

# **Curriculum Vitae Dr. Claus-Dieter Kuhn**

## **Personal data:**

Name: Dr. Claus-Dieter Kuhn  
Date of birth: July 19, 1978  
Nationality: German  
Family status: married, 2 children



## **CURRENT POSITION**

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Since 09/2014      Junior Research Group Leader within the Elite Network of Bavaria at the University of Bayreuth, URL: [www.kuhnlab.uni-bayreuth.de](http://www.kuhnlab.uni-bayreuth.de)

## **EDUCATION**

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10/2003 - 02/2008    PhD Student at the Gene Center of the Ludwig-Maximilians-University in Munich, in the Group of Prof. Dr. Patrick Cramer  
08/2002 - 07/2003    Master of Science with a Major in Chemistry, Department of Biochemistry and Biophysics, Stockholm University, Sweden  
10/1999 - 07/2002    Undergraduate Studies in Biochemistry at the University of Regensburg

## **PROFESSIONAL CAREER**

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03/2010 - 07/2014    Postdoctoral Fellow at Cold Spring Harbor Laboratory, NY, USA, in the Group of Prof. Dr. Leemor Joshua-Tor  
10/2009 - 02/2010    X-ray crystallographer with Proteros Biostructures, Martinsried  
03/2008 - 09/2009    Postdoctoral Fellow at Cold Spring Harbor Laboratory, NY, USA, in the Group of Prof. Dr. Leemor Joshua-Tor

## **SCHOLARSHIPS, AWARDS AND GRANTS**

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2018                  Grant from the Oberfrankenstiftung for our work on "The impact of Neuronal enhancer RNAs on Neuronal plasticity and Neurogenesis"  
2017                  DFG Grant as part of the Priority Program 1738 (Emerging roles of non-coding RNAs in nervous system development, plasticity and disease)

2016	Recipient of the <b>Paul Ehrlich and Ludwig Darmstaedter Prize for Young Researchers</b> ( <i>together with the Heinz-Maier Leibniz Prize the highest prize for Biomedical Research in Germany</i> )
2016	DFG Grant for our work on the "Role of neuronal eRNAs in transcription activation"
2014	Junior Group Leader within the Elite Network of Bavaria at the University of Bayreuth
2008 - 2012	Postdoctoral Fellowship from the <b>Jane Coffin Childs Memorial Fund for Medical Research</b> , Yale University Medical School, Yale, USA
2005 - 2008	Member of the Elite Network of Bavaria Graduate Programs 'Protein Dynamics in Health and Disease' and 'Nano-Biotechnology'
2008	Publication Award from the Center for Nanoscience, Ludwig-Maximilians-University Munich
2007	Römerprize from the Department of Chemistry and Biochemistry of the Ludwig-Maximilians-University Munich
2004 - 2006	<b>Kekulé Scholarship</b> from the Fund of German Chemical Industry (FCI)
1999 - 2003	Scholarship for highly gifted students from the Wilhelm-Narr-Foundation in Kirchheim/Teck

## PUBLICATIONS

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### *Original articles*

1. Iana V. Kim, Elisabeth M. Duncan, Eric J. Ross, Vladyslava Gorbovitska, Stephanie Nowotarski, Sarah A. Elliott, Alejandro Sánchez Alvarado and **Claus-D. Kuhn** (2019). Planarians recruit piRNAs for mRNA turnover in adult stem cells. **Genes & Development** **33**, 1575-1590
2. Iana V. Kim, Eric J. Ross, Sascha Dietrich, Kristina Döring, Alejandro Sánchez Alvarado and **Claus-D. Kuhn** (2019). Efficient ribodepletion for RNA sequencing in planarians. **BMC Genomics**, *in press*.
3. Dirk Kostrewa\*, **Claus-D. Kuhn\***, Christoph Engel, and Patrick Cramer (2015). An alternative RNA polymerase I structure reveals a dimer hinge. **Acta Crys. Section D** **71**, 1850-1855. (\* contributed equally)
4. **Claus-D. Kuhn**, Jeremy E. Wilusz, Yuxuan Zheng, Peter A. Beal, and Leemor Joshua-Tor (2015). On-Enzyme Refolding Permits Small RNA and tRNA Surveillance by the CCA-Adding Enzyme. **Cell** **160**, 1-15.
5. Jeremy E. Wilusz, Courtney K. JnBaptiste, Laura Y. Lu, Claus-D. Kuhn, Leemor Joshua-Tor, and Phillip A. Sharp (2012). A triple helix stabilizes the 3' ends of long noncoding RNAs that lack poly(A) tails. **Genes and Development** **26**, 2392-2407.
6. Elad Elkayam, **Claus-D. Kuhn**, Ante Tocilj, Astrid D. Haase, Emily M. Greene, Gregory J. Hannon, and Leemor Joshua-Tor (2012). The Structure of Human Argonaute-2 in Complex with miR-20a. **Cell** **150**, 100-110.

