

**Yongqing Liu, Ph.D.**

505 South Hancock Street (Work)

Louisville, KY, 40202

(502) 852-8669

[y0liu016@louisville.edu](mailto:y0liu016@louisville.edu)

---

**EDUCATION**

- 2/1978 - 2/1982 B.S., Hunan Agricultural University, Changsha, Hunan Province, China
- 9/1983 - 7/1987 M.S., Hunan Agricultural University, Changsha, Hunan Province, China
- 9/1992 - 6/1996 Ph.D., Wageningen University, Wageningen, the Netherlands
- 4/1998 - 12/2000 Postdoctoral Fellow, the Noble Foundation, Ardmore, OK, USA
- 1/2001 - 12/2003 Postdoctoral Fellow, Oak Ridge National Laboratory, Oak Ridge, TN, USA

**ACADEMIC APPOINTMENTS**

- 1/2004 - 12/2004 Senior Research Associate  
Department of Biochemistry and Molecular Biology  
University of Louisville  
Louisville, KY, USA
- 1/2005 - 8/2008 Senior Research Associate  
Department of Ophthalmology and Visual Sciences  
University of Louisville  
Louisville, KY, USA
- 9/2008 - 9/2009 Instructor  
Department of Ophthalmology and Visual Sciences  
University of Louisville  
Louisville, KY, USA
- 2009 – 2019 Assistant Professor  
Department of Ophthalmology and Visual Sciences  
University of Louisville  
Louisville, KY, USA
- 2019 – Present Assistant Professor  
James Brown Cancer Center, Dept. of Medicine  
University of Louisville  
Louisville, KY, USA

**OTHER POSITIONS AND EMPLOYMENT**

- 7/1987 - 6/1993 Assistant Professor  
Department of Horticulture  
Hunan Agricultural University  
Changsha, China
- 7/1993 - 4/1998 Associate Professor  
Department of Horticulture

Hunan Agricultural University  
Changsha, China

### PROFESSIONAL MEMBERSHIPS

1998 - 2000 American Society for Biochemistry and Molecular Biology (ASBMB), USA  
 2001 - 2003 American Society for Microbiology (ASM), USA  
 1998 - 2000 The Association for Research in Vision and Ophthalmology (ARVO), USA

### HONORS AND AWARDS

1987, 1989, 1991 Distinguished teacher, Hunan Agricultural University, China  
 1991 Visiting Scientist Scholarship, National Educational Committee, China  
 1992 IAC Fellowship, International Agricultural Center, the Netherlands  
 1993 Sandwich Fellowship, Wageningen University, the Netherlands  
 2011 Travel Award of \$3,500 as an invited speaker for ASIA-ARVO 2011 in Singapore  
 2014 Travel Award of \$2,500 as an invited speaker for BIT 7<sup>th</sup> Annual Congress Regenerative Medicine & Stem Cells 2014 in Haikou, China

### COMMITTEE ASSIGNMENTS AND ADMINISTRATIVE SERVICES

1993 - 1997 Committee member, Advisory council and committee for graduates (Master degree) of Hunan Agricultural University, China  
 1993 - 1997 Committee member, Crop seeds evaluation committee of Hunan Province, China  
 2013 - 2016 Committee member, Elected to serve Ph.D. thesis evaluation committee for Mr. Tareq Almaqtari at the Department of Pharmacology & Toxicology, University of Louisville, Louisville KY, USA  
 2013 - 2016 Committee member, Elected to serve the Rules, Policies, and Credentials Committee, SOM, University of Louisville, Louisville KY, USA  
 2013 - 2016 Committee member, Elected to serve Ph.D. thesis evaluation committee for Ms. Yao Chen at the Department of Ophthalmology, Central South University, Changsha, China  
 2013 - Present Committee member, Appointed as a Member of Graduate Faculty of the School of Medicine, University of Louisville, Louisville KY, USA

### MEMBER OF EDITORIAL BOARD OF JOURNALS

2017 - Present Cancer Sciences  
 2017 - Present Annals of Ophthalmology and Visual Sciences  
 2018 - Present microRNA  
 2018 - Present Scientific Reports  
 2020 - Present Cells

### PAPER REVIEW FOR JOURNALS

2015 - Present BMC Ophthalmology  
 2015 - Present MDPI Cancers  
 2016 - Present OncoTarget and Therapy  
 2016 - Present Technology in Cancer Research & Treatment  
 2016 - Present Journal of Visualized Experiments (JoVE)  
 2017 - Present MDPI International Journal of Molecular Sciences (IJMS)  
 2017 - Present MDPI Molecules  
 2017 - Present Acta Neuropathologica  
 2017 - Present Theranostics  
 2017 - Present Cells  
 2017 - Present Current Eye Research

2017 - Present	Annals of Ophthalmology and Visual Sciences
2018 - Present	microRNA
2018 - Present	Scientific Reports
2019 - Present	Cells
2019 - Present	Cancer Sciences
2019 - Present	BBA – Molecular Cell Research
2019 - Present	British Journal of Cancer
2019 - Present	Scientific Reports
2020 - Present	Annals of Ophthalmology and Visual Sciences
2020 - Present	microRNA
2020 - Present	Cellular & Molecular Immunology
2020 - Present	Dove Cancer Management and Research
2021 - Present	Neural Regeneration Research
2021 - Present	Science Advance
2021 - Present	Plos One
2021 - Present	Frontier in Cell and Development Biology
2022 - Present	Clinical and Translational Medicine
2022 - Present	Journal of Neuroinflammation

