

Julia Kamenz, Dr. rer. nat

Assistant Professor - Rosalind Franklin Fellow
Laboratory for Cell Cycle Dynamics
Groningen Biomolecular Sciences and Biotechnology Institute
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Education

Dr. rer. nat. in Biochemistry (Ph.D. equivalent, *summa cum laude*) 2009 – 2015
Eberhard Karls University, Tuebingen, Germany

Diploma in Biochemistry (M.Sc. equivalent) 2003 – 2008
Eberhard Karls University, Tuebingen, Germany
Focus: Biochemistry, Cell Biology, Analytical Chemistry

Research

Assistant Professor since Sep 2020
University of Groningen, Groningen, Netherlands

Postdoctoral fellow Advisor: Prof. James Ferrell 2015 – 2020
'Phosphoregulation of cell cycle transitions'
Department of Chemical and Systems Biology
Stanford University, Stanford, USA

Doctoral student Advisor: Dr. Silke Hauf 2009 – 2015
'Temporal coordination of the metaphase to anaphase transition'
Friedrich Miescher Laboratory Max Planck Society, Tuebingen, Germany

Grants and fellowships (selected)

NWO Open Competition XS (50k €) 2023

ERC Starting Grant – *CellCycleInVitro* (1.5 Mio €) 2022

NWO Open Competition XS (50k €) 2021

NWO Talent programme – Vidi award (800k €) 2021

Postdoctoral Fellowship, German Research Foundation (DFG, 110K €) 2016 – 2018

Ph.D. fellowship, Max Planck Society (75k €) 2012 – 2014/
2009

Ph.D. fellowship, Boehringer Ingelheim Fonds (50k €) 2009 – 2011

Selected conferences and presentations

Physics of the early embryonic cell divisions – Company of Biologists workshop, East Sussex, UK, *co-organizer* 2024

BioSB – Dutch Bioinformatics and Systems Biology conference, The Netherlands, *program committee* 2024

Triple ERC grant retreat – Aneuploidy, BIOMEKANET, CellCycleInVitro Sietges, Spain, *invited speaker* 2023

EMBO Workshop: Signal regulation by protein phosphatases: Mechanisms and Pathways, Copenhagen, Denmark, *invited speaker* 2023

Salk Cell Cycle Meeting 2023, San Diego, USA 2023
abstract selected for oral presentation

ASCB EMBO Meeting 2022, Washington D.C, USA 2022

abstract selected for oral presentation

EMBO Workshop “The cell cycle: One engine – many cycles“, Konstanz, Germany, *abstract selected for oral presentation* 2022

Division of Cancer Sciences Next Generation Seminar Series, Manchester, UK, *invited seminar* 2022

ASCB EMBO Meeting 2020, Cell Bio virtual *abstract selected for oral presentation* 2020

Jacques Monod Conference ‘Mitotic and Meiotic Cell Cycle Control and execution’, Roscoff, France *abstract selected for oral presentation* 2019

The Francis Crick Institute, London, UK *invited seminar* 2018

5th Winter q-bio, Kauai, USA *abstract selected for an oral presentation* 2017

CSHL Meeting ‘The Cell Cycle’, Cold Spring Harbor, USA *abstract selected for an oral presentation* 2016

CSHL Meeting ‘The Cell Cycle’, Cold Spring Harbor, USA *abstract selected for an oral presentation* 2014

Teaching

Teaching – University of Groningen

International Genetically Engineered Machine (iGEM) Competition (Supervision of the interdisciplinary student team) 2022 - present

Practical Course Microbiology – 2nd year BSc Life Science&Technology (Design, coordination, teaching) 2021 - present

- o Newly designed 3-week practical course teaching state-of-the-art microbiological techniques (i.e. directed evolution, continuous growth in miniature chemostats)

Voted ‘Best 2nd year course in Life Science&Technology’

Cell biology & Immunology Lecture Series – 1st year BSc Biology (lecturer, coordinator from 2023/2024 onwards) 2021 - present

- o Re-designed lectures on cell signaling, cytoskeleton, cell cycle, apoptosis and cancer (biology focused)

Cellular Chemistry Lecture Series – 3rd year BSc Chemistry (lecturer, 50 % of the course) 2021 - present

- o Re-designed lectures on cell signaling, cytoskeleton, cell cycle, apoptosis, cancer, and mass spectrometry (chemistry focused)

Teaching – Stanford University

Chemical and Systems Biology Boot Camp – Stanford University 2018

- o Developed a 5-day practical course to introduce 1st year graduate students to quantitative biological approaches, tissue culture and fluorescence live cell imaging.

