

# Curriculum Vitae and Bibliography

## Xing Li, PhD

### Personal Information

Work Address: Mayo Clinic  
200 1st St SW  
Rochester, MN 55905  
507-538-1682

Email Address: Li.Xing@mayo.edu

### Present Academic Rank and Position

**Assistant Professor of Biomedical Informatics** - Mayo Clinic College of Medicine 10/2014 - Present

**Associate Consultant I-Research** - Division of Biomedical Statistics and Informatics, Department of Health Sciences Research, Mayo Clinic, Rochester, Minnesota 01/2015 - Present

### Education

Shandong University, Jinan, China - BS, Microbiology 07/1996

Peking University, Beijing, China - MS, Molecular Biology & Biochemistry 07/2001

University of Michigan, Ann Arbor, Michigan - PhD, Bioinformatics 12/2008

#### Additional Education

Statistical Learning 04/2014  
An online course offered by Stanford (Profs. Trevor Hastie and Rob Tibshirani) -- statistical learning and machine learning  
Stanford University

Certificate in Computational Genomics 07/2013  
University of Illinois at Urbana-Champaign (UIUC)  
Urbana-Champaign, Illinois

### Certifications

#### Mayo Clinic Quality Academy

Mayo Clinic Quality Fellow: Bronze Level Certification 12/2011

### Honors/Awards

**Excellent Undergraduate Fellowship** - Shandong University, Jinan, China 1992 - 1993

**National Fellowship** - Peking University, Beijing, China 1998 - 2001

**Horace H. Rackham Fellowship** - Rackham Graduate School, The University of Michigan Ann Arbor 2001 - 2002

**Bioinformatics Program Fellowship** - Medical School, The University of Michigan Ann Arbor 2002 - 2003

**Best Presentation Award (DDW)** - American Gastroenterological Association 2005

**Scholar-In-Training Award (SABCS)** - American Association for Cancer Research 2009

**Travel Fellowship Award (ISMB)** - International Society of Computational Biology 2010

### Previous Professional Positions and Major Appointments

<b>Research Scientist</b> - Shandong Jintai Biotechnology Co., Jinan, China	08/1996 - 07/1998
<b>Research Fellow</b> - Bioinformatics PhD Program, The University of Michigan Ann Arbor, Ann Arbor, Michigan	09/2003 - 12/2008
<b>Postdoctoral Research Fellow</b> - Bioinformatics PhD Program, The University of Michigan Ann Arbor, Ann Arbor, Michigan	01/2009
<b>Postdoctoral Fellow</b> - Biomedical Informatics Department, Windber Research Institute, Windber, Pennsylvania	02/2009 - 05/2010
<b>Bioinformatics Scientist</b> - Biomedical Informatics Department, Windber Research Institute, Windber, Pennsylvania	05/2010 - 01/2011
<b>Research Associate</b> - Division of Biomedical Statistics and Informatics, Department of Health Sciences Research, Mayo Clinic, Rochester, Minnesota	01/2011 - 01/2015

## Professional & Community Memberships, Societies and Services

### Professional Memberships & Services

American Association for Cancer Research Member	2009 - Present
International Society for Computational Biology Member	2009 - Present
American Heart Association (AHA), Council on Functional Genomics and Translational Biology Active Member	2012 - Present
American Statistical Association Professional Member	2015 - Present

## Journal Responsibilities

### Journal Editorial Responsibilities

Toxicology and Forensic Medicine Editor	2015 - Present
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### Journal Other Responsibilities

Genomics Peer Reviewer	2009 - Present
Journal of Genetics and Genomics Peer Reviewer	2009 - Present
Current Genomics Peer Reviewer	2009 - Present
BioMed Research International Peer Reviewer	2012 - Present
PLoS ONE Peer Reviewer	2013 - Present
Annual Research & Review in Biology Peer Reviewer	2013 - Present
Physiological Genomics Peer Reviewer	2013 - Present
BMC Bioinformatics Reviewer	2014 - Present