#### AD HOC PROPOSAL REVIEW

2014 - Present	India Alliance Wellcome Trust/DBT
2021 - Present	National Institutes of Health (NIH), BDE Study Section
2022 - Present	National Science Centre Poland

#### EDUCATIONAL ACTIVITIES

2008 - Present	<u>Speaker</u> for departmental seminar series at the Department of Ophthalmology and Visual Sciences, University of Louisville school of Medicine
2010 - Present	<u>Speaker</u> for COBRE seminar series at the Birth Defects Center, University of Louisville School of Dentistry
2010 - Present	<u>Speaker</u> for Molecular Target seminar series at the Brown Cancer Center, University of Louisville School of Medicine

#### MENTOR FOR LAB TRAINEES

2005 - 2006	<u>Dr. Ling Gao</u> , Postdoctoral Associate
2006 - 2007	<u>Dr. Xiaoyan Peng</u> , Visiting Scholar from China
2007	<u>Dr. Jun Song Mo</u> , Assistant Professor
2006 - 2008	<u>Dr. Shahenda El-Naggar</u> , Postdoctoral Associate
2007 - 2008	<u>Dr. Wei Wang</u> , Postdoctoral Associate
2008	<u>Mr. John Zhou</u> , Senior high school student, summer intern
2009 - 2011	<u>Dr. Liang Zhou</u> , Postdoctoral Associate
2012	<u>Ms. Helen Lu</u> , Senior high school student, summer intern
2011 - 2012	<u>Dr. Li Huang</u> , Postdoctoral Associate
2011 - 2013	<u>Dr. Sang Jong Lee</u> , Visiting scholar from Korea
2013 - 2014	<u>Dr. Lei Gao</u> , Visiting scholar from China
2013 - 2014	<u>Dr. Fenghua Chen</u> , Visiting scholar from China
2015	<u>Mr. Noah Sock</u> , High school student, summer intern
2013 - 2015	<u>Dr. Ni Xu</u> , Visiting PhD student from China
2014 - 2015	<u>Dr. Huayi Lu</u> , Visiting scholar from China
2014 - 2016	<u>Dr. Yao Chen</u> , Visiting PhD student from China
2011 - 2017	<u>Mr. Kevin Dean</u> , Technologist senior

2016 - 2017	<u>Dr. Tingting Liu</u> , Visiting scholar from China
2017 - 2018	<u>Dr. Lei Jin</u> , Visiting scholar from China
2016 - 2019	<u>Dr. Ashwini Kini</u> , Postdoctoral Fellow
2016 - 2019	<u>Dr. Xiao Liu</u> , Visiting scholar from China
2017 - 2020	<u>Mr. John Liu</u> , DuPond Manual High school student
2018 - 2020	<u>Dr. Niloofar Piri</u> , Resident of Ophthalmology
2019 - 2020	<u>Dr. Yan Guo</u> , Visiting scholar from China
2019 - 2020	<u>Dr. Wei Liang</u> , Visiting scholar from China
2019 - 2022	<u>Dr. Yingnan Zhang</u> , Visiting scholar from China
2021 - 2022	<u>Lucy Sloan</u> , Summer medical student
2021 - 2022	<u>Maggie Finn</u> , Summer medical student
2022 – 2023	<u>Khoi K Do</u> , Summer medical student
2023 – 2024	Lama Hanbali, Summer medical student
2023 - Present	Dr. Fuhua Wang, Visiting Scholar from China
2010 - Present	<u>Ms. Xiaoqin Lu</u> , Technologist II

#### GRANTS SUBMITTED (for the past five years)

1. Title	ZEB1 REGULATION OF NITROGEN MUSTARD-INJURED CORNEAL HEALING
Granter	New NIH R01
When submitted	May 2022
Applicant as	PI
Review result	Pending
2. Title	ZEB1 REGULATION CORNEAL NEOVASCULARIZATION
Granter	Resubmitted NIH R01
When submitted	February 2022
Applicant as	PI
Review result	Not funded
3. Title	ZEB1 REGULATION CORNEAL NEOVASCULARIZATION
Granter	New NIH R01
When submitted	June 2021
Applicant as	PI
Review result	Not funded
4. Title	SUMMER VISION SCIENCES TRAINING PROGRAM
Granter	Renewal NIH T35
When submitted	May 2021
Applicant as	Co-PI (PI: Dr. Brian Ceresa)
Review result	Funded
5. Title	SPHERE-INDUCED REPROGRAMMING OF RPE CELLS TO DUAL POTENTIAL RPE STEM-LIKE CELLS
Granter	New NIH R01
When submitted	May 2020
Applicant as	PI
Review result	Not funded
6. Title	RESTORATION OF CONE FUNCTION IN RETINITIS PIGMENTOSA
Granter	New NIH R01
When submitted	September 2017
Applicant as	Co-PI (PI: Douglas Dean)
Review result	Funded

