

Curriculum Vitae
Shisheng Li (PhD)

Contact Information

Department of Comparative Biomedical Sciences School
of Veterinary Medicine
Louisiana State University Baton
Rouge, LA 70803

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Professional Preparation

Washington State University	Biochemistry	Postdoc, 1997-2002
University of Wales, Swansea, UK	Molecular Biology	PhD, 1997
Nankai University, P.R. China	Genetics	MS, 1988
Henan Normal University, P.R. China	Biology	BS, 1985

Appointments

2015-present Professor, Department of Comparative Biomedical Sciences, Louisiana State University.

2010-2015 Associate Professor, Department of Comparative Biomedical Sciences, Louisiana State University.

2004-2010 Assistant Professor, Department of Comparative Biomedical Sciences, Louisiana State University.

2004-present Member, Graduate Faculty, Louisiana State University.

2004-present Mentor of graduate and professional students.

2004-present Member, LSU Life Course and Aging Center (LCAC),

2002-2004 Research Assistant Professor, School of Molecular Biosciences, Washington State University.

1997-2002 Post-doctoral Research Fellow, School of Molecular Biosciences, Washington State University. Advisor: Michael J. Smerdon.

1994-1997 Ph.D. student, Molecular Biology, School of Biological Sciences, University of Wales, Swansea, UK. Advisor: Raymond Waters.

1993-1994 WHO (World Health Organization) Fellow, MRC Radiobiology Unit (now MCR Radiation and Genome Stability Unit), Harwell, Oxfordshire, UK.

1990-1993 Staff Scientist, Institute of Radiation Medicine, Chinese Academy of Medical Sciences, Tianjin, P. R. China.

1988-1990 Assistant Researcher, Institute of Radiation Medicine, Chinese Academy of Medical Sciences, Tianjin, P. R. China.

Honors, Other experience and Professional Memberships

1999-2008	Member of the American Society for Biochemistry and Molecular Biology.
2004-present	Member of the American Association for the Advancement of Science.
2004-present	Member of the Graduate Faculty, Louisiana State University.
2004-present	Mentor of undergraduate, graduate and professional students.

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2004-2017 Member of the Louisiana State University Life Course and Aging Center. 2006-2012 Member of the American Society for Microbiology.
2008-present Panelist and/or grant review for NSF.
2009 Grant review for March of Dimes Foundation.
2009 Grant review for Medical Research Council (MRC), UK.
2009 Grant review for Korea Research Foundation.
2009 Pfizer Award for Research Excellence.
2011 Grant review for Cancer Research UK and Research Grants Council Hong Kong.
2012-present Associate Editorial Board of International Journal of Biochemistry and Molecular Biology.
2013 Grant review for Korea Research Foundation.
2014-present Grant review for Research Grants Council Hong Kong.
2015 Faculty Distinguished Scholar Award, Louisiana State University
2017 Dean's Teacher Merit Honor Roll, Louisiana State University
2018 Dean's Teacher Merit Honor Roll, Louisiana State University
2019 Dean's Teacher Merit Honor Roll, Louisiana State University
2021-2022 Panelist for NSF GRFP (Graduate Research Fellowship Program)
2022 NIH Cancer Etiology Study Section
2022 Faculty Distinguished Scholar Award, Louisiana State University
2023-2024 Panelist for NSF GRFP (Graduate Research Fellowship Program)
2024 NIH Special Emphasis Panel/Scientific Review Group 2024/10 ZES1 ARL-D (V1) R

Reviewer for scientific journals (e.g., Angewandte Chemie International Edition, Biol Proc Online, Cell Chem Biol, Cell Mol Life Sci, Computational Structural Biotech J, Current Genetics, DNA and Cell Biology, DNA Repair, Epigenetics & Chromatin, FEBS Lett, G3 (Genes, Genomics, Genetics), Int J Nanomed, IUBMB Life, J Biol Chem, J Mol Biol, J Pediatric Genetics, J Photochem Photobiol, Mol Cell Biol, Mol Cell Biochem, Molecular Genetics and Genomics, Mut Res, Nucleic acids Res, Photochem Photobio, PLoS Genetics, PLoS ONE, PNAS, Sci Rep).

