

Johannes Krause

Geburt 1980 in Leinefelde, Thüringen, Germany
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Forschungsschwerpunkte

- **Alte und sehr alte DNA**
- **Evolution des Menschen**
- **Historische Krankheitserreger**
- **Vergleichende und evolutionäre Genomik**

Gegenwärtige Positionen

seit 2016 **Direktor Max-Planck – Harvard Forschungszentrum** für die archäologisch-naturwissenschaftliche Erforschung des antiken Mittelmeerraums (MHAAM)
seit 2015 **Honoraryprofessor für Archäo- und Paläogenetik**, Institut für Naturwissenschaftliche Archäologie, Eberhard Karls Universität Tübingen
seit 2014 **Direktor am Max-Planck-Institut für Menschheitsgeschichte**, Jena, Abteilung Archäogenetik

Karriere

2013-2015 **Professor (W3)** für Archäo- und Paläogenetik, Institut für Naturwissenschaftliche Archäologie, Eberhard Karls Universität Tübingen
2010-2013 **Juniorprofessor** für Paläogenetik, Institut für Naturwissenschaftliche Archäologie, Eberhard Karls Universität Tübingen
2008-2010 **Wissenschaftlicher Mitarbeiter** am Max-Planck-Institut für Evolutionäre Anthropologie, Abteilung für Evolutionäre Genetik, Leipzig, Deutschland. Forschungsgebiet: Genomik
2005-2008 **Dr. rer. nat.** *From Genes to Genomes: Applications for Multiplex PCR in Ancient DNA Research*, Note: 1.0 "Summa cum laude", Universität Leipzig & Max-Planck-Institut für Evolutionäre Anthropologie, Leipzig

Universitäre Ausbildung

2000-2005 **Biochemie**, Universität Leipzig, Deutschland
2002-2003 **Biochemie**, University College Cork, Ireland

Erfolgreiche Forschungsanträge

- 2017-2019 **GENESEZS:** „Genetische Erschließung von Seuchen Zentralasiens“ – BMBF gefördertes Projekt zusammen mit KSCQZD (Kazakh Scientific Center of Quarantine and Zoonotic Diseases) and IGGC (Institute of General Genetics and Cytology) in Almaty Kasachstan. Fördervolumen: 170.000 Euro
- 2016-2021 **MHAAM** - Max-Planck – Harvard Forschungszentrum für die archäologisch-naturwissenschaftliche Erforschung des antiken Mittelmeerraums. Fördervolumen: 5.000.000 Euro
- 2015 – 2018 **D-A-Ch Projekt:** „Das Oberbipp Dolmen im Kontext der Neolithischen Revolution“. Fördervolumen: 200.000 Euro für J.Krause
- 2013 – 2018 **ERC Starting grant:** „Pathogenomik von wiederkehrenden Infektionskrankheiten“. Fördervolumen: 1.500.000 Euro
- 2013 – 2016 **WIN-Kolleg** Heidelberger Akademie Projekt: „Neue Wege der Verflechtung von Natur- und Geisteswissenschaften“. Fördervolumen für die Forschungsgruppe Paläogenetik: 130 000 Euro
- 2013 – 2016 **Landesstiftung Baden Württemberg:** „Genetische Untersuchung der frühgeschichtlichen Besiedlung des Ach- und Lonetals“. Fördervolumen: 150.000 Euro.
- 2012 – 2015 **DFG Projekt:** „Die Besiedlung Europas: Populationsgenetische Untersuchung Eiszeitlicher Jäger und Sammler in Europa“. Fördervolumen: 250.000 Euro
- 2010 – 2014 **Carl-Zeiss-Stiftung** Umweltarchäologie: „Der Einfluss von Klimawandel auf frühe Gesellschaften“. Fördervolumen für die Forschungsgruppe Paläogenetik: 400.000 Euro

Mitgliedschaften, Auszeichnungen

- 2017 **Thüringer Forschungspreis** im Bereich der Grundlagenforschung
- 2016 **CARTA** (Center for Academic Research & Training in Anthropogeny), korrespondierendes Mitglied
- 2016 **Deutsches Archäologisches Institut**, korrespondierendes Mitglied
- 2015 **Boerhaave Nascholing Award**, Exzellenter Redner
- seit 2013 **Heidelberger Akademie der Wissenschaften** WIN-Kolleg Fellow
- 2010 **Tübinger Förderpreis** der Gesellschaft für Urgeschichte und Quartärökologie für die beste Doktorarbeit
- 2010 **AAAS Newcomb Cleveland Prize** für die beste wissenschaftliche Publikation des Jahres in Science