7. Title	TRANSDIFFERENTIATION OF FIBROBLASTS INTO MACROPHAGES
Granter	New NIH R21
When submitted	Jun 2018
Applicant as	PI
Review result	Scored, not funded
8. Title	SPHERE-INDUCED REJUVENATION AND DEDIFFERENTIATION OF MAMMALIAN MÜLLER GLIAL CELLS
Granter	New NIH R21
When submitted	February 2022
Applicant as	PI
Review result	Not funded

## PATENTS

1. Title: Somatic cell-derived pluripotent cells and methods of use therefor  
Application number: US2009/067503  
Inventors: Douglas Dean & Yongqing Liu

## ORAL PRESENTATIONS

### National/International (Invited speaker)

1. Applications of Sphere-induced Reprogramming to Regenerative Medicine. BIT's 7<sup>th</sup> Annual World Congress of Regenerative Medicine & Stem Cells 2014 at Haikou China, December 13<sup>th</sup> – 16<sup>th</sup>, 2014
2. Long-Term Culture and Efficient Photoreceptor Differentiation of Swine Embryonic Retinal Progenitor Cells. ARVO 2012 Conference at Fort Lauderdale, Florida USA, May 7th, 2012.
3. Sphere-Induced Dedifferentiation of Somatic Cells Generates Cells Capable of Producing Multiple Lineages. ASIAARVO Conference in Singapore. January 20th, 2011.

### Local/Regional (Invited seminars)

1. Zeb1 regulation of corneal wound healing. Department of Medicine, University of Louisville, Louisville, USA, June 8, 2022
2. Zeb1 regulation of corneal neovascularization. Department of Medicine, University of Louisville, Louisville, USA, July 7, 2021
3. Sphere-induced reprogramming and cell-based remediation of retinal degeneration. Department of Ophthalmology and Visual Sciences, University of Louisville, Louisville, USA, January 10, 2018
4. Sphere-induced reprogramming and cell-based remediation of retinal degeneration. Xiangya second hospital, South China University, Changsha, China, December 11, 2017
5. ZEB1 regulates multiple components involved in uveal melanoma progression. James Brown Cancer Center, University of Louisville, March 29, 2017.
6. Sphere-induced rejuvenation and reprogramming of swine Muller glia. University of Louisville Chinese Faculty Club, November 19, 2016
7. Sphere-induced rejuvenation of swine and human Muller glial cells. Department of Ophthalmology, Tongren Hospital, Beijing, China, July 5, 2016
8. ZEB1 is an oncogenic factor regulating uveal melanoma progression. Department of Ophthalmology, Second Xiangya Hospital, Changsha, China, June 18, 2016.
9. ZEB1 is an oncogenic factor for human uveal melanoma progression. Department of Ophthalmology and Visual Sciences, University of Louisville, Louisville KY, USA, Mar 11th, 2016.
10. Sphere-induced immortalization and reprogramming. Department of Ophthalmology and Visual Sciences, University of Louisville, Louisville KY, USA, Mar 27th, 2015.

11. Sphere-induced macrophages. Department of Hematology, Xinqiao Hospital, Third Military Medical University, Chongqing, China, Nov. 25th, 2014
12. Sphere-induced mouse RPE stem cells and their application to the animals of retinal degeneration. Department of Ophthalmology, Second Xiangya Hospital, Changsha, China, Nov. 6th, 2014.
13. Sphere-induced mouse RPE stem cells and their application to the animals of retinal degeneration. Department of Ophthalmology, Tongren Hospital, Beijing, China, Nov. 3rd, 2014.
14. Sphere-induced Transdifferentiation of Fibroblasts into Macrophages. Departmental Series of Seminar, Department of Ophthalmology and Visual Sciences, U of L, Louisville KY, USA, October 24th, 2014.
15. Sphere-induced Reprogramming. School of Public Health, University of Louisville, Louisville KY, USA, October 21th, 2014.
16. Sphere-induced reprogramming and immortalization. Firing Line Presentation, Department of Ophthalmology and Visual Sciences, U of L, Louisville KY, USA, February 7th, 2014.
17. Repression of ZEB1 and Induction of HIF Synergistically Cause Reprogramming of Fibroblasts in Spheres. Birth Defects Center, University of Louisville, Louisville KY, USA, May 2nd, 2013.
18. Zeb1 Plays a Critical Role in Transforming Mouse Fibroblasts into Stem-like State. Molecular Target Program, JBCC, University of Louisville, Louisville KY, USA, February 28th, 2013.
19. Repression of ZEB1 and Induction of HIF Synergistically Cause Reprogramming of Fibroblasts in Spheres. Department of Ophthalmology and Visual Sciences, University of Louisville, Louisville KY, USA, January 4th, 2013.
20. Sphere-Induced Dedifferentiation of MEFs to Multipotent Stem-like Cells. COBRE Site Visit Seminar, Birth Defects Center, University of Louisville, Louisville KY, USA, November 2nd, 2012.
21. Sphere-induced reprogramming of MEFs to Multipotent stem-like cells. Central South University, Changsha, China. June 1st, 2012.
22. Sphere-induced rejuvenation of senescent MEF. Tongren Hospital, Beijing, China, May 28th, 2012.
23. Long-Term Culture and Efficient Photoreceptor Differentiation of Swine Embryonic Retinal Progenitor Cells. ARVO 2012 Conference at Fort Lauderdale, Florida USA, May 7th, 2012.
24. Sphere-Induced Dedifferentiation of MEFs to Multipotent Stem-like Cells. Department of Ophthalmology and Visual Sciences, University of Louisville, Louisville KY, USA, June 25th, 2012.
25. Sphere-Induced Dedifferentiation of MEFs to Multipotent Stem-like Cells. Birth Defects Center, University of Louisville, Louisville KY, USA, April 24th, 2012.
26. Retinoblastoma (Rb) and cancer stem cells. Molecular Target Program, The Brown Cancer Center, University of Louisville, Louisville, KY, USA, May 15, 2011.
27. Sphere-induced reprogramming of MEFs to pluripotent stem cells. Central South University, Changsha, China. January 25, 2011.
28. Sphere-Induced Dedifferentiation of Somatic Cells Generates Cells Capable of Producing Multiple Lineages. ASIAARVO Conference in Singapore. January 20, 2011.
29. Sphere-Induced Dedifferentiation of Rb Triple-knockout MEFs Undergo Reprogramming to a Cancer Stem Cell Phenotype, Birth Defects Center, University of Louisville School of Dentistry, Louisville, KY, USA, September 20, 2010.
30. Sphere-derived pluripotent stem cells in mouse. Reproductive & Genetic Specialized Hospital, Xiangya Medical School, Central South University, Changsha, China. August 22, 2009.
31. Epithelium-mesenchymal transition and eye disease. Department of Ophthalmology, Second Xiangya Hospital, Central South University, China. August 21, 2009.
32. Retinoblastoma and epithelium-mesenchymal transition. Tongren Hospital, Beijing, China. August 12, 2009
33. Retinoblastoma and cancer stem cell. College of Biological Sciences, China Agricultural University, Beijing, China. August 11, 2009.

34. Mouse Fibroblasts Lacking RB1 Function form Spheres and Undergo Reprogramming to a Cancer Stem Cell Phenotype. BIT's 2nd Annual Congress of Regenerative Medicine and Stem Cell at 2009 4th China Medical Biotech Forum, Theme: Open a Whole New World, Dalian China. August 9, 2009.
35. Transcriptional Analysis of Long-Living Ames Dwarf Mice. School of Animal Sciences, Hunan Agricultural University, China. December 7, 2008.
36. Retinoblastoma (Rb) Protein and Cancer Stem Cell. Department of Ophthalmology, Second Xiangya Hospital, Central South University, China. December 6, 2008.
37. Retinoblastoma (Rb) Protein and Cancer Stem Cell. International School, Jinan University, China. December 2, 2008.
38. Fibroblasts Lacking RB1 Function Form Spheres and Undergo Reprogramming to a Cancer Stem Cell Phenotype. School of Life Sciences, Zhejiang University, China. November 28, 2008.
39. The Matrix Metalloproteinase Gene GmMMP2 Is Activated in Response to Pathogenic Infections in Soybean. School of Bioengineering, Hunan Agricultural University, China. December 16, 2005.
40. Functional and Comparative Genomic Analyses of Two Eubacteria Important for DOE's Mission. School of Minerals Processing & Bioengineering, Central South University, China. December 15, 2005.

## PUBLICATIONS

### Articles Published in Peer-reviewed Journals:

1. Liu Z, Zeng F, Zhang Y, **Liu Y**, Li Z, Liu X. Future perspective of stem cell-derived exosomes: Cell-free therapeutic strategies for retinal degeneration. *Front Bioeng Biotechnol*. 2022 Nov 14;10:905516. doi: 10.3389/fbioe.2022.905516. eCollection 2022. PMID: 36452207 Free PMC article. Review.
2. Guo Y, Lu X, Chen Y, Clark G, Trent J, Cuatrecasas M, Emery D, Song ZH, Chariker J, Rouchka E, Postigo A, **Liu Y**, Dean DC. Opposing roles of ZEB1 in the cytoplasm and nucleus control cytoskeletal assembly and YAP1 activity. *Cell Rep*. 2022 Oct 4;41(1):111452. doi: 10.1016/j.celrep.2022.111452. PMID: 36198275
3. Chen Y, Lu X, Gao L, Dean DC, **Liu Y**. Spheroid-induced heterogeneity and plasticity of uveal melanoma cells. *Cell Oncol (Dordr)*. 2022 Apr 11;. doi: 10.1007/s13402-022-00671-y. PMID: 35404029.
4. Liang W, Zhang Y, Zhou L, Lu X, Finn ME, Wang W, Shao H, Dean DC, Zhang L, **Liu Y**. Zeb1 regulation of wound-healing-induced inflammation in alkali-damaged corneas. *iScience*. 2022 Mar 8;25(4):104038. doi: 10.1016/j.isci.2022.104038. eCollection 2022 Apr 15. PMID: 35340433
5. Guo Y, Lu X, Chen Y, Rendon B, Mitchell RA, Cuatrecasas M, Cortés M, Postigo A, **Liu Y**, Dean DC. Zeb1 induces immune checkpoints to form an immunosuppressive envelope around invading cancer cells. *Sci Adv*. 2021 May 21;7(21):eabd7455. doi: 10.1126/sciadv.abd7455. Print 2021 May. PMID: 34020945
6. Wu J, Chen N, **Liu Y**, Godlewski G, Kaplan HJ, Shrader SH, Song ZH, Shao H. Studies of involvement of G-protein coupled receptor-3 in cannabidiol effects on inflammatory responses of mouse primary astrocytes and microglia. *PLoS One*. 2021 May 13;16(5):e0251677. doi: 10.1371/journal.pone.0251677. eCollection 2021. PMID: 33984046
7. Zhang Y, Liu X, Liang W, Dean DC, Zhang L, **Liu Y**. Expression and Function of ZEB1 in the Cornea. *Cells*. 2021 Apr 16;10(4):925. doi: 10.3390/cells10040925.
8. Peng X, Gao L, **Liu Y**. Cell-based therapies for age-related macular degeneration: cell replacement versus paracrine effects. *Neural Regen Res*. 2021;16(6):1214-1215. PMID: 33269782.
9. Lee SJ, Wang W, Jin L, Lu X, Gao L, Chen Y, Liu T, Emery D, Vukmanic E, **Liu Y**, Kaplan HJ, Dean D. Rod photoreceptor clearance due to misfolded rhodopsin is linked to a DAMP-immune checkpoint switch. *J Biol Chem*. 2021. PMID: 33214223.

10. Jin L, Zhang Y, Liang W, Lu X, Piri N, Wang W, Kaplan HJ, Dean DC, Zhang L, **Liu Y**. Zeb1 promotes corneal neovascularization by regulation of vascular endothelial cell proliferation. *Commun Biol*. 2020 3(1):349. doi: 10.1038/s42003-020-1069-z. PMID: 32620870.
11. Chen F, Liu X, Chen Y, Lu H, Wang W, Lu X, Dean KC, Gao L, Kaplan HJ, Dean DC, Peng X, **Liu Y**. Sphere-induced reprogramming of RPE cells into dual-potential RPE stem-like cells. *EbioMedicine*, 2020. 23;52:102618. doi: 10.1016/j.ebiom.2019.102618. PMID: 31982829.
12. Liu X, Chen F, Chen Y, Lu H, Lu X, Peng X, Kaplan HJ, Dean DC, Gao L, **Liu Y**. Paracrine effects of intraocularly implanted cells on degenerating retinas in mice. *Stem Cell Res Ther*. 2020 11(1):142. doi: 10.1186/s13287-020-01651-5. PMID: 32234075.
13. Wang W, Kini A, Wang Y, Liu T, Chen Y, Vukmanic E, Emery D, **Liu Y**, Lu X, Jin L, Lee SJ, Scott P, Liu X, Dean K, Lu Q, Fortuny E, James R, Kaplan HJ, Du J, Dean DC. Metabolic Deregulation of the Blood-Outer Retinal Barrier in Retinitis Pigmentosa. *Cell Rep*. 2019 Jul 30;28(5):1323-1334.e4. doi: 10.1016/j.celrep.2019.06.093.
14. **Liu Y**, Siles L, Postigo A, Dean DC. Epigenetically distinct sister chromatids and asymmetric generation of tumor initiating cells. *Cell Cycle*. 2018; 17(18):2221-2229. IF: 3.96
15. **Liu Y**, L Siles, X Lu, K Dean, M Cuatrecasas, A Postigo, DC Dean. Mitotic polarization of transcription factors during asymmetric division establishes fate of forming cancer cells. *Nat Commun*, 2018, 9:2424. IF: 12.14.
16. Chen Y, Liu X, Ling G, **Liu Y**. Intravitreal Injection of Human Uveal Melanoma Cells in Nude Mice. *Bio Protoc*. 2017 Nov 5;7(21). pii: e2594. doi: 10.21769/BioProtoc..2594.
17. Liu X, Tang L, **Liu Y**. Mouse Müller Cell Isolation and Culture. *Bio Protoc*. 2017 Aug 5;7(15). pii: e2429. doi: 10.21769/BioProtoc.2429.
18. Chen Y, Gao L, **Liu Y**. ZEB1 Is An Oncogenic Factor that Represses Many Tumor Suppressors in Uveal Melanoma. *Clin Oncol*. 2: 1256. 2017.
19. Chen Y, Lu X, Montoya-Durango DE, Liu YH, Dean KC, Darling DS, Kaplan HJ, Dean DC, Gao L, **Liu Y**. ZEB1 Regulates Multiple Oncogenic Components Involved in Uveal Melanoma Progression. *Sci Rep*. 2017 Mar 3;7(1):45. doi: 10.1038/s41598-017-00079-x.
20. Xu N, Chen Y, Dean KC, Lu X, Liu X, Wang W, Dean DC, Kaplan HJ, Gao L, Dong F, **Liu Y**. Sphere-Induced Rejuvenation of Swine and Human Müller Glia Is Primarily Caused by Telomere Elongation. *Stem Cells*. 35(6):1579-1591. 2017 Mar 5. doi: 10.1002/stem.2585.
21. Wang W, Lee SJ, Scott PA, Lu X, Emery D, **Liu Y**, Ezashi T, Roberts MR, Ross JW, Kaplan HJ, Dean DC. Two-Step Reactivation of Dormant Cones in Retinitis Pigmentosa. *Cell Rep*. 2016 Apr 12;15(2):372-85. 2016.
22. Xu N, Liu Y, Dean DC. Directed differentiation of swine Müller glia into photoreceptor cells in vitro. *Chinese J Exp Ophthalmol*. 34(1): 43-48. 2016.
23. Dean KC, Huang L, Chen Y, Lu X, **Liu Y**. An Rb1-dependent amplification loop between Ets1 and Zeb1 is evident in thymocyte differentiation and invasive lung adenocarcinoma. *BMC Mol Biol*. 16(1):8. doi: 10.1186/s12867015-0038-4, 2015.
24. Zhang P, Wang L, Rodriguez-Aguayo C, Yuan Y, Debeb BG, Chen D, Sun Y, You MJ, **Liu Y**, Dean DC, Woodward WA, Liang H, Yang X, Lopez-Berestein G, Sood AK, Hu Y, Ang KK, Chen J, Ma L. miR-205 acts as a tumour radiosensitizer by targeting ZEB1 and Ubc13. *Nat Commun*. 2014 Dec 5;5:5671. doi: 10.1038/ncomms6671.
25. **Liu Y**, Lu X, Huang L, Wang W, Jiang G, Dean KC, Clem B, Telang S, Jenson AB, Cuatrecasas M, Chesney J, Darling DS, Postigo A, Dean DC. Different thresholds of ZEB1 are required for Ras-mediated tumour initiation and metastasis. *Nat Commun*. 2014 Dec 1;5:5660. doi: 10.1038/ncomms6660. PMID: 25434817
26. Zhang P, Wei Y, Wang L, Debeb BG, Yuan Y, Zhang J, Yuan J, Wang M, Chen D, Sun Y, Woodward WA, **Liu Y**, Dean DC, Liang H, Hu Y, Ang KK, Hung MC, Chen J, Ma L. ATM-mediated stabilization of



- ZEB1 promotes DNA damage response and radioresistance through CHK1. *Nat Cell Biol.* 16(9):864-75, 2014.
27. Wang W, Zhou L, Lee SJ, **Liu Y**, Fernandez de Castro J, Emery D, Vukmanic E, Kaplan HJ, Dean DC. Swine cone and rod precursors arise sequentially and display sequential and transient integration and differentiation potential following transplantation. *Invest Ophthalmol Vis Sci.* 15;55(1):301-9, 2014.
  28. **Liu Y**, Sanchez-Tillo E, Lu X, Huang L, Clem B, Telang S, Jenson AB, Cuatrecasas M, Chesney J, Postigo A, Dean DC. The ZEB1 Transcription Factor Acts in a Negative Feedback Loop with miR200 Downstream of Ras and Rb1 to Regulate Bmi1 Expression. *J Biol Chem.* 288(16):11572-80, 2013.
  29. **Liu Y**, Sánchez-Tilló E, Lu X, Clem B, Telang S, Jenson AB, Cuatrecasas M, Chesney J, Postigo A, Dean DC. Rb1 family mutation is sufficient for sarcoma initiation. *Nat Commun.* 2013 Oct 23;4:2650. doi: 10.1038/ncomms3650.
  30. **Liu Y**, Mukhopadhyay P, Pisano MM, Lu X, Huang L, Lu Q, Dean DC. Repression of Zeb1 and Hypoxia Cause Sequential MET and Induction of Aid, Oct4, and Dnmt1, Leading to Immortalization and Multipotential Reprogramming of Fibroblasts in Spheres. *Stem Cells.* 31(7):1350-62, 2013.
  31. **Liu Y**, Sanchez-Tillo E, Lu X, Huang L, Clem B, Telang S, Jenson AB, Cuatrecasas M, Chesney J, Postigo A, Dean DC. Sequential Inductions of the ZEB1 Transcription Factor Caused by Mutation of Rb and then Ras are required for Tumor Initiation and Progression. *J Biol Chem.* 288(16):11572-80, 2013.
  32. Reynolds M, Lane AN, Robertson B, Kemp S, **Liu Y**, Hill BG, Dean DC, Clem BF. Control of Glutamine Metabolism by the Tumor Suppressor Rb. *Oncogene.* 2013 Jan 28. doi: 10.1038/onc.2012.635. [Epub ahead of print]
  33. Sánchez-Tilló E, **Liu Y**, de Barrios O, Siles L, Fanlo L, Cuatrecasas M, Darling DS, Dean DC, Castells A, Postigo A. EMT-activating transcription factors in cancer: beyond EMT and tumor invasiveness. *Cell Mol Life Sci.* 69(20):3429-56, 2012.
  34. Zhou L, Wang W, **Liu Y**, Fernandez de Castro J, Ezashi T, Telugu BP, Roberts RM, Kaplan HJ, Dean DC. Differentiation of Swine iPSC into Rod Photoreceptors and Their Integration into the Retina. *Stem Cells.* 29(6):972-80, 2011.
  35. **Liu Y**, Xin Y, Ye F, Wang W, Lu Q, Kaplan HJ, Dean DC. Taz-Tead1 Links Cell-Cell Contact to Zeb1 Expression, Proliferation and Dedifferentiation in Retinal Pigment Epithelial Cells. *Invest Ophthalmol Vis Sci.* 51:3372-8, 2010.
  36. **Liu Y**, Dean DC. Tumor initiation via loss of cell contact inhibition versus Ras mutation: Do all roads lead to EMT? *Cell Cycle* 9:897-900, 2010.
  37. El-Naggar S, **Liu Y**, Dean DC. Disruption of the Rb1 Pathway Leads to Overexpression of mTor, Constitutive Phosphorylation of Akt on Serine 473, and a Block in Erk Activation. *Mol Cell Biol* 29:5710-7, 2009.
  38. **Liu Y**, Ye F, Li Q, Tamiya S, Darling D, Kaplan HJ, Dean DC. Zeb1 Represses Mitf and Regulates Pigment Synthesis, Cell Proliferation and Epithelial Morphology. 2009. *Invest Ophthalmol Vis Sci.* 50:5080-8, 2009.
  39. **Liu Y**, Gao L, Zuba-Surma EK, Peng X, Kucia M, Ratajczak MZ, Wang W, Enzman V, Kaplan HJ, Dean DC. Mouse Neonatal Ocular Multipotential Stem-like Cells. *Exp Hematol.* 37(9):1096-107, 2009.
  40. Montoya-Durango DE, **Liu Y**, Teneng I, Kalbfleisch T, Lacy ME, Steffen MC, Ramos KS. Epigenetic control of mammalian LINE-1 retrotransposon by retinoblastoma proteins. *Mutat. Res. Fund. Mol.* M. 665: 20-8, 2009.
  41. **Liu Y**, Clem B, Zuba-Surma EK, El-Naggar S, Telang S, Jenson AB, Wang Y, Shao H, Ratajczak MZ, Chesney J, Dean DC. Mouse fibroblasts lacking RB1 function form spheres and undergo reprogramming to a cancer stem cell phenotype. *Cell Stem Cell.* 4:336-47, 2009.
  42. Tezel TH, Geng L, Lato EB, Schaal S, **Liu Y**, Dean DC, Klein JB, Kaplan HJ. Synthesis And Secretion of Hemoglobin By Retinal Pigment Epithelium. *Invest Ophthalmol Vis Sci.* 50:1911-9, 2009.

43. Liu Y, Wang E. Transcriptional analysis of normal human fibroblast responses to microgravity stress. ***Genomics Proteomics Bioinformatics***. 6:29-41, 2008.
44. Liu Y, Peng X, Tan J, Darling DS, Kaplan HJ, Dean DC. Zeb1 mutant mice as a model of posterior corneal dystrophy. ***Invest Ophthalmol Vis Sci***. 49:1843-9, 2008.
45. Liu Y, El-Naggar S, Clem B, Chesney J, Dean DC. The Rb/E2F pathway and Ras activation regulate RecQ helicase gene expression. *Biochem J*. 412:299-306, 2008.
46. Liu Y, El-Naggar S, Darling DS, Higashi Y, Dean DC. Zeb1 links epithelial-mesenchymal transition and cellular senescence. ***Development***. 135:579-88, 2008.
47. Liu Y, Costantino ME, Montoya-Durango D, Higashi Y, Darling DS, Dean DC. The zinc finger transcription factor ZFH1A is linked to cell proliferation by Rb-E2F1. ***Biochem J***. 408:79-85, 2007.
48. Gao W, Liu Y, Giometti CS, Wu L, Liu X, Yan T, Tollaksen S, Khar, T, Klingeman D, Mehlhorn ., Jardine PM, Xu D, Fields MW, Xu X, Zhou J. Knockout of a prohibitin-like protein results in alternation of iron metabolism, increased spontaneous mutation and hydrogen peroxide sensitivity in bacterium *Shewanella oneidensis*. ***BMC Genomics***. 7: 76, 2006.
49. Bhattacharyya MK, Narayanan NN, Gao H, Santra DK, Salimath SS, Kasuga T, Liu Y, Espinosa B, L Ellison L, Marek L, Shoemaker R, Gijzen M, Buzzell RI. Identification of a large cluster of coiled coil-nucleotide binding site-leucine rich repeat-type genes from the Rps1 region containing *Phytophthora* resistance genes in soybean. *TAG Theor Appl Genet*. 111: 75-86, 2005.
50. Gao W, Liu Y, Zhou J, Pan H. Effects of a strong static magnetic field on bacterium *Shewanella oneidensis*: an assessment by using whole genome microarray. ***Bioelectromagnetics***. 26: 558-563, 2005. (Co-first author)
51. Liu Y, Gao W, Wu L, Liu X, Yan T, Fields MW, Thompson DK Zhou JZ. Transcriptome analysis of *Shewanella oneidensis* MR-1 in response to elevated salt conditions. ***J Bacteriol***. 187: 2501-2507, 2005.
52. Chou WM, Shigaki T, Dammann C, Liu Y, Bhattacharyya MK. Inhibition of phosphoinositide-specific phospholipase C results in the induction of pathogenesis-related genes in soybean. ***Plant Biol***. 6: 664-672, 2004.
53. Liu Y, Zhou J, Omelchenko M, Beliaev A, Venkateswaran A, Stair J, Wu L, Thompson D, Xu D, Zhai M, Gaidamakova EK, Rogozin IB, Makarova KS, Koonin EV, Daly MJ. Transcriptome dynamics of the radioresistant bacterium *Deinococcus radiodurans* induced by ionizing radiation. ***Proc. Natl. Acad. Sci. USA*** 100: 4191-4196, 2003.
54. Liu Y, Dammann C, Bhattacharyya MK. The matrix metalloproteinase gene GmMMP2 is activated in response to pathogenic infections in soybean. ***Plant Physiol***. 127: 1788-1797, 2001.
55. Liu Y, Groot SPC, Hilhorst HMW, Bino RJ, Bray CM. The synthesis of heat shock proteins and its influences on cabbage (*Brassica oleracea* L.) seed germination. In Alan G. Taylor et al. (eds.) ***Progress in Seed Research***, pp. 4047, 1998.
56. Gornik, K., De Castro, R.D., Liu, Y., Bino, R.J., Groot, S.P.C.: Inhibition of cell division during cabbage (*Brassica oleracea* L.) seed germination. ***Seed Sci Res***. 7, 333-340, 1997.
57. Liu Y, Hilhorst HWM, Groot SPC, Bino RJ. Amount of DNA and internal morphology of gibberellin- and abscisic acid-deficient tomato (*Lycopersicon esculentum* Mill.) seeds during maturation and germination. ***Ann Bot***. 79, 161-168, 1997.
58. Groot SPC, Bino RJ, Liu, Y. Cell cycle analysis in dormancy and germinating tomato seeds. In R.H. Ellis et al. (eds.) ***Basic Applied Aspects of Seed Biology***. pp.395-402, 1997.
59. Liu Y, Luo Z, Hilhorst HWM, Karssen CM. Effects of endogenous GA and ABA on water relations in tomato fruit and seeds during development. ***Acta Phytophysiologica Sinica*** 22, 19-26, 1996.
60. Liu Y, Hilhorst HWM, Groot SPC, Bino RJ. Effects of osmotic priming on dormancy and storability of tomato (*Lycopersicon esculentum* Mill.) seeds. ***Seed Sci Res***. 6, 49-55, 1996.

61. Liu Y, Bino, RJ. Nuclear replication of tomato seeds during osmotic priming and germination. **Acta Phytophysiologica Sinica** 21, 15-21, 1995.
62. Liu Y, Bino RJ, Karssen CM, Hilhorst HWM. Water relations of GA- and ABA-deficient tomato (*Lycopersicon esculentum* cv. Moneymaker) seed and fruit development and their influence on germination. **Physiol Plant**, 96,425-432, 1995.
63. Liu Y, Bino RJ, Karssen CM. GA and ABA regulation on the cell cycle in germination of tomato seeds. **Acta Botanica Sinica** 37, 274-282, 1995.
64. Liu, Y., Luo, Z., Karssen, C.M., Hilhorst, H.W.M. and Bino, J.R.: A regulation role of gibberellin and abscisic acid on seed germination in tomato. **Acta Horticulturae Sinica** 22, 267-271, 1995.
65. Liu Y, Luo Z, Hilhorst HWM, Karssen CM. Effects of GA and ABA on water relations of tomato seeds during germination and osmotic priming. **Acta Botanica Sinica** 37, 956-962, 1995.
66. Liu Y, Bergeroet HW, Ric Vos CH, hilhorst HWM, Kraak HL, Karssen CM, Bino RJ. Nuclear replication activities during imbibition of abscisic acid- and gibberellin-deficient tomato (*Lycopersicon esculentum* Mill.) seeds. **Planta** 194, 368-373, 1994.
67. Liu Y, van der Burg WJ, Bino, RJ. Influence of pre-imbibition on internal morphology and germination performance of tomato seeds. **Acta Horticulturae Sinica** 21, 344-350, 1994.
68. Liu Y, Van der Burg WJ, Aartse JW, Van Zwol RA, Jalink H, Bino RJ. X-ray studies on change in embryo and endosperm morphology during priming and imbibition of tomato seeds. **Seed Sci Res.** 3, 171-178, 1993.
69. Liu Y, Bino.J. Influence of seed maturation and osmotic treatments on germination of tomato seeds. **Plant Physiol Commun.** 30, 94-97, 1993.
70. Liu Y. Effects of pre-sowing and gibberellins on seed germination in tomato. **Seed** 68, 9-11, 1993.

72. **Liu Y**, Tan, J. Studies on the isozyme loci for the genetic identification of hybrid cabbage. **J Hunan Agr Uni** 16, 4956, 1990.
73. **Liu Y**, Shen M. Studies on the germplasm resources of daylily. Acta Horticulturae Sinica 17, 349-356, 1990.
74. **Liu Y**, Liu Z, Li G. Isozyme analysis of relationships between vegetable species in Cucurbita. **J Hunan Agr Uni**. 15, 49-56, 1989.
75. Shen M, **Liu Y**, Ai X. Evaluation on the traits of daylily seedlings derived from in vitro culture. **J Hunan Agr Uni**. 13, 69-76, 1987.

**Book chapters:**

1. Chen, Y., Ling, G., **Liu, Y**. Signaling Pathways And Potential Molecular Targets In Uveal Melanoma. In SMGroup (Eds.), Management of Malignant Melanoma (pp. 95-102). 2017. Open Access: eBook.