Teaching Assignments

2019-present Course coordinator: Veterinary Cell Biology (VMED5131)
2019-Present Course coordinator: Cell Biology (CBS7205)
2015-2019 Course coordinator: Cell Biology and Histology (VMED 5126).
2013 Veterinary Pharmacology (VMED 5223).
2005-2012 Animal Biochemistry, Gastrointestinal Physiology, and Metabolism (renamed as Biochemistry and Membrane/Muscle Physiology) (VMED 5110).
2005-present Biomedical Cell and Molecular Biology (CBS7104). 2006-2008 Cell Biology and Histology (VMED 5126).

Supervision of Students

Major professor:

2021-present Hannah Holmberg, PhD candidate
2021-present Cheng Lu, PhD candidate
2017-2023 Wenzhi Gong, PhD candidate
2019-2021 Derek Forrester, Vet Med Biomed Sci Certificate

Shisheng Li

2012-2018	Danny Ko, PhD (currently Scientist at Epic-Bio)
2011-2017	Mingyang Li , PhD (currently Assistant Professor at Jiangsu University of Science and Technology, China
2012-2016	Sheikh Arafatur Rahman, MSc (currently Assistant Professor at Bangladesh Agricultural University
2009-2014	Wentao Li, PhD (currently Assistant Professor at University of Georgia)
2006-2011	Danielle LeJeune (Tatum), PhD (currently Director of Research at Tulane University School of Medicine)
2005-2010	Baojin Ding, PhD (currently Assistant Professor at LSU Health Shreveport)

Committee member:

2005-2010	Jeffrey Cutrera, PhD
2007-2012	Denada Dibra, PhD
2009-2014	Rebecca Hill, PhD, CBS
2009-2014	Rui Xiao, PhD, CBS
2010-2016	Emily Qualls-Creemore, PhD
2014-2019	Yi-fan Chen, PhD, CBS
2014-2019	Samia O'Brian, PhD, CBS
2015-2019	Qingqiu Yang, PhD, VCS
2015-2020	Yawen Hu, PhD, CBS
2015-2020	Fei Meng, PhD, Biological Sciences
2018-2024	Weiqiong Rong, PhD, CBS
2022-	Ignitius Ezekiel Lim, PhD, CBS
2022-	Ajn Vats, PhD, CBS

Dean's representative:

2008-2014	Dinesh Kumar Bhupathiraju, PhD Department of Chemistry
2012-2019	Anuja Pande, PhD, Department of Biological Sciences
2013-2019	Ashley Able, PhD, Department of Biological Sciences
2016-2020	Shaif Rahman, PhD, Department of Chemical Engineering
2018-2023	Caroline Copeland, PhD, Department of Biological and Agricultural Engineering
2018-2024	James Stampley, Department of Kinesiology
2020-2024	Lucinda Boyd, PhD, Chemistry
2019-	Rasidah O. Ali, PhD, Department of Chemistry
2021-	Rasidah Olubukola Ali, PhD, Chemistry

Undergraduate students:

2024-	Joel Sercovich
2023-	Evan McConnell
2023-	Amna Rather
2023	Maureen Shelby
Summer 2022	Joseph Girod, Baton Rouge Community College
2020-2021	Heather R. Green
2019-2021	Kateland Howard
2019-2021	Erica Romain
2019	Ashton Says (Department of Biological Sciences)
2018	Thao (Taylor) Vo (Department of Chemical Engineering)
Summer 2018	Michael Lieu (Department of Biological Sciences)

Summer 2018 Adam Bao (Department of Biological Engineering) 2017-2018
Derek Forrester (Department of Biological Sciences, LSU) 2009-2013
Cristina Giles (Department of Biological Sciences, LSU).
2009-2013 Aaron Ackley (Department of Biological Sciences, LSU).
Summer 2012 Cristina Giles (Department of Biological Sciences, LSU), Howard Hugh's
Summer Research Scholar.
Summer 2011 Justin Yan (Department of Biological Sciences, LSU), NSF Research
Experience for Undergraduates.
Summer 2009 Kathleen McCarthy (SVM, LSU), Summer Scholars Program for Veterinary
Students.
Tatenda Mujeni, (Bennett College for Women), HHMI Undergraduate
Summer Research Program.
Margaret Placer (School of Animal Sciences, LSU), NSF Research
Experience for Undergraduates.
Summer 2008 Shannan Berryhill (Tulane University), LBRN Summer Undergraduate
Research Program.

