

Publications

González K*, Gangapurwala G*, Alex J*, Vollrath A, Cseresnyés Z, Weber C, Czaplewska JA, Hoeppener S, Svensson CM, Orasch T, Heinekamp T, Guerrero-Sánchez C, Figge MT, Schubert US, Brakhage AA (2023) Targeting of phagolysosomes containing conidia of the human pathogenic fungus *Aspergillus fumigatus* with polymeric particles. *Appl Microbiol Biotechnol* 107(2-3), 819-834.

Praetorius JP, Walluks K, Svensson CM, Arnold D, Figge MT# (2023) IMFSegNet: Cost-effective and objective quantification of intramuscular fat in histological sections by deep learning. *Comput Struct Biotechnol J* 21, 3696-3704.

Svensson CM*, Reglinski K*, Schliebs W, Erdmann R, Eggeling C#, Figge MT# (2023) Quantitative analysis of peroxisome tracks using a Hidden Markov Model. *Sci Rep* 13(1), 19694.

Schmidt C*, Hanne J*, Moore J, Meesters C, Ferrando-May E, Weidtkamp-Peters S, members of the NFDI4BIOIMAGE initiative (incl. Svensson CM, Figge MT) (2022) Research data management for bioimaging: The 2021 NFDI4BIOIMAGE community survey. *F1000Research* 11, 638.

Stanišić A, Svensson CM, Ettelt U, Kries H# (2022) Defining a nonribosomal specificity code for design. *bioRxiv* [Preprint]

Campagner A, Ciucci D, Svensson CM, Figge MT, Cabitza F (2021) Ground truthing from multi-rater labeling with three-way decision and possibility theory. *Inf Sci* 545, 771-790.

Kästner B, Hengoju S, Svensson CM, Figge MT, Rosenbaum MA (2021) Mit Tropfenmikrofluidik zu Hochgeschwindigkeits-Biotechnologie. *BIOspektrum* 27(3), 260-262. (Review)

Shopova IA, Belyaev I, Dasari P, Jahreis S, Stroe MC, Cseresnyés Z, Zimmermann AK, Medyukhina A, Svensson C-M, Krüger T, Szeifert V, Nietzsche S, Conrad T, Blango MG, Knemeyer O, von Lilienfeld-Toal M, Zipfel PF, Ligeti E, Figge MT, Brakhage AA (2020) Human neutrophils produce antifungal extracellular vesicles against *Aspergillus fumigatus*. *mBio* 11(2), e00596-20.

Hirth G, Svensson C-M, Böttcher K, Ullrich S, Figge MT, Jungnickel B (2019) Regulation of the germinal center reaction and somatic hypermutation dynamics by homologous recombination. *J Immunol* 203(6), 1493-1501.

Kresinsky A, Schnöder TM, Jacobsen ID, Rauner M, Hofbauer LC, Ast V, König R, Hoffmann B, Svensson C-M, Figge MT, Hilger I, Heidel FH, Böhmer FD, Müller JP (2019) Lack of CD45 in FLT3-ITD mice results in a myeloproliferative phenotype, cortical porosity, and ectopic bone formation. *Oncogene* 38(24), 4773-4787.

Svensson C-M, Figge MT (2019) Künstliche Intelligenz für die biomedizinische Bildgebung. *GIT Labor-Fachzeitschrift*, (Review)

Svensson C-M*, Shydkevich O*, Dietrich S, Mahler L, Weber T, Choudhary M, Tovar M, Figge MT**, Roth M*; *authors contributed equally; #corresponding authors; **authors contributed equally (2019) Coding of experimental conditions in microfluidic droplet assays using colored beads and machine learning supported image analysis. *Small* 15(4), e1802384.

Tuchscherr L, Pöllath C, Siegmund A, Deinhardt-Emmer S, Hörr V, Svensson C-M, Figge MT, Monecke S, Löffler B (2019) Clinical *S. aureus* isolates vary in their virulence to promote adaptation to the host. *Toxins* 11(3), 135.

Allert S^{*}, Förster TM^{*}, Svensson C-M, Richardson JP, Pawlik T, Hebecker B, Rudolphi S, Juraschitz M, Schaller M, Blagojevic M, Morschhäuser J, Figge MT, Jacobsen ID, Naglik JR, Kasper L, Mogavero S, Hube B; ^{*}authors contributed equally (2018) *Candida albicans*-induced epithelial damage mediates translocation through intestinal barriers. *mBio* 9(3), e00915.

Svensson C-M, Medyukhina A, Belyaev I, Al-Zaben N, Figge MT (2018) Untangling cell tracks: Quantifying cell migration by time lapse image data analysis. *Cytometry A* 93(3), 357-370. (Review)

Dudeck J^{*}, Medyukhina A^{*}, Froebel J, Svensson C-M, Kotrba J, Gerlach M, Gradtke AC, Schröder B, Speier S, Figge MT^{**}, Dudeck A^{**}; ^{*}authors contributed equally; ^{**}corresponding authors, authors contributed equally (2017) Mast cells acquire MHCII from dendritic cells during skin inflammation. *J Exp Med* 214(12), 3791-3811.

Svensson C-M, Bondoc K G, Pohnert G, Figge MT (2017) Segmentation of clusters by template rotation expectation maximization. *Comput Vis Image Underst* 152, 64-72.

Svensson C-M^{*}, Hoffmann B^{*}, Irmeler I, Straßburger M, Figge MT^{**}, Saluz HP^{**}; ^{*}authors contributed equally; ^{**}corresponding authors, authors contributed equally (2017) Quantification of arthritic bone degradation by analysis of 3D micro-computed tomography data. *Sci Rep* 7, 44434.

Kraibooj K^{*}, Schoeler H^{*}, Svensson C-M, Brakhage AA, Figge MT (2015) Automated quantification of the phagocytosis of *Aspergillus fumigatus* conidia by a novel image analysis algorithm. *Frontiers in Microbiology* 6(549), ^{*}authors contributed equally.

Svensson C-M, Hübler R, Figge MT (2015) Automated classification of circulating tumor cells and the impact of inter-observer variability on classifier training and performance. *Journal of Immunology Research* 2015(Article ID 573165), 9.

Svensson C-M, Krusekopf S, Lücke J, Figge MT (2014) Automated detection of circulating tumor cells with naive Bayesian classifiers. *Cytometry A* 85(6), 501-511.

^{*}equal contribution [#]corresponding author