Jonghwan Kim, Ph.D.

Curriculum Vitae

Department of Molecular Biosciences Institute for Cellular and Molecular Biology Center for Systems and Synthetic Biology The University of Texas at Austin Email: jonghwankim@mail.utexas.edu

EDUCATION

The University of Texas at Austin (2000-2005). Ph.D. in Cellular and Molecular Biology Hanyang University, Seoul, Korea (1997-1999). M.S. in Biology Hanyang University, Seoul, Korea (1990-1994). B.S. in Biology

POSITION/TRAINING

- Associate Professor, (2017/9-). Department of Molecular Biosciences,
 - Institute for Cellular and Molecular Biology, Center for Systems and Synthetic Biology, The University of Texas at Austin
- Assistant Professor, CPRIT Scholar (2011-2017). Department of Molecular Biosciences, The University of Texas at Austin
- Instructor (2010-2011). Pediatrics, Children's Hospital Boston, Harvard Medical School
- Research Fellow (2009-2010). Children's Hospital Boston, Harvard Medical School
- **Research Associate** (2006-2009). Laboratory of Dr. Stuart H. Orkin, Howard Hughes Medical Institute, Division of Hematology/Oncology, Harvard Medical School
- **Doctoral Research** (2000-2005). Laboratory of Dr. Vishwanath R. Iyer, The University of Texas at Austin
- **Research Assistant** (1999-2000). Laboratory of Dr. Chul Geun Kim, Department of Biology, Hanyang University, Seoul, Korea

Mandatory Military Service (1994-1996). ROKA/EUSA, Yongsan, Seoul, Korea

HONORS AND AWARDS

- Burroughs Wellcome Fund (BWF), Preterm Birth Initiative Award, 2017-2021 Cancer Prevention Research Institute of Texas (CPRIT). Award for Recruitment of First-Time, Tenure-Track Faculty Members, 2011-2016.
- Institute for Cellular and Molecular Biology Fellow, University of Texas, 2011-2017
- The 22nd Annual Meeting of the Korean Society for Molecular and Cellular Biology (KSMCB), Travel Award, 2010.

NIH Pathway to Independence (PI) Award, 2009-2014.

International Society for Stem Cell Research (ISSCR), Travel Award, 2008.

- William S. Livingston Outstanding Employee Award Honorable Mention, UT-Austin, 2005.
- The A. P. Bradie Endowed Fellowship, UT-Austin, 2002.

TEACHING

Course taught at UT-Austin

BCH369K, Techniques of Research (independent research), Fall, 2014 BI0344, Molecular Biology. Spring, 2013-2017.

BIO383K, Current Literature in Cell and Developmental Biology. Spring, 2012. BIO397H, Dean's Scholar's Honors Thesis Program, Supervising Professor. Spring, 2012-present.

Other teaching experiences

Mentor, Harvard Stem Cell Institute (HSCI), Undergraduate Summer Internship Program. Summer, 2009.

Assistant Instructor, DNA microarray applications course, Cold Spring Harbor Laboratory (CSHL). NY, USA June 2004.

Teaching Assistant, Molecules to Organisms (BIO301), UT-Austin. Spring, 2002. Teaching Assistant, Genetics Laboratory, Hanyang University, Seoul, Korea. Spring, 1998.

Current graduate students in my laboratory

Haewon Chung Summer 2012-present. (M.S. Seoul National University)
KSEA West Gulf Coast Regional Conference, Presentation 3rd prize, 2015.
Graduate School Summer Fellowship (merit-based competition),2016.
Scientist and Engineers Early-career Development (SEED) workshop, Travel Award, 2016.
Lucy LeBlanc Summer 2016-present. (B.S. University of Nevada)
Hamilton Seed Grant, Department of Molecular Biosciences, 2017.
NSF Graduate Research Fellowship (GRFP), 2017-2020.

Graduate degrees conferred in my laboratory

Catherine Rhee, Ph.D. Summer 2012-Fall 2016. (B.S. University of Wisconsin at Madison) Catherine is currently a postdoctoral fellow at Harvard Medical School. David Scadden lab. MCDB poster award,2013.

