

Overview of Posters

#	Authors	Titles
1	N. Reuter, I. Catanese , T. Rubil, C. Wong, M.A. Mall	Effect of Neutrophil Elastase on Mucus Viscoelasticity and Mucociliary Transport in Muco-Obstructive Lung Disease
2	T. Rubil , L. Franz, A. Balázs, M. Overtus, K. Kemnitz-Hassanin, C. Govaerts, C.P.R. Hackenberger, M.A. Mall	A cell-permeable nanobody synergizes with CFTR modulators to restore near-normal F508del-CFTR function in airway epithelial cells from patients with cystic fibrosis
3	A. Michel-Busch , J. Proksch, R.F. Schmidt, D. Zakutna, B. Kokschi, M. Gradzielski	Small Angle Neutron Scattering Investigation of Mucus Mimicking Glycosylated Peptide Hydrogels
4	J. Kroissenbrunner, C. Baydaroglu, B. von Seggern , R.F. Schmidt, A. Michel-Busch, H. Kiefer, M. Gradzielski, R.R. Netz	Probing the Viscoelasticity of Mucus-like Hydrogels
5	O. Aksu , J. Proksch, B. Kokschi, S. Block	Permeability of glycan-presenting, dynamic hydrogels
6	E. Kazakova , P. Ponomareva, E. Raatz, A. Galashov, M. Pigaleva, O. Seitz	Towards Structurally Diverse MUC5AC Glycopeptide Models
7	S. Kurmies , F. Telschow, S. Block	Identifying interactions of Cy3-dyes in nano environments
8	R. Sprick , P. Samperio Ventayol, K. Fentker, C. Wong, C. Moose, K. Diestelhorst, A. Klimek, Y. Bambal, P. Mertins, M.A. Mall, S. Block, R.R. Netz, S. Bartfeld	Modelling the intestinal mucus barrier in health and disease
9	P. Ponomareva , E. Georgiadou, R. Ellington, R. Haag, M. Pigaleva	Molecular Mobility and Diffusion in Mucus-mimicking gels through EPR Spectroscopy
10	J.K. Abledu , C. Herbst, P. Ghosh, J. Gorenflös López, C. Hackenberger, O. Seitz, E. Lopez-Rodriguez, M. Ochs, W.M. Kuebler	Mechanical stretch increases sialic acid abundance in the alveolar epithelial glycocalyx
11	D. Sulayev , M. Ochs, S. Twamley, E. Lopez-Rodriguez	Comparison of different fluorescence microscopic methods to resolve the structure of the alveolar epithelial glycocalyx
12	I. Yavuz , V. Gluhovic, S. Popovic, S.G. Twamley, M. Dukic, S. Giambelluca, S. Lochen, K. Fentker, L. Bechtella, A. Zappe, C. Butnarusu, D. Lauster, P. Mertins, K. Pagel, G. Nouailles, W.M. Kuebler, M. Ochs, E. Lopez-Rodriguez	Surfactant protein A and D regulate sialylation and barrier function of the alveolar epithelial glycocalyx
13	C. Goekeri , S.M.K. Schickinger, A. Nettesheim, K.A.K. Linke, N. Hardiman, L. Bechtella, G.M. Vos, E. Lopez-Rodriguez, S. Timm, S. Kunder, A. Voß, K. Pagel, A.D. Gruber, M. Ochs, M. Witzenrath, G. Nouailles	2-deoxy-D-galactose modulates the murine glycome and enhances pneumococcal susceptibility to oxidative stress
14	S. Mukherjee , S.M.K. Schickinger, L. Salmon, K. Hoffmann, U. Behrendt, G. Vos, K. Pagel, A. Hocke, G. Nouailles, C.M. Zobel, CAPNETZ Study Group, M. Witzenrath, C. Goekeri	Influence of <i>FUT2</i> secretor status on pneumococcal infection of the airway epithelium
15	K. Diestelhorst , A. Bakaev, F. Ghazisaeedi, F. Henkel, A. Klimek, S. Braetz, K. Tedin, O. Lieleg, M. Fulde, R.R. Netz, S. Block	Motility of flagellated bacteria in hydrogels
16	N.G. Kub , R. Flieger, M. Kleoff, G. Vos, J. Jordan, T. Povolotsky, G. Nölte, P. Wendelgaß, E. Quass, N. Hribernik, R. Haag	Synthesis of Mucin Inspired Polymers
17	M.R. Limmene , Q. Rao, N. Ma, M. Adeli, R. Haag	The Development of Thermoreversible Poly(glycerol)-Poly(oxazoline) Hydrogels for iPSC Culturing and Differentiation
18	A. De Martino , Ketaki Sandu	Exploring epithelial-driven mechanisms in Crohn’s disease using a human terminal ileum model
19	K. Sandu , A. De Martino	Characterising properties of intestinal mucus from ex vivo to synthetic sampling
20	P. Ghosh, A. Koçak, A. Guha , A. Balázs, C. Wong, F. Telschow, J. Balke, L. Ojha, U. Alexiev, S. Block, M.A. Mall, O. Seitz	Boronated Peptide-Rotor Dye Probes Reveal the Heterogeneity of the Glycocalyx and Mucus on Living Cell Surfaces
21	A. Puhlmann , C. Baydaroglu, M. Strehlau, S.A. Ardila Fernandez, B. Schade, M. Gradzielski, B. Kokschi	Engineering Softness: How Molecular Tweaks in Coiled-Coils Shape Hydrogel Behavior
22	L. Rota , M. Delbianco	Rationally designed mucin-like glyco-hydrogels
23	N. Hardiman , C. Goekeri, U. Behrendt, K. Hoffmann, S. Kunder, A.D. Gruber, S.A. Malaker, M. Witzenrath, K. Pagel, G. Nouailles	Breaking Barriers: Probing Airway Mucin Glycoproteins in Pneumococcal Infection With StcE.
