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Curriculum Vitae

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Education and Training:

1985 B.A., Biochemistry, Pomona College
1989 Ph.D., Biological Chemistry and Molecular Pharmacology, Harvard Medical School.
Advisor: Professor Jack W. Szostak
1989 – 1991 Research Fellow in Molecular Biology, Massachusetts General Hospital;
Research Fellow in Genetics, Harvard Medical School. Advisor: Professor Jack
W. Szostak
1991 – 1994 Lucille P. Markey Postdoctoral Scholar in Biomedical Science, University of
Colorado, Department of Chemistry and Biochemistry. Advisor: Professor Thomas R.
Cech

Honorary degrees:

2015 Hon. D.Sc., University of Leuven
2016 Hon. D.Sc., Yale University
2016 Hon. D.Sc., York University
2017 Hon. D.Sc., Mount Sinai School of Medicine
2017 Hon. D.Sc., Hong Kong University

Positions:

2015 – 2018 Chair, Chancellor's Advisory Committee on Biology, UC Berkeley
2013 – Present Executive Director, Innovative Genomics Institute, UC Berkeley/UCSF
2013 – 2015 Head, Division of Biochemistry, Biophysics and Structural Biology, UC Berkeley
2013 – Present Li Ka Shing Chancellor's Chair in Biomedical Sciences, UC Berkeley
2002 – Present Professor, University of California, Berkeley, Department of Molecular and Cell
Biology and Department of Chemistry
1997 – Present Investigator, Howard Hughes Medical Institute
2000 – 2002 Henry Ford II Professor, Yale University, Department of Molecular Biophysics and
Biochemistry
1999 – 2002 Professor, Yale University, Department of Molecular Biophysics and Biochemistry
1998 Associate Professor, Yale University, Department of Molecular Biophysics and
Biochemistry
1994 – 1997 Assistant Professor, Yale University, Department of Molecular Biophysics and
Biochemistry

Honors:

2018 V de Vida Award, Asociación Española Contra el Cáncer
2018 Kavli Prize in Nanoscience

2018 Royal Society - Croonian Medal
 2018 National Academy of Sciences Award in Chemical Sciences
 2018 Gustavus John Esselen Award for Chemistry, Northeastern Section Chemical Society Inc.
 2018 Fellow of the American Association for Cancer Research
 2018 Lila & Murray Gruber Memorial Cancer Research Award, American Academy of Dermatology (AAD)
 2018 Dickson Prize in Science, Carnegie Mellon University
 2017 Edward O. Wilson and George Stibitz Award
 2017 Golden Plate Award, International Achievement Org.
 2017 Albert Einstein Foundation Award
 2017 Wallace H. Coulter Award
 2017 Albany Medical Center Prize
 2017 BBVA Frontiers of Knowledge Award, Spain
 2017 F.A. Cotton Medal
 2017 Fellow, American Association for Cancer Research
 2017 Japan Prize, Japan
 2017 Luminary Award, Precision Medicine World Conference
 2016 Heineken Prize, Netherlands
 2016 Tang Prize in Biopharmaceutical Science, Taiwan
 2016 Paul Allen Distinguished Investigator
 2016 Canada Gairdner Prize, Canada
 2016 Warren Alpert Foundation Prize, Harvard Medical School
 2016 Nakasone Award, Human Frontier Science Program
 2016 Paul Ehrlich and Ludwig Darmstaedter Prize, Germany
 2016 L’Oreal-UNESCO International Prize for Women in Science
 2015 Association of Biomolecular Resource Facilities Award
 2015 Charles Butcher Award, University of Colorado
 2015 Massry Prize, UCLA/USC
 2015 Gruber Prize in Genetics
 2015 Princess of Asturias Award for Technical and Scientific Research
 2015 Fellow, American Society for Microbiology
 2015 International Society for Transgenic Technologies Prize
 2015 Time 100, *Time Magazine’s* 100 most influential people in the world
 2014 Breakthrough Prize in Life Sciences
 2014 Member, National Academy of Inventors
 2014 *Foreign Policy’s* 100 Leading Global Thinkers
 2014 Jacob Heskel Gabbay Award in Biotechnology and Medicine
 2014 Dr. Paul Janssen Award for Biomedical Research
 2014 Lurie Prize, Foundation for the NIH
 2013 BayBio Pantheon Award
 2013 Hans Neurath Award, Protein Society
 2013 Mildred Cohn Award, ASBMB
 2010 Member, Institute of Medicine of the National Academies
 2008 Fellow, American Association for the Advancement of Science
 2007 The Nucleic Acid Group Award, NACON VII, Sheffield, UK
 2003 Member, American Academy of Arts and Sciences
 2002 Member, National Academy of Sciences
 2001 Eli Lilly Award in Biological Chemistry, American Chemical Society
 2016 – present Trustee, Pomona College
 2000 – 2012 Trustee, Pomona College
 2000 – 2012 Member, Life Sciences Institute Advisory Board, University of Michigan

2000 Jean Francois LeFevre Memorial Lectureship, CNRS, Strasbourg, France
2000 R.B. Woodward Visiting Professorship, Harvard University
2000 Alan T. Waterman Award, National Science Foundation
1999 National Academy of Sciences Award for Initiatives in Research
1996 Johnson Foundation Prize for Innovative Research

Publications:

Research articles

- Rouet, R., Thuma, B.A., Roy, M.D., Lintner, N.G., Rubitski, D.M., Finley, J.E., Wisniewska, H.M., Mendonsa, R., Hirsh, A., de Oñate, L., Compte Barrón, J., McLellan, T.J., Bellenger, J., Feng, X., Varghese, A., Chrnyk, B.A., Borzilleri, K., Hesp, K.D., Zhou, K., Ma, N., Tu, M., Dullea, R., McClure, K.F., Wilson, R.C., Liras, S., Mascitti, V., and Doudna, J.A. (2018) Receptor-Mediated Delivery of CRISPR-Cas9 Endonuclease for Cell-Type-Specific Gene Editing. *J Am Chem Soc* **140**, 6596-6603.
- Lintner, N.G., McClure, K.F., Petersen, D., Londregan, A.T., Piotrowski, D.W., Wei, L., Xiao, J., Bolt, M., Loria, P.M., Maguire, B., Geoghegan, K.F., Huang, A., Rolph, T., Liras, S., Doudna, J.A., Dullea, R.G., and Cate, J.H.D. (2018) Correction: Selective stalling of human translation through small-molecule engagement of the ribosome nascent chain. *PLoS Biol* **16**, e1002628.
- Lapinaite, A., Doudna, J.A., and Cate, J.H.D. (2018) Programmable RNA recognition using a CRISPR-associated Argonaute. *Proc Natl Acad Sci U S A* **115**, 3368-3373.
- Chen, J.S., Ma, E., Harrington, L.B., Da Costa, M., Tian, X., Palefsky, J.M., and Doudna, J.A. (2018) CRISPR-Cas12a target binding unleashes indiscriminate single-stranded DNase activity. *Science* **360**, 436-439.
- Kiessling, L.L., and Doudna, J.A. (2018) Spotlight: A Conversation with Laura Kiessling and Jennifer Doudna. *ACS Chem Biol* **13**, 290-295.
- Strutt, S.C., Torrez, R.M., Kaya, E., Negrete, O.A. and Doudna, J.A. (2018) RNA-dependent RNA targeting by CRISPR-Cas9. *Elife* **7**, pii: e32724.
- Moreno-Mateos, M.A., Fernandez, J.P., Rouet, R., Vejnár, C.E., Lane, M.A., Mis, E., Khokha, M.K., Doudna, J.A. and Giraldez, A.J. (2017) CRISPR-Cpf1 mediates efficient homology-directed repair and temperature-controlled genome editing. *Nat Commun* **8**, 2024.
- Blair, J.D., Hockemeyer, D., Doudna, J.A., Bateup, H.S. and Floor, S.N. (2017) Widespread Translational Remodeling during Human Neuronal Differentiation. *Cell Rep* **21**, 2005-2016.
- Harrington, L.B., Paez-Espino, D., Staahl, B.T., Chen, J.S., Ma, E., Kyrpides, N.C. and Doudna, J.A. (2017) A thermostable Cas9 with increased lifetime in human plasma. *Nat Commun* **8**, 1424.
- Chen, J.S., Dagdas, Y.S., Kleinstiver, B.P., Welch, M.M., Sousa, A.A., Harrington, L.B., Sternberg, S.H., Joung, J.K., Yildiz, A. and Doudna, J.A. (2017) Enhanced proofreading governs CRISPR-Cas9 targeting accuracy. *Nature* **550**, 407-410.
- Knott, G.J., East-Seletsky, A., Cofsky, J.C., Holton, J.M., Charles, E., O'Connell, M.R. and Doudna, J.A. (2017) Guide-bound structures of an RNA-targeting A-cleaving CRISPR-Cas13a enzyme. *Nature Struct Mol Biol* **24**, 825-833.
- Harrington, L.B., Doxzen, K.W., Ma, E., Liu, J., Knott, G.J., Edraki, A., Amrani, N., Chen, J.S., Cofsky, J.C., Kranzusch, P.J., Sontheimer, E.J., Davidson, A.R., Maxwell, K.L. and Doudna, J.A. (2017) A broad-spectrum inhibitor of CRISPR-Cas9. *Cell* **170**, 1224-1233.e15.
- Dagdas, Y.S., Chen, J.S., Sternberg, S.H., Doudna, J.A. and Yildiz, A. (2017) A conformational checkpoint between DNA binding and cleavage by CRISPR-Cas9. *Science Adv* **3**, eaao0027.
- Wright, A.V., Liu, J.J., Knott, G.J., Doxzen, K.W., Nogales, E. and Doudna, J.A. (2017) Structures of the CRISPR genome integration complex. *Science* **357**, 1113-1118.
- Shin, J., Jiang, F., Liu, J.J., Bray, N.L., Rauch, B.J., Baik, S.H., Nogales, E., Bondy-Denomy, J., Corn, J.E. and Doudna, J.A. (2017) Disabling Cas9 by an anti-CRISPR DNA mimic. *Science Adv* **3**, e1701620.
- Doxzen, K.W. and Doudna, J.A. (2017) DNA recognition by an RNA-guided bacterial Argonaute. *PLoS One* **12**, e0177097.
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- Floor, S.N., Condon, K.J., Sharma, D., Jankowsky, E. and Doudna, J.A. (2015) Autoinhibitory interdomain interactions and subfamily-specific extensions redefine the catalytic core of the human DEAD-box protein DDX3. *J Biol Chem* **291**, 2412-2421.
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- Redding, S., Sternberg, S.H., Marshall, M., Gibb, B., Bhat, P., Guegler, C., Wiedenheft, B., Doudna, J.A. and Greene, E.C. (2015) Surveillance and processing of foreign DNA by the *Escherichia coli* CRISPR-Cas system. *Cell* **163**, 854-65.
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- Nuñez, J.K., Harrington, L.B., Kranzusch, P.J., Engelman, A. and Doudna, J.A. (2015) Foreign DNA capture during CRISPR-Cas adaptive immunity. *Nature* **527**, 535-8.
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