Curriculum Vitae

Kang Zhang, M.D., Ph.D.

I. Personal Bio

Professor Kang Zhang has demonstrated significant academic leadership, previously serving as the Founding Director of the Institute for Genomic Medicine and Distinguished Professor at the University of California, San Diego. He currently holds multiple key positions, including President of the World Association of Chinese Eye Doctors. He is Vice-Dean for Research of the Faculty of Medicine, both at Macau University of Science and Technology. He is also a Chair Professor and Chief Ophthalmologist at the University Hospital, where he contributed to medical education, research, and clinical care.

His research spans several cutting-edge fields, including Medical Artificial Intelligence, multiomics, stem cells and regenerative medicine, leading to numerous internationally recognized, breakthrough discoveries. He has authored over 400 Web of Science-indexed publications, with nearly 300 in top-tier journals such as Nature, Science, Cell, and The New England Journal of Medicine. His work has been cited over 80,000 times, and he has an H-index of 114. His sustained scholarly impact is demonstrated by his consistent recognition as a Clarivate "Global Highly Cited Researcher" from 2019 to 2024.

He launched the digital twin in healthcare initiative and established the International Digital Twin Consortium in Healthcare and Medicine, with publications of its White Paper and several landmark papers.

Professor Zhang's research has been highlighted by major international awards and selections, including Science Magazine's "Top 10 Scientific Breakthroughs of the Year" (2006) and Nature Medicine's "Notable Advances in Life Sciences" (2016); His work has also been featured on the cover of Cell and named its "Best Paper of the Year" (2018), and honored as Cell's "Best Cross-Disciplinary Paper in China" (2020). His research has been featured by NBC, CBS, BBC, Wall Street Journal, New York times, Guardian.

He has been elected a fellow of numerous prestigious organizations, including the American Association for the Advancement of Science (AAAS), the American Institute for Medical and Biological Engineering (AIMBE), the American Society for Clinical Investigation (ASCI), and the Association of American Physicians (AAP). He is also a fellow of the Royal Society of Medicine (UK) and the Royal Society of Chemistry (UK). His other honors include the "Chang Jiang Scholar" Award, the World Chinese Medical Association "Henry Fok" Award, and recognition as one of "America's Best Ophthalmologists." He is an inventor on over 20

granted U.S. patents.

As a founding Co-Editor-in-Chief of Signal Transduction and Targeted Therapy (STTT), he has significantly contributed to academic publishing and knowledge dissemination.

In summary, through his pioneering research, sustained academic leadership, and cross-disciplinary impact, Professor Kang Zhang has firmly established his prominent status and outstanding reputation in the international medical science community.

II.Education and Professional Experience

Sep 1980 – Jul 1984 Bachelor of Science in Biochemistry, Sichuan University, China

Sep 1985 – May 1991 Ph.D. in Genetics, Harvard University, USA

Sep 1991 – May 1995 Doctor of Medicine (M.D.), Harvard University, USA

Sep 1991 – May 1995 Joint M.D. Program, Harvard University & Massachusetts Institute of Technology (MIT), USA

Jul 1995 – Jun 1996 Intern, General Surgery and Internal Medicine, Denver General Hospital, USA

Jul 1996 – Jun 1999 Resident Physician, Wilmer Eye Institute, Johns Hopkins University, USA

Jul 1999 – Jun 2000 Attending Ophthalmologist, Wilmer Eye Institute, Johns Hopkins University, USA

Jul 2000 – Jun 2002 Attending Ophthalmologist & Assistant Professor, Cole Eye Institute, Cleveland Clinic, USA

Jul 2002 – Jun 2008 Attending Ophthalmologist & Associate Professor, Moran Eye Center, University of Utah, USA

Jan 2008 – Dec 2010 Visiting Chair Professor, Peking University, China

Jul 2008 – Jun 2019 Attending Ophthalmologist & Director, Center for Ophthalmic Genetics, Shiley Eye Institute, University of California, San Diego (UCSD), USA