Lois Sager Foxhall Memorial Fund Travel Award,2013.

KASBP (Korean American Society in Biotech and Pharmaceuticals) Fellowship,2014.

Graduate School Summer Fellowship (merit-based competition),2015.

Best Paper Award by the KSEA-Austin Chapter, 2015.

Scientist and Engineers Early-career Development (SEED) workshop, Travel Award, 2015. Best Poster Awards, Institute for Cellular and Molecular Biology (ICMB) Annual Retreat, 2016. Nadima Uprety, M.A. Summer 2015-Fall 2016. (B.S. University of Houston)

Postdoctoral fellows mentored in my laboratory

Bum-Kyu Lee2012-present. (Ph.D., University of Texas at Austin)MGM Research Lion Award,2012.Samyeol Baek2012-2017. (Ph.D., Seoul National University)KSEA West Gulf Coast Regional Conference, Presentation 2nd prize, 2015.Scientist and Engineers Early-career Development (SEED) workshop, Travel Award, 2015.Rom Rhome International Travel Award, 2017.Assistant Professor and PI at MDI Biological Laboratory, Starting Aug 2017.

Jiwoon Lee 2013-2015. (Ph.D., University of Texas at Austin) Jiwoon is currently a research scientist at University of Pittsburgh .Jeff Gross lab.

Research associates/assistants in my laboratory

Wenwen Shen, M.S.	2012-2016.
Laurie Cannon, B.S.	2014-2016.
Kendra R. Cook, M.S.	2013-2014.
Nikita Aware, M.S.	2013-2014.
Jessica Lawshe, B.S.	2011-2013.

Rotation students supervised in my laboratory

Jung-Kuei Chen Heawon Chung Catherine Rhee Tien-Yu Huang Li-Ya Chiu Jesse Cohn Yating Chen Thomas M Johnson Jamison Miller Sean Kang Natalie Gath Samantha Chang Nadima Uprety Pallavi Kompella Lucy Leblanc Marvin Mercado Scott Tucker	Fall 2011 (CMB) Fall 2011 (CMB) Fall 2011 (MGM/CMB) Fall 2011 (CMB) Fall 2012 (CMB) Fall 2012 (CMB) Fall 2012 (CMB) Fall 2012 (CMB) Summer 2013 (CMB) Fall 2013 (CMB) Fall 2014 (CMB) Fall 2014 (CMB) Fall 2014 (CMB) Fall 2014 (Pharmacy) Fall 2015 (MGM) Spring 2016 (CMB) Fall 2016 (CMB)
<u>Visiting fellows/students</u>	
Woong-Hee Lee	Spring/Summer 2012 (Seoul National University, Dr. Yoo-Sun Noh's lab)
Yoshiaki Tanaka, Ph.D.	Summer 2013 (Yale University, Dr. In-Hyun Park's lab)
Thomas SAF	Spring 2015 (Université Paris Diderot, State University of Paris VII)
<u>Undergraduate students mer</u> Damir Ljuboja	Dean's Scholar's Honors Program, 2012-2013.
Dean's Honored Gra Admitted to Harvar	d Medical School (2014)
Azeen Anjum	Dean's Scholar's Honors Program, 2012-2014.
<i>,</i>	College of Medicine (2015)
Elizabeth Eisenmenger	Health Science Honors program, 2013-2014. <i>lical School at Houston (2014)</i>
Christina Lee	Spring 2013-Summer 2014.
Admitted to Korea U	Iniversity College of Medicine (2016)
Kyle Saysana	Spring 2014-Fall 2014.
	thwestern Medical School (2016)
	Health Science Honors program, 2013-2016. Summer Internship Program, Paris, France, 2015. thwestern Medical School (2016)
Siddharth Rode	Plan II Honor program, Spring 2015.
Amy Mullikin	Fall 2014-Fall 2015.
Andy Yu	Engineering Honors program, Fall 2015-present.
Byoung Ug Ryu	Biochemistry Honors program, Fall 2016-present.
Shannon Dupont	Biochemistry, Fall 2016-present.
High school student mentore	<u>d in my laboratory</u>
Minji Kim	Liberal Arts and Science Academy (LASA), Summer 2013-2015.
Admitted to Vanderbilt University (2015)	
Faith Song	Westwood High School, Summer 2016.