High School Students:

Summer 2022 Michelle Huang, Baton Rouge Magnet High School. Summer
Summer 2011 Kalle Liimatta, Baton Rouge Magnet High School.

Middle School Students:

Fall 2023 Nathaniel Alleyne, Kenilworth Science & Technology Academy

Publications

Journal articles

1. Gong, W., Holmberg, H., Huang, M. and **Li, S.** (2024) Interplay of the Tfb1 Pleckstrin homology domain with Rad2 and Rad4 in transcription coupled and global genomic nucleotide excision repair. *Nucleic Acids Res.* 2024, 1–14.
2. Sarsam, R. D., Xu, J., Lahiri, I., Gong, W., Oh, J., Zhou, Z., Chong, J., Hao, N., **Li, S.**, Wang, D. and Leschziner, A. E. (2024) Elf1 promotes Rad26's interaction with lesionarrested Pol II for transcription-coupled repair. *PNAS* **121**, e2314245121.
3. Gong, W. and **Li, S.** (2023) Rpb7 Represses Transcription Coupled Nucleotide Excision Repair. *J. Biol. Chem.* **299**, 104969.
4. Geijer, M. E., Zhou, D., Selvam, K., Steurer, B., Mukherjee, C., Evers, B., Cugusi, S., van Toorn, M., van der Woude, M., Janssens, R., Kok, Y. P., Gong, W., Raams, A., Lo, C., Lebbink, J. H. G.; Geverts, B.; Plummer, D. A.; Bezstarosti, K.; Theil, A. F.; Mitter, R.; Houtsmuller, A. B., Vermeulen, W., Demmers, J. A. A., **Li, S.**, van Vugt, M. A. T. M., Lans, H., Bernards, R., Svejstrup, J. Q., Chaudhuri, A. R., Wyrick, J. J., Marteiijn, J. A. (2021) Elongation factor ELOF1 drives transcription-coupled repair and prevents genome instability. *Nature Cell Biology* **23**, 608–619.
5. Selvam, K., Rahman, S.A., Forrester, D., Bao, A., Lieu, M. and **Li, S.** (2020) Histone H4 LRS mutations can attenuate UV mutagenesis without affecting PCNA ubiquitination or sumoylation. *DNA Repair* **95**, 102959.
6. Ko, T. Sharma, R. and **Li, S.** (2020) Genome-wide screening identifies novel genes implicated in cellular sensitivity to BRAF^{V600E} expression. *Oncogene* **39**, 723-738.
7. Ko, T. and **Li, S.** (2019) Genome-wide screening identifies novel genes and biological processes implicated in cisplatin resistance. *FASEB J.* **33**, 7143-7154.