British Journal of Pharmaceutical Research	
Peer Reviewer	2014 - Present
Journal of Advances in Medical and Pharmaceutical Sciences	
Peer Reviewer	2014 - Present
British Journal of Mathematics and Computer Science	
Peer Reviewer	2014 - Present
British Journal of Medicine and Medical Research	
Peer Reviewer	2014 - Present
Stem Cell Review and Reports	
Peer Reviewer	2014 - Present
Journal of Cancer and Tumor International	
Peer Reviewer	2014 - Present
European Journal of Medicinal Plants	
Peer Reviewer	2015 - Present
International Journal of Biochemistry	
Peer Reviewer	2015 - Present
British Microbiology Research Journal	
Peer Reviewer	2015 - Present
Cardiology and Angiology: An International Journal	
Peer Reviewer	2015 - Present
International Journal of TROPICAL DISEASE & Health	
Reviewer	2015 - Present
British Journal of Applied Science & Technology	
Peer Reviewer	2015 - Present
FEBS Open Bio	
Peer Reviewer	2015 - Present
International Journal of Medical and Pharmaceutical Case Reports	
Peer Reviewer	2015 - Present
Journal of Basic and Applied Research international	
Peer Reviewer	2015 - Present
Journal of Biology and Nature	
Peer Reviewer	2015 - Present
Journal of Disease and Global Health	
Peer Reviewer	2015 - Present
Journal of Scientific Research and Reports	
Peer Reviewer	2015 - Present
Computational and Mathematical Methods in Medicine	
Peer Reviewer	2015 - Present
International Journal of Biochemistry Research & Review	
Peer Reviewer	2015 - Present
International Neuropsychiatric Disease Journal	
Peer Reviewer	2015 - Present

Journal of International Research in Medical and Pharmaceutical Sciences Peer Reviewer	2015 - Present
Asian Journal of Mathematics and Computer Research Peer Reviewer	2015 - Present
Journal of Applied Physical Science International Peer Reviewer	2015 - Present
Journal of Applied Chemical Science International Peer Reviewer	2015 - Present

## **Presentations Extramural**

### **National/International**

#### **Invited**

Microarray and NGS Data Analysis: Case Studies in Breast Cancer Regeneron Pharmaceuticals, Inc. Tarrytown, New York	10/2010
Microarray Data Analysis Using Peripheral Blood Samples Suggests Differential Enrichment of Signaling Pathways between Breast Cancer Patients and Normal Subjects The 10th CBCP Annual Conference, Walter Reed Army Medical Center Washington, District of Columbia	11/2009
Deciphering the genome expression profiles and regulations in mouse gut with an integrated strategy of microarray and bioinformatics St. Jude Children's Research Hospital Memphis, Tennessee	05/2008

#### **Oral**

Secreto FJ, Li X, Bruinsma E, Hawse G, Perales-Clemente E, Rasmussen B, Miller J, Nelson T. Quantifying the cellular response to DNA damage as a means of assessing human IPS clone quality World Stem Cell Summit (WSCS) 2013 San Diego, California	12/2013
Hartjes K, Li X, Martinez-Fernandez A, Terzic A, Nelson T. Limited gene expression profile in induced pluripotent stem cells predicts cardiogenic outcome across diverse somatic origins AHA Scientific Sessions 2013 Dallas, Texas	11/2013
Hrstka S, Li X, Theis J, Nelson TJ. Imbalances in Notch Signaling Impair Cardiogenesis in Patient-specific Induced Pluripotent Stem Cells Created to Model Hypoplastic Left Heart Syndrome. Cell Symposia 2013: Using Stem Cells to Model and Treat Human Disease. Los Angeles, California	11/2013
Theis JL, Li X, Evans JM, Middha S, O'Leary PW, Nelson TJ, Olson TM. Whole Genome Sequencing in a Multiplex Family Identifies a Novel NOTCH1 Mutation and Implicates a Polygenic Basis for Hypoplastic Left Heart Syndrome The Individualized Medicine Conference 2013 ROCHESTER, Minnesota	09/2013