Administrative Responsibilities

MBS student and travel award committee, 2013-present. MCDB seminar committee, 2012-2013. CMB international student admission committee, 2015-present. CMB qualifying exam committee (Q15), 2016-present.

Prelim Exam Committee

Garrett Cornelison (Mihic lab), Spring, 2013. Krista M Angileri (Gross lab), Spring, 2014. Gurvani Bhupindersingh (Dudley lab), Fall, 2014. Ruijiao Xin (Huq lab), Fall 2014. Yanpeng Xi (Sung lab), Fall 2014. Chung-Hsuan Kao (Paull lab), Spring, 2015. Calder Reinsborough (Xhemalce lab), Spring, 2016. Rachel Lex (Vokes lab), Spring, 2016. Jaime Hibbard (Wallingford Lab), Spring, 2017. Ranjeet Kar (Eberhart and Iyer lab), Spring, 2017. Pooja P. Mandke (Vasquez lab), Spring, 2017. Joshua Black (Johnson lab), Spring, 2017.

Ph.D. Thesis Committee

Yaelim Lee (Iyer lab)* Wei-Ta Chen (Miller lab)* Jung Kuei Chen (Liu lab) Ruijiao Xin (Hug lab) Yanpeng Xi (Sung lab) Tien-Yu Huang (Chen lab) Krista M Angileri (Gross lab) Li-Ya Chiu (Miller lab) Haridha Shivram (Iyer lab) Sung Rye Park (Sung lab) Jason Lee (Baker lab, BME)* Keyue Ma (Jiang lab, BME) Samantha Shelton (Xhemalce lab) Calder W Reinsborough (Xhemalce lab) Kayla Henderson (Baker lab, BME)* Rachel Lex (Vokes lab)

Peer-review of publications for the following journals (2011-present)

Cell Stem Cell, Nature Structural & Molecular Biology, Gene & Development, Nature Communications, Nucleic Acid Research, Cell Reports, Stem Cell Reports, Epigenetics & Chromatin, FASEB Journal, BMC Cancer, and PLoS One

Grant review (2013-present)

New York State Stem Cell Science Foundation (NYSTEM), USA. September, 2013 New York State Stem Cell Science Foundation (NYSTEM), USA. September, 2016 Medical Research Council (MRC), UK. National Institute of Health (NIH), Neurogenesis and Cell Fate (NCF) study section, ad hoc reviewer (October, 2015)

National Institute of Health (NIH), Molecular and Integrative Signal Transduction study (MIST)

study section, ZRG1 CB-G (02) reviewer (November, 2016)

Miscellaneous University Service

Invited panelist for K99/R00 panel discussion. UT-Austin. May 2013. Guest lecturer, Seminar in Human Biology (BI0137), UT-Austin. Spring, 2014. Guest lecturer, Genes, Genomes, and Gene Expression (MOL395J). Fall, 2014.

International/domestic meetings

US - Korea Conference 2016, Dallas, TX. Systems Biology and Informatics, Session Chair

US - Korea Conference 2017, Washington, DC. Systems Biology and Informatics, Session Chair

RESEARCH

Research interests

Pluripotent Stem Cells, Trophoblast Stem Cells, Cancer Stem Cells, Self-Renewal and Pluripotency, Lineage Specification, Early Embryo Development, Transcriptional Regulation, Epigenetic Regulation, Regulatory Networks, Systems Biology

Professional society

2008-present International Society for Stem Cell Research (ISSCR), Member

- 2011-present Korean-American Scientists and Engineers Association (KSEA), Member
- 2015-present Society for Developmental Biology (SDB), Member
- 2015-present American Society for Cell Biology (ASCB), Member