24	A. Poletti , U. Behrendt, N. Hardiman, P. Georg, 3R Primary Tissue Pipeline, G. Nouailles	Tonsil organoids as a platform for <i>in vitro</i> analysis of human adaptive immune responses
25	M. Safferthal , C. Walton-Doyle, A. Schwerdtfeger, P. Mönch, K. Sandu, C. Gutwein, B. Siegmund, K. Pagel	Ileocecal Resection Alters the Ileal Mucus O-Glycome in Crohn’s Disease Patients
26	A. Schwerdtfeger , V. Baikenova , M. Safferthal, G. Vos, M. Jhamvar, Y. Jiang, K. Ludwig, B. Thongrom, T. Lange, S. Singha Modak, P. Tang, E. Mohammadifar, K. Pagel, R. Haag, R. Bej	Sequential Labeling as a Strategy for Preparative HMO Fractionation
27	A. Loewe , J. Arenhoevel, C. Moose, K. Glodny, A. Addante, C.K. Wong, L. Schaupp, A. Balázs, R.M. Urbantat, S. Graeber, J. Duerr, G.G. Fuller, M. Gradzielski, D. Lauster, R. Haag, M.A. Mall	Novel Polymeric Reducing Agents as Mucus Modulators in Cystic Fibrosis
28	F. Bock , J. Serrano, C.P.R. Hackenberger, D.C. Lauster	Probing charge-dependent protein transport in mucus using supercharged sfGFPs
29	H. Brakebusch , M. Elliott, C. Goekeri, C. Hackenberger, D. Lauster, S. Mukherjee, J. Serrano, M. Witzenrath	Mucus-Targeted Lectin-Antibody Bioconjugates for Antimicrobial Applications
30	S. Florez-Rueda , J. Serrano, F. Bock, R. Diehn, N. Boback, X. Lin, C. Langner, J.M. Adler, H. Brakebusch, M. Bardua, C. Butnarusu, J. Trimpert, C.P.R. Hackenberger, D.C. Lauster	Mucus Anchoring Protein (MAP)-Antibody Conjugates Enhance Viral Trapping and Antiviral Activity at the Airway Mucosa
31	D.S. Thanos , Z. Caliskan Acik, E.P. Becker, M.-E. Zirngibl, T.L. Povolotsky, M. Wiermer, M. Remus-Emsermann, S. Chandna	Upcycling Industrial Lignin into Cationic Hydrogels with Potential for Sustainable Plant Protection
32	C. Moose , J. Arenhoevel, R. Haag, G.G. Fuller	Dynamic in-situ rheometry of micro-volume hydrogel samples
33	M. Gabler , M. Renner-Rao, E. Duthoo, P. Fratzl, F. Jehle	Secretion, assembly and structure-function relationship of snail-mucus based materials
34	Y. Kerkhoff , H. Rulff, P.W. Mönch, C. Gutwein, A. Loewe, S. Timm, R.M. Urbantat, K. Ludwig, R. Haag, M. Gradzielski, M.A. Mall, B. Siegmund, M. Ochs	AI-supported quantification of network structures in SEM imaged human mucus
35	C. Gunnella , L. Sardelli, F. Giammarino, P. Kargal Gopalakrishna, A. Di Bernardo, R. Cena-Diez, A. Sonnerborg, M. Cavarelli, S. Visentin, O. Lieleg	Denaturing and reducing agents improve porcine gastric mucin purification while preserving functional properties
36	F. Henkel , A. Fill, J. Reh, C. Schüßler, L. Reichert, D. Arcuti, P. Mela, J. Torgersen, M.A. Mall, M. Maeres, O. Lieleg	Kicking Diffusion in the Butt: Nanomotors Stimulate Superdiffusion of Passive Nanoparticles Across Mucosal Barriers
37	U. Özdemir , O. Lieleg	Comparison of gastric, salivary and intestinal mucin coatings
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39	X. Yu , L.R. Gareis, L. Reichert, S.A. Sieber, J. Torgersen, O. Lieleg	Mucin-enriched microneedles with bacteria-repellent properties and tunable drug release
40	C. Schüßler , K. Limberg , T. Rödel, S. Weigel, H. Sprenger, A. Braeuning, R.V. Velho, F. Ebert, S. Mechsner, M. Maeres	Advancing research on Metalloglycobiology – Impact of trace element deficiency in the intestine and endometriosis
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