- Li X, Martinez-Fernandez A, Kocher JP, Nelson TJ. Rcircle: an R package for integration and visualization of “-omics” data  
The Individualized Medicine Conference 2013  
ROCHESTER, Minnesota 09/2013
- Li X, Martinez-Fernandez A, Thesis J, Terzic A, Olson TM, Nelson TJ. Data integration and prioritization from patient-specific iPSC-derived RNA-seq and whole genome sequencing to identify candidate pathways in Hypoplastic Left Heart Syndrome  
The Individualized Medicine Conference 2013  
ROCHESTER, Minnesota 09/2013
- Perales-Clemente E, Folmes C, Martinez-Fernandez A, Li X, Hristka S, McDonald A, Oglesbee D, Perez-Terzic C, Terzic A, Nelson T. Patient-specific induced pluripotent stem cells purge mtDNA heteroplasmy while maintaining cardiogenic capacity.  
NHLBI Mitochondrial Biology Symposium Mitochondrial Genetics In Health And Diseases (NIH)  
Bethesda, Maryland 05/2013
- Martinez-Fernandez A, Li X, Hartjes KA, Terzic A and Nelson TJ. Cardiac development roadmap as a platform to inform cardiovascular applications.  
10th Stem Cell Summit  
Boston, Massachusetts 04/2013
- Beraldi R, Li X, Martinez-Fernandez A, Reyes S, Secreto F, Terzic A, Olson TM, Nelson TJ. RBM20 regulates cardiogenesis through RNA processing machinery of cardiac genes during early stem cell differentiation  
Conference of Cardiac Remodeling, Signaling, Matrix and Heart Function  
Snowbird, Utah 04/2013
- Li X, Martinez-Fernandez A, Terzic A, Nelson TJ. Dynamic Transcriptome Atlas for Natural Cardiogenesis and Congenital Heart Defects.  
Conference of Cardiac Remodeling, Signaling, Matrix and Heart Function  
Snowbird, Utah 04/2013
- Li X, Beraldi R, Martinez-Fernandez A, Olson TM, Nelson TJ. Mapping mechanism of human dilated cardiomyopathy by profiling transcriptome data of natural cardiogenesis.  
The 12th Annual Bioinformatics Summit  
Buchanan, Tennessee 03/2013
- Martinez-Fernandez A, Li X, Hartjes KA, Terzic A and Nelson TJ. Cardiac developmental roadmap predicts cardiogenic outcome of pluripotent stem cells.  
AHA, Los Angeles, USA. November 3rd-7th, 2012. FGTB- Young investigator competition winner.  
Los Angeles, California 11/2012
- Poster**
- Time course transcriptome data analysis for in vitro modeling of dilated cardiomyopathy using patient-derived induced pluripotent stem cells  
14TH ANNUAL BIOINFORMATICS SUMMIT 2015  
Buchanan, Tennessee 03/2015

- Disease-related genes and pathways via integrating patient-specific iPSC-derived RNA-seq and whole-genome sequencing in hypoplastic left heart syndrome. 10/2014  
Individualizing medicine (IM) 2014  
Rochester, Minnesota
- Rcircle: an R package for integrating and visualizing multiple “-omics” data for knowledge discovery. 07/2014  
22nd annual International Conference on Intelligent Systems for Molecular Biology (ISMB 2014)  
Boston, Massachusetts
- Rcircle: an R package for Integrating and Visualizing multiple “-omics” data for Knowledge Discovery 06/2014 - 07/2014  
The R User Conference 2014 (UseR!2014)  
Los Angeles, California
- Prioritizing disease-related genes and pathways by integrating patient-specific iPSC-derived RNA-seq and whole genome sequencing in hypoplastic left heart syndrome. 04/2014  
The 13th Bioinformatics Summit 2014  
Cadiz, Kentucky
- Li X, Martinez-Fernandez A, Nelson T. Prioritizing disrupted pathways inherent to congenital heart diseases through integration of cardiogenic Transcriptome and disease-centric Interactome. 09/2012  
36th Annual Midwest Pediatric Cardiology Society Conference, Milwaukee, WI USA. Sept 2012  
Milwaukee, Wisconsin
- Bazil J, Qi F, Stamm K, Tomita-Mitchell A, Li X, Nelson T and Beard D. Reverse Engineering Gene Regulatory Networks Using a Parallel Algorithm. 09/2012  
International Study Group for Systems Biology (ISGSB 2012). Ameland, The Netherlands Sep 25-28, 2012  
Ameland, Netherlands
- Li X, Martinez-Fernandez A, Nelson T. Prioritizing disrupted pathways inherent to congenital heart diseases through integration of cardiogenic Transcriptome and disease-centric Interactome. 07/2012  
ISMB 2012, Long Beach, CA, USA. July 15-17, 2012  
Long Beach, California
- Perales-Clemente E, Martinez-Fernandez A, Folmes. C, Li X, Hrstka S, McDonald A, Oglesbee D, Perez-Terzic C, Terzic A and Nelson TJ. Disease-causing mitochondrial heteroplasmy segregates within iPS cells generated from MELAS patient-specific reprogramming 07/2012  
The 10 annual meeting of International Society for Stem Cell Research (ISSCR) in Yokohama, Japan June 13-16, 2012  
Yokohama, Japan
- Martinez-Fernandez A, Li X, Hartjes KA, Kachelski CD, Terzic A and Nelson TJ. Stage specific progenitors for optimized engraftment in post-ischemic hearts. 06/2012  
9th International symposium on Stem cell therapy and cardiovascular innovations. Madrid, Spain. June 7th-8th, 2012. Best Poster Award.  
Madrid, Spain