Jul 2008 – Jun 2019 Tenured Professor, University of California, San Diego (UCSD), USA

Jul 2010 – Jun 2015 Founding Director, Institute for Human Genomic Medicine, and Tenured Professor, University of California, San Diego (UCSD), USA

Aug 2019 – Present Chair Professor, Associate Dean of Faculty of Medicine, Director of Institute for AI in Medicine & Director of Ophthalmology Center, Macau University of Science and Technology, Macao SAR, China

III. Editorial Experience

2006 – 2010 Medical Editor-in-Chief (China Edition), *Ophthalmology News and World Report*

2012 – 2015 Associate Editor, *Chinese Journal of Retinal Diseases*

2012 – 2018 Advisory Editor, *Journal of Clinical Investigation*

2013 – 2018 Editorial Board Member, *Journal of Biological Chemistry*

2015 – Present Co-Editor-in-Chief, *Signal Transduction and Targeted Therapy*

2018 – Present Co-Editor-in-Chief, *Precision Clinical Medicine*

IV. .Reviewer Experience

Referee for American Journal of Human Genetics

Referee for American Journal of Medical Genetics

Referee for American Journal of Pathology
Referee for Archives of Ophthalmology
Referee for Biochemical Journal
Referee for BMC Genomics
Referee for Cell
Referee for Molecular Cell
Referee for Cell Stem Cell
Referee for Developmental Dynamics
Referee for Experimental Eye Research
Referee for Expert Opinion in Ophthalmology
Referee for Genome Biology
Referee for Human Genetics
Referee for Human Molecular Genetics
Referee for Human Gene Therapy
Referee for International Journal of Biologic Science
Referee for Investigative Ophthalmology and Visual Science
Referee for Journal of Biological Chemistry
Referee for Journal of Cataract and Refractive Surgery
Referee for Journal of Clinical Investigation
Referee for Journal of Lipid Research
Referee for Journal of Medical Genetics
Referee for Journal of Neurology
Referee for Lancet
Referee for Molecular Therapy
Referee for Molecular Vision
Referee for Nature
Referee for Nature Genetics
Referee for Nature Medicine
Referee for Nature Materials
Referee for Nature Biomedical Engineering
Referee for Nature Communications
Referee for Neuroscience
Referee for New England Journal of Medicine
Referee for Ophthalmic Genetics
Referee for Ophthalmology
Referee for PNAS
Referee for PNAS Plus
Referee for PLoS Biology
Referee for PLoS Medicine
Referee for PLoS Genetics
Referee for PLoS One
Referee for Progress in Retina and Eye Research
Referee for Retina
Referee for Science

Referee for Science Translational Medicine
Referee for Trend in Genetics
Referee for Trends in Molecular Medicine

V. Academic Honors and Distinctions

Fellow, Royal College of Medicine (United Kingdom)
Fellow, Royal Society of Chemistry (United Kingdom)
Top 100 Asia-Pacific Ophthalmologists (2022)
Ho Ying Tung Award for Outstanding Chinese Physician Worldwide (2022)
Second Prize, Macao Special Administrative Region Natural Science Award (2022)
World's Top 2% Scientists (2024)
World's Top 2% Scientists (2023)
World's Top 2% Scientists (2022)
Ranked No.1 in Ophthalmology in China among the World's Top 100,000 Scientists (2022)
Ranked No.1 in Ophthalmology in China among the World's Top 100,000 Scientists (2021)
Highly Cited Researcher 2024 (Cross-Field)
Highly Cited Researcher 2023 (Cross-Field)
Highly Cited Researcher 2022 (Cross-Field)
Highly Cited Researcher 2021 (Cross-Field)
Highly Cited Researcher 2020 (Cross-Field)
Highly Cited Researcher 2019 (Cross-Field)
The Ophthalmologist World 100 Power List (2016, 2018)
Fellow, American Institute for Medical and Biological Engineering (2016)
Fellow, Association of American Physicians (2011).
Fellow, American Association for the Advancement of Science (2011).
America's Top Ophthalmologists, Consumer's research Council of America (2011).
NIH Director's Transformative R01 Program (with a perfect review score 10, 2010)
Senior Investigator Award, Research to Prevent Blindness (2010)
Outstanding Achievement Award, Chinese Ophthalmological Society, 2009
Burroughs Wellcome Fund Clinical Scientist Award in Translational Research, 2008
Lew R. Wasserman Merit Award, Research to Prevent Blindness, 2006
Macula Society membership, 2006
American Society of Clinical Investigation membership, 2006
Macular Vision Research Award, 2002
Ruth Steinbach Fund for Macular Degeneration, 2001
Charles Schepens Award for Excellence in Retina Research. 2001
Johns Hopkins Medical Institutions Clinician Scientist Award. 1999
Stark Research Award in Ophthalmology, Wilmer Eye Institute, Johns Hopkins University. 1998
Association of University Professors of Ophthalmology (AUPO) Inaugural Residents and Fellow's
Research Forum, runner-up. 1997
Knights Templar Eye Foundation Research Award. 1996
Magna Cum Laude, Harvard Medical School. 1995

