

Curriculum Vitae Janine Kirstein

Personal Data

Title	Prof. Dr.
First name	Janine
Name	Kirstein
Current position	W3-Professor for Biochemistry of Aging, permanent position
Current institutions	Friedrich-Schiller-Universität Jena + Leibniz Institute on Aging / Fritz-Lipmann Institute, Jena, Germany
Identifiers/ORCID	0000-0003-4990-2497

Qualifications and Career

Stages	Periods and Details
Diplom	1998 – 2003; Biology, Universität Greifswald (final grade 1.1)
Doctorate Dr. rer. nat.	09/2007 <i>summa cum laude</i> ; “Regulation of the AAA+ protein ClpC by adaptor proteins” Freie Universität Berlin, Germany,
Stages of academic career	07/2025 – Speaker and Project leader of DFG Research Unit FOR5872 09/2024 – Project Leader of DFG Priority Program SPP2453 04/2023 – W3-Professor for Biochemistry of Aging FSU Jena 04/2023 – Senior Research Group Leader at Leibniz-Institute on Aging – Fritz-Lipmann Institute, Jena 2022 – Project Leader of DFG Research Unit FOR5228 2019 – 2023 W2-Professor for Cell Biology, Universität Bremen 2016 – 2019 Project Leader of DFG Priority Program SPP1623 2015 – 2019 Project Leader of DFG SFB740 2013 – 2017 Project Leader of NeuroCure Excellence Cluster 2013 – 2019 Junior Research Group Leader at Leibniz Research Institute for Molecular Pharmacology (FMP), Berlin 2009 – 2013 Lecturer at Northwestern University, USA 2008 – 2013 Postdoc at Northwestern University, USA 2007 – 2008 Postdoc at Freie Universität Berlin, Germany

Supplementary Career Information 1 child (*2017)

Engagement in the Research System

- 2025 – Speaker of DFG Research Unit FOR 5872 “Chaperone-mediated regulation of the emergence of disease-causing amyloids inside biomolecular condensates”
- 2024 – 2028 Elected member of DFG Fachkollegium “Biochemie”
- 2024 – Member of Institute council of Leibniz-Institute on Aging, Jena
- 2021 – 2023 Vice Dean of Faculty of Chemistry and Biology of Universität Bremen
- 2019 – 2023 Coordinator of MSc Biochemistry and Molecular Biology, Universität Bremen

2019 – 2021 Commissioner for Transfer of Faculty of Biology & Chemistry, Universität Bremen
 2019 – 2023 Member of hiring committees for Professorships of *Biochemistry* (Constructor University), *Biotechnology*, and *Systemic Neurobiology* (Universität Bremen)
 2019 – Committee member of Studienstiftung des deutschen Volkes
 2016 Co-Organization of the 2nd European Worm Meeting, Berlin
 2015 Co-Organization of EU-COST GENiE Conference, Istanbul, Turkey
 2015 – Editorial board member of *Frontiers in Molecular Biosciences*
 2014 Co-Organization of the 1st European Worm Meeting, Berlin
 2013 – Ad-hoc Reviewer for: ERC, DFG, ANR, BMBF, ETH, Alexander von Humboldt Foundation, Nat Comm, Nat Chem Biol, Nat Cell Biol, EMBO J, EMBO Rep, Mol Cell, Cell Rep, JBC, PLoS Genetics, JCB, eLife

Supervision of early career researchers

Doctoral candidates:

- Completed PhD theses (66% female, 45% international): Kristin Arnsburg (2013-2017, *magna cum laude*, now teacher), Diogo Feleciano (2015-2019, *magna cum laude*, now Venture Analyst), Christian Gallrein (2016-2020, *summa cum laude*, now Postdoc FLI, Jena), Manuel Iburg (2016-2020, *magna cum laude*, now Postdoc at Rice University, Houston, USA), Maria Lucia Pigazzini (2018-2022, *summa cum laude*, now Postdoc at EMBL Heidelberg), Yasmin Richter (2022-2023, *summa cum laude*, now Postdoc Friedrich-Schiller-University, Jena), Sabrina Montresor (2019-2023, *magna cum laude*), Merve Özel (2019-2023, *magna cum laude*, now Postdoc, FMP Berlin), Franziska Hirsch (2021-2025, *magna cum laude*, now medical writer)
- Current PhD students (40% female, 80% international): Mira Sleiman, Sudarson Baskaran, Kunal Gharat, Sanjana Junnarkar, Georg Bossenz

Post-docs (75% female, 25% international):

- Annika Scior (2013-2018), Katrin Jünemann (2016-2018), Sara Ayala Mariscal (2018-2021), Annette Peter (2019-2023), Johann Steinmeier (2019-2021), Priscila Shibao (2022-2025), Yasmin Richter (2024 - 2027), Christian Gallrein (2024 -)

B.Sc. and M.Sc. theses supervised: >30

Mentoring activities: for the ASPIRE program of the MDC; Freie Universität Berlin and DKFZ postdoc network, Coordinator of the Postdoc network of the Leibniz Institute on Aging

10 selected publications

Montresor S, Pigazzini ML, Baskaran S, Sleiman M, Adhikari G, Basilicata L, Secker L, Jacob N, Ehlert Y, Kelkar A, Kalsi GK, Kulkarni N, Spellerberg P, **Kirstein J**. HSP110 is a modulator of amyloid beta (A β) aggregation and proteotoxicity. J Neurochem. 2024 Aug 23.