Akademischer Service

- 2013-2015 Sprecher der **EVEREST** Evolution and Ecology Research School, Tübingen
- seit 2012 Vorstandsmitglied bei **EVE** – Institut für Evolution und Ökologie, Tübingen
- seit 2011 Vorstandsmitglied **TZA** - Tübinger Zentrum für Archäologie
- seit 2010 Mitherausgeber von **BMC Genomics**

seit 2005 Gutachter (ad hoc) für *Science*, *Nature*, *Nature Reviews Genetics*, *PLoS Biology*, *PLoS ONE*, *Molecular Biology and Evolution*, *Am. J. Phys. Anthropol.*, *BMC Evolutionary Biology*, *BMB Microbiology*, *Science Advances*, *Nature Communications*, *Nature Microbiology*, *Mitochondria*, *BMC Bioinformatics*, *Biotechniques*, *Genome research*, *MBE*, *Biolinguistics*, *PNAS*, Reviewing Editor for eLife

Lehre

2013-2015 Seminar und Vorlesung **Einführung in die evolutionäre Paläogenetik**, Paläoanthropologie Bachelor, Universität Tübingen
2011-2015 Seminar, Vorlesung und praktische Übung in **Paläogenetik**, Paläoanthropologie Bachelor, Universität Tübingen
2010-2015 Seminar, Vorlesung und praktische Übung in **Humangenetik**, Paläoanthropologie Bachelor, Universität Tübingen
2009/2010 Seminar und praktische Übung in **Biochemie**, Polyvalenter Bachelor, Universität Leipzig
2009 Praktische Übung in **Evolutionsökologie**, Mastermodul für Biologen, Universität Leipzig

Public Outreach

Ausgewählte Televisionsbeiträge:

Zweites Deutsches Fernsehen: „Terra X“ (**November 2017, Oktober 2018**)
Latestthinking.org (**2016**)
MDR aktuell (**2015, 2016, 2017**):
BBC: „The Mystery of Rome's X Tombs“ (**2013**)
3Sat: „Scobel: Viren“ (**2013**)
Planetopia: „Der Schwarze Tod“ (**2012**)
Bundesfilmverband BDFV: „Neandertaler Sind wir wirklich verwandt“ (**2011**)
ARTE: „Der Neandertaler in Uns“ (**2010**)
WDR: Quarks & Co: „Wieviel Neandertaler steckt in uns?“ (**2010**)
Zweites Deutsches Fernsehen, History: „Der Neandertaler-Code“ (**2010**)
National Geographic Documentary: „Neanderthal Code“ (**2008**)
The History Channel Documentary: „Clash of the Cavemen“ (**2008**)
Exploratorium Virtual Museum „Evidence: How we know what we know“ (**2008**)
Zweites Deutsches Fernsehen: „Der Neandertaler“ (**2006**)

Ausgewählte Rundfunkbeiträge:

Deutschlandradio, Radio Eins, Deutschlandfunk, Radioeins, SRF, NPR, CBC Radio, BBC Radio, Radio Scotland, RBB Kulturradio, MDR Figaro, Mephisto, Radio Schweden, Radio NZ, BBC World, BBC Africa, ORF Radiokolleg, Irish Radio, Radio Sachsen, SBS Sydney

Ausgewählte Print Medien:

Science, Nature, The New York Times, , National Geographic, Discovery News, GEO Magazine, Times (London), The Guardian, The Independent, Der Spiegel, Der Fokus, FAZ, Die Zeit, Die Welt, Sueddeutsche Zeitung, Channel Four News, USA Today, CNN Online, Washington Post, Frankfurter Rundschau, Science Daily, Neue Zürcher Zeitung, Der Standard, Spektrum der Wissenschaft, International Business Times, Times of India, Science Daily, La Vanguardia, El Pais, Le Figaro

Präsentationen auf Einladung

Insgesamt 105 (23 Keynote lectures)

Publikationen

(Stand August 2017, ein kontinuierlich aktualisiertes Publikationsverzeichnis finden Sie unter: <http://www.shh.mpg.de/Johannes-Krause-Publikationen>)

Insgesamt	83
Begutachtete Artikel	82
Buchkapitel	1
H-Index	42

Yao, Hong-Bing, Chuan-Chao Wang, Jiang Wang, Xiaolan Tao, Lei Shang, Shao-Qing Wen, Qiajun Du, Qiongying Deng, Bingying Xu, Ying Huang, Hong-Dan Wang, Shujin Li, Bin Cong, Liying Ma, Li Jin, **Johannes Krause**, and Hui Li (2017) Genetic structure of Tibetan populations in Gansu revealed by forensic STR loci. *Scientific Reports* 7.

