

**Scientific CV**

Name	Renate Kain																															
Place of Birth	Vienna, Austria																															
Nationality	Austria																															
Private Address	Mauerbachstraße 10, A-1140Vienna, Austria																															
Academic Degree	MD, PhD																															
Current Position	Professor, Chair Head of Department of Pathology Member steering committee (Deputy director), Comprehensive Cancer Center, Medical University of Vienna																															
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ORCID ID	<a href="https://orcid.org/0000-0002-2428-543X">https://orcid.org/0000-0002-2428-543X</a>																															
Main Areas of Research	Pathogenesis of ANCA associated autoimmune vasculitis (AAV) Autoantibodies to human lysosomal membrane protein-2 (hLAMP-2) and other glycoproteins in AAV Autoimmunity to membrane proteins in the pathogenesis of FNGN and AAV The role of extracellular vesicles as biomarkers in AAV The role of autophagy in antigen presentation and autoimmunity																															
Education & Career	<table> <tr> <td>1982 – 1985</td> <td>Tutor for Histology, Institute of Micromorphology and Electron Microscopy, University of Vienna</td> </tr> <tr> <td>1986</td> <td>MD (University of Vienna, School of Medicine)</td> </tr> <tr> <td>1986 - 1992</td> <td>Postgraduate Trainee in Surgical Pathology Specialisation in Nephropathology, Institute of Pathological Anatomy, University of Vienna</td> </tr> <tr> <td>1992</td> <td>Certified Pathologist (Board registration, Austrian Chamber of Physicians)</td> </tr> <tr> <td>1992 - 1993</td> <td>University Assistant, Institute of Pathological Anatomy, University of Vienna</td> </tr> <tr> <td>1994 - 1997</td> <td>Postdoctoral Research Associate, The Burnham Institute (formerly La Jolla Cancer Research Foundation), La Jolla, California, USA.</td> </tr> <tr> <td>1998</td> <td>Certified Cytopathologist (Board registration, Austrian Chamber of Physicians)</td> </tr> <tr> <td>1998 – 1999</td> <td>University Assistant, Institute of Pathological Anatomy, University of Vienna</td> </tr> <tr> <td>2000 - 2001</td> <td>Maternity leave</td> </tr> <tr> <td>2001 - 2005</td> <td>NKRF Clinical Senior Research Fellow, Department of Pathology and Immunology and Inflammation Theme, University of Aberdeen, UK</td> </tr> <tr> <td>2005 -2006</td> <td>Clinical Senior Lecturer, Department of Pathology, University of Aberdeen, UK</td> </tr> <tr> <td>2006 – 2010</td> <td>Assistant Professor, Department of Pathology, Vienna</td> </tr> <tr> <td>2007</td> <td>ÖÄK Diplom Genetik (Austrian Chamber of Physicians)</td> </tr> <tr> <td>2009</td> <td>PhD (University of Aberdeen, UK)</td> </tr> <tr> <td>2010</td> <td>Habilitation, Venia docendi in Pathology (MedUni</td> </tr> </table>		1982 – 1985	Tutor for Histology, Institute of Micromorphology and Electron Microscopy, University of Vienna	1986	MD (University of Vienna, School of Medicine)	1986 - 1992	Postgraduate Trainee in Surgical Pathology Specialisation in Nephropathology, Institute of Pathological Anatomy, University of Vienna	1992	Certified Pathologist (Board registration, Austrian Chamber of Physicians)	1992 - 1993	University Assistant, Institute of Pathological Anatomy, University of Vienna	1994 - 1997	Postdoctoral Research Associate, The Burnham Institute (formerly La Jolla Cancer Research Foundation), La Jolla, California, USA.	1998	Certified Cytopathologist (Board registration, Austrian Chamber of Physicians)	1998 – 1999	University Assistant, Institute of Pathological Anatomy, University of Vienna	2000 - 2001	Maternity leave	2001 - 2005	NKRF Clinical Senior Research Fellow, Department of Pathology and Immunology and Inflammation Theme, University of Aberdeen, UK	2005 -2006	Clinical Senior Lecturer, Department of Pathology, University of Aberdeen, UK	2006 – 2010	Assistant Professor, Department of Pathology, Vienna	2007	ÖÄK Diplom Genetik (Austrian Chamber of Physicians)	2009	PhD (University of Aberdeen, UK)	2010	Habilitation, Venia docendi in Pathology (MedUni
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	Vienna)
2010 – 2016	Ao.Prof. for Pathology, Department of Pathology, Vienna
2011	Certified Human Geneticist (Austrian Chamber of Physicians)
2011	18. – 20.7.11: Visiting Professorship, IKFZ Erlangen: Molekulare Mimikry und Glomerulonephritis
2014/19	ÖÄK Fortbildungsdiplom (Austrian Chamber of Physicians)

