

CV Prof. Dr. rer. nat. Jan Münch

General Information

Name, Forename, Title	Münch, Jan, Prof. Dr. rer. nat.
DOB	07.11.1972
Gender	Male
Office Address:	Ulm University Medical Center, Institute of Molecular Virology, Meyerhofstrasse 1, 89081 Ulm, Germany
Phone / E-Mail	+49 731 500 65154 / jan.muench@uni-ulm.de
Current Position:	Professor (W3) for Molecular Virology (since 12. 2010)

Academic Education

1993 - 1998	Studies of Biology (Diploma), FAU University, Erlangen, Germany, 04/1998 Diploma
04/2002	Doctoral thesis (natural sciences), FAU University, Erlangen

Postgraduate professional career

2017/10	Director of the Institute of Molecular Virology, University Clinic Ulm
Since 2010	W3 Professor at the Institute of Molecular Virology, University Clinic Ulm
2004-2010	W1 Professor Institute of Virology, University Clinic Ulm
2002-2004	Postdoc with F. Kirchhoff, Institute of Virology, University Clinic Ulm

Academic Awards

2015	Cooperation Award Business-Science by Ulm University
2012	Manchot Lecture in Infection Biology
2012	Award by the International Society of Amyloidosis
2011	German AIDS Award by the German AIDS society
2009	Loeffler-Frosch Award by the German Society of Virology
2008	Dr. Ernst-Wiethoff Award for Innovative Research
2008	GlaxoSmithKline Science Award
2007	Merckle Research Award
2007	Innovation Award by the German University Clinics

Project Management Experience

- PI/Co-PI of several research projects funded in total with > 5.1 million €; currently PI of three projects within the Collaborative Research Center 1279, and of individual projects funded the German Research Foundation (DFG), the State Baden-Württemberg, the Volkswagen-Foundation and the Leibniz Foundation

Scientific Focus Areas

- Retrovirology, HIV/AIDS, peptide drugs, peptide nanofibrils, targeted viral transduction, antimicrobial peptides, CXCR4 antagonists, Zika virus biology

Supervision of Students

- 17 PhD (currently 5), 5 Postdocs (currently 2)

Bibliography Prof. Dr. Jan Münch

Bibliographical data:

h-index: 43 (32 since 2014)

i10-index: 80 (66 since 2014)

citations 7182 (3456 since 2014)

Selected Publications (out of 115), Co-Applicants in bold

Krüger F, Kumar V, Monge P, Conzelmann C, Smith N, Gothelf KV, Tolstrup M, **Münch J***, **Zelikin AN***. Nucleic Acids as a Nature-Inspired Scaffold for Macromolecular Prodrugs of Nucleoside Analogues. *Adv Sci* (Weinh). 2019 Jan 28;6(6):1802095. * co-corresponding authors

Frich CK, Krüger F, Walther R, Domar C, Andersen AHF, Tvilum A, Dagnæs-Hansen F, Denton PW, Tolstrup M, Paludan SR, **Münch J***, **Zelikin AN***. Non-covalent hitchhiking on endogenous carriers as a protraction mechanism for antiviral macromolecular prodrugs. *J Control Release*. 2019 Jan 28;294:298-310. * co-corresponding authors

Müller JA, Harms M, Krüger F, Groß R, Joas S, Hayn M, Dietz AN, Lippold S, von Einem J, Schubert A, Michel M, Mayer B, Cortese M, Jang KS, Sandi-Monroy N, Deniz M, Ebner F, Vapalahti O, Otto M, Bartenschlager R, Herbeuval JP, Schmidt-Chanasit J, Roan NR, **Münch J**. Semen inhibits Zika virus infection of cells and tissues from the anogenital region. *Nat Commun*. 2018 Jun 7;9(1):2207.

Röcker AE, Müller JA, Dietzel E, Harms M, Krüger F, Heid C, Sowislok A, Riber CF, Kupke A, Lippold S, von Einem J, Beer J, Knöll B, Becker S, Schmidt-Chanasit J, Otto M, Vapalahti O, **Zelikin AN**, Bitan G, Schrader T, **Münch J**. The molecular tweezer CLR01 inhibits Ebola and Zika virus infection. *Antiviral Res*. 2018 Apr;152:26-35.

