

**Univ.-Prof. Dr. rer. nat. Wolfram Antonin**  
**Institute of Biochemistry and Molecular Cell Biology**

**Personal Data**

Name: Univ.-Prof. Dr. rer. nat. Wolfram Antonin  
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Address: Institute of Biochemistry and Molecular Cell Biology  
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Date and place of birth: September 26, 1972 in Bad Nauheim, Germany

**Academic Qualification**

2017 W3 Professor for Biochemistry, RWTH Aachen University  
2013 Habilitation in Cell Biology at the Eberhard Karls University Tübingen  
2001 Doctor of Natural Sciences, University of Hannover; grade: summa cum laude  
1997 Diploma in Biochemistry, University of Hannover; grade: sehr gut

**Professional Career**

Since 2017 W3 Professor for Biochemistry and head of the Institute of Biochemistry and Molecular Cell Biology, RWTH Aachen University

2006-2017 Independent Max Planck research group leader at the Friedrich Miescher Laboratory of the Max Planck Society (W2, associate professor level, Oct 2015-Jan 2017 as an Heisenberg fellow) in Tübingen

2005-2006 Staff scientist at the European Molecular Biological Laboratory (EMBL) in Heidelberg

2002-2005 Postdoctoral fellow at the European Molecular Biology Laboratory (EMBL) in Heidelberg in the group of Dr. Iain Mattaj

2001 Research associate at the Max Planck Institute for Biophysical Chemistry in Göttingen in the group of Prof. Reinhard Jahn

1997-2001 PhD student at the Max Planck Institute for Biophysical Chemistry in Göttingen in the group of Prof. Reinhard Jahn

1992-1997 Undergraduate student in Biochemistry, University of Hannover

**Awards and Fellowships**

2015-2017 Heisenberg fellowship of the DFG

2005-2010 Member of the Young Academy at the Berlin-Brandenburg Academy of Sciences and Humanities and the German Academy of Natural Scientists Leopoldina

2004-2005 Postdoctoral fellowship of the Ernst Schering Foundation

2002-2003 EMBO long-term fellowship

2002-2003 Research fellowship of the German Research Foundation (DFG, not accepted due to parallel funding from EMBO)

2002 Otto Hahn Medal of the Max Planck Society for outstanding scientific achievement

1992-1997 Scholarship of the German National Academic Foundation (Studienstiftung des Deutschen Volkes)

**Memberships**

American Society for Cell Biology (ASCB), American Society for Biochemistry and Molecular Biology (ASBMB), German Society for Biochemistry and Molecular Biology (GBM), German Society for Cell Biology (DGZ)

### **Institutional responsibilities**

- 2018- Member of commissions (recruitment for clinical and pre-clinical professorships, Studienbeitragsersatzmittel/Qualitätsverbesserungsmittel in der Lehre, Bibliothekskommission, Kommission für Chancengerechtigkeit) at Medical Faculty, RWTH Aachen University
- 2017- Faculty member Biomedical Graduate School Aachen
- 2017- Faculty member, Medical Faculty, RWTH Aachen University
- 2011-2017 Faculty member of the international Max Planck Research School "From Molecules to Organisms"
- 2007-2008 Organizer of the Institute Seminar for External Speakers, Max Planck Institute for Developmental Biology and the Friedrich Miescher Laboratory
- 2006-2016 Organizer of the Institute Seminar for Graduate Students and Postdocs, Max Planck Institute for Developmental Biology and the Friedrich Miescher Laboratory
- 2006-2017 Faculty member of the international PhD programme of the Max Planck Institute for Developmental Biology and the Friedrich Miescher Laboratory, Tübingen, 2012-2016 as programme committee member
- 2004- Member of several PhD advisory committees at EMBL Heidelberg, University Tübingen, ETH Zurich and the RWTH Aachen

### **Teaching activities**

- 2017- Full professor for Biochemistry, RWTH Aachen University. Various courses for medical, biotechnology and biology students (BSc and MSc level)
- 2012 Summer school "Membrane Biochemistry" of the German National Academic Foundation
- 2006-2017 Lectures and practical courses in Biology, Biochemistry and Cell Biology (BSc and MSc level), University Tübingen

### **Organization of scientific meetings**

- 2011 Co-organizer, BRIGFOS (British-German Frontiers of Science) meeting, Chicheley Hall near London, UK.
- 2010 Organizer, interdisciplinary meeting "Between Nations and Disciplines", Berlin, Germany.
- 2009 Organizer, Scientific Symposium "Forty years of the Friedrich Miescher Laboratory", Tübingen, Germany.

### **Other community duties**

Editorial Board Member for Cells

"Ambassador" at RWTH Aachen for the American Society for Cell Biology (ASCB) and German Society for Biochemistry and Molecular Biology (GBM)

Vertrauensdozent for the German National Academic Foundation (Studienstiftung des Deutschen Volkes), Member of the Selection Committee of the German National Academic Foundation

Reviewer for scientific journals: BioEssays, Cell Research, Cells, Current Biology, Current Opinion in Cell Biology, Development, Developmental Cell, elife, EMBO Journal, EMBO Reports, European Journal of Cell Biology, FEBS letters, Journal of Cell Biology, Journal of Cell Science, Journal of Membrane Biology, Journal of Molecular Biology, Journal of Visualized Experiments, Molecular Biology of the Cell, Molecular Cell, Nature, Nature Cell Biology, Nature Communications, Nature Structural & Molecular Biology, Nucleus, PLOS One, PNAS, Science, Science Advances, Scientific Reports, Structure.