Presentations

- 2003 Hanyang University, Department of Life Science, Seoul, Korea
- 2008 The 16th New England Bioscience Society (NEBS) Annual Meeting, Boston, MA
- 2008 Hanyang University, Department of Life Science, Seoul, Korea
- 2008 Hanyang University, Division of Molecular & Life Science, Ansan, Korea
- 2008 Yonsei University, Department of Biotechnology, Seoul, Korea
- 2008 Korea University, Division of Biotechnology, Seoul, Korea
- 2010 University of Michigan at Ann Arbor, Center for Stem Cell Biology, Ann Arbor, MI
- 2010 National Institute of Allergy and Infectious Diseases (NIAID), Bethesda, MD
- 2010 National Heart, Lung and Blood Institute (NHLBI), Bethesda, MD
- 2010 New York University Medical School, Skirball Institute, New York, NY
- 2010 Boston University, Systems Biology Program, Boston, MA
- 2010 University of North Carolina, Department of Genetics, Chapel Hill, NC
- 2010 Pohang Institute of Science and Technology (POSTECH), Department of Life Science, Pohang, Korea
- 2010 Seoul National University, School of Biological Sciences, Seoul, Korea
- 2010 The 22nd Annual Meeting of the Korean Society for Molecular and Cellular Biology (KSMCB), Seoul, Korea
- 2010 Hanyang University, Department of Life Science, Seoul, Korea
- 2010 Korea Advanced Institute of Science and Technology (KAIST), Department of Biological Science, Deajeon, Korea
- 2010 University of Texas Southwestern Medical Center at Dallas, Cecil H. and Ida Green Center, Dallas, TX
- 2011 University of Pennsylvania, School of Medicine, Epigenetics Program, Philadelphia, PA

- 2011 University of California, Irvine, Sue and Bill Gross Stem Cell Research Center, and Systems Biology Program, Irvine, CA
- 2011 University of Texas at Austin, Section of Molecular Cell and Developmental Biology, Institute for Cellular and Molecular Biology, Austin, TX
- 2011 Washington University at Saint Louis, Department of Developmental Biology, St. Louis, MO
- 2011 Yale School of Medicine, Department of Pathology, Systems Biology Institute, New Haven, CT
- 2011 University of Texas at Austin, Institute for Cellular and Molecular Biology Retreat, Austin, TX
- 2012 Korean-American Scientists and Engineers Association (KSEA), Central Texas Regional Conference, Austin, TX
- 2012 University of Texas at Austin, Center for Systems and Synthetic Biology, Austin, TX
- 2013 US Korea Conference 2013, New York/New Jersey, Secaucus, NJ
- 2013 Seoul National University, School of Biological Sciences, Seoul, Korea
- 2013 University of Texas at Austin, Dean's Scholars Speaker Series, Austin, TX
- 2014 University of Texas at Austin, Institute for Cellular and Molecular Biology Retreat, Austin, TX
- 2014 Frontiers in Stem Cells and Regeneration, Advanced Training Course, Woods Hole, MA
- 2014 Yale School of Medicine, Department of Genetics, New Haven, CT
- 2015 University of Texas at Austin, Faculty Discussion Group, Austin, TX
- 2015 Society for Developmental Biology (SDB) Southwest Regional Meeting, Dallas, TX
- 2015 University of Wisconsin at Madison, School of Medicine and Public Health, Department of Cell and Regenerative Biology, Madison, WI
- 2016 Baylor University, Department of Biology, Waco, TX
- 2016 US Korea Conference 2016, Dallas, TX
- 2016 West Gulf Coast Regional Conference/ Korean-American Bio-medical Scientists Symposium, Houston, TX
- 2017 US Korea Conference 2017, Washington, DC
- 2017 University of Kansas Medical Center, Institute of Reproductive Health and Regenerative Medicine, Department of Pathology & Laboratory Medicine, Kansas City, KS
- 2017 State University of New York at Buffalo, Department of Biochemistry, Buffalo, NY

PUBLICATIONS (# Corresponding)

44. Lee BK, Lee J, Shen W, Rhee C, Chung H, **Kim J**[#] (2017) Fbxl19 Recruits Rnf20 to CpG Islands and Regulates H2B Mono-Ubiquitination. <u>*Nucleic Acid Research.</u> (Accepted)*</u>

43. Rhee C, Edwards M, Dang C, Harris J, **Kim J**, Tucker HO (2017) Arid3a is required for mammalian placenta development. *Developmental Biology*. 422(2):83-91.