First Bower Award for Research on Macular Degeneration Wills Eye Hospital, Philadelphia. 1993
Reed Scholar, M.I.T.. 1993 -1994
Johnson & Johnson Scholar, M.I.T.. 1991 -1992
Highest Scholarships and High Distinction in Biochemistry, Sichuan Univ. 1980 -1984

VI. Publications

6.1 Representative in Leading International Journals

1. Wang K, Liu F, Wu W, Hu C, Shen X, Wang M, Li G, Zeng F, Liu L, Wong IN, Liu S, Zou Z, Li B, Li J, Huang X, Jin S, Li Z, Xu H, Chen G, Chen X, Zhu Y, Li P, Feng Z, Wang W, Cheng L, Yang M, Hou Q, Lu W, Sun Y, Li K, Zhong T, Sun Z, Yin Y, Loupy A, Oermann E, Chen X, Zhang K. (2025)A full life cycle biological clock based on routine clinical data and its impact in health and diseases. Nature medicine, doi: 10.1038/s41591-025-04006-w.

2. Liu F, Niu Y, Zhang Q, Wang K, Dong Z, Wong IN, Cheng L, Li T, Duan L, Li K, Li G, Hou TW, Fok M, Luo H, Chen X, Zhang K, Yin Y. (2025) A foundational architecture for AI agents in healthcare. Cell reports. Medicine, doi: 10.1016/j.xcrm.2025.102374.

3. He J, Shi J, Yang C, Peng G, Ju C, Zhao Y, Liu H, He P, Liu X, Zhang Z, Chen C, Pan D, Yang Z, Guang W, Li H, Chen Z, Liu M, Liang H, Huang W, Jeon K, Chen-Yoshikawa TF, Rucker AJ, Lal A, Zhong N, Zhang K, Liu X, Xu X. (2025) Pig-to-human lung xenotransplantation into a brain-dead recipient. Nature medicine, doi: 10.1038/s41591-025-03861-x.

4. Lu Y, Liu F, Yu Y, Chen B, Yu W, Zou Z, Li K, Man M, Ou C, Wang C, Zhang K, Wang J, Huang X. (2025) AI-enabled molecular phenotyping and prognostic predictions in lung cancer through multimodal clinical information integration. Cell reports. Medicine, doi: 10.1016/j.xcrm.2025.102216.

5. Liu F, Zhou H, Wang K, Yu Y, Gao Y, Sun Z, Liu S, Sun S, Zou Z, Li Z, Li B, Miao H, Liu Y, Hou T, Fok M, Patil NG, Xue K, Li T, Oermann E, Yin Y, Duan L, Qu J, Huang X, Jin S, Zhang K.(2025) MetaGP: A generative foundation model integrating electronic health records and multimodal imaging for addressing unmet clinical needs.Cell reports. Medicine, doi: 10.1016/j.xcrm.2025.102056

6. Zheng, H., Yu, J., Gao, L., Wang, K., Xu, Z., Zeng, Z., Zheng, K., Tang, X., Tian, X., Zhao, Q., Zhao, J., Wan, H., Cao, Z., Zhang, K., Cheng, J., Brosius, J., Zhang, H., Li, W., Yan, W., Shao, Z., … Deng, C. (2025). S1PR1-biased activation drives the resolution of endothelial dysfunction-associated inflammatory diseases by maintaining endothelial integrity. Nature communications,doi: 10.1038/s41467-025-57124-x.