8. Selvam, K., Rahman, S. A. and **Li, S.** (2019) Histone H4 H75E mutation attenuates global genomic and Rad26-independent transcription-coupled nucleotide excision repair. *Nucleic Acids Res.* **47**, 7392-7401.
9. Selvam, K., Ding, B., Sharma, R. and **Li, S.** (2019) Evidence that moderate eviction of Spt5 and promotion of error-free transcriptional bypass by Rad26 facilitates transcription coupled repair. *J. Mol. Biol.* **431**, 1322-1338.
10. Li, W. and **Li, S.** (2017) Facilitators and repressors of transcription coupled DNA repair in *Saccharomyces cerevisiae*. *Photochemistry and Photobiology* **93**, 259-267.
11. Li, W., Selvam, K., Rahman, S. A. and **Li, S.** (2016) Sen1, the yeast homolog of human senataxin, plays a more direct role than Rad26 in transcription coupled DNA repair. *Nucleic Acids Res.* **44**, 6794-6802.
12. **Li, S.** (2015). Transcription coupled nucleotide excision repair in the yeast *Saccharomyces cerevisiae*: the ambiguous role of Rad26. *DNA Repair* **36**, 43-48.
13. Li, M., Ko, T. and **Li, S.** (2015). High-resolution digital mapping of *N*-methylpurines in human cells reveals modulation of their induction and repair by nearest-neighbor nucleotides. *J. Biol. Chem.* **290**, 23148–23161.
14. Li, W., Selvam, K., Ko, T. and **Li, S.** (2014). Transcription bypass of DNA lesions enhances cell survival but attenuates transcription coupled DNA repair. *Nucleic Acids Res.* **42**, 13242-13253.
15. Li, W., Giles, C. and **Li, S.** (2014). Insights into how Spt5 functions in transcription elongation and suppressing transcription coupled DNA repair. *Nucleic Acids Res.* **42**, 7069-7083.
16. **Li, S.** (2012). Implication of posttranslational histone modifications in nucleotide excision repair. *Int J Mol Sci.* **13**, 12461-12486.
17. Tatum, D. and **Li, S.** (2011). Evidence that the histone methyltransferase Dot1 mediates global genomic repair by methylating histone H3 on lysine 79. *J. Biol. Chem.* **286**, 17530-17535.
18. Tatum, D., Li, W., Placer, M. and **Li, S.** (2011). Diverse roles of RNA polymerase II-associated factor 1 complex in different subpathways of nucleotide excision repair. *J. Biol. Chem.* **286**, 30304-30313.
19. **Li, S.** (2011) *N*-methylpurines are heterogeneously repaired in human mitochondria but not evidently repaired in yeast mitochondria. *DNA Repair* **10**, 65-72.
20. Ding, B., LeJeune, D. and **Li, S.** (2010). The C-terminal repeat domain of Spt5 plays an important role in suppression of Rad26-independent transcription coupled repair. *J. Biol. Chem.* **285**, 5317-5326.
21. LeJeune, D., Chen, X., Ruggiero, C., Berryhill, S., Ding, B. and **Li, S.** (2009). Yeast Elc1 plays an important role in global genomic repair but not in transcription coupled repair. *DNA Repair* **8**, 40-50.
22. Chen, X., Ding, B., LeJeune, D., Ruggiero, C. and **Li, S.** (2009). Rpb1 sumoylation in response to UV radiation or transcriptional impairment in yeast. *PLoS ONE.* **4**, e5267.
23. **Li, S.**, Ding, B., LeJeune, D., Ruggiero, C., Chen, X. and Smerdon, M.J. (2007). The roles of Rad16 and Rad26 in repairing repressed and actively transcribed genes in yeast. *DNA Repair.* **6**, 1596-1606.
24. Chen, X., Ruggiero, C. and **Li, S.** (2007). Yeast Rpb9 plays an important role in ubiquitylation and degradation of Rpb1 in response to UV induced DNA damage. *Mol. Cell. Biol.* **27**, 4617-4625.