## Research Interests

My research interests focus on bioinformatic analysis and statistical data mining on large-scale genome-wide data, including microarray, SNP arrays, and Next Generation Sequencing (NGS) data (whole genome sequence, RNA-seq, Exome-seq, and ChIP-seq) in the fields of Stem Cell and iPSCs, Hypoplastic Left Heart Syndrome (HLHS) and Cardiovascular diseases, breast cancer, gastrointestinal cancer and development, organogenesis and human genetics. I am also interested in developing tools and software for (large) data integration and visualization with programming in R, Perl, Java, C++, etc. I have developed several R packages, such as Rcircle and 3DPCA, etc.

## Research Grants Awarded

### Completed Grants

#### Mayo Clinic

Co-Investigator	Prediction and Optimization of Cardiogenicity in Induced Pluripotent Stem Cells for Regeneratvie Applications in: Prediction and Optimization of Cardiogenicity in Induced Pluripotent Stem Cells for Regenerative Applications. Funded by CRM - Center for Regenerative Medicine.	07/2013 - 12/2013 \$50,000.00
Co-Investigator	Developmentally-guided optimization of cell engraftment for regenerative treatment of myocardial infarction. Funded by CRM - Center for Regenerative Medicine. PI: Dr. Almudena Martinez-Fernandez	06/2012 – 12/2012 \$46,368.00
Co-Investigator	Pharmacogenomics of Doxorubicin-Induced Cardiotoxicity. Funded by CRM - Center for Individualized Medicine. PI: Dr. Tim Nelson	04/2014 – 12/2015 \$50,000.00
Co-Investigator	2015 Transformational Centers Collaborative Award - Clinical Diagnostic Platform using Patient-Specific Cardiac Progenitors to Predict Doxorubicin-Induced Cardiotoxicity. Funded by CRM - Center for Regenerative Medicine. PI: Dr. Tim Nelson	04/2014 – 12/2015 \$50,000.00
Lead Bioinformatician	Genome sequencing analysis and data integration, Program of Hypoplastic Left Heart Syndrome (Phase I). Funded by Todd and Karen Wanek Foundation PIs: Drs. Tim Nelson (HLHS Program Director), Tim Olson, Pat O'Leary, Andre Terzic	10/2010 – 9/2015 Multi-millions \$
Bioinformatician	Cardiac regenerative potency of umbilical cord blood (UCB) stem cells through activation of cardiac progenitors for congenital heart disease repair PI: Dr. Susana Centero Peral	July 1, 2015 – July 1, 2017 \$300,000.00
Lead Bioinformatician	Genome sequencing analysis and data integration, Program of Hypoplastic Left Heart Syndrome (Phase II). Funded by Todd and Karen Wanek Foundation PIs: Drs. Tim Nelson (HLHS Program Director), Tim Olson, Pat O'Leary, Andre Terzic	10/2015– 9/2018 Multi-millions \$

### Other

Development the data analysis pipelines for whole genome sequencing, RNAseq, and bisulfite sequencing (whole genome methylation) in the division of BSI.

