Curriculum Vitae

1. General Information

Name: König, Renate,
Title: Dr. phil. nat.,
Position:
Group Leader (Paul-Ehrlich-Institut, Langen, Germany)
Adjunct Assistant Professor (SBP Medical Discovery Institute, La Jolla, CA, USA)

Paul-Ehrlich-Institut
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Publications: https://www.ncbi.nlm.nih.gov/m/pubmed/?term=Konig%2CRenate
ORCID ID: https://orcid.org/0000-0003-4882-9179

2. Education and degrees

2002 Ph.D. (Dr. phil. nat.) in Biochemistry, Johann-Wolfgang-Goethe University of Frankfurt
1997 M.S. (Diplom) in Biology, University of Bayreuth

3. Personal statement

Our group has a strong track record in identifying and characterizing novel cellular regulators of innate immune responses against pathogen infection. We possess considerable expertise in high-throughput screening approaches and the integration of systems-level datasets. We initiated the first siRNA screens identifying cellular factors affecting viral replication on a global scale. Recently, we implemented a meta-analysis of genome-wide RNAi and proteomics datasets to reveal important cellular factors affecting virus replication.

4. Academic career

2010 - present	Group Leader, Paul-Ehrlich-Institute in Langen, Germany *www.pei.de/renate-koenig*
2010 - present	Adjunct Assistant Professor, Sanford-Burnham Medical Research Institute, San Diego, CA, USA
2017 – present	Member of the HMA/EMA Joint Task Force on Big Data; *https://www.hma.eu/506.html?&L=0*
2008 – 2010	Research Assistant Professor, Sanford-Burnham Medical Research Institute, San Diego, CA, USA, Prof. Chanda
2007 – 2008	Staff Scientist, Sanford-Burnham Medical Research Institute, San Diego, CA, USA, Prof. Chanda
2004 – 2007	Institute Fellow (Staff Scientist), The Genomics Institute of the Novartis Research Foundation, San Diego, CA, USA, Dr. Chanda
2002 – 2004	Postdoc, The Salk Institute, San Diego, CA, USA, Prof. Landau

5. Awards, Honors and Other

Session Chair	Frontiers in Retrovirology Conference, Leuven, Belgium, 2018 Cold-Spring-Harbor Retrovirus Meeting, New York, 2016 and 2012 German Society for Virology (GfV), Bochum, Münster Marburg and Düsseldorf in 2015, 2016, 2017 and 2019 CROI (Conference Retroviruses and Opportunistic Infections), Boston, 2014
2013, 2015	Appointed Member of the international steering committee for the DÖAK (German-Austrian AIDS congress)
2011 – 2015	Associated member of the HINT Center, HIV Immune Networks Team
2010 – 2010	Member of the HINT Center, HIV Immune Networks Team, www.hint.org

6. Publication metrics, **Source: Web of Science; date of query: June 2nd 2019**

Number of citable publications: 48	*Source: Web of Science; date of query: June 2nd 2019*	*Source: Google Scholar; date of query: July 24th 2019*
Number of citations (not including self-citations)	4599	6391
i10-index	29	32
h-index	19	20

7. Selected publications, **Impact factors (IF) Source: Web of Science; date of query: June 2nd 2019**

Fuchs NV, Schieck M, Neuenkirch M, Tondera C, Schmitz H, des Portes V, Germanaud D, Steinemann D, Göhring G, **König R**. Induced pluripotent stem cells (iPSCs) derived from a Renpenning Syndrome Patient with c.459_462delAGAG Mutation in PQBP1 (PEIi001-A). **Stem Cell Research,** 10.1016/j.scr.2019.101592, **in press**.
IF: 3.9

Schott K, Hein-Fuchs N, Derua R, Mahboubi B, Schnellbächer E, Seifried J, Tondera C, Schmitz H, Shepard C, Brandariz-Nuñez A, Diaz-Griffero F, Reuter A, Kim B, Janssens V, and **König R; 2018**, Dephosphorylation of the HIV-1 restriction factor SAMHD1 is mediated by PP2A-B55α holoenzymes during mitotic exit. **Nature Communications** Jun 8;9(1):2227, **IF 12.3**

Riess M, Fuchs NV, Idica A, Hamdorf M, Flory E, Pedersen IM, **König R**. **2017** Interferons Induce Expression of SAMHD1 in Monocytes through Downregulation of miR-181a and miR-30a. **Journal of Biological Chemistry**. Jan 6;292(1):264-277.
IF 4.0