25. Ding, B., Ruggiero, C., Chen, X. and **Li, S.** (2007). Tfb5 is partially dispensable for Rad26 mediated transcription coupled nucleotide excision repair in yeast. *DNA Repair*. **6**, 1661-1669.
26. **Li, S.**, Chen, X., Ruggiero, C., Ding, B. and Smerdon, M. J. (2006). Modulation of Rad26- and Rpb9-mediated DNA repair by different promoter elements. *J. Biol. Chem.* **281**, 36643-36651.
27. **Li, S.**, Ding, B., Chen, R., Ruggiero, C. and Chen, X. (2006). Evidence that the transcription elongation function of Rpb9 is involved in transcription-coupled DNA repair in *Saccharomyces cerevisiae*. *Mol. Cell. Biol.* **26**, 9430-9441.
28. **Li, S.** and Smerdon, M. J. (2004) Dissecting transcription-coupled and global genomic repair in the chromatin of yeast GAL1-10 genes. *J. Biol. Chem.* **279**, 14418-14426.
29. **Li, S.** and Smerdon, M. J. (2002) Rpb4 and Rpb9 mediate subpathways of transcriptioncoupled DNA repair in *Saccharomyces cerevisiae*. *EMBO J.* **21**, 5921-5929.
30. **Li, S.** and Smerdon, M. J. (2002) Nucleosome structure and repair of N-methylpurines in the GAL1-10 genes of *Saccharomyces cerevisiae*. *J. Biol. Chem.* **277**, 44651-44659.
31. **Li, S.**, Waters, R. and Smerdon, M. J. (2000) Low and high resolution mapping of DNA damage at specific sites. *Methods* **22**, 170-179.
32. **Li, S.** and Smerdon, M. J. (1999) Base Excision repair of N-methylpurines in a yeast minichromosome: effect of transcription, DNA sequence and nucleosome positioning. *J. Biol. Chem.* **274**, 12201-12204.
33. **Li, S.**, Livingstone-Zatchej, M., Gupta, R., Meijer, M., Thoma, F. and Smerdon, M. J. (1999) Nucleotide excision repair in a constitutive and inducible gene of a yeast minichromosome in intact cells. *Nucleic Acids Res.* **27**, 3610-3620.
34. **Li, S.** and Waters, R. (1998) Escherichia coli strains lacking protein HU are UV sensitive due to a role for HU in homologous recombination. *J. Bacteriol.* **180**, 3750-3756.
35. **Li, S.** and Waters, R. (1997) Induction and repair of cyclobutane pyrimidine dimers in the *Escherichia coli* tRNA gene *tyrT*: Fis protein affects dimer induction in the control region and suppresses preferential repair in the coding region of the transcribed strand, except in a short region near the transcription start site. *J. Mol. Biol.* **271**, 31-46.
36. **Li, S.** and Thacker, J. (1997) High-efficiency stable DNA transfection using cationic detergent and glycerol. *Biochem. Biophys. Res. Commun.* **231**, 531-534.
37. Teng, Y., **Li, S.**, Waters, R. and Reed, S. H. (1997) Excision repair at the level of nucleotide in the *Saccharomyces cerevisiae* MFA2 gene: the mapping of where enhanced repair in the transcribed strand begins or ends and the identification of only a partial Rad16 requisite for repairing upstream control sequences. *J. Mol. Biol.* **267**, 324-337.
38. **Li, S.** and Waters, R. (1996) Nucleotide level detection of cyclobutane pyrimidine dimers using oligonucleotides and magnetic beads to facilitate labelling of DNA fragments incised at the dimers and chemical sequencing reference ladders. *Carcinogenesis* **17**, 1549-1552.
39. **Li, S.** and Zhang, Y. (1991) Chromosome variations of the calli and regenerated plants in common wheat. *Acta Genetica Sinica* (changed the name to Journal of Genetics and Genomics). **18**, 332-338.
40. **Li, S.** and Zhang, Y. (1990) Sister chromatid exchanges in wheat callus cells. *Acta Genetica Sinica* (changed the name to Journal of Genetics and Genomics). **17**, 365-368.
41. **Li, S.** and Zhang, Y. (1990) Studies on tissue culture of wheat immature inflorescences and the differentiation of calli. *Plant Science Journal*. **8**, 349-354.

Book chapters

1. Tatum, D. and **Li, S.** (2011). Nucleotide excision repair in *S. cerevisiae*. In: DNA Repair - on the Pathways to Fixing DNA Damage and Errors (Storici, F. Ed). InTech. pp. 97-122.
2. **Li, S.** (2009). Chapter 9: Animal and Yeast Models of Cockayne Syndrome. In: Molecular Mechanisms of Cockayne Syndrome (Ahmad S.I. Ed.). Landes Bioscience, Austin, Texas. pp97-107.