42. Sanchez A, De Vivo A, Uprety N, **Kim J**, Stevens SM Jr., Kee Y (2016) The BMI1-UBR5 Axis Regulates Transcriptional Repression at Damaged Chromatin. *Proc Natl Acad Sci U S A.* 113(40): 11243-11248.

41. Bordiya Y, Zheng Y, Nam J, Choi HW, Lee BK, **Kim J**, Klessig DF, Fei Z, Kang HG (2016) Arabidopsis MORC1 is Associated with a Subset of Transposable Elements that are Proximal to Defense Genes. <u>*Mol Plant Microbe*</u> <u>*Interact*</u>. 2016 Aug 2. [Epub ahead of print]

40. Chung H, Lee BK, Uprety N, **Kim J**[#] (2016) Yap1 is Dispensable for Self-Renewal but Required for Proper Differentiation of Mouse Embryonic Stem (ES) Cells. <u>*EMBO Reports*</u>. 17(4):519-29.

39. Li Q, Lex RK, Chung H, Giovanetti SM, Ji Z, Ji H, Person MD, **Kim J**, Vokes SA (2016) Nanog Binds to Gli Proteins and Represses Hedgehog-Mediated Transcription. *JBC*. 291(13):7171-82.

38. Kim S, Ezhilarasan R, Phillips M, Gallego-Perez D, Sparks A, Taylor D, Ladner K, Furuta T, Sabit H, Chhipa R, Cho JH, Beck S, Kurozumi K, Kuroiwa T, Iwata R, Asai A, **Kim J**, Sulman EP, Cheng S, Lee LJ, Nakada M, Guttridge D, DasGupta B, Goidts V, Bhat KP, Nakano I (2016), Serine/Threonine kinase MLK4 determines Mesenchymal Identity in Glioma Stem Cells in an NF-κB-dependent manner. <u>*Cancer Cell*</u>. 29(2):201-13.

37. Hoshino K, Chung H, Wu CH, Rajendran K, Huang YY, Chen P, Sokolov KV, **Kim J**, Zhang X (2015) Immunofluorescence-Assisted Microfluidic Single-Cell Quantitative Reverse Transcription Polymerase Chain Reaction Analysis for Tumour Cells Separated from Blood. *Journal of Circulating Biomarkers*. 4:11. doi: 10.5772/61822

36. Lee BK, Shen W, Lee J, Rhee C, Chung H, Kim K, Park IH, **Kim J**[#] (2015) Tgif1 Counterbalances the Activity of Core Pluripotency Factors in Mouse Embryonic Stem Cells. <u>*Cell Reports*</u>. 13(1):52-60.

35. Das PP, Hendrix DA, Apostolou E, Buchner AH, Canver MC, Beyaz S, Ljuboja D, Kuintzle R, Kim W, Karnik R, Shao Z, Xie H, Xu J, De Los Angeles A, Zhang Y, Choe J, Jun DL, Shen X, Gregory RI, Daley GQ, Meissner A, Kellis M, Hochedlinger K, **Kim J**, Orkin SH (2015) PRC2 Is Required to Maintain Expression of the Maternal Gtl2-Rian-Mirg Locus by Preventing De Novo DNA Methylation in Mouse Embryonic Stem Cells. <u>*Cell Reports*</u>. 12(9):1456-70.

34. Beck S*, Lee BK*, **Kim J**[#] (2015) Multi-Layered Global Gene Regulation in Mouse Embryonic Stem Cells. *Cell Mol Life Sci*. 72(2):199-216.

