ZUOYUE WANG

Professor Office phone: (909)869-3872
Department of History Department fax: (909)869-4724

California State Polytechnic University <u>zywang@cpp.edu</u>

Pomona, CA 91768 https://www.cpp.edu/faculty/zywang

Education:

PhD in History, University of California, Santa Barbara, 1994 (thesis: "American Science and the Cold War: The Rise of the President's Science Advisory Committee")

MS in History of Physics, Chinese Academy of Sciences, Beijing, China, 1985 (thesis: "The Equivalence of the Matrix and Wave Mechanics and the Two Research Programs of the Quantum Mechanics")

BS in Physics, Henan Normal University, Xinxiang, China, 1982

Experiences:

Cal Poly Pomona History Dept., Assist. Prof. 1999-2004; Asso. Prof. 2004-2008; Prof., 2008-Harvey Mudd College Hixon-Riggs Visiting Prof. in Sci., Tech., and Society, 2008-2009

Visiting Scholar, Institute for the History of Natural Sciences, Chinese Academy of Sciences, Beijing, summers of 2002, 2004, 2007, 2010-2011, 2013-2018; Visiting Professor, the University of the Chinese Academy of Sciences, Beijing, summers of 2004, 2009-2011, 2013-2018; Visiting Professor, the University of Science and Technology of China, Hefei, China, summers of 2013, 2016-2019; Visiting Professor, Tsinghua University, Fall 2019.

UC Berkeley History Department, Visiting Lecturer, spring 1999

UC Santa Barbara History Department, Visiting Lecturer/Researcher, 1994-1999

UC Santa Barbara Library Special Collections, Manuscript Processor, 1993-1999

Instructor in History of Science, Chinese Academy of Sciences Graduate School, Beijing, 1985-1986

Selected Recent Professional Awards/Honors:

Elected fellow of the American Association for the Advancement of Science (AAAS) (in the field of history and philosophy of science), 2019.

Lynn Starling Trimble Science Heritage Public Lecture of the American Institute of Physics ("Physicists as Diplomats: US-China Scientific Exchanges from Arms Control to Climate Change"), College Park, MD, March 23, 2016.

Grant from the US National Science Foundation for project on "Chinese/American Scientists: Transnational Science during the Cold War and Beyond," 2010-2014.

Hixon-Riggs Visiting Professor in Science, Technology, and Society at Harvey Mudd College, Claremont, for 2007-2008.

Co-recipient, 2003 Derek Price/Rod Webster Prize, History of Science Society.

Books:

In Sputnik's Shadow: The President's Science Advisory Committee and Cold War America (New Brunswick, NJ: Rutgers University Press, July 2008). A Chinese translation was published

- by Peking University Press in 2011《在卫星的阴影下:美国总统科学顾问委员会与冷战中的美国》.
- Co-editor, An Advocate for Democracy and Human Rights: Essays in Honor of Xu Liangying on His 90th Birthday (Hong Kong: Mirror Books, 2012, in Chinese 《呼唤民主与人权》). Co-edited by LIU Bing and CHEN Hengliu. Xu was the main translator of Einstein's writings into Chinese.
- Co-editor, Fang Lizhi in Science: A Memorial Collection (Hong Kong: Mirror Books, 2014, in Chinese and English《方励之纪念文集科学卷). Fang Lizhi was an astrophysicist and Chinese dissident.
- Co-editor, Fang Lizhi in the Humanities: A Memorial Collection (Hong Kong: Mirror Books, 2016, in Chinese and English《方励之纪念文集人文卷).
- Scientific-Technological Revolutions and American Modernization (Jinan: Shandong Education Press, 2017) (in Chinese《科技革命与美国现代化》).