7. Loupy A, Preka E, Chen X, Wang H, He J, Zhang K. (2025) Reshaping transplantation with AI, emerging technologies and xenotransplantation. Nature medicine, doi:

10.1038/s41591-025-03801-9.

8. Zhang K, Yang X, Wang Y, Yu Y, Huang N, Li G, Li X, Wu JC, Yang S. (2025) Artificial intelligence in drug development. Nature medicine, doi: 10.1038/s41591-024-03434-4.

9. Wang J, Wang K, Yu Y, Lu Y, Xiao W, Sun Z, Liu F, Zou Z, Gao Y, Yang L, Zhou H Y, Miao H, Zhao W, Huang L, Zeng L, Guo R, Chong I, Deng B, Cheng L, Chen X, Luo J, Zhu M H, Baptista-Hon D, Monteiro O, Li M, Ke Y, Li J, Zeng S, Guan T, Zeng J, Xue K, Oermann E, Luo H, Yin Y, Zhang K & Qu J. (2024) Self-improving generative foundation model for synthetic medical image generation and clinical applications. Nature medicine, doi:10.1038/s41591-024-03359-y.

10. Wang J, Gao Y, Wang F, Zeng S, Li J, Miao H, Wang T, Zeng J, Baptista-Hon D, Monteiro O, Guan T, Cheng L, Lu Y, Luo Z, Li M, Zhu J, Nie S, Zhang K, Zhou Y. (2024) Accurate estimation of biological age and its application in disease prediction using a multimodal image Transformer system. Proceedings of the National Academy of Sciences, doi: 10.1073/pnas.2308812120.

11. Wang G, Liu X, Wang K, Gao Y, Li G, Baptista-Hon DT, Yang XH, Xue K, Tai WH, Jiang Z, Cheng L, Fok M, Lau JY-N, Yang S, Lu L, Zhang P, Zhang K. (2023) Deep-learning-enabled protein–protein interaction analysis for prediction of SARS-CoV-2 infectivity and variant evolution. Nature Medicine,doi: 10.1038/s41591-023-02483-5.

12. Zhou HY, Yu Y, Wang C, Zhang S, Gao Y, Pan J, Shao J, Lu G, Zhang K, Li W. (2023) A transformer-based representation-learning model with unified processing of multimodal input for clinical diagnostics. Nature Biomedical Engineering, doi: 10.1038/s41551-023-01045-x.

13. Li F, Su Y, Lin F, Li Z, Song Y, Nie S, Xu J, Chen L, Chen S, Li H, Xue K, Che H, Chen Z, Yang B, Zhang H, Ge M, Zhong W, Yang C, Chen L, Wang F, Jia Y, Li W, Wu Y, Li Y, Gao Y, Zhou Y, Zhang K, Zhang X. (2022). A deep-learning system predicts glaucoma incidence and progression using retinal photographs. The Journal of Clinical Investigation, doi: 10.1172/JCI157968.

14. Li X, Wang J, Wang L, Gao Y, Feng G, Li G, Zou J, Yu M, Li YF, Liu C, Yuan XW, Zhao L, Ouyang H, Zhu JK, Li W, Zhou Q, Zhang K. (2022). Lipid metabolism dysfunction induced by age-dependent DNA methylation accelerates aging. Signal Transduction and Targeted Therapy,doi: 10.1038/s41392-022-00964-6.

15. Chen F, Duan X, Yu Y, Yang S, Chen Y, Gee CE, Nagel G, Zhang K, Gao S, Shen Y. (2022). Visual function restoration with a highly sensitive and fast Channelrhodopsin in blind mice. Signal transduction and targeted therapy, doi: 10.1038/s41392-022-00935-x.