33. Beck S, Lee BK, Rhee C, Song J, Woo AJ, **Kim J**[#] (2014) CpG Island-Mediated Global Gene Regulatory Modes in Mouse Embryonic Stem Cells. *Nature Communications*. 18;5:5490.

32. Rhee C, Lee BK, Beck S, Cook KR, Anjum A, Tucker HO*, **Kim J***# (2014) Arid3a is Essential to Execution of the First Cell Fate Decision via Direct Embryonic and Extraembryonic Transcriptional Regulation. <u>*Genes and Development*</u>. 28(20):2219-32.

31. Ki S*, Park D*, Selden HJ, Seita J, Chung H, **Kim J**, Iyer VR, Ehrlich L (2014) Global Transcriptional Profiling Reveals Distinct Functions of Thymic Stromal Subsets and Age-Related Changes During Thymic Involution. *Cell Reports*. 9:402-415.

30. Kim MY, Park J, Lee JJ, Ha DH, **Kim J**, Kim CG, Hwang J, Kim CG (2014) Staufen1-Mediated mRNA Decay Induces Requiem mRNA Decay through Binding of Staufen1 to the Requiem 3'UTR. *Nucleic Acid Research*. 42(11):6999-7011.

29. Das PP, Shao Z, Beyaz S, Apostolou E, Pinello L, De Los Angeles A, O'Brien K, Atsma JM, Fujiwara Y, Nguyen M, Ljuboja D, Guo G, Woo AJ, Yuan GC, Onder T, Daley GQ, Hochedlinger K, **Kim J**, Orkin SH (2014) Distinct and Combinatorial Functions of Jmjd2b/Kdm4b and Jmjd2c/Kdm4c in Mouse Embryonic Stem Cells Identity. <u>*Mol*</u> <u>Cell</u>. 53(1):1–17.

28. Kim J, Chen JK, **Kim J**, Jeong S, Ohn T (2013) Splicing Factor SRSF3 Represses the Translation of Programmed Cell Death 4 mRNA by Associating with the 5'UTR Region. *Cell Death Differ*. 21(3):481-90.

27. Woo AJ, Wieland K, Huang H, Akie TE, Piers T, Fleming MD, Boyd T, **Kim J**, Cantor AB (2013) Developmental Differences in IFN Signaling Affect GATA1s-Induced Megakaryocyte Hyperproliferation. *J Clin Invest.* 123(8):3292–3304.

26. Baena E, Shao Z, Linn DE, Glass K, Hamblen MJ, Fujiwara Y, **Kim J**, Nguyen M, Zhang X, Godinho FJ, Bronson RT, Mucci LA, Loda M, Yuan GC, Orkin SH, Li Z (2013) ETV1 Directs Androgen Metabolism and Confers Aggressive Prostate Cancer in Targeted Mice and Patients. *Genes and Development*, 5;27(6):683-98.

25. Park KS, Cha Y, Kim CH, Ahn HJ, Kim D, Ko S, Kim KH, Chang MY, Ko JH, Noh YS, Han YM, **Kim J**, Song J, Kim JY, Tesar PJ, Lanza R, Lee KA, Kim KS. (2013) Transcription Elongation Factor Tcea3 Regulates the Pluripotent Differentiation Potential of Mouse Embryonic Stem Cells, via the Lefty1-Nodal-Smad2 Pathway. <u>Stem Cells</u>. 31(2):282-92.

24. Lee JH, **Kim J**, Gludish D, Roach RR, Saunders AH, Chen H, Conner DA, Fujiwara Y, Stripp BR, Kim CF (2013) Surfactant Protein-C Chromatin-Bound Green Fluorescence Protein Reporter Mice Reveal Heterogeneity of Surfactant Protein C-Expressing Lung Cells. *Am J Respir Cell Mol Biol*. 48(3):288-98.

23. Kim J, Di Vizio D, Kim TK, **Kim J**, Kