Quigley, C., Andersen, S.K., Müller, M.M.
- 36. What does Fitts’ law reveal about slowing of information processing during aging?**
Rey-Robert, B., Temprado, J.-J.
- 37. Age modulates sensory memory processing of temporal and frequency aspects of tonepatterns**
Rimmele, J., Keitel, C., Sussman, E., Jacobsen, T., Schröger, E.
- 38. Age related effects on working memory: a behavioral study using the N-back paradigm**
Saliasi, E., Geerlings, L., Lorist, M.M., Maurits, N.M.
- 39. Cognitive training in older employees**
Schapkin, S.A., Schadlovskiy, E., Kovaliov, Y.T.
- 40. Taking the pulse of aging: Fitness, vascular elasticity and cerebral health**
Schneider-Garces, N., Low, K., Maclin, E.L., Gratton, G., Fabiani, M.
- 41. How does movement training influence cognitive capability and balance in the elderly? A pilot study**
Thomas, M., Stöver, K.
- 42. Age-related changes in frontal oscillatory communication underlying reinforcement learning**
van de Vijver, I., Cohen, M.X., Ridderinkhof, K.R.

- 43. Sentence length in biographical interviews as an indicator of risk for Alzheimer's disease: Analyses of the "ILSE". A longitudinal ageing study**
Wendelstein, B., Felder, E., Schröder, J.
- 44. Error processing in patients with Parkinson's disease and in normal ageing**
Willemsen, R., Müller, T., Schwarz, M., Falkenstein, M.
- 45. Electrophysiological correlates of improvement in a Stroop task after cognitive training in healthy aged persons**
Wipking, C., Gajewski, P., Falkenstein, M.