16. Li M, Huang H, Wang B, Jiang S, Guo H, Zhu L, Wu S, Liu J, Wang L, Lan X, Zhang W, Zhu J, Li F, Tan J, Mao Z, Liu C, Ji J, Ding J, Zhang K, Yuan J, Liu Y, Ouyang H. (2022).

Comprehensive 3D epigenomic maps define limbal stem/progenitor cell function and identity. Nature communications,doi: 10.1038/s41467-022-28966-6.

17. Zhang L, Zhang Y, Wang C, Yang Y, Ni Y, Wang Z, Song T, Yao M, Liu Z, Chao N, Yang Y, Shao J, Li Z, Zhou R, Chen L, Zhang D, Zhao Y, Liu W, Li Y, He P, Lin JW, Wang Y, Zhang K, Chen L, Li W.(2022) Integrated single-cell RNA sequencing analysis reveals distinct cellular and transcriptional modules associated with survival in lung cancer. Signal Transduct Target Ther, doi: 10.1038/s41392-021-00824-9.

18. Wang C, Wang Z, Wang G, Lau JY, Zhang K, Li W. (2021) COVID-19 in early 2021: current status and looking forward. Signal Transduct Target Ther, doi: 10.1038/s41392-021-00527-1.

19. Zhou Z, Du P, Yu M, Baptista-Hon DT, Miao M, Xiang AP, Lau JY; COVID-19 Immunity Investigation Group; Li G, Zhang K. (2021) Assessment of infectivity and the impact on neutralizing activity of immune sera of the COVID-19 variant, CAL.20C. Signal Transduct Target Ther, doi: 10.1038/s41392-021-00695-0.

20. Xu Y, Li X, Zhu B, Liang H, Fang C, Gong Y, Guo Q, Sun X, Zhao D, Shen J, Zhang H, Liu H, Xia H, Tang J, Zhang K, Gong S.(2020) Characteristics of pediatric SARS-CoV-2 infection and potential evidence for persistent fecal viral shedding. Nature Medicine, doi: 10.1038/s41591-020-0817-4.

21. Yang J, Wang W, Chen Z, Lu S, Yang F, Bi Z, Bao L, Mo F, Li X, Huang Y, Hong W, Yang Y, Zhao Y, Ye F, Lin S, Deng W, Chen H, Lei H, Zhang Z, Luo M, Gao H, Zheng Y, Gong Y, Jiang X, Xu Y, Lv Q, Li D, Wang M, Li F, Wang S, Wang G, Yu P, Qu Y, Yang L, Deng H, Tong A, Li J, Wang Z, Yang J, Shen G, Zhao Z, Li Y, Luo J, Liu H, Yu W, Yang M, Xu J, Wang J, Li H, Wang H, Kuang D, Lin P, Hu Z, Guo W, Cheng W, He Y, Song X, Chen C, Xue Z, Yao S, Chen L, Ma X, Chen S, Gou M, Huang W, Wang Y, Fan C, Tian Z, Shi M, Wang FS, Dai L, Wu M, Li G, Wang G, Peng Y, Qian Z, Huang C, Lau JY, Yang Z, Wei Y, Cen X, Peng X, Qin C, Zhang K, Lu G, Wei X. (2020) A vaccine targeting the RBD of the S protein of SARS-CoV-2 induces protective immunity. Nature, doi: 10.1038/s41586-020-2599-8.

22. Zhang K, Liu X, Shen J, Li Z, Sang Y, Wu X, Zha Y, Liang W, Wang C, Wang K, Ye L, Gao M, Zhou Z, Li L, Wang J, Yang Z, Cai H, Xu J, Yang L, Cai W, Xu W, Wu S, Zhang W, Jiang S, Zheng L, Zhang X, Wang L, Lu L, Li J, Yin H, Wang W, Li O, Zhang C, Liang L, Wu T, Deng R, Wei K, Zhou Y, Chen T, Lau JY, Fok M, He J, Lin T, Li W, Wang G. (2020) Clinically Applicable AI System for Accurate Diagnosis, Quantitative Measurements, and Prognosis of COVID-19 Pneumonia Using Computed Tomography. Cell, doi: 10.1016/j.cell.2020.04.045..