Book in Progress:

Chinese American Scientists: A Transnational History

Selected Scholarly Articles and Book Chapters (*refers to peer-reviewed) (most published papers can be downloaded in PDF from www.cpp.edu/faculty/zywang):

- *"Practicing Mr. Science: Chinese Scientists and the May Fourth Movement from Zhu Kezhen to Fang Lizhi," *East Asian Science, Technology and Society* 16, no. 3 (2022): 327-348.
- "Hongye Fan [樊洪业]: A Pioneer in the Historical Studies of Science in Modern China," *East Asian Science, Technology and Society* 15, no. 3 (2021): 381-385. Co-authored by Weimin Xiong.
- "Commentary on Science for the People, China: Science Walks on Two Legs," *Science for the People* magazine Special Collection 2021"Rereading China: Science Walks on Two Legs: A Critical Edition of an SftP Classic," September 6, 2021.
- "Q&A [with David Barboza]: Zuoyue Wang on the History of Chinese Students at U.S. Universities," *The Wire China* (website), July 18, 2021.
- "How Did Qian Xuesen Contribute to American and Chinese Space Programs?" *Filling Space* (website) (https://filling-space.com/), January 15, 2021.
- "Entangled Worldlines: Four Physicists Whose Transnational Trajectories Reshaped Physics and Diplomacy in China and the United States," *Forum on International Physics Newsletter* (American Physical Society), August 2020, pp. 14-16.
- "From Modern Physics to the Cold War and Beyond," *Historical Studies in the Natural Sciences* 50, nos. 1-2 (2020): 25-30. Part of a special issue entitled "Looking Backward, Looking Forward: HSNS at 50."
- *"Transnational Mathematics and Movements: Shiing-Shen Chern, Hua Luogeng, and the Princeton Institute for Advanced Study from World War II to the Cold War," *Chinese Annals of History of Science and Technology* 3, no. 2 (2019): 118-165. Co-authored by Jinhai Guo.
- *"Controlled Exchanges: Public-Private Hybridity, Transnational Networking, and Knowledge Circulation in US-China Scientific Discourse on Nuclear Arms Control," in John Krige (ed.), *How Knowledge Moves: Writing the Transnational History of Science and Technology* (Chicago: University of Chicago Press, 2019), 368-410.

- *"Theory Attached to Practice: Chinese Debates over Basic Research from Thought Remolding to the Bomb, 1949-1966," in David Kaldewey and Desiree Schauz (eds.), *Basic and Applied Research: The Language of Science Policy in the Twentieth Century* (New York: Berghahn Books, 2018), 228-247.
- "Science under the Trump Administration in Historical Perspective," *H-Diplo/ISSF* (International Security Studies Forum), April 17, 2018.
- "T. D. Lee and C. N. Yang Received Cold Treatment: The First Chinese Nobel Laureates 60 Years Ago," *The Intellectual* (a daily publication on Chinese social media Wechat), November 26, 2017, co-authored by Xinmin Hua. (In Chinese)
- *"Archival Materials Related to Chinese American Scientists and Modern China," *The PRC History Review* 2, no. 3 (June 2017): 21-23.
- *"Planning for Science and Technology in China and India," *British Journal for the History of Science Themes* 1 (2016): 83-113, open access. Co-authored by Jahnavi Phalky.
- "A Historical Study of the American Branch of the Science Society of China," *Journal of the Dialectics of Nature* 38, no. 3 (May 2016): 1-11. (In Chinese)
- *"The Chinese Developmental State during the Cold War: The Making of the 1956 Twelve-Year Science and Technology Plan," *History and Technology* 31, no. 3 (2015): 180-205.
- "Sputnik Moments: Science and Technology Policy from Eisenhower to Obama," in Andrew J. Polsky (ed.), *The Eisenhower Presidency: Lessons for the Twenty-First Century* (Lanham, MD: Lexington Books, 2015), 117-129.
- *"The Cold War and the Reshaping of Transnational Science in China," in Naomi Oreskes and John Krige (eds.), *Science and Technology in the Global Cold War* (Cambridge, MA: MIT Press, 2014), 343-370.
- *"The Historian of Science Xu Liangying," *The Chinese Journal for the History of Science and Technology* 35, no. 1 (2014): 49-61. Co-authored by Danian Hu. (In Chinese)
- *"A Historical Study of Chinese Physicists' Visits at the Niels Bohr Institute of Denmark in the 1960s," *Studies in the History of Natural Sciences* 32, no. 4 (2013): 470-490. Co-authored by Xiaodong Yin. (In Chinese)
- *"Engineering a New Space: Chinese American Scientists and Engineers in Aerospace in Southern California," in Peter Westwick (ed.), *Blue Sky Metropolis* (Berkeley and Los Angeles: University of California Press, 2012), 197-213. Book selected by the Los Angeles Public Library as one of its "Best of 2012: Non-Fiction."
- "China and the International Geophysical Year," in Roger D. Launius, James Rodger Fleming, and David H. DeVorkin (eds.), *Globalizing Polar Science: Reconsidering the Social and Intellectual Implications of the International Polar and Geophysical Years* (New York: Palgrave Macmillan, 2010), 143-155. Co-authored by Jiuchen Zhang.
- "Transnational Science during the Cold War: The Case of Chinese/American Scientists," *Isis: An International Review Devoted to the History of Science and Its Cultural Influences* 101, no. 2 (June 2010): 367-377.
- "Physics in China in the Context of the Cold War, 1949-1976," in Helmuth Trischler and Mark Walker (eds.), *Physics and Politics: Research and Research Support in Twentieth Century Germany in International Perspective* (Berlin: Steiner-Verlag, 2010), 251-276.
- "What Can We Expect from the New [Obama] Administration?" *Harvey Mudd College Magazine*, Winter 2008, 16-17. Co-authored by Richard Olson.
- "History of Science and American Science Policy," *Isis* 99, no. 2 (June 2008): 365-373. Co-authored by Naomi Oreskes.