## Bibliography

### Peer-reviewed Articles

1. Campbell KA, **Li X**, Biendarra SM, Terzic A, Nelson TJ. Nos3 iPSCs model concordant signatures of in utero cardiac pathogenesis. *J Mol Cell Cardiol.* 2015 Sep 04; 87:228-36. PMID:26344701. DOI:10.1016/j.yjmcc.2015.08.021.
2. Wyles SP, Faustino RS, **Li X**, Terzic A, Nelson TJ. Systems-based technologies in profiling the stem cell molecular framework for cardioregenerative medicine. *Stem Cell Reviews And Reports.* 2015 Jun; 11(3):501-10.
3. Cantero Peral S, Burkhart HM, Oommen S, Yamada S, Nyberg SL, **Li X**, O'Leary PW, Terzic A, Cannon BC, Nelson TJ, Wanek Program Porcine Pipeline Group, Wanek Program Porcine Pipeline Group. Safety and feasibility for pediatric cardiac regeneration using epicardial delivery of autologous umbilical cord blood-derived mononuclear cells established in a porcine model system. *Stem Cells Transl Med.* 2015 Feb; 4(2):195-206. Epub 2015 Jan 05. PMID:25561683. PMCID:4303361. DOI:10.5966/sctm.2014-0195.
4. **Li X**, Nair A, Wang S, Wang L. Quality control of RNA-seq experiments. *Methods Mol Biol.* 2015; 1269:137-46. PMID:25577376. DOI:10.1007/978-1-4939-2291-8\_8.
5. Bi Y, Mukhopadhyay D, Drinane M, Ji B, **Li X**, Cao S, Shah VH. Endocytosis of collagen by hepatic stellate cells regulates extracellular matrix dynamics. *Am J Physiol Cell Physiol.* 2014 Oct 1; 307(7):C622-33. Epub 2014 Jul 30. PMID:25080486. PMCID:4187054. DOI:10.1152/ajpcell.00086.2014.
6. Wyles SP, Faustino RS, **Li X**, Terzic A, Nelson TJ. Systems-Based Technologies in Profiling the Stem Cell Molecular Framework for Cardioregenerative Medicine. *Stem Cell Rev.* 2014 Sep 14. PMID:25218144. PMCID:4362919. DOI:10.1007/s12015-014-9557-5.
7. Suresh R, **Li X**, Chiriac A, Goel K, Terzic A, Perez-Terzic C, Nelson TJ. Transcriptome from circulating cells suggests dysregulated pathways associated with long-term recurrent events following first-time myocardial infarction. *J Mol Cell Cardiol.* 2014 Sep; 74:13-21. Epub 2014 May 04. PMID:24801707. PMCID:4115027. DOI:10.1016/j.yjmcc.2014.04.017.
8. Hartjes KA, **Li X**, Martinez-Fernandez A, Roemmich AJ, Larsen BT, Terzic A, Nelson TJ. Selection via pluripotency-related transcriptional screen minimizes the influence of somatic origin on iPSC differentiation propensity. *Stem Cells.* 2014 Sep; 32(9):2350-9. PMID:24802033. PMCID:4167634. DOI:10.1002/stem.1734.
9. Beraldi R, **Li X**, Martinez Fernandez A, Reyes S, Secreto F, Terzic A, Olson TM, Nelson TJ. Rbm20-deficient cardiogenesis reveals early disruption of RNA processing and sarcomere remodeling establishing a developmental etiology for dilated cardiomyopathy. *Hum Mol Genet.* 2014 Jul 15; 23(14):3779-91. Epub 2014 Feb 28. PMID:24584570. PMCID:4065152. DOI:10.1093/hmg/ddu091.
10. **Li X**, Martinez-Fernandez A, Hartjes KA, Kocher JP, Olson TM, Terzic A, Nelson TJ. Transcriptional atlas of cardiogenesis maps congenital heart disease interactome. *Physiol Genomics.* 2014 Jul 1; 46(13):482-95. Epub 2014 May 06. PMID:24803680. PMCID:4080280. DOI:10.1152/physiolgenomics.00015.2014.
11. Bazil JN, Stamm KD, **Li X**, Thiagarajan R, Nelson TJ, Tomita-Mitchell A, Beard DA. The inferred cardiogenic gene regulatory network in the mammalian heart. *PLoS One.* 2014; 9(6):e100842. Epub 2014 Jun 27. PMID:24971943. PMCID:4074065. DOI:10.1371/journal.pone.0100842.
12. Martinez-Fernandez A, **Li X**, Hartjes KA, Terzic A, Nelson TJ. Natural cardiogenesis-based template predicts cardiogenic potential of induced pluripotent stem cell lines. *Circ Cardiovasc*



Genet. 2013 Oct; 6(5):462-71. Epub 2013 Sep 14. PMID:24036272. PMCID:3936313.  
DOI:10.1161/CIRCGENETICS.113.000045.