23. Xu X, Sun J, Nie S, Li H, Kong Y, Liang M, Hou J, Huang X, Li D, Ma T, Peng J, Gao S, Shao Y, Zhu H, Lau JY, Wang G, Xie C, Jiang L, Huang A, Yang Z, Zhang K, Hou FF. (2020) Seroprevalence of immunoglobulin M and G antibodies against SARS-CoV-2 in China. Nature Medicine, doi: 10.1038/s41591-020-0949-6.

24. Jiang H, Ou Z, He Y, Yu M, Wu S, Li G, Zhu J, Zhang R, Wang J, Zheng L, Zhang X, Hao W, He L, Gu X, Quan Q, Zhang E, Luo H, Wei W, Li Z, Zang G, Zhang C, Poon T, Zhang D, Ziyar I, Zhang RZ, Li O, Cheng L, Shimizu T, Cui X, Zhu JK, Sun X, Zhang K. (2020) DNA methylation markers in the diagnosis and prognosis of common leukemias. Signal Transduction and Targeted Therapy, doi: 10.1038/s41392-019-0090-5

25. He J, Baxter SL, Xu J, Xu J, Zhou X, Zhang K. (2019) The practical implementation of artificial intelligence technologies in medicine. Nature Medicine, doi: 10.1038/s41591-018-0307-0.

26. Liang H, Tsui BY, Ni H, Valentim CCS, Baxter SL, Liu G, Cai W, Kermany DS, Sun X, Chen

J, He L, Zhu J, Tian P, Shao H, Zheng L, Hou R, Hewett S, Li G, Liang P, Zang X, Zhang Z, Pan L, Cai H, Ling R, Li S, Cui Y, Tang S, Ye H, Huang X, He W, Liang W, Zhang Q, Jiang J, Yu W, Gao J, Ou W, Deng Y, Hou Q, Wang B, Yao C, Liang Y, Zhang S, Duan Y, Zhang R, Gibson S, Zhang CL, Li O, Zhang ED, Karin G, Nguyen N, Wu X, Wen C, Xu J, Xu W, Wang B, Wang W, Li J, Pizzato B, Bao C, Xiang D, He W, He S, Zhou Y, Haw W, Goldbaum M, Tremoulet A, Hsu CN, Carter H, Zhu L, Zhang K, Xia H. (2019) Evaluation and accurate diagnoses of pediatric diseases using artificial intelligence. Nature Medicine, doi: 10.1038/s41591-018-0335-9.

27. Kermany DS, Goldbaum M, Cai W, Valentim CCS, Liang H, Baxter SL, McKeown A, Yang G, Wu X, Yan F, Dong J, Prasadha MK, Pei J, Ting MYL, Zhu J, Li C, Hewett S, Dong J, Ziyar I, Shi A, Zhang R, Zheng L, Hou R, Shi W, Fu X, Duan Y, Huu VAN, Wen C, Zhang ED, Zhang CL, Li O, Wang X, Singer MA, Sun X, Xu J, Tafreshi A, Lewis MA, Xia H, Zhang K. (2018) Identifying Medical Diagnoses and Treatable Diseases by Image-Based Deep Learning. Cell, doi: 10.1016/j.cell.2018.02.010.

28. Lu Y, Zhang K. (2018) Cellular reprogramming in the retina—seeing the Light. New England Journal of Medicine, doi: 10.1056/NEJMra1715486.

29. Xia H, Li X, Gao W, Fu X, Fang RH, Zhang L, Zhang K. (2018) Tissue repair and regeneration with endogenous stem cells. Nature Reviews Materials, doi: 10.1038/s41578-018-0058-8.