Guo H*, **König R***, Deng M, Riess M, Mo J, Zhang L, Petrucelli A, Yoh SM, Barefoot B, Samo M, Sempowski GD, Zhang A, Colberg-Poley AM, Feng H, Lemon SM, Liu Y, Zhang Y, Wen H, Zhang Z, Damania B, Tsao LC, Wang Q, Su L, Duncan JA, Chanda SK, Ting JP. **2016**. NLRX1 Sequesters STING to Negatively Regulate the Interferon Response, Thereby Facilitating the Replication of HIV-1 and DNA Viruses. **Cell Host Microbe**. 19(4):515-28. ***contributed equally**

IF 17.8

Sommer AF, Rivière L, Qu B, Schott K, Riess M, Ni Y, Shepard C, Schnellbächer E, Finkernagel M, Himmelsbach K, Welzel K, Kettern N, Donnerhak C, Münk C, Flory E, Liese J, Kim B, Urban S, **König R**. **2016.** Restrictive influence of SAMHD1 on Hepatitis B Virus life cycle. **Scientific Reports**. 6:26616.
IF 4.1

Tripathi, S., M.O. Pohl, Y. Zhou, A. Rodriguez-Frandsen, G. Wang, D.A. Stein, H.M. Moulton, P. DeJesus, J. Che, L.C. Mulder, E. Yanguez, D. Andenmatten, L. Pache, B. Manicassamy, R.A. Albrecht, M.G. Gonzalez, Q. Nguyen, A. Brass, S. Elledge, M. White, S. Shapira, N. Hacohen, A. Karlas, T.F. Meyer, M. Shales, A. Gatorano, J.R. Johnson, G. Jang, T. Johnson, E. Verschueren, D. Sanders, N. Krogan, M. Shaw, **R. König**[#], S. Stertz[#], A. Garcia-Sastre[#], and S.K. Chanda[#]. **2015**. Meta- and Orthogonal Integration of Influenza "OMICs" Data Defines a Role for UBR4 in Virus Budding. **Cell Host Microbe**. 18:723-735. [#]**co-corresponding authors**
IF 17.8

Yoh, S.M., M. Schneider, J. Seifried, S. Soonthornvacharin, R.E. Akleh, K.C. Olivieri, P.D. De Jesus, C. Ruan, E. de Castro, P.A. Ruiz, D. Germanaud, V. des Portes, A. Garcia-Sastre, **R. König**, and S.K. Chanda. **2015**. PQBP1 Is a Proximal Sensor of the cGAS-Dependent Innate Response to HIV-1. **Cell.** 161:1293-1305. IF: 31.3
IF 31.3

Berger A, Sommer AFR, Zwarg J, Hamdorf M, Welzel K, Esly N, Panitz S, Reuter A, Ramos I, Jatiani A, Mulder LCF, Fernandez-Sesma A, Rutsch F, Simon V, **König R[#],** Flory E [#]. **2011.** SAMHD1-Deficient CD14+ Cells from Individuals with Aicardi-Goutières Syndrome Are Highly Susceptible to HIV-1 Infection. **PLoS Pathog.** 7(12): e1002425. [#]**co-corresponding authors**, **IF 6.1**

König, R.*, S. Stertz*****, Y. Zhou, A. Inoue, H.H. Hoffmann, S. Bhattacharyya, J.G. Alamares, D.M. Tscherne, M.B. Ortigoza, Y. Liang, Q. Gao, S.E. Andrews, S. Bandyopadhyay, P. De Jesus, B.P. Tu, L. Pache, C. Shih, A. Orth, G. Bonamy, L. Miraglia, T. Ideker, A. Garcia-Sastre, J.A. Young, P. Palese, M.L. Shaw, and S.K. Chanda. **2010.** Human host factors required for influenza virus replication. **Nature.** 463:813-817. ***contributed equally, IF 41.5**

König, R., Y. Zhou, D. Elleder, T.L. Diamond, G.M. Bonamy, J.T. Irelan, C.Y. Chiang, B.P. Tu, P.D. De Jesus, C.E. Lilley, S. Seidel, A.M. Opaluch, J.S. Caldwell, M.D. Weitzman, K.L. Kuhen, S. Bandyopadhyay, T. Ideker, A.P. Orth, L.J. Miraglia, F.D. Bushman, J.A. Young, and S.K. Chanda. **2008.** Global analysis of host-pathogen interactions that regulate early-stage HIV-1 replication. **Cell.** 135:49-60.
IF 31.3

König R., Chiang C.Y., Tu B.P., Yan S.F., DeJesus P.D., Romero A., Bergauer T., Orth A., Krueger U., Zhou Y., Chanda S.K. **2007.** A probability-based approach for the analysis of large-scale RNAi screens. **Nature Methods,** 4(10):847-9. **IF 26.9**