Lisowski P, Lickfett S, Rybak-Wolf A, Menacho C, Le S, Pentimalli TM, Notopoulou S, Dykstra W, Oehler D, López-Calcerrada S, Mlody B, Otto M, Wu H, Richter Y, Roth P, Anand R, Kulka LAM, Meierhofer D, Glazar P, Legnini I, Telugu NS, Hahn T, Neuendorf N, Miller DC, Böddrich A, Polzin A, Mayatepek E, Diecke S, Olzscha H, **Kirstein J**, Ugalde C, Petrakis S, Cambridge S, Rajewsky N, Kühn R, Wanker EE, Priller J, Metzger JJ, Prigione A.; Mutant huntingtin impairs

neurodevelopment in human brain organoids through CHCHD2-mediated neurometabolic failure. Nat Communications 2024 Aug 22;15(1):7027.

Ayala Mariscal SM, Pigazzini ML, Richter Y, Özel M, Grothaus IL, Protze J, Ziege K, Kulke M, ElBediwi M, Vermaas JV, Colombi Ciacchi L, Köppen S, Liu F, **Kirstein J**; Identification of a HTT-specific binding motif in DNAJB1 essential for suppression and disaggregation of HTT. Nature Communications, 2022 Aug 10;13(1):4692

Gallrein C, Iburg M, Michelberger T, Koçak A, Puchkov D, Liu F, Ayala Mariscal SM, Nayak T, Kaminski Schierle GS, **Kirstein J**; Novel Amyloid-beta pathology C. elegans model reveals distinct neurons as seeds of pathogenicity. Progress in Neurobiology, Sep 11:101907

Iburg M, Puchkov D, Brugada IUR, Bergemann L, Rieprecht U & **Kirstein J**; The non-canonical small heat shock protein HSP-17 from C. elegans is a selective protein aggregase. J Biol Chem, 2020 Mar 6;295(10):3064-3079

Kreis P*, Gallrein C, Rojas-Puente E, Mack TGA, Kroon C, Dinkel V, Willmes C, Murk K, tomDieck S, Schuman EM, **Kirstein J***, Eickholt BJ*; ATM phosphorylation of the actin-binding protein drebrin controls oxidation stress-resistance and lifespan. Nature Communications, 2019 10(1):486 (* co-corresponding authors)

Scior A, Arnsburg K, Iburg M, Juenemann K, Mlody B, Pigazzini ML, Buntru A, Puchkov D, Wanker EE, Prigione A, Priller J & **Kirstein J**; Complete suppression of Htt aggregation and disaggregation of Htt fibrils by a specific trimeric chaperone complex. The EMBO Journal, 2018; 37(2):282-299

Kirstein J, Arnsburg K, Scior A, Szlachcic A, Guilbride DL, Morimoto RI, Bukau B, Nillegoda NB; In vivo properties of the disaggregase function of J-proteins and Hsc70 in C. elegans stress and aging. Aging Cell, 2017 16(6):1414-1424

Nillegoda NB, **Kirstein J**, Szlachcic A, Berynskyy M, Stank A, Stengel F, Arnsburg K, Gao X, Scior A, Aebersold R, Guilbride DL, Wade RC, Morimoto RI, Mayer MP, Bukau B; Crucial HSP70 co-chaperone complex unlocks metazoan protein disaggregation. Nature 2015; 524(7564)

Kirstein J*, Morito D, Kakihana T, Sugihara M, Minnen A, Hipp MS, Nussbaum-Krammer C, Hartl FU, Nagata K, Morimoto RI; Proteotoxic stress and ageing triggers the loss of redox homeostasis across cellular compartments. The EMBO Journal 2015; 34(18). (*co-corresponding author)

Academic Distinctions

2022	Allen Distinguished Investigator Award
2022	Offer W3-Professorship for Biochemistry, Universität Bielefeld, declined
2018, 2016 + 2015	NeuroCure Excellence Cluster Innovation Award
2014 – 2015	Schering Stiftung: Young Leaders of Science Program
2008 – 2011	HFSP Postdoc Stipend
2008	DFG Postdoc Stipend, declined
2008	EMBO Postdoc Stipend, declined
2008	PhD Award of VAAM (Vereinigung für Allgemeine und Angewandte

	Mikrobiologie)
2007	EMBO Short-term Fellowship
2000 – 2003	Stipend of the Studienstiftung des deutschen Volkes