13. Folmes CD, Martinez-Fernandez A, Perales-Clemente E, **Li X**, McDonald A, Oglesbee D, Hrstka SC, Perez-Terzic C, Terzic A, Nelson TJ. Disease-causing mitochondrial heteroplasmy segregated within induced pluripotent stem cell clones derived from a patient with MELAS. *Stem Cells*. 2013 Jul; 31(7):1298-308. PMID:23553816. PMCID:3706526. DOI:10.1002/stem.1389.
14. Bailey K, Kirk A, Naik S, Nace R, Steele MB, Suksanpaisan L, **Li X**, Federspiel MJ, Peng KW, Kirk D, Russell SJ. Mathematical model for radial expansion and conflation of intratumoral infectious centers predicts curative oncolytic virotherapy parameters. *PLoS One*. 2013; 8(9):e73759. Epub 2013 Sep 11. PMID:24040057. PMCID:3770695. DOI:10.1371/journal.pone.0073759.
15. Sun Z, Baheti S, Middha S, Kanwar R, Zhang Y, **Li X**, Beutler AS, Klee E, Asmann YW, Thompson EA, Kocher JP. SAAP-RRBS: streamlined analysis and annotation pipeline for reduced representation bisulfite sequencing. *Bioinformatics*. 2012 Aug 15; 28(16):2180-1. Epub 2012 Jun 10. PMID:22689387. PMCID:3413387. DOI:10.1093/bioinformatics/bts337.
16. Asmann YW, Necela BM, Kalari KR, Hossain A, Baker TR, Carr JM, Davis C, Getz JE, Hostetter G, **Li X**, McLaughlin SA, Radisky DC, Schroth GP, Cunliffe HE, Perez EA, Thompson EA. Detection of redundant fusion transcripts as biomarkers or disease-specific therapeutic targets in breast cancer. *Cancer Res*. 2012 Apr 15; 72(8):1921-8. Epub 2012 Apr 10. PMID:22496456. DOI:10.1158/0008-5472.CAN-11-3142.
17. Zacharias WJ, Madison BB, Kretovich KE, Walton KD, Richards N, Udager AM, **Li X**, Gumucio DL. Hedgehog signaling controls homeostasis of adult intestinal smooth muscle. *Dev Biol*. 2011 Jul 1; 355(1):152-62. Epub 2011 Apr 28. PMID:21545794. PMCID:3118277. DOI:10.1016/j.ydbio.2011.04.025.
18. Zacharias WJ, **Li X**, Madison BB, Kretovich K, Kao JY, Merchant JL, Gumucio DL. Hedgehog is an anti-inflammatory epithelial signal for the intestinal lamina propria. *Gastroenterology*. 2010 Jun; 138(7):2368-77, 2377.e1-4. Epub 2010 Mar 03. PMID:20206176. PMCID:2883680. DOI:10.1053/j.gastro.2010.02.057.
19. **Li X**, Udager AM, Hu C, Qiao XT, Richards N, Gumucio DL. Dynamic patterning at the pylorus: formation of an epithelial intestine-stomach boundary in late fetal life. *Dev Dyn*. 2009 Dec; 238(12):3205-17. PMID:19877272. PMCID:2927962. DOI:10.1002/dvdy.22134.
20. Gudjonsson JE, Ding J, **Li X**, Nair RP, Tejasvi T, Qin ZS, Ghosh D, Aphale A, Gumucio DL, Voorhees JJ, Abecasis GR, Elder JT. Global gene expression analysis reveals evidence for decreased lipid biosynthesis and increased innate immunity in uninvolved psoriatic skin. *J Invest Dermatol*. 2009 Dec; 129(12):2795-804. Epub 2009 Jul 02. PMID:19571819. PMCID:2783967. DOI:10.1038/jid.2009.173.
21. **Li X**, Madison BB, Zacharias W, Kolterud A, States D, Gumucio DL. Deconvoluting the intestine: molecular evidence for a major role of the mesenchyme in the modulation of signaling cross talk. *Physiol Genomics*. 2007 May 11; 29(3):290-301. Epub 2007 Feb 13. PMID:17299133. DOI:10.1152/physiolgenomics.00269.2006.

## Abstracts

1. **Li X**, Martinez-Fernandez A, Theis J, Kocher JP, Terzic A, Olson T, Nelson TJ. Prioritizing disease-related genes and pathways by integrating patient-specific iPSC-derived RNA-seq and whole genome sequencing in hypoplastic left heart syndrome. *BMC Bioinformatics*. 29 September 2014; 15(Suppl 10):7.

2. \* Hartjes KA, **Li X**, Martinez-Fernandez A, Terzic A, Nelson TJ. Limited gene expression profile in induced pluripotent stem cells predicts cardiogenic outcome across diverse somatic cell origins. *Circulation*. 2013 Nov 26; 128(22).
3. **Li X**, Martinez-Fernandez A, Nelson T. Prioritizing disrupted pathways inherent to congenital heart diseases through integration of cardiogenic Transcriptome and disease-centric Interactome. 36th Annual Midwest Pediatric Cardiology Society Conference. Milwaukee WI. Poster. 2012 Sep 25-28.
4. Bazil J, Qi F, Stamm K, Tomita-Mitchell A, **Li X**, Nelson T, Beard D. Reverse Engineering Gene Regulatory Networks Using a Parallel Algorithm. International Study Group for Systems Biology (ISGSB). Ameland The Netherlands, Poster. 2012 Sep 25-28.
5. **Li X**, Martinez-Fernandez A, Nelson T. Prioritizing disrupted pathways inherent to congenital heart diseases through integration of cardiogenic Transcriptome and disease-centric Interactome. ISMB 2012, Long Beach, CA, USA. Poster. 2012 Jul 15-17.
6. Perales-Clemente E, Martinez-Fernandez A, Folmes C, **Li X**, Hrstka S, McDonald A, Oglesbee D, Perez-Terzic C, Terzic A, Nelson TJ. Disease-causing mitochondrial heteroplasmy segregates within iPS cells generated from MELAS patient-specific reprogramming. The 10 annual meeting of International Society for Stem Cell Research ISSCR in Yokohama Japan. Poster. 2012 Jun 13-16.
7. Martinez-Fernandez A, **Li X**, Hartjes KA, Kachelski CD, Terzic A, Nelson TJ. Stage specific progenitors for optimized engraftment in post-ischemic hearts. 9th International symposium on Stem cell therapy and cardiovascular innovations. Madrid Spain. Best Poster Award. 2012 Jun 7-8.
8. Rapuri PB, **Li X**, Brillhart G, Deyarmin B, Kvecher L, Hu H, Hooke JA, Shriver CD, Mural RJ. Comparison of Gene Expression Profiles of Lymph Node Positive and Lymph Node Negative ER Positive Breast Tumors in Pre- and Postmenopausal Women. *SABCS*. 2011:3-06-06.
9. Saini J, **Li X**, Kvecher L, Larson C, Croft D, Yang Y-C, Hooke JA, Shriver CD, Mural RJ, Hu H. Differential Gene Expression Analysis among Post-menopausal Caucasian Invasive Breast Cancer, Benign and Normal Subjects. *Cancer Research SABCS10-P3-01-04*. 33rd Annual CTRC-AACR San Antonio Breast Cancer Symposium *SABCS2010*. 2010 Dec 15; 70(24 Suppl 2):December 15. DOI:101158/0008-5472.
10. Bekhash A, Saini J, **Li X**, Rapuri P, Hooke JA, Kovatich AJ, Mural RJ, Shriver CD, Hu H. Ethnicity Difference of Benign Breast Diseases in Breast Cancer and Non-Cancer Patients. *Cancer Research SABCS10-P3-13-02*. 33rd Annual CTRC-AACR San Antonio Breast Cancer Symposium *SABCS2010*. 2010 Dec 15; 70(24 Suppl 2):2010 Dec. DOI:101158/0008-5472.
11. **Li X**, Rapuri P, Melley J, Brillhart G, Wu W, Kvecher L, Deyarmin B, Progar C, Hooke CJ, Shriver C, Mural R, Hu H. Comparative analysis of gene expression profiles in human breast cancer from microarray data using breast tissues and peripheral blood samples. 18th Annual International Conference on Intelligent Systems for Molecular Biology (ISMB the official conference of the International Society for Computational Biology) ISCB Travel Fellowship Award. 2010.
12. Zacharias WJ, Kao JY, **Li X**, Gumucio DL. Constitutive Inhibition of Hedgehog (HH) Signaling Causes Intestinal Villus Atrophy, Spontaneous Small Intestinal Inflammation, and Dermatitis: A Mouse Phenocopy of Human Celiac Disease? *Gastroenterology (2009 DDW Abstract Supplement)*. 2009 May; 136(5 Suppl 1):A-58.

