

Curriculum Vitae

Rainer Pepperkok Dr. rer. Nat.
Date of birth: 7 September 1961

Employment and research experience

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| 2019-present | Director Scientific Core Facilities and Scientific Services, EMBL Heidelberg |
| 2014-2019 | Head of Core Facilities Unit EMBL, Heidelberg |
| 1998-present | Teamleader at EMBL Heidelberg, Cell Biology Cell Biophysics Unit, Head of the Advanced Light Microscopy Facility |
| 1996-1998 | Head of light microscopy at the Imperial Cancer Research Fund, London |
| 1995-1996 | University research assistant in the group of Prof. Dr.T. Kreis (University of Geneva) |
| 1993-1995 | Recipient of an EMBO long-term postdoctoral research fellowship in the group of Prof. Dr. T. Kreis (University of Geneva, Switzerland). |
| 1987-1993 | Staff member at EMBL Heidelberg, group of Dr. W. Ansorge. |

Education

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| 1992 | PhD in Cell Biology at the University of Kaiserslautern. |
| 1989-1992 | PhD work at the German Cancer Research Center, Heidelberg. |
| 1987 | Diplom in applied physics at the University of Heidelberg |
| 1986-1987 | Diplomarbeit at the European Molecular Biology Laboratory (EMBL) in the Group of Dr. W. Ansorge |
| 1981-1987 | Student of Ruprecht-Karls University of Heidelberg, Faculties of Physics and Mathematics. |

Selected publications

- Simpson, J.C., Wellenreuther, R., Poustka, A., **Pepperkok, R.**, and Wiemann, S. (2000). Systematic sub-cellular localization of novel proteins identified by large-scale cDNA sequencing. *EMBO Reports*, 1, 287-292.
- Liebel U, Starkuviene V, Erfle H, Simpson JC, Poustka A, Wiemann S, **Pepperkok R.** 2003. A microscope-based screening platform for large-scale functional protein analysis in intact cells. *FEBS Lett.* 20: 394-398.
- Neumann B, Walter T, Hériché JK, Bulkescher J, Erfle H, Conrad C, Rogers P, Poser I, Held M, Liebel U, Cetin C, Sieckmann F, Pau G, Kabbe R, Wünsche A, Satagopam V, Schmitz MH, Chapuis C, Gerlich DW, Schneider R, Eils R, Huber W, Peters JM, Hyman AA, Durbin R, **Pepperkok R**, Ellenberg J. (2010) Phenotypic profiling of the human genome by time-lapse microscopy reveals cell division genes. *Nature* 464:721-727.
- Conrad C, Wünsche A, Tan TH, Bulkescher J, Sieckmann F, Verissimo F, Edelstein A, Walter T, Liebel U, **Pepperkok R**, Ellenberg J. (2011). Micropilot: automation of fluorescence microscopy-based imaging for systems biology. *Nat Methods.* 8, 246-9.
- Almaça J, Faria D, Sousa M, Uliyakina I, Conrad C, Sirianant L, Clarke LA, Martins JP, Santos M, Heriché JK, Huber W, Schreiber R, **Pepperkok R**, Kunzelmann K, Amaral MD. 2013. High-content siRNA screen reveals global ENaC regulators and potential cystic fibrosis therapy targets. *Cell.* 12;154(6):1390-400.
- Khan MM, Poeckel D, Halavatyi A, Zukowska-Kasprzyk J, Stein F, Vappiani J, Sevin DC, Tischer C, Zinn N, Eley JD, Gudmann NS, Muley T, Winter H, Fisher AJ, Nanthakumar CB, Bergamini G, **Pepperkok R.** 2021. An integrated multi-omic and quantitative label-free microscopy-based approach to study pro-fibrotic signalling in ex vivo human precision-cut lung slices. *Eur Respir J. Eur Respir J.* 58(1):2000221. doi: 10.1183/13993003.00221-2020.
- Zimoń M, Huang Y, Trasta A, Halavatyi A, Liu JZ, Chen CY, Blattmann P, Klaus B, Whelan CD, Sexton D, John S, Huber W, Tsai EA, **Pepperkok R**, Runz H. 2021. Pairwise effects between lipid GWAS genes modulate lipid plasma levels and cellular uptake. *Nat Commun.*12(1):6411. doi: 10.1038/s41467-021-26761-3. PMID: 34741066; PMCID: PMC8571362.
- Khan MM, Galea G, Jung J, Zukowska J, Lauer D, Tuechler N, Halavatyi A, Tischer C, Haberkant P, Stein F, Jung F, Landry JJM, Khan AM, Oorschot V, Becher I, Neumann B, Muley T, Winter H, Duerr J, Mall MA, Grassi A, de la Cueva E, Benes V, Gote-Schniering J, Savitski M, **Pepperkok R.** (2024) Dextromethorphan inhibits collagen and collagen-like cargo secretion to ameliorate lung fibrosis. *Sci Transl Med.* 16(778):eadj3087. doi: 10.1126/scitranslmed.adj3087, PMID: 39693409
- Tuechler N, Burtscher ML, Garrido-Rodriguez M, Khan MM, Türei D, Tischer C, Kaspar S, Schwarz JJ, Stein F, Rettel M, Kramann R, Savitski MM, Saez-Rodriguez J, **Pepperkok R.** (2025). Dynamic multi-omics and mechanistic modeling approach uncovers novel mechanisms of kidney fibrosis progression. *Mol Syst Biol.* 21:1030-1065. doi: 10.1038/s44320-025-00116-2.
- Cosenza MR, Gaiatto A, Erarslan Uysal B, Andrades Á, Sautter NL, Simunovic M, Jendrusch MA, Zumalave S, Rausch T, Halavatyi A, Geissen EM, Eigenmann JL, Weber T, Hasenfeld P, Benito E, Stober C, Cortes-Ciriano I, Kulozik AE, **Pepperkok R**, Korbel JO. Origins of chromosome instability unveiled by coupled imaging and genomics. *Nature.* 2025 Dec;648(8093):383-393. doi: 10.1038/s41586-025-09632-5. Epub 2025 Oct 29. PMID: 41162705; PMCID: PMC12695650.