SamSrf Publication List

Aware of any studies using SamSrf that aren't listed here?

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Articles by SamPenDu lab & collaborators

Altan, E, Morgan, CA, Dakin, SC, & Schwarzkopf, DS (2024). Spatial frequency adaptation modulates population receptive field sizes. *eLife* Reviewed Preprint (Revisions in progress)

Altan E, Boyaci H, Dakin SC, & Schwarzkopf DS. Perceiving object size in pictures involves high-level processing. *Proceedings of the Royal Society B: Biological Science* 292: 20242967, 2025.

Liu, P, Doehler, J, Henschke, JU, Northall, A, Serian, A, Loaiza-Carvajal, LC, Budinger, E, Schwarzkopf, DS, Speck, O, Pakan, JMP, & Kuehn, E (2024). Cortical sensory aging is layer-specific. *Nature Neuroscience* (In press).

Anderson, EJ, Dekker, TM, Farahbakhsh, M, Hirji, N, Schwarzkopf, DS, Michaelides, M, & Rees, G (2024). fMRI and gene therapy in adults with CNGB3 mutation. *Brain Research Bulletin* 215: 111026.

Urale, PWB, Zhu, L, Gough, R, Arnold, DH, & Schwarzkopf, DS (2023). Extrastriate activity reflects the absence of local retinal input. *Consciousness & Cognition* 114: 103566.

Tangtartharakul, G, Morgan, CA, Rushton, SK, & Schwarzkopf, DS (2023). Retinotopic connectivity maps of human visual cortex with unconstrained eye movements. *Human Brain Mapping* 44(16): 5221-5237.

Huang, Z, Urale, PWB, Morgan, CA, Rees, G, & Schwarzkopf, DS (2023). The role of awareness in shaping responses in human visual cortex. *Royal Society Open Science* 10: 230380.

Farahbakhsh, M, Anderson, EJ, Rider, A, Greenwood, JA, Hirji, N, Zaman, S, Jones, PR, Schwarzkopf, DS, Rees, G, Michaelides, M, & Dekker, TM (2022). A demonstration of cone function plasticity after gene therapy in achromatopsia. *Brain* 145(11): 3803–15.

Urale, PWB, Pucket, AM, York, A, Arnold, D, & Schwarzkopf, DS (2022). Highly accurate retinotopic maps of the physiological blind spot in human visual cortex. *Human Brain Mapping* 43(17): 5111–25.

Stoll, S, Infanti, E, de Haas, B, & Schwarzkopf, DS (2022). Pitfalls in Post Hoc Analyses of Population Receptive Field Data. *bioRxiv*:10.1101/2020.12.15.422942

Ho, M, & Schwarzkopf, DS (2022). The human primary visual cortex (V1) encodes the perceived position of static but not moving objects. *Commun Biol* 5: 181.

Alvarez, I, Finlayson, NJ, Ei, S, de Haas, B, Greenwood, JA, & Schwarzkopf, DS (2021). Heritable functional architecture in human visual cortex. *NeuroImage* 239: 118286.

de Haas, B, Sereno, MI, & Schwarzkopf, DS (2021). Inferior occipital gyrus is organised along common gradients of spatial and face-part selectivity. *Journal of Neuroscience* 41(25): 5511-21.

Alvarez I, Hurley SA, Parker AJ, Bridge H (2021). Human primary visual cortex shows larger population receptive fields for binocular disparity-defined stimuli. *Brain Struct Funct* 226: 2819–2838.

Stoll, S, Finlayson, NJ, & Schwarzkopf, DS (2020). Topographic Signatures of Global Object Perception in Human Visual Cortex. *NeuroImage* 220: 116926.

Alvarez, I, Smittenaar, R, Handley, SE, Liasis, A, Sereno, MI, Schwarzkopf, DS, & Clark, CA (2020). Altered visual population receptive fields in human albinism. *Cortex* 128: 107-23.

Infanti, I, & Schwarzkopf, DS (2020). Mapping sequences can bias population receptive field estimates. *NeuroImage* 211: 116636.

Morgan, C, & Schwarzkopf, DS (2020). Comparison of human population receptive field estimates between scanners and the effect of temporal filtering. *F1000Research* 8: 1681.

Hughes, AE, Greenwood, JA, Finlayson, NJ, & Schwarzkopf, DS (2019). Population receptive field estimate for motion-defined stimuli. *NeuroImage* 199: 245-60.

Dekker TM, Schwarzkopf DS, de Haas B, Nardini M, Sereno MI (2019). Population receptive field tuning properties of visual cortex during childhood. *Dev Cogn Neurosci* 100614.

Moutsiana C, Soliman R, de Wit L, James-Galton M, Sereno MI, Plant GT, Schwarzkopf DS (2018). Unexplained Progressive Visual Field Loss in the Presence of Normal Retinotopic Maps. *Front Psychol* 9: 1722.

de Haas B, Schwarzkopf DS (2018). Spatially selective responses to Kanizsa and occlusion stimuli in human visual cortex. *Sci Rep* 8: 611.

Anderson EJ, Tibber MS, Schwarzkopf DS, Shergill SS, Fernandez-Egea E, Rees G, Dakin SC (2017). Visual Population Receptive Fields in People with Schizophrenia Have Reduced Inhibitory Surrounds. *J Neurosci* 37: 1546–1556.

Moutsiana C, de Haas B, Papageorgiou A, van Dijk JA, Balraj A, Greenwood JA, Schwarzkopf DS (2016). Cortical idiosyncrasies predict the perception of object size. *Nat Commun* 7: 12110.

van Dijk JA, de Haas B, Moutsiana C, Schwarzkopf DS (2016). Intersession reliability of population receptive field estimates. *NeuroImage* 143:293-303.

Smittenaar, CR, MacSweeney, M, Sereno, MI, & Schwarzkopf, DS (2016). Does Congenital Deafness Affect the Structural and Functional Architecture of Primary Visual Cortex? *Open Neuroimaging Journal* 10: 1-19.

Alvarez I, De Haas BA, Clark CA, Rees G, Schwarzkopf DS (2015). Comparing different stimulus configurations for population receptive field mapping in human fMRI. *Front Hum Neurosci* 9: 96.

de Haas B, Schwarzkopf DS, Anderson EJ, Rees G (2014). Perceptual load affects spatial tuning of neuronal populations in human early visual cortex. *Curr Biol* 24: R66-67. *(but see retraction notice: de Haas et al, 2020 for important confound with binning analyses of pRF data)*

Schwarzkopf DS, Anderson EJ, Haas B de, White SJ, Rees G (2014). Larger Extrastriate Population Receptive Fields in Autism Spectrum Disorders. *J Neurosci* 34: 2713–2724.

Alvarez I, Schwarzkopf DS, Clark CA (2014). Extrastriate projections in human optic radiation revealed by fMRI-informed tractography. *Brain Struct Funct* 220(5): 2519-32.

Articles by other labs

Jastrzębowska MA, Ozkirli A, Cretenoud AF, Draganski B, Herzog MH (2023). Is there a neural common factor for visual illusions? bioRxiv: 2023.12.27.573437. *(as this is a preprint and may therefore still undergo changes)*

Wu H, Zuo Z, Yuan Z, Zhou T, Zhuo Y, Zheng N, Chen B (2023). Neural representation of gestalt grouping and attention effect in human visual cortex. *J Neurosci Methods* 399: 109980.

Kristensen DG, Sandberg K (2021). Population receptive fields of human primary visual cortex organised as DC-balanced bandpass filters. *Sci Rep* 11: 22423.

Lin Y-S, Greenlee M, Malania M (2021). Does the training on a visual crowding task alter the population receptive field estimates? *J Vis* 21: 2335. *(this is a VSS conference abstract – please let us know if it has been published)*

Jastrzębowska, MA, Chicherov, V, Draganski, B, & Herzog, MH (2021). Unraveling brain interactions in vision: The example of crowding. *NeuroImage* 240: 118390.

Huang W, Yan H, Wang C, Yang X, Li J, Zuo Z, Zhang J, Chen H (2021). Deep Natural Image Reconstruction from Human Brain Activity Based on Conditional Progressively Growing Generative Adversarial Networks. *Neurosci Bull* 37: 369–379.

Wang C, Yan H, Huang W, Li J, Yang J, Li R, Zhang L, Li L, Zhang J, Zuo Z, Chen H (2020). 'When' and 'what' did you see? A novel fMRI-based visual decoding framework. *J Neural Eng* 17: 056013.

Huang W, Yan H, Wang C, Li J, Yang X, Li L, Zuo Z, Zhang J, Chen H (2020). Long short-term memory-based neural decoding of object categories evoked by natural images. *Hum Brain Mapp* 41: 4442–4453.

Protopapa F, Hayashi MJ, Kulashekhar S, Zwaag W van der, Battistella G, Murray MM, Kanai R, Bueti D (2019). Chronotopic maps in human supplementary motor area. *PLOS Biol* 17: e3000026.