Mentoring

Current lab composition: 4 PhD students, 1 Postdoc, 1 MSc student, 1 undergraduate researcher, 1 research associate

Mentoring – University of Groningen (MSc level – 6 months projects)

Marit Toxopedus – MSc project Biomolecular Sciences	2023
Irene Santolayaa – Erasmus student MSc Biomolecular Sciences	2023
Niels Senechal – MSc project Biomedical Sciences	2022
Julius Fülleborn - MSc project Biomolecular Sciences	2021

Mentoring – Stanford University

Salvador Buse (undergraduate summer student)	2018
Annie Carilli (undergraduate summer student, honor thesis)	2017 & 2018
Anay Reddy (rotating graduate student)	2018
Judith Flores (undergraduate summer student – Stanford Summer Research Program)	2017
Tenaya Wilson-Charles (undergraduate summer student)	2016

Mentoring – Friedrich Miescher Laboratory of Max Planck Society

Armin Kubis (undergraduate researcher and bachelor student)	2013
Svenja Schneider (undergraduate research)	2011
Kelly Werner (undergraduate summer student – Research Internships in Science and Engineering, RISE)	2010

Additional scientific activities

Institutional service

Initiator and co-organizer of the weekly departmental seminar series	Since 2023
Chair ‚Sounding board for the improvement of animal welfare and animal research at the Faculty of Science and Engineering‘	Since 2023
Committee ‚Evaluation of the Biochemistry Learning Line – BSc Chemistry‘	2023
Member of eight PhD defense and one recruitment committees	Since 2020
Organizer of the <i>Xenopus</i> User Group, Stanford University	2017-2018

Community service

Journal Review: Oncogene, eLife, EMBO J, Cell Reports, Journal of Cell Biology, PLoS One, Molecular Genetics and Genomics

Grant review: Dutch research organization (NWO), Stanford Summer Research Program

Leadership

Board member – Max Gruber Foundation	Since 2023
Member Women in Science and Engineering (WISE) community at Stanford University (weekly peer group meetings)	2017 – 2020
PhD representative, Max Planck Institute for Developmental Biology and the Friedrich Miescher Laboratory	2012- 2013

Outreach

Student for a Day – Life Science and Technology track, hands-on experience	Since 2022
YAG Pub Lecture Series – <i>lay lecture about our cell cycle research</i>	2023
Eye-Opener Royal Netherlands Chemical Society - <i>1 min lay video about our research</i>	2023

Publications

*corresponding author, #equal contribution

- Fabian L Prins, Dario Tomanin, **Julia Kamenz** and George Azzopardi 2023
 'Biometric Recognition of African Clawed Frogs'.
 Computer Analysis of Images and Patterns. CAIP 2023. Lecture Notes in
 Computer Science, vol 14185. Springer
- Julia Kamenz***, Renping Qiao, Qiong Yang and James E Ferrell Jr. 2021
 'Real-time monitoring of APC/C-mediated substrate degradation using *Xenopus*
laevis egg extracts'. *Methods Mol Biol*, 2021; 2329:29-38
- Julia Kamenz***, Lendert Gelens and James E Ferrell Jr.* 2021
 'Bistable, biphasic regulation of PP2A-B55 accounts for the dynamics of mitotic
 substrate phosphorylation'. *Current Biology*, 2021 Feb 22; 31(4):794-808
- Sarah Lockhead#, Alisa Moskaleva#, **Julia Kamenz#***, Yuxin Chen, Minjung Kang, 2020
 Anay R Reddy A, Silvia DM Santos, James E Ferrell Jr*.
 'The Apparent Requirement for Protein Synthesis during G2 Phase Is due to
 Checkpoint Activation'. *Cell Reports*, 2020 July 14; 32(2):107901
- Rahul Thadani, **Julia Kamenz**, Sebastian Heeger, Sofia Munoz and Frank Uhlmann 2018
 'Cell-cycle regulation of dynamic chromosome association of the condensin
 complex'. *Cell Reports*, 2018 May 22; 23(8):2308-2317
- Julia Kamenz** and James E Ferrell Jr. 2017
 'The temporal ordering of cell-cycle phosphorylation'
Molecular Cell, 2017 Feb 2; 65(3): 371-373
- Julia Kamenz** and Silke Hauf 2017
 'Time to split up: Dynamics of chromosome separation'
Trends in Cell Biology, 2017 Jan; 27(1): 42-54
- Julia Kamenz**, Tamara Mihaljev, Armin Kubis, Stefan Legewie and Silke Hauf 2015
 'Robust ordering of anaphase events by adaptive thresholds and competing
 degradation pathways'#
Molecular Cell, 2015 Nov 5; 60(3): 446-459
 #featured in a Preview in *Developmental Cell*, Nov 2015
- Simon A Fromm, **Julia Kamenz**, Erik R Nödelke, Ancilla Neu, Georg Zocher and 2014
 Remco Sprangers
 'In vitro reconstitution of a cellular phase-transition process that involves the
 mRNA decapping machinery'
Angewandte Chemie (Int Ed Engl), 2014 Jul 7; 53(28):7354-9
- Julia Kamenz*** and Silke Hauf* 2014
 'Slow checkpoint activation kinetics as a safety device in anaphase'#
Current Biology, 2014 Mar 17; 24(6):646-51 featured in a Dispatch in *Current*
Biology
- Stephanie Heinrich, Eva-Maria Geissen, **Julia Kamenz**, Susanne Trautmann, 2013
 Christian Widmer, Phillipp Drewe, Michael Knop, Nicole Radde, Jan Hasenauer
 and Silke Hauf
 'Determinants of robustness in spindle assembly checkpoint signaling'#
Nature Cell Biology, 2013 Nov; 15(11):1328-39
 featured in a News&Views in *Nature Cell Biology*, Nov 2013
- Simon A Fromm, Vincent Truffault, **Julia Kamenz**, Jörg B Braun, Niklas A Hoffmann, 2012
 Elisa Izaurralde and Remco Sprangers
 'The structural basis of Edc3- and Scd6-mediated activation of the Dcp1:Dcp2
 mRNA decapping complex'
EMBO Journal, 2012 Jan 18; 31(2):279-90