7. Sebastian R. Geiger, Claus-D. Kuhn, Christoph Leidig, Jörg Renkawitz, and Patrick Cramer (2008). Crystallization of the RNA polymerase I subcomplex A14/43 by iterative prediction, probing, and removal of multiple flexible regions. *Acta Crys. Section F* 64, 413-418.
8. Jochen Gerber, Alarich Reiter, Robert Steinbauer, Steffen Jakob, Claus-D. Kuhn, Patrick Cramer, Joachim Griesenbeck, Philipp Milkereit, and Herbert Tschochner (2008). Site specific phosphorylation of yeast RNA polymerase I. *Nucleic Acids Res.* 36, 793-802.
9. **Claus-D. Kuhn**, Sebastian R. Geiger, Sonja Baumli, Marco Gartmann, Jochen Gerber, Stefan Jennebach, Thorsten Mielke, Herbert Tschochner, Roland Beckmann, and Patrick Cramer (2007). Functional architecture of RNA Polymerase I. *Cell* 131, 1260-1272.
10. Shashi Bhushan, Claus-D. Kuhn, Anna-Karin Berglund, Christian Roth, and Elzbieta Glaser (2006). The role of the N-terminal domain of chloroplast targeting peptides in organellar protein import and miss-sorting. *FEBS Letters* 580, 3966-7.

#### **Articles submitted or in revision**

11. Felix Klatt, Alexander Leitner, Iana V. Kim, Xuan-Hung Ho, Elisabeth V. Schneider, Franziska Langhammer, Robin Weinmann, Melanie R. Müller, Robert Huber, Gunter Meister and **Claus-D. Kuhn** (2019). MED12 wraps around CDK8 and utilizes an activation helix to stimulate its kinase activity. *PNAS, in revision.*
12. Longhua Guo, Fengli Guo, Shasha Zhang, Kexi Yi, Melainia McClain, Claus-D. Kuhn, Tari Parmely and Alejandro Sánchez Alvarado (2019). Subcellular analyses of planarian meiosis implicate a novel, double-membraned vesiculation process in nuclear envelope breakdown. *Molecular Biology of The Cell, in revision.* (*bioRxiv doi: 10.1101/620609*)

#### **Review articles**

13. Iana Kim, Vladyslava Gorbovitska and **Claus-D. Kuhn** (2017). Wie RNA die Genregulation beeinflusst. *Biospektrum* 23 (5), 513–515
14. **Claus-D. Kuhn** (2016). RNA flexibility governs tRNA function. *BioEssays* 38 (5), 465-73.
15. **Claus-D. Kuhn** and Leemor Joshua-Tor (2013). Eukaryotic Argonautes come into focus. *Trends in Biochemical Sciences* 38, 263-271.
16. Patrick Cramer, Karim J. Armache, Sonja Baumli, Stefan Benkert, Florian Brueckner, Claudia Buchen, Gerke E. Damsma, Stefan Dengl, Sebastian R. Geiger, Anja J. Jasiak, Anass Jawhari, Stefan Jennebach, Tomislav Kamenski, Hubert Kettenberger, Claus-D. Kuhn, Elisabeth Lehmann, Kristin Leike, Jasmin Sydow, and Alessandro Vannini (2008). Structure of Eukaryotic RNA Polymerases. *Annual Review of Biophysics* 37, 337-352.

#### **REVIEWING ACTIVITY**

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EMBO Journal, eLIFE, RNA, German Research Foundation (DFG), Wellcome Trust