Meeting presentations (only those after joining the LSU faculty are listed)

1. Gong, W. and Li, S. Repression of Transcription Coupled Nucleotide Excision Repair by Rpb7. Oral presentation. EMGS WOW EVENT: DNA REPAIR SPECIAL INTEREST GROUP. May 17th, 2023
2. Gong, W. and Li, S. Rpb7 Represses Transcription Coupled Nucleotide Excision Repair. Midwest DNA Repair Symposium, Iowa City, IA. May 5 - 7, 2023.
3. Ko, T. and **Li, S.** Genome-wide CRISPR/Cas9 knockout screening identifies novel genes and biological processes implicated in cisplatin resistance. Oral presentation. 7th International Conference on Biomedical and Environmental Sciences and Technologies (icBEST-2018) and 9th International Symposium on DNA Damage Response & Human Disease (isDDRHD-2018). Shenzhen, China, November 1-4, 2018.
4. Selvam, K. and **Li, S.** Promotion of error-free transcriptional bypass of DNA lesions is essential for Rad26 to facilitate transcription coupled DNA repair. Environmental Mutagenesis & Genomics Society 49th Annual Meeting. San Antonio, Texas, September 22-26, 2018.
5. Selvam, K. and **Li, S.** Overactive Rad26 represses transcription coupled DNA repair in *Saccharomyces cerevisiae*. Environmental Mutagenesis & Genomics Society 48th Annual Meeting. Raleigh, North Carolina, September 9-13, 2017.
6. **Li, S.** Transcription coupled DNA repair in yeast: facilitators and repressors. Oral presentation. Smerdon/Reeves Symposium. Pullman, Washington, May 21-24, 2015.
7. Li, M., Ko, T. and **Li, S.** High-resolution Digital Mapping of N-Methylpurines in Human Cells Reveals Modulation of Their Induction and Repair by Nearest-neighbor Nucleotides. Environmental Mutagenesis and Genomics Society 46th Annual Meeting. New Orleans, September 26-30, 2015.
8. Selvam, K., Rahman, S.A. and **Li, S.** Identification and Characterization of Mutants of Histone H4 Residues Surrounding H3K79 in DNA Repair. New Orleans, September 26-30, 2015.
9. Li, W. and **Li, S.** The roles of Spt5 in transcription elongation and transcription coupled DNA repair Transcriptional Regulation Chromatin and RNA Polymerase II. Snowbird Ski and Summer Resort, Snowbird, UT, October 2-6, 2014.
10. Li, W., Giles, C. and **Li, S.** How Spt5 promotes transcription elongation and represses transcription coupled DNA repair. TM's 3rd World Genetics & Genomics Online Conference. May 20-22, 2014
11. **Li, S.** The role of histone H3 lysine 79 methylation in global genomic nucleotide excision repair. Oral presentation. BIT's 3rd Annual World Congress of Molecular & Cellular Biology. June 14-16, 2013. Suzhou, China.
12. Tatum, D. and **Li, S.** The role of histone H3 lysine 79 in nucleotide excision repair. Oral presentation. 36th Meeting of the American Society for Photobiology. June 23-27, 2012. Montreal, Canada
13. Chen, X., Ding, B., LeJeune, D., Ruggiero, C. and **Li, S.** Sumoylation of Rpb1 restrains activation of DNA damage checkpoint by RNA polymerase II. DNA Repair and

Mutagenesis: From Molecular Structure to Human Disease. May 30-June 5, 2009. Whistler, Canada.