13. Udager AM, **Li X**, Qiao X, Lim K-C, Engel JD, Gumucio DL. GATA3 and Nephrocan Are Expressed in Highly Restricted Patterns At the Developing Pylorus. *Gastroenterology*; 2009 DDW Abstract Supplement. 2009 May; 136(5 Suppl 1):A-391.
14. Saini J, Kovatich A, **Li X**, Bekash A, Hooke J, Mural RJ, Shriver CD, Hu H. Association of clinicopathologic characteristics with IHC-based breast cancer subtypes. *Cancer Research*. 2009; 69:635s.
15. **Li X**, Hu H, Shriver CD, Mural, RJ. Microarray Data Analysis Using Peripheral Blood Samples Suggests Differential Enrichment of Signaling Pathways between Breast Cancer Patients and Normal Subjects. *Cancer Research (AACR Scholar-In-Training Award)*. 2009; 69:654s.
16. Zacharias WJ, Lees CW, Kao JY, **Li X**, Satsangi J, Gumucio DL. Epithelial Hedgehog Signals Modulate the Inflammatory Response of the Intestinal Lamina Propria. *Gastroenterology*; 2008 DDW Abstract Supplement. 2008 Apr; 134(4 Suppl 1):A-255.
17. Udager AM, **Li X**, Qiao X, Gumucio DL. Transcriptional Control of Epithelial Cell Identity: Dynamic Expression of Cell-Intrinsic Factors During Formation of the Pyloric Border. *Gastroenterology*; 2008 DDW Abstract Supplement. 2008 Apr; 134(4 Suppl 1):A-389-90.
18. Zacharias WJ, Madison BB, **Li X**, Kolterud A, Gumucio DL. Sonic and Indian hedgehog regulate intestinal villus smooth muscle differentiation. *Developmental Biology*. 2006 Jul 1; 295(1):453.
19. Zacharias W, Madison B, **Li X**, Kolterud A, Gumucio D. Identification of Sonic and Indian Hedgehog Activity During Small Intestine Morphogenesis. *American Gastroenterological Association (AGA) Research Forum*. 2006 May.
20. **Li X**, Madison B, Kolterud A, Gumucio D. Identification of Hedgehog Target Genes in the Developing Mouse Intestine. *American Gastroenterological Association (AGA) Research Forum (Best Presentation Award)*. 2005 May.

### Thesis

1. **Li X**. Bioinformatic Analysis of Epithelial:Mesenchymal Crosstalk during Mouse Gut Development and Patterning. Ph.D. Thesis (The University of Michigan, Ann Arbor, MI, US). 2009.

### Forthcoming

1. Wyles S, **Li X**, Hrstka S, Reyes S, Oommen S, Edwards J, Terzic A, Olson T, Nelson T. Prioritizing molecular deficiencies in cardiogenesis from patients with RBM20 familial dilated cardiomyopathy using human induced pluripotent stem cells *Circulation*. 2015.
2. Campbell K, **Li X**, Biendarra S, Terzic A, Nelson T. Nos3<sup>-/-</sup> iPSCs model concordant signatures of in utero cardiac pathogenesis. *Circulation Cardiovascular Genetics*. 2015.
3. Faustino R, Folmes C, Arrell D, **Li X**, Evans J, Terzic A, Terzic C. NUP153 integrates discrete genome regulatory elements within stable gene deserts in pluripotent chromatin. *Stem Cells and Development*. 2015.

\* Indicates that the primary author was a mentee of this author.