Schandock F, Riber CF, Röcker A, Müller JA, Harms M, Gajda P, Zuwala K, Andersen AHF, Løvschall KB, Tolstrup M, Kreppel F, **Münch J***, **Zelikin AN***. Macromolecular Antiviral Agents against Zika, Ebola, SARS, and Other Pathogenic Viruses. *Adv Healthc Mater*. 2017 Dec;6(23). * co-corresponding authors

Roan NR, Sandi-Monroy N, Kohgadari N, Usmani SM, Hamil KG, Neidleman J, Montano M, Ständker L, Röcker A, Cavois M, Rosen J, Marson K, Smith JF, Pilcher CD, Gagsteiger F, Sakk O, O'Rand M, Lishko PV, Kirchhoff F, **Münch J***, Greene WC*. Semen amyloids participate in spermatozoa selection and clearance. *Elife*. 2017;6. pii: e24888. * co-corresponding authors.

Zirafi O, Kim K, Ständker L, Mohr KB, Sauter D, Heigle A, Kluge S, Wiercinska E, Chudziak D, Richter R, Moepps B, Gierschik P, Vas V, Geiger H, Lamla M, Weil T, Burster T, Zgraja A, Daubeuf F, Frossard N, Hachet-Haas M, Heunisch F, Reichetzer C, Galzi JL, Pérez-Castells J, Canales-Mayordomo A, Jiménez-Barbero J, Giménez-Gallego G, Schneider M, Shorter J, Telenti T, Hoche B, Forssmann WG, Bonig H, **Kirchhoff F**, **Münch J**. Discovery and characterization of an endogenous CXCR4 antagonist. *Cell Rep*

Zirafi O, Kim KA, Roan NR, Kluge SF, Müller JA, Jiang S, Mayer B, Greene WC, **Kirchhoff F**, **Münch J**. Semen enhances HIV infectivity and impairs the antiviral efficacy of microbicides. *Sci Transl Med*. 2014 Nov 12;6(262):262ra157.

Usmani SM, Zirafi O, Müller JA, Sandi-Monroy NL, Yadav JK, Meier C, Weil T, Roan NR, Greene WC, Walther P, Nilsson KP, Hammarström P, Wetzel R, Pilcher CD, Gagsteiger F, Fändrich M, **Kirchhoff F**, **Münch J**. Direct visualization of HIV-enhancing endogenous amyloid fibrils in human semen. *Nat Commun*. 2014; 5:3508.

Yolamanova M, Meier C., Shaytan A, Vas V, Bertocini C, Arnold F, Zirafi O, Usmani S, Müller J, Sauter D, Goffinet C, Palesch D, Walther P, Roan NR, Geiger H, Lunov O, Simmet T, Bohne J, Schrezenmeier H, Schwarz K, Ständker L, Forssmann WG, Salvatella X, Khalatur P, Khokhlov A, Knowles T, Weil T, **Kirchhoff F**, **Münch J**. Peptide nanofibrils boost retroviral gene transfer and provide a rapid means for concentrating viruses. *Nature Nanotechnology*. 2013, 8:130-136

Sievers S, Karanicolas J, Chang H, Zhao A, Jiang L, Zirafi O, Stevens OT, **Münch J**, Baker D, Eisenberg D. Structure-Based Design of Non-Natural Amino Acid Inhibitors of Amyloid Fibrillation. *Nature*. 2011. 475:96-100

Forssmann WG, The YH, Stoll M, Adermann K, Albrecht U, Barros K, Busmann A, Canales-Mayordomo A, Giménez-Gallego G, Hirsch J, Jiménez-Barbero J, Meyer-Olson D, **Münch J**, Pérez-Castells J, Ständker L, **Kirchhoff F**, Schmidt RE. Short-term monotherapy in HIV-infected patients with a virus entry inhibitor against the gp41 fusion peptide. *Sci Transl Med*. 2010

Münch, J., Rücker, E., Ständker, L., Adermann, K., Goffinet, C., Schindler, M., Wildum, S., Chinnadurai, R., Rajan, D., Specht, A., Giménez-Gallego, G., Sánchez, P.C., Fowler, D.M., Koulou, A., Kelly, J.W., Mothes, W., Grivel, J.C., Margolis, L., Keppler, O.T., Forssmann, W.G., **Kirchhoff, F.** (2007). Semen-derived amyloid fibrils drastically enhance HIV infection. *Cell*. 14;131:1059-71

Münch, J., Ständker, L., Adermann, K., Schulz, A., Schindler, M., Chinnadurai, R., Pöhlmann, S., Chaipan, C., Biet, T., Peters, T., Meyer, B., Wilhelm, D., Lu, H., Jing, W., Jiang, S., Forssmann, W.G., **Kirchhoff, F.** (2007). Discovery and optimization of a natural HIV-1 entry inhibitor targeting the gp41 fusion peptide. *Cell*. 129:263-75.