**Selected memberships**

2021-2022	Member of Executive board (President 2019-2021), steering committee Österreichische Gesellschaft für Pathologie (OeGPATh; Austrian Society of Pathology, Section IAP)
2018 – 2022	Member of executive board (President 2018-2020), Austrian Platform for Personalised Medicine (ÖPPM)
2022 – onwards	Councilor, Renal Pathology Society
2023 – onwards	Chair, EM-WG European Society Pathology

Österreichische Gesellschaft für Transplantation, Transfusion und Genetik (Austrotransplant), member  
 Austrian Society f. Electron Microscopy (ASEM), member  
 American Society of Nephrology, member  
 European Society of Pathology, member  
 Nephropathology Working Group (ESP), member  
 Kidney Research UK Alumni

**Network Coordination and Grant funding (past 10 years)**

1.2.2021-31.1.2027 H2020-JTI-IMI2-2019-18-two-stage. IMI2-RIA. Digital Pathology for the Development of Artificial Intelligence (BIGPICTURE). GA 945358, WP3 lead.

1.1.2019 – 31.12.2022 H2020-MSCA-ITN-2018: HELICAL: HHealth data Linkage for ClinicAL benefit. Grant agreement 813545. Principal Investigator.

1.02.2017 – 31.1. 2020 FWF-ANR 2016 Call for French - Austrian Joint Projects: ACKITEC: From AAV to Chronic Kidney disease: contribution of TEnascin-C (Principal investigators R. Kain Vienna and G. Orend Strasbourg).

1.11.2015 – 31.04.2019. Horizon2020, PHC3-2015-two-stage, RIA. RELapses prevENTion in chronic autoimmune disease: common mechanisms and co-morbidities (RELENT), GA 668036-2 (<http://www.relent.eu/>, <https://www.researchgate.net/project/RELENT-project>). Coordinator.

1.11.2010 – 31.04.2015. FP7-HEALTH-2010-single-stage, RIA. Infectious triggers of chronic autoimmunity (INTRICATE), GA 261382: <http://intricate.eu/>. Coordinator.

1.11.2009 – 31.10.2013. FP7-People-ITN-2008. Marie Curie Actions—Networks for Initial Training (ITN). Translational Science in Vascular Inflammation and Remodelling (TransSVIR); GA 238756. (<http://www.meduniwien.ac.at/transvir/en/about-transvir.php>). Training coordinator.

1.5.2015 – 31.4.2016. Vasculitis foundation. Role of LAMP-2 in tolerance to ANCA antigens, Principal Investigator;

1.11.2013 – 31.10.2016. Institut National du Cancer, France; Projets libres de recherche «Biologie et Sciences du Cancer: TEN-PLA-MET - Tenascin-C and platelets: potential accomplices in breast cancer lung metastasis, Principal Investigator;

1.5.2013 – 31.4.2015 FP7-PEOPLE.2011.IEF. Marie Curie Intra-European Fellowships (IEF) for Irina Grigorieva: GATA3 in Kidney (PIEF.G A-2011-302739) (Sponsor) Euro 187.888

1.11.2012 – 31.10.2014. ERA-EDTA clinical research fellowship administered by the Fellowship Programme office of the European Molecular Biology Organization (EMBO) for Miriam Ball: Analysis of the relationship between infections with fimbriated bacteria and ANCA-associated Vasculitis;

1.2.2010 – 31.1.2014. WWTF Life Science Call 2008, LS09-075: Autoantibodies to hLAMP-2 in FNGN, Applicant;

**Ten selected Publications**

1. Kain R, Matsui K, Exner M, Binder S, Schaffner G, Sommer EM, Kerjaschki D. A novel class of autoantigens of anti-neutrophil cytoplasmic antibodies in necrotizing and crescentic glomerulonephritis: the lysosomal membrane glycoprotein h-lamp-2 in neutrophil granulocytes and a related membrane protein in glomerular endothelial cells. *J Exp Med*. 1995. 181:585-597. doi: 10.1084/jem.181.2.585
2. Kain R, Exner M, Brandes R, Ziebermayr R, Cunningham D, Alderson CA, Davidovits A, Raab I, Jahn R, Ashour O, Spitzauer S, Sunder-Plassmann G, Fukuda M, Klemm P, Rees AJ & Kerjaschki D. Molecular mimicry in pauci-immune crescentic glomerulonephritis. *Nature Medicine*. 2008. 14(10):1088-1096. doi: 10.1038/nm.1874
3. Kain R, Tadema H, McKinney EF, Benharkou A, Brandes R, Peschel A, Hubert V, Feenstra T, Sengölge G, Stegeman C, Heeringa P, Lyons PA, Smith KG, Kallenberg C, Rees AJ. High prevalence of autoantibodies to hLAMP-2 in anti-neutrophil cytoplasmic antibody-associated vasculitis. *J Am Soc Nephrol*. 2012, 23:556-66. doi: 10.1681/ASN.2011090920
4. Peschel A, Basu N, Benharkou A, Brandes R, Brown M, Dieckmann R, Rees AJ and Kain R. Autoantibodies to hLAMP-2 in ANCA negative pauci-immune focal necrotizing glomerulonephritis. *J Am Soc Nephrol*. 2014 25:455-63. doi: 10.1681/ASN.2013030320
5. Hubert V, Peschel A, Langer B, Gröger M, Rees A, Kain R. LAMP-2 is required for incorporating syntaxin-17 into autophagosomes and for their fusion with lysosomes. *Biol Open*. 2016. 5(10):1516-1529. doi: 10.1242/bio.018648
6. Leone DA, Peschel A, Brown M, Schachner H, Ball MJ, Gyuraszova M, Salzer-Muhar U, Fukuda M, Vizzardelli C, Bohle B, Rees AJ, Kain R. Surface LAMP-2 is an endocytic receptor that diverts antigen internalized by human dendritic cells into highly immunogenic exosomes. 2017. *J Immunol*. 2017 Jul 15;199(2):531-54. doi: 10.4049/jimmunol.1601263
7. Grigorieva IV, Oszwald A, Grigorieva EF, Schachner H, Neudert B, Ostendorf T, Floege J, Lindenmeyer MT, Cohen CD, Panzer U, Aigner C, Schmidt A, Grosveld F, Thakker RV, Rees AJ, Kain R. A Novel Role for GATA3 in Mesangial Cells in Glomerular Development and Injury. *J Am Soc Nephrol*. 2019 Sep;30(9):1641-1658. doi: 10.1681/ASN.2018111143
8. Kitching AR, Anders HJ, Basu N, Brouwer E, Gordon J, Jayne DR, Kullman J, Lyons PA, Merkel PA, Savage COS, Specks U, Kain R. ANCA-associated vasculitis. *Nat Rev Dis Primers*. 2020 Aug 27;6(1):71. doi:10.1038/s41572-020-0204-y. PMID:32855422
9. Fayçal CA, Oszwald A, Feilen T, Cosenza-Contreras M, Schilling O, Loustau T, Steinbach F, Schachner H, Langer B, Heeringa P, Rees AJ, Orend G, Kain R. An adapted passive model of anti-MPO dependent crescentic glomerulonephritis reveals matrix dysregulation and is amenable to modulation by CXCR4 inhibition. *Matrix Biol*. 2022 Feb;106:12-33. doi: 10.1016/j.matbio.2022.01.001.
10. Oszwald A, Mejía-Pedroza RA, Schachner H, Aigner C, Rees AJ, Kain R. Digital spatial profiling of glomerular gene expression in pauci-immune focal necrotizing glomerulonephritis. 2023 *Kidney360*, 4(1):83-91. doi: 10.34067/KID.000461202.