14. Ding, B., LeJeune, D and **Li, S.** Phosphorylation of Yeast Spt5 C-terminal Repeat by Bur1 Kinase Is Involved in the Suppression of Transcription Coupled DNA Repair. Environmental Mutagen Society 40th Annual Meeting. October 24-28, 2009. St. Louis, Missouri.
15. LeJeune, D., Chen X., Ruggiero, C., Berryhill, S., Ding, B. and **Li, S.** Yeast Elc1 plays an important role in global genomic repair but not in transcription coupled repair. ASBMB (American Society for Biochemistry and Molecular Biology) annual meeting. April 18-22, 2009, New Orleans.
16. Ding, B., Chen X., Ruggiero, C., LeJeune, D. and **Li, S.** Spt4 and Spt5 cooperatively suppress transcription coupled DNA repair through binding to RNA polymerase II in the absence of Rad26. ASBMB (American Society for Biochemistry and Molecular Biology) annual meeting. April 18-22, 2009, New Orleans.
17. **Li, S.**, Chen X., Ding, B. and LeJeune, D. Rpb1 sumoylation in response to UV radiation or transcription impairment in yeast. ASBMB (American Society for Biochemistry and Molecular Biology) annual meeting. April 18-22, 2009, New Orleans.
18. LeJeune, D., Ding, B. and **Li, S.** PAF and Spt4 act in the same pathway to suppress transcription coupled repair in yeast. DNA Repair and Mutagenesis: From Molecular Structure to Human Disease. May 30-June 5, 2009. Whistler, Canada.
19. Ding, B. and **Li, S.** Evidence that Spt4 and Spt5 cooperatively suppress transcription coupled DNA repair in the absence of Rad26 in yeast. Gordon Conference on Mammalian DNA Repair. Ventura, California, Feb. 8-13, 2009.
20. **Li, S.**, Ding, B., Chen, R., Ruggiero, C. and Chen, X. Rpb9 and transcription coupled DNA repair. Gordon Conference on Mammalian DNA Repair. Ventura, California, Feb. 4-9, 2007.
21. **Li, S.**, Ding, B., Chen, R., Ruggiero, C. and Chen X. Transcription elongation function of Rpb9 is involved in transcription coupled DNA repair in yeast. Transcriptional Regulation by Chromatin and RNA Polymerase II. Nov. 2-5, 2006, Kiawah island, South Carolina.

Research Support Current:

LSU Collaborative Cancer Research Initiative (CCRI) LSU-2022-CCRI-6

Li, Shisheng and DeBenedetti, Arrigo (PIs)

Identification of gene targets for effective cisplatin-based treatment of prostate cancer.

11/1/2022-10/31/2023 Amount:

\$200,000

NSF, MCB-2102072

Li, Shisheng (PI)

Regulation of transcription coupled DNA repair

07/01/2021-06/30/2024

Total cost: \$685,032

NIH/NIEHS, R03ES033789

Li, Shisheng (PI)

Implication of histone H4 LRS mutations in translesion synthesis and UV mutagenesis

12/01/2021-11/30/2023

Total cost: \$142,432

NIH/R21AR076583

(Co-I) (PI, Shaomian Yao)

Shisheng Li

Molecular basis for the loss of differentiation capability in human bone marrow stem cells during expansion. 8/1/2020-7/31/2022 Total cost: \$ 346,038 **Completed:**

NSF, MCB-1615550 Li, Shisheng (PI)

The role of Sen1 in transcription coupled DNA repair (TCR)

07/01/2016-05/31/2021

Total cost: \$550,000

NSF, MCB-1244019 Li, Shisheng (PI)

Dot1 and histone H3 K79 methylation in nucleotide excision repair

02/01/2013 – 01/31/2017

Total cost: \$642,444

NIH/NCI, R15CA164862 Li, Shisheng (PI)

DNA damage and repair in human melanocytes: relation to melanomagenesis mutations.

2/17/2012 – 1/31/2015

Total cost: \$457,963

NIH/NIEHS, R03ES020557 Li, Shisheng (PI)

High-throughput high-resolution mapping of DNA damage and repair in human cells.

07/20/2012 – 06/30/2014

Total cost: \$148,000

NSF, MCB-0745229 Li, Shisheng (PI)

The role of RNA polymerase II in transcription coupled nucleotide excision repair

7/1/2008 – 6/30/2011

Total cost: \$450,000

NSF, MCB-0939219 Li, Shisheng (PI)

Research Experience for Undergraduates

8/1/2009 – 6/30/2010

Total cost: \$12,000

LSU SVM Competitive Organized Research Program, Li, Shisheng (PI)

Characterization of UV-induced Rpb1 sumoylation 8/1/2009 – 6/30/2010 Total

cost: \$10,000.

LSU SVM Competitive Organized Research Program, Li, Shisheng (PI)

Facilitation or suppression of transcription coupled DNA repair: identification of critical amino acid residues in the essential RNA polymerase II subunits

8/1/2007 – 6/30/2008 Total

cost: \$10,000

NIH/NIEHS, R01 ES012718 Li, Shisheng (PI)

Transcription coupled DNA repair in *S. cerevisiae*

8/1/2004 - 5/31/2008

Total cost: \$837,900

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