Reviewer for funding bodies: Austrian Academy of Sciences, Austrian Science Fund, Baden-Württemberg Stiftung, Biotechnology and Biological Sciences Research Council (BBSRC), Boehringer Ingelheim Fonds, Deutsche Krebshilfe, German Research Foundation (DFG), Dystonia Medical Research Foundation, Ernst Schering Foundation, European Research Council (ERC), European Commission/Research Executive Agency, Fondation pour la Recherche Médicale (FRM), Alexander von Humboldt Foundation, Human Frontier Science Program (HFSP), Israel Science Foundation (ISF),

German National Academic Foundation, Medical Research Council (MRC), National Institutes of Health (NIH), National Science Foundation (NSF), Netherlands Organization for Scientific Research (NOW), Swiss National Science Foundation (SNF), The French National Research Agency (ANR), The Wellcome Trust.

### **Selected Third Party Funding of the last 5 Years**

2013-2018 ERC starting grant: CHROMDECON, 1,498,728 Euro  
2018-2022 AN377/7-1 (Sachbeihilfe) from the German Research Foundation (DFG): Interphase nuclear pore complex assembly, 363,806 Euro  
2020-2023 AN377/3-3 (Sachbeihilfe) from the German Research Foundation (DFG): RuvBL1/2 function in mitotic chromatin decondensation, 429,517 Euro  
2021-2024 AN377/11-1 (project within CRU 5011 InteraKD) from the German Research Foundation (DFG): Altered cellular compartmentalization as a potential pathomechanism driving CKD, 297,900 Euro  
2023-2026 AN377/12-1 (Sachbeihilfe) from the German Research Foundation (DFG): VPS72/YL1 function in nuclear re-assembly, 512,326 Euro

### **Outreach and additional activities**

Mentor for EICOS (European Initiative for Communicators of Science)  
Organizing “hands on experiments” as open day events at EMBL and the Friedrich Miescher Laboratory, lab experiments for school and kindergarten classes  
Laboratory and institute tours for the “Deutsche Jungforscher Netzwerk” (juFORUM).

### **Publication Record**

H-Index: 42, 48 peer-reviewed original publications, 20 reviews

### **10 most important publications**

Amm, I., A. Hellwig, J. Schwarz, M. Tatarek-Nossol, C. Lüchtenborg, M. Kallas, B. Brügger, and **Antonin, W.** (2023). Distinct domains in Ndc1 mediate its interaction with the Nup84 complex and the nuclear membrane. *J Cell Biol.* doi: 10.1083/jcb.202210059.

Holzer, G., P. De Magistris, C. Gramminger, R. Sachdev, A. Magalska, A. Schooley, A. Scheufen, B. Lennartz, M. Tatarek-Nossol, H. Lue, M.I. Linder, U. Kutay, C. Preisinger, D. Moreno-Andres, and **Antonin, W.** (2021). The nucleoporin Nup50 activates the Ran guanine nucleotide exchange factor RCC1 to promote NPC assembly at the end of mitosis. *EMBO J.* 40:e108788.

Braun DA, Sadowski CE, Kohl S, Lovric S, Astrinidis SA, Pabst WL, Gee HY, Ashraf S, Lawson JA, Shril S, Airik M, Tan W, Schapiro D, Rao J, Choi WI, Hermle T, Kemper MJ, Pohl M, Ozaltin F, Konrad M, Bogdanovic R, Büscher R, Helmchen U, Serdaroglu E, Lifton RP, **Antonin W**, Hildebrand F (2016). Mutations in nuclear pore genes NUP93, NUP205 and XPO5 cause steroid-resistant nephrotic syndrome. *Nat Genet* 48, 457-465.

Vollmer B, Lorenz M, Moreno-Andres D, Bodenhofer M, De Magistris P, Astrinidis SA, Schooley A, Flotenmeyer M, Leptihn S, **Antonin, W** (2015). Nup153 Recruits the Nup107-160 Complex to the Inner Nuclear Membrane for Interphasic Nuclear Pore Complex Assembly. *Dev Cell* 33, 717-728.

Magalska A, Schellhaus K, Moreno-Andres D, Zanini F, Schooley A, Sachdev R, Schwarz H, Madlung J, **Antonin W** (2014). RuvB-like ATPases function in chromatin decondensation at the end of mitosis. *Dev Cell* 31, 305-318.

Vollmer B, Schooley A, Sachdev R, Eisenhardt N, Schneider AM, Sieverding C, Madlung J, Gerken U, Macek B, **Antonin W** (2012). Dimerization and direct membrane interaction of Nup53 contribute to nuclear pore complex assembly. *EMBO J* 31, 4072-84.

Theerthagiri G, Eisenhardt N, Schwarz H, **Antonin W** (2010). The nucleoporin Nup188 controls passage of membrane proteins across the nuclear pore complex. *J Cell Biol* 189, 1129-1142.

Franz C, Walczak R, Yavuz S, Santarella R, Gentzel M, Askjaer P, Galy V, Hetzer M, Mattaj IW, **Antonin W** (2007). MEL-28/ELYS is required for the recruitment of nucleoporins to chromatin and postmitotic nuclear pore complex assembly. *EMBO Rep* 8, 165-172.

Mansfeld J, Guttinger S, Hawryluk-Gara LA, Pante N, Mall M, Galy V, Haselmann U, Muhlhauser P, Wozniak RW, Mattaj IW, Kutay U, **Antonin W** (2006). The conserved transmembrane nucleoporin NDC1 is required for nuclear pore complex assembly in vertebrate cells. Mol Cell 22, 93-103.

**Antonin W**, Franz C, Haselmann U, Antony C, Mattaj IW (2005). The integral membrane nucleoporin pom121 functionally links nuclear pore complex assembly and nuclear envelope formation. Mol Cell 17, 83-92.