- "Science and the State in Modern China," *Isis* 98, no. 3 (September 2007): 558-570.
- "China Goes to the Poles: Science, Nationalism, and Internationalism in Chinese Polar Exploration," in Keith R. Benson and Helen M. Rozwadowski (eds.), *Extremes: Oceanographer's Adventures at the Poles* (Sagamore Beach, MA: Science History Publications, 2007), 269-302.
- "Why Has the United States Not Established a Department of Science and Technology?" *Science and Culture* 2, no. 5 (2005): 36-49. (In Chinese)
- "Ideologically Correct' Science: French Revolution, Soviet Union, National Socialism, WWII Japan, McCarthyism, and People's Republic of China," in Mark Walker (ed.), *Science and Ideology: A Comparative History* (London and New York: Routledge, 2002), 35-65. Coauthored by Michael Gordin, Walter Grunden, and Mark Walker. German translation appeared in Uwe Hoßfeld and Rainer Brömer (eds.), *Darwinismus und/als Ideologie* (Berlin: Verlag für Wissenschaft und Bildung, 2001), 29-69.
- *"Saving China through Science: The Science Society of China, Scientific Nationalism, and Civil Society in Republican China," *Osiris: A Research Journal Devoted to the History of Science and Its Cultural Influences* 17, (2002): 291-322. (A thematic issue on *Science and Civil Society* edited by Lynn K. Nyhart and Thomas Broman).
- "Chinese American Scientists and U.S.-China Scientific Relations: From Richard Nixon to Wen Ho Lee," in Peter H. Koehn and Xiao-huang Yin (eds.) *Chinese Americans and U.S.-China Relations* (New York: M. E. Sharpe, M. E. Sharpe, 2002), 207-334. A Chinese edition of the book was published by New China Press in Beijing in 2004.
- *"Between the Devil and the Deep Sea: C. K. Tseng, Mariculture, and the Politics of Science in Modern China," *Isis* 91, no. 1 (March 2000), 59-88. Co-authored by Peter Neushul. Winner of the 2003 Derek Price/Rod Webster Prize of the History of Science Society.
- "U.S.-China Scientific Exchange: A Case Study of State-sponsored Scientific Internationalism during the Cold War and beyond," *Historical Studies in the Physical and Biological Sciences* 30, pt. 1 (1999): 249-277.
- *"Responding to *Silent Spring*: Scientists, Popular Science Communication, and Environmental Policy in the Kennedy Years," *Science Communication* 19, no. 4 (December 1997): 141-163. On the making of a 1963 report by the President's Science Advisory Committee, *The Use of Pesticides*, that turned the tide of opposition to *Silent Spring* by the scientific establishment.
- *"The First World War, Academic Science, and the 'Two Cultures': Educational Reforms at the University of Cambridge," *Minerva* 33, no. 2 (Summer 1995): 107-127.
- *"The Politics of Big Science in the Cold War: PSAC [President's Science Advisory Committee] and the funding of SLAC [Stanford Linear Accelerator Center]," *Historical Studies in the Physical and Biological Sciences* 25, pt. 2 (1995): 329-356.

Encyclopedia Entries:

"Donald F. Hornig," *American National Biography* (New York: Oxford University Press, 2018). Xiaojian Zhao and Edward J. W. Park (eds.), *Asian Americans: An Encyclopedia of Social, Cultural, and Political Change* (Santa Barbara, CA: Greenwood, 2014):

Chiing-shen Chern (pp. 206-207)

Steven Chu (pp. 316-318)

Tsuang-dao Lee (pp. 773-775)

Yuan T. Lee (pp. 777-779)

Yoshiro Nambu (pp. 862-863)

Samuel Chao Chung Ting (pp. 1113-1115)

Chien Shiung Wu (pp. 1207-1209)

Chen-Ning Yang (pp. 1224-1227)

Shing-Tung Yau (pp. 1233-1234)

Yitang Zhang (pp. 1251-1252)

Entries in Hugh Slotten (ed.), Oxford Encyclopedia of the History of Science, Medicine, and Technology in America, 2 vols. (New York: Oxford University Press, 2014):

James R. Killian, Jr. (v. 1, pp. 607-608)

Tsung-Dao Lee (v. 1, pp. 627-628)

Office of Science and Technology Policy (v. 2, pp. 200-201)

President's Science Advisory Committee (v. 2, pp. 285-286)

Chien-Shiung Wu (v. 2, pp. 600-601)

Chen-Ning Yang (v. 2, pp. 603-604)

Noretta Koertge (chief. ed.), *New Dictionary of Scientific Biography* (New York: Charles Scribner's Sons, 2007):

"Chien Shiung Wu" (Chinese American woman nuclear physicist)

"Zhu Kezhen" (Chinese meteorologist and science administrator)

"Zhao Zhongyao (Chinese nuclear physicist)

Sandro Petruccioli (gen. ed.), *Storia della Scienza* (history of science), v. 8, pp. 553-560 (Rome: Istituto dell'Enciclopedia Italiana, 2005): Ristrutturazione (restructuring) (on the post-World War II international restructuring in science and technology).

Alexander DeConde, et al. (eds.), *Encyclopedia of American Foreign Policy* (New York: Charles Scribner's Sons, 2002): "Science, Technology, and Foreign Policy," v. 3, 443-459. Co-authored by Ronald Doel.

Marc Rothenberg (ed.), *The History of Science in the United States: An Encyclopedia* (New York: Garland Publishing, 2001):

"Scientific advice to the president" (pp. 451-453);

"United States House of Representatives Committee on Science and Technology" (132-133);

"United States Office of Naval Research" (411-412).

American National Biography (New York: Oxford University Press, 1999):

"James Brown Fisk," v. 8, 769-770;

"William Houston," v. 11, 283-284;

"Maria Gertrude Goeppert Mayer," v. 14, 769-770.

Frank N. Magill (ed.), *Great Lives from History: British and Commonwealth Series* (Pasadena: Salem Press, 1987), 560-564:

"James Chadwick" (20th century British nuclear physicist; co-authored by L. Badash).

Unpublished Manuscripts:

Glenn T. Seaborg with Zuoyue Wang, My Three Presidents: A Memoir of the Chairman of the Atomic Energy Commission under Kennedy, Johnson, and Nixon, 1994.

Book Reviews:

"An Antiquated Language, Reimagined" (book review of Jing Tsu, Kingdom of Characters: The Language Revolution that Made China Modern)

in Science 375, no. 6577 (January 14, 2022): 151.

Arunabh Ghosh, *Making It Count: Statistics and Statecraft in the Early People's Republic of China* in *Isis* 112, no. 2 (June 2021): 428-429.

Greg Whiteside, Science and American Foreign Relations since World War II in American Historical Review 125, no. 5 (December 2020): 1915–1916.

Thomas S. Mullaney, *The Chinese Typewriter: A History*, in *Journal of Asian Studies* 77, no. 4 (November 2018): 1076-1078.

Essay review of *Zhu Kezhen Quanji* (The Complete Works of Coching Chu), in *East Asian Science, Technology and Society* 12, no. 2 (June 2018): 201-209.

Yanek Mieczkowski, Eisenhower's Sputnik Moment: The Race for Space and World Prestige, in Journal of Cold War Studies 18, no. 4 (Fall 2016): 257-259.

Lawrence R. Sullivan and Nancy Y. Liu, *Historical Dictionary of Science and Technology in Modern China*,

in Isis 107, no. 3 (September 2016): 652-654.

Matthew Farish, *The Contours of America's Cold War*, in *Journal of American History* 98, no. 4 (March 2012): 1191-1192.

Jon Hunner, J. Robert Oppenheimer, the Cold War, and the Atomic West, in Pacific Historical Review 80, no. 1 (February 2011): 161-162.

Zhang Jian, Ke xue she tuan zai jin dai Zhongguo de ming yun: yi Zhongguo ke xue she wei zhong xin (Science associations and the change of society in modern China: A study on the Science Society of China),

in Isis 99, no. 2 (June 2008): 437-438.

Charles Thorpe, *Oppenheimer: The Tragic Intellect*, in *Isis* 99, no. 1 (March 2008): <u>228-229</u>.

John Krige, American Hegemony and the Postwar Reconstruction of Science in Europe, in Register of the Kentucky Historical Society 105 no. 2 (Spring 2007): 358-360.

Laurence Schneider, *Biology and Revolution in Twentieth-Century China*, in *East Asian Science, Technology, and Medicine*, no. 23 (2005): 145-146.

Richard Polenberg, In the Matter of J. Robert Oppenheimer: The Security Clearance Hearing, in Isis 95, no. 4 (December 2004): 750-751.

Evan A. Feigenbaum, China's Techno-Warriors: National Security and Strategic Competition from the Nuclear and the Information Age, in Journal of Interdisciplinary History 35, no. 4 (Spring 2004): 679-681.

Paul Dickson, *Sputnik: The Shock of the Century*, in *Isis* 94, no. 4 (December 2003): 766-767.

Edward Teller with Judith Shoolery, Memoirs: A Twentieth-Century Journey in Science and Politics

in Isis 94, no. 2 (June 2003): 419-420.

Allan A. Needell, Science, Cold War, and the American State: Lloyd V. Berkner and the Balance of Professional Ideals

in Isis 93, no. 2 (June 2002): 343-345.

Robert Crease, Making Physics: A Biography of Brookhaven National Laboratory, 1946-1972, in Annals of Science 58, no.1 (2001): 93-94.

Fan Dainian and Robert S. Cohen (eds.), Chinese Studies in the History and Philosophy of Science and Technology,

in Historical Studies in the Physical and Biological Sciences 31, pt. 2 (2001): 382-383.

Iris Chang, *Thread of the Silkworm* (biography of H. S. Tsien, a Chinese American aerodynamicist who was forced out of the US during the McCarthy era and who went on to found the Chinese missile program),

in Isis 91, no. 3 (September 2000): 628-629.

William J. Haas, *China Voyager: Gist Gee's Life in Science*, in *Isis* 90, no. 4 (December 1999): 845-846. Co-authored by Jedidiah Kroncke.

G. Pascal Zachary, *Endless Frontier: Vannevar Bush, Engineer of the American Century*, in *Isis* 90, no. 2 (June 1999): 386-387.

Daniel R. Sarewitz, Frontiers of Illusion: Science, Technology, and the Politics of Progress, in Isis 90, no. 1 (March 1999): 147-148.

H. Lyman Miller, *Science and Dissent in Post-Mao China: The Politics of Knowledge*, in *Historical Studies in the Physical and Biological Sciences* 27, pt. 2 (1997): 363-364.

Paul Forman and Jose M. Sanchez-Ron (eds.), National Military Establishments and the Advancement of Science and Technology,

in Historical Studies in the Physical and Biological Sciences 27, pt. 2 (1997): 358-359.

Etel Solingen (ed.), Scientists and the State: Domestic Structures and International Context, in Technology and Culture 37, no. 1 (January 1996): 213-215.

Philip Stehle, Order, Chaos, Order: The Transition from Classical to Quantum Physics, in Physics Today 48, no. 1 (January 1995): 56.

Jack S. Goldstein, A Different Sort of Time: The Life of Jerrold R. Zacharias, Scientist, Engineer, Educator,

in Isis 84, no. 4 (December 1993): 825-826.

Bruce L. R. Smith, *American Science Policy since World War II*, in *Isis* 84, no. 3 (September 1993): 614-615.

Lillian Hoddeson, et al. (eds.), Out of the Crystal Maze: Chapters from the History of Solid State Physics,

in American Journal of Physics 61, no. 8 (August 1993): 766.

David Cahan, An Institute for an Empire: The Physikalisch-Technische Reichsanstalt, 1871-1918, in American Journal of Physics 58, (1990): 604-605.

Richard Rhodes, The Making of the Atomic Bomb,

in *Technology and Culture* 30, (1989): 1078-1081. Reprinted in Elizabeth Thomason (ed.), *Nonfiction Classics for Students: Presenting Analysis, Context, and Criticism on Nonfiction Works* (New York: Gale Group, 2001), 210-211.

Selected Cal Poly Pomona Services

Member, Weglyn Endowed Chair Advisory Committee on Multicultural Studies, 2018-

Member, Asian American Transnational Research Institute (AATRI), 2016-

Member, Science, Technology, and Society (STS) Program Advisory Board, 2009-

Member, College of Letters, Arts, and Social Sciences RTP Committee, 2011-2012

Member, Faculty Learning Community on "What Is a Learning-Centered University?" 2004-2007

Member, Provost's Advisory Committee on the Status of Women in STEM Disciplines, 2007-2008

Member, WASC (Western Association of Schools and Colleges) Educational Effectiveness Subcommittee, 2006-2008

President, Asian Pacific Faculty, Staff, and Student Association (APFSSA), 2007-2008

Memberships:

History of Science Society American Association for the Advancement of Science American Physical Society

Scholarly Interests:

History of American science, technology, environmental, and innovation policy History of science and politics in modern China History of Chinese/Asian Americans in science and technology Transnational history of science History of US presidential science advising History of modern physics

Recent Professional Services:

Member, Coordinating Committee of the Forum for the History of Science in America, History of Science Society, 1999-2002

Editorial Board Member, Chinese Journal for the History of Science and Technology, 2005-

Editorial Board Member, Isis (official journal of the History of Science Society), 2006-2008

Associate Editor, *Historical Studies in the Natural Sciences* (formerly *Historical Studies in the Physical and Biological Sciences*), 2007-

Member, SLAC Archives and History Office Program Review Committee, 2007

Member, Zhu Kezhen Award Committee of the Society for the History of East Asian Science, Technology and Medicine, 2007

Member, National Science Foundation Graduate Research Fellowship Program Review Panel, 2007-2010

Member, Margaret W. Rossiter History of Women in Science Prize Committee, History of Science Society, 2008-2010 (chair in 2010)

Editorial Board Member, [Chinese] Studies in the History of Natural Sciences, 2009-

Vice President, Pacific Circle, a scientific commission of the Division of the History of Science and Technology of the International Union for the History and Philosophy of Science, 2009-2021

Editorial Board Member, [Chinese] Journal of Dialectics of Nature, 2010-

Editorial Board Member, [Chinese] Science and Culture Review, 2011-

Member of Council, History of Science Society, 2012-2014

Member of Nominating Committee, History of Science Society, 2013

Member, Price/Webster Prize Committee, History of Science Society, 2013-2015 (chair in 2015)

Editorial Board Member, British Journal for the History of Science, 2015-

Member, Membership Committee, History of Science Society, 2016-2021 (chair for 2020 and 2021)

Editorial Board Member, Endeavour, 2016-

Editorial Board Member, Chinese Annals of the History of Science and Technology, 2017-

Member, Electorate Nominating Committee, Section on the History & Philosophy of Science, American Association for the Advancement of Science (AAAS), 2018-2021.

Editorial Board Member, *East Asian Science, Technology and Society*, 2019-2021 Referee for:

Isis, Minerva, Social Studies of Science, Public Understanding of Science, Journal of History of Biology, Endeavour, University of California Press, University of Chicago Press, MIT Press, NSF Science and Society Program, NSF Office of International Science and Engineering, American Council of Learned Societies, Harvard University Asia Center Publications Office.

Short Bio: Zuoyue Wang is a professor of history at the California State Polytechnic University, Pomona, specializing in science, technology, and politics in modern US, China, and transnational contexts. Born in China and originally trained in physics, he received his PhD from UC Santa Barbara in 1994 and published *In Sputnik's Shadow: The President's Science Advisory Committee and Cold War America* in 2008. He is currently studying the history of Chinese American scientists and US-China relations, for which he received a grant from the National Science Foundation in 2010-2014. He was elected a fellow of the American Association for the Advancement of Science (AAAS) in 2019.

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