30. Guo S, Diep D, Plongthongkum N, Fung HL, Zhang K, Zhang K. (2017) Identification of methylation haplotype blocks aids in deconvolution of heterogeneous tissue samples and tumor tissue-of-origin mapping from plasma DNA. Nature Genetics, doi: 10.1038/ng.3819.

31. Zhu J, Ming C, Fu X, Duan Y, Hoang DA, Rutgard J, Zhang R, Wang W, Hou R, Zhang D, Zhang E, Zhang C, Hao X, Xiong W, Zhang K. (2017) Gene and mutation independent therapy via CRISPR-Cas9 mediated cellular reprogramming in rod photoreceptors. Cell Research, doi: 10.1038/cr.2017.57.

32. Xu RH, Wei W, Krawczyk M, Wang W, Luo H, Flagg K, Yi S, Shi W, Quan Q, Li K, Zheng L, Zhang H, Caughey BA, Zhao Q, Hou J, Zhang R, Xu Y, Cai H, Li G, Hou R, Zhong Z, Lin D, Fu X, Zhu J, Duan Y, Yu M, Ying B, Zhang W, Wang J, Zhang E, Zhang C, Li O, Guo R, Carter H, Zhu JK, Hao X, Zhang K. (2017) Circulating tumour DNA methylation markers for diagnosis and prognosis of hepatocellular carcinoma. Nature Materials, doi: 10.1038/nmat4997.

33. Lin H, Ouyang H, Zhu J, Huang S, Liu Z, Chen S, Cao G, Li G, Signer RA, Xu Y, Chung C, Zhang Y, Lin D, Patel S, Wu F, Cai H, Hou J, Wen C, Jafari M, Liu X, Luo L, Zhu J, Qiu A, Hou R, Chen B, Chen J, Granet D, Heichel C, Shang F, Li X, Krawczyk M, Skowronska-Krawczyk D, Wang Y, Shi W, Chen D, Zhong Z, Zhong S, Zhang L, Chen S, Morrison SJ, Maas RL, Zhang K, Liu Y. (2016) Lens regeneration using endogenous stem cells with gain of visual function. Nature, doi: 10.1038/nature17181.

34. Suzuki K, Tsunekawa Y, Hernandez-Benitez R, Wu J, Zhu J, Kim EJ, Hatanaka F, Yamamoto M, Araoka T, Li Z, Kurita M, Hishida T, Li M, Aizawa E, Guo S, Chen S, Goebl A, Soligalla RD, Qu J, Jiang T, Fu X, Jafari M, Esteban CR, Berggren WT, Lajara J, Nuñez-Delicado E, Guillen P, Campistol JM, Matsuzaki F, Liu GH, Magistretti P, Zhang K, Callaway EM, Zhang K, Belmonte JC. (2016) In vivo genome editing via CRISPR/Cas9 mediated homology-independent targeted integration. Nature, doi: 10.1038/nature20565.

35. Wang W, Gawlik K, Lopez J, Wen C, Zhu J, Wu F, Shi W, Scheibler S, Cai H, Vairavan R, Shi A, Haw W, Ferreyra H, Zhang M, Chang S, Zhang K. (2016) Genetic and environmental factors strongly influence risk, severity and progression of age-related macular degeneration. Signal Transduction and Targeted Therapy, doi: 10.1038/sigtrans.2016.16..

36. Zhao L, Chen XJ, Zhu J, Xi YB, Yang X, Hu LD, Ouyang H, Patel SH, Jin X, Lin D, Wu F, Flagg K, Cai H, Li G, Cao G, Lin Y, Chen D, Wen C, Chung C, Wang Y, Qiu A, Yeh E, Wang W, Hu X, Grob S, Abagyan R, Su Z, Tjondro HC, Zhao XJ, Luo H, Hou R, Jefferson J, Perry P, Gao W, Kozak I, Granet D, Li Y, Sun X, Wang J, Zhang L, Liu Y, Yan YB, Zhang K. (2015) Lanosterol reverses protein aggregation in cataracts. Nature, doi: 10.1038/nature14650.

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