Warinner, Christina, Alexander Herbig, Allison Mann, James A. Fellows Yates, Clemens L. Weiß, Hernán A Burbano, Ludovic Orlando, and **Johannes Krause** (2017) A Robust Framework for Microbial Archaeology. *Annual Review of Genomics and Human Genetics* 18.

Szécsényi-Nagy, Anna, Christina Roth, Guido Brandt, Cristina Rihuete-Herrada, Cristina Tejedor-Rodríguez, Petra Held, Íñigo García-Martínez-de-Lagrán, Héctor Arcusa Magallón, Stephanie Zesch, Corina Knipper, Eszter Bánffy, Susanne Friederich, Harald Meller, Primitiva Bueno Ramírez, Rosa Barroso Bermejo, Rodrigo de Balbín Behrmann, Ana M. Herrero-Corral, Raúl Flores Fernández, Carmen Alonso Fernández, Javier Jiménez Echevarria, Laura Rindlisbacher, Camila Oliart, María-Inés Fregeiro, Ignacio Soriano, Oriol Vicente, Rafael Micó, Vicente Lull, Jorge Soler Díaz, Juan Antonio López Padilla, Consuelo Roca de Togores Muñoz, Mauro S. Hernández Pérez, Francisco Javier Jover Maestre, Joaquín Lomba Maurandi, Azucena Avilés Fernández, Katina T. Lillios, Ana Maria Silva, Miguel Magalhães Ramalho, Luiz Miguel Oosterbeek, Claudia Cunha, Anna J. Waterman, Jordi Roig Buxó, Andrés Martínez, Juana Ponce Martínez, Mark Hunt Ortiz, Juan Carlos Mejías-García, Juan Carlos Pecero Espín, Rosario Cruz-Auñón Briones, Tiago Tomé, Eduardo Carmona Ballester, João Luís Cardoso, Ana Cristina Araújo, Corina Liesau von Lettow-Vorbeck, Concepción Blasco Bosqued, Patricia Ríos

- Mendoza, Ana Pujante, José I. Royo-Guillén, Marco Aurelio Esquembre Beviá, Victor Manuel Dos Santos Goncalves, Rui Parreira, Elena Morán Hernández, Elena Méndez Izquierdo, Jorge Vega y Miguel, Roberto Menduïña García, Victoria Martínez Calvo, Oscar López Jiménez, **Johannes Krause**, Sandra L. Pichler, Rafael Garrido-Pena, Michael Kunst, Roberto Risch, Manuel A. Rojo-Guerra, Wolfgang Haak, and Kurt W. Alt (2017) The maternal genetic make-up of the Iberian Peninsula between the Neolithic and the Early Bronze Age. *Scientific Reports* 7: 15644.
- Swarts, Kelly, Rafal M. Gutaker, Bruce Benz, Michael Blake, Robert Bukowski, James Holland, Melissa Kruse-Peeples, Nicholas Lepak, Lynda Prim, M., Cinta Romay, Jeffrey Ross-Ibarra, Jose Jesus de Sanchez-Gonzalez, Chris Schmidt, Verena Schuenemann, **Johannes Krause**, R. G. Matson, Detlef Weigel, Edward S. Buckler, and Hernán A. Burbano (2017) Genomic estimation of complex traits reveals ancient maize adaptation to temperate North America. *Science* 357: 512-515.
- Skoglund, Pontus, Jessica C. Thompson, Mary E. Prendergast, Alissa Mittnik, Kendra Sirak, Mateja Hajdinjak, Tasneem Salie, Swapan Mallick, Alexander Peltzer, Anja Heinze, Iñigo Olalde, Matthew Ferry, Eadaoin Harney, Megan Michel, Kristin Stewardson, Jessica I. Cerezo-Román, Chrissy Chiumia, Alison Crowther, Elizabeth Gomani-Chindebvu, Agness O. Gidna, Katherine M. Grillo, Iiro Taneli Helenius, Garrett Hellenthal, Richard Helm, Mark Horton, Saioa López, Audax Z. P. Mabulla, John Parkington, Ceri Shipton, Mark G. Thomas, Ruth Tibesasa, Menno Welling, Vanessa M. Hayes, Douglas J. Kennett, Raj Ramesar, Matthias Meyer, Svante Pääbo, Nick Patterson, Alan G. Morris, Nicole Boivin, Ron Pinhasi, **Johannes Krause**, and David Reich (2017) Reconstructing prehistoric African population structure. *Cell* 171: 59-71.
- Schuenemann, Verena J., Alexander Peltzer, Beatrix Welte, W. Paul van Pelt, Martyna Molak, Chuan-Chao Wang, Anja Furtwängler, Christian Urban, Ella Reiter, Kay Nieselt, Barbara Teßmann, Michael Francken, Katerina Harvati, Wolfgang Haak, Stephan Schiffels, and **Johannes Krause** (2017) Ancient Egyptian mummy genomes suggest an increase of Sub-Saharan African ancestry in post-Roman periods. *Nature Communications* 8: 15694.
- Prendergast, Mary E., Michael Buckley, Alison Crowther, Laurent Frantz, Heidi Eager, Ophélie Lebrasseur, Rainer Hutterer, Ardern Hulme-Beaman, Wim van Neer, Katerina Douka, Margaret-Ashley Veall, Eriéndira M. Quintana Morales, Verena J. Schuenemann, Ella Reiter, Richard Allen, Evangelos A. Dimopoulos, Richard M. Helm, Ceri Shipton, Ogeto Mwebi, Christiane Denys, Mark Horton, Stephanie Wynne-Jones, Jeffrey Fleisher, Chantal Radimilahy, Henry Wright, Jeremy B. Searle, **Johannes Krause**, Greger Larson, and Nicole L. Boivin (2017) Reconstructing Asian faunal introductions to eastern Africa from multi-proxy biomolecular and archaeological datasets. *PLoS One* 12: e0182565
- Posth, Cosimo, Christoph Wißing, Keiko Kitagawa, Luca Pagani, Laura van Holstein, Fernando Racimo, Kurt Wehrberger, Nicholas J. Conard, Claus Joachim Kind, Hervé Bocherens, and **Johannes Krause** (2017) Deeply divergent archaic mitochondrial genome provides lower time boundary for African gene flow into Neanderthals. *Nature Communications* 8: 16046.
- Lazaridis, Iosif, Alissa Mittnik, Nick Patterson, Swapan Mallick, Nadin Rohland, Saskia Pfrengle, Anja Furtwängler, Alexander Peltzer, Cosimo Posth, Andonis Vasilakis, P. J. P. McGeorge, Eleni Konsolaki-Yannopoulou, George Korres, Holley Martlew, Manolis Michalodimitrakis, Mehmet Özsait, Nesrin Özsait, Anastasia Papanasiou, Michael Richards, Songül Alpaslan Roodenberg, Yannis Tzedakis, Robert Arnott, Daniel M. Fernandes, Jeffery R. Hughey, Dimitra M. Lotakis, Patrick A. Navas, Yannis Maniatis, John A. Stamatoyannopoulos, Kristin

- Stewardson, Philipp Stockhammer, Ron Pinhasi, David Reich, **Johannes Krause**, and George Stamatoyannopoulos (2017) Genetic origins of the Minoans and Mycenaeans. *Nature* 548.
- Knipper, Corina, Alissa Mittnik, Ken Massy, Catharina Kociumaka, Isil Kucukkalipci, Michael Maus, Fabian Wittenborn, Stephanie E. Metz, Anja Staskiewicz, **Johannes Krause**, and Philipp W. Stockhammer (2017) Female exogamy and gene pool diversification at the transition from the Final Neolithic to the Early Bronze Age in central Europe. *Proceedings of the National Academy of Sciences of the United States of America* 114: 10083-10088.
- Key, Felix M., Cosimo Posth, **Johannes Krause**, Alexander Herbig, and Kirsten I. Bos (2017) Mining Metagenomic Data Sets for Ancient DNA: Recommended Protocols for Authentication. *Trends in Genetics* 33: 508-520.
- Andrades Valtueña, Aida, Alissa Mittnik, Felix Michael Key, Wolfgang Haak, Raili Allmäe, Andrej Belinskij, Mantas Daubaras, Michal Feldman, Rimantas Jankauskas, Ivor Janković, Ken Massy, Mario Novak, Saskia Pfrenkle, Sabine Reinhold, Mario Šlaus, Maria A. Spyrou, Anna Szécsényi-Nagy, Mari Törv, Svend Hansen, Kirsten I. Bos, Philipp W. Stockhammer, Alexander Herbig, and **Johannes Krause** (2017) The Stone Age plague and its persistence in Eurasia. *Current Biology* 27: 3683 - 3691.e3688.
- Weiß, Clemens L., Verena J. Schuenemann, Jane Devos, Gautam Shirsekar, Ella Reiter, Billie A. Gould, John R. Stinchcombe, **Johannes Krause**, and Hernán A. Burbano (2016) Temporal patterns of damage and decay kinetics of DNA retrieved from plant herbarium specimens. *Royal Society Open Science* 3: 160239
- Spyrou, Maria A., Rezeda Tukhbatova, Michal Feldman, Joanna Drath, Sacha Kacki, Julia Beltrán de Heredia, Susanne Arnold, Airat G. Sitdikov, Dominique Castex, Joachim Wahl, Ilgizar R. Gazimzyanov, Danis K. Nurgaliev, Alexander Herbig, Kirsten Bos, and **Johannes Krause** (2016) Historical Y. pestis genomes reveal the European Black Death as the source of ancient and modern plague pandemics. *Cell Host & Microbe* 19: 874-881.
- Soubrier, Julien, Graham Gower, Kefei Chen, Stephen M. Richards, Bastien Llamas, Kieren J. Mitchell, Simon Y. W. Ho, Pavel Kosintsev, Michael S. Y. Lee, Gennady Baryshnikov, Ruth Bollongino, Pere Bover, Joachim Burger, David Chivall, Evelyne Crégut-Bonnoure, Jared E. Decker, Vladimir B. Doronichev, Katerina Douka, Damien A. Fordham, Federica Fontana, Carole Fritz, Jan Glimmerveen, Liubov V. Golovanova, Colin Groves, Antonio Guerreschi, Wolfgang Haak, Tom Higham, Emilia Hofman-Kamińska, Alexander Immel, Marie-Anne Julien, **Johannes Krause**, Oleksandra Krotova, Frauke Langbein, Greger Larson, Adam Rohrlach, Amelie Scheu, Robert D. Schnabel, Jeremy F. Taylor, Małgorzata Tokarska, Gilles Tosello, Johannes van der Plicht, Ayla van Loenen, Jean-Denis Vigne, Oliver Wooley, Ludovic Orlando, Rafał Kowalczyk, Beth Shapiro, and Alan Cooper (2016) Early cave art and ancient DNA record the origin of European bison. *Nature Communications* 7: 713158
- Skoglund, Pontus, Cosimo Posth, Kendra Sirak, Matthew Spriggs, Frederique Valentin, Stuart Bedford, Geoffrey A. Clark, Christian Reepmeyer, Fiona Petchey, Daniel Fernandes, Qiaomei Fu, Eadaoin Harney, Mark Lipson, Swapan Mallick, Mario Novak, Nadine Rohland, Kristin Stewardson, Syafiq Abdullah, Murray P. Cox, Françoise R. Friedlaender, Jonathan S. Friedlaender, Toomas Kivisild, George Koki, Pradiptajati Kusuma, D. Andrew Merriwether, Francois-X. Ricaut, Joseph T. S. Wee, Nick Patterson, **Johannes Krause**, Ron Pinhasi, and David Reich (2016) Genomic insights into the peopling of the Southwest Pacific. *Nature* 538: 510-518.
- Rougier, Hélène, Isabelle Crevecoeur, Cédric Beauval, Cosimo Posth, Damien Flas, Christoph Wissing, Anja Furtwängler, Mietje Germonpré, Asier Gómez-Olivencia,

- Patrick Semal, Johannes van der Plicht, Hervé Bocherens, and **Johannes Krause** (2016) Neandertal cannibalism and Neandertal bones used as tools in Northern Europe. *Scientific Reports* 6: 29005
- Posth, Cosimo, Gabriel Renaud, Alissa Mittnik, Dorothee G. Drucker, Hélène Rougier, Christophe Cupillard, Frédérique Valentin, Corinne Thevenet, Furtwängler Anja, Christoph Wißing, Michael Francken, Maria Malina, Michael Bolus, Martina Lari, Elena Gigli, Giulia Capecchi, Isabelle Crevecoeur, Cédric Beauval, Damien Flas, Mietje Germonpré, Johannes van der Plicht, Richard Cottiaux, Bernard Gély, Annamaria Ronchitelli, Kurt Wehrberger, Dan Grigorescu, Jiri Svoboda, Patrick Semal, David Caramelli, Hervé Bocherens, Katerina Harvati, Nicholas J. Conard, Wolfgang Haak, Adam Powell, and **Johannes Krause** (2016) Pleistocene mitochondrial genomes suggest a single major dispersal of non-Africans and late glacial population turnover in Europe. *Current Biology* 26: 827 - 833
- Pelzer, Alexander, Günter Jäger, Alexander Herbig, Alexander Seitz, Christian Knip, **Johannes Krause**, and Kay Nieselt (2016) EAGER: efficient ancient genome reconstruction. *Genome Biology* 17: 60.
- Mittnik, Alissa, Chuan-Chao Wang, Jiří Svoboda, and **Johannes Krause** (2016) A molecular approach to the sexing of the triple burial at the upper paleolithic site of Dolní Věstonice. *PLoS One* 11: e0163019.
- Mascher, Martin, Verena J. Schuenemann, Uri Davidovich, Nimrod Marom, Axel Himmelbach, Sarel Hübner, Abraham Korol, Michal David, Ella Reiter, Simone Riehl, Mona Schreiber, Samuel H. Vohr, Richard E. Green, Ian K. Dawson, Joanne Russell, Benjamin Kilian, Gary J. Muehlbauer, Robbie Waugh, Tzion Fahima, **Johannes Krause**, Ehud Weiss, and Nils Stein (2016) Genomic analysis of 6,000-year-old cultivated grain illuminates the domestication history of barley. *Nature Genetics* 48: 1089–1093.
- Maixner, Frank, Ben Krause-Kyora, Dmitrij Turaev, Alexander Herbig, Michael R. Hoopmann, Janice L. Hallows, Ulrike Kusebauch, Eduard Egarter Vigl, Peter Malferttheiner, Francis Megraud, Niall O’Sullivan, Giovanna Cipollini, Valentina Coia, Marco Samadelli, Lars Engstrand, Bodo Linz, Robert L. Moritz, Rudolf Grimm, **Johannes Krause**, Almut Nebel, Yoshan Moodley, Thomas Rattei, and Albert Zink (2016) The 5300-year-old *Helicobacter pylori* genome of the Iceman. *Science* 351: 162 - 165
- Lazaridis, Iosif, Dani Nadel, Gary Rollefson, Deborah C. Merrett, Nadin Rohland, Swapan Mallick, Daniel Fernandes, Mario Novak, Beatriz Gamarra, Kendra Sirak, Sarah Connell, Kristin Stewardson, Eadaoin Harney, Qiaomei Fu, Gloria Gonzalez-Fortes, Eppie R. Jones, Songül Alpaslan Roodenberg, György Lengyel, Fanny Bocquentin, Boris Gasparian, Janet M. Monge, Michael Gregg, Vered Eshed, Ahuva-Sivan Mizrahi, Christopher Meiklejohn, Fokke Gerritsen, Luminita Bejenaru, Matthias Blüher, Archie Campbell, Gianpiero Cavalleri, David Comas, Philippe Froguel, Edmund Gilbert, Shona M. Kerr, Peter Kovacs, **Johannes Krause**, Darren McGettigan, Michael Merrigan, D. Andrew Merriwether, Seamus O’Reilly, Martin B. Richards, Ornella Semino, Michel Shamoon-Pour, Gheorghe Stefanescu, Michael Stumvoll, Anke Tönjes, Antonio Torroni, James F. Wilson, Loic Yengo, Nelli A. Hovhannisyanyan, Nick Patterson, Ron Pinhasi, and David Reich (2016) Genomic insights into the origin of farming in the ancient Near East. *Nature* 536: 419-424.
- Krause, Johannes**, and Svante Pääbo (2016) Genetic time travel. *Genetics* 203: 9-12.
- Immel, Alexander, Adeline Le Cabec, Marion Bonazzi, Alexander Herbig, Heiko Temming, Verena Schuenemann, Kirsten I. Bos, Frauke Langbein, Katerina Harvati, Anne Bridault, Gilbert Pion, Marie-Anne Julien, Oleksandra Krotova, Nicholas J. Conard, Susanne C. Münzel, Dorothee G. Drucker, Bence Viola, Jean-Jacques Hublin, Pau Tafforeau, and **Johannes Krause** (2016) Effect of X-ray irradiation on

- ancient DNA in sub-fossil bones : guidelines for safe X-ray imaging. *Scientific Reports* 6: 32969
- Gogarten, Jan F., Ariane Dux, Verena J. Schuenemann, Kathrin Nowak, Christophe Boesch, Roman M. Wittig, **Johannes Krause**, Sébastien Calvignac-Spencer, and Fabian H. Leendertz (2016) Tools for opening new chapters in the book of *Treponema pallidum* evolutionary history. *Clinical Microbiology and Infection* 22: 916-921.
- Fu, Qiaomei, Cosimo Posth, Mateja Hajdinjak, Martin Petr, Swapan Mallick, Daniel Fernandes, Anja Furtwängler, Wolfgang Haak, Matthias Meyer, Alissa Mittnik, Birgit Nickel, Alexander Peltzer, Nadin Rohland, Viviane Slon, Sahra Talamo, Iosif Lazaridis, Mark Lipson, Iain Mathieson, Stephan Schiffels, Pontus Skoglund, Anatoly P. Derevianko, Nikolai Drozdov, Vyacheslav Slavinsky, Alexander Tsybankov, Renata Grifoni Cremonesi, Francesco Mallegni, Bernard Gély, Eligio Vacca, Manuel R. González Morales, Lawrence G. Straus, Christine Neugebauer-Maresch, Maria Teschler-Nicola, Silviu Constantin, Oana Teodora Moldovan, Stefano Benazzi, Marco Peresani, Donato Coppola, Martina Lari, Stefano Ricci, Annamaria Ronchitelli, Frédérique Valentin, Corinne Thevenet, Kurt Wehrberger, Kurt Grigorescu, Hélène Rougier, Isabelle Crevecoeur, Damien Flas, Patrick Semal, Marcello A. Mannino, Christophe Cupillard, Hervé Bocherens, Nicholas J. Conard, Katerina Harvati, Vyacheslav Moiseyev, Dorothee G. Drucker, Jiří Svoboda, Michael P. Richards, David Caramelli, Ron Pinhasi, Janet Kelso, Nick Patterson, **Johannes Krause**, Svante Pääbo, and David Reich (2016) The genetic history of Ice Age Europe. *Nature* 534: 200-205.
- Feldman, Michal, Michaela Harbeck, Marcel Keller, Maria A. Spyrou, Andreas Rott, Bernd Trautmann, Holger C. Scholz, Bernd Paffgen, Joris Peters, Michael McCormick, Kirsten Bos, Alexander Herbig, and **Johannes Krause** (2016) A high-coverage *Yersinia pestis* genome from a 6th-century Justinianic plague victim. *Molecular Biology and Evolution* 33: 2911-2923.
- Bos, Kirsten, Alexander Herbig, Jason Sahl, Nicholas Waglechner, Mathieu Fourment, Stephen A. Forrest, Jennifer Klunk, Verena J. Schuenemann, Debi Poinar, Melanie Kuch, Brian G. Golding, Olivier Dutour, Paul Keim, David M. Wagner, Edward C. Holmes, **Johannes Krause**, and Hendrik N. Poinar (2016) Eighteenth century *Yersinia pestis* genomes reveal the long-term persistence of an historical plague focus. *eLife* 5: e12994
- Arora, Natasha, Verena J. Schuenemann, Günter Jäger, Alexander Peltzer, Alexander Seitz, Alexander Herbig, Michal Strouhal, Linda Grillová, Leonor Sánchez-Busó, Denise Kühnert, Kirsten I. Bos, Leyla Rivero Davis, Lenka Mikalová, Sylvia Bruisten, Peter Komericki, Patrick French, Paul R. Grant, María A. Pando, Lucía Gallo Vaulet, Marcelo Rodríguez Fermepin, Antonio Martinez, Arturo Centurion Lara, Lorenzo Giacani, Steven J. Norris, David Šmajš, Philipp P. Bosshard, Fernando González-Candelas, Kay Nieselt, **Johannes Krause**, and Homayoun C. Bagheri (2016) Origin of modern syphilis and emergence of a pandemic *Treponema pallidum* cluster. *Nature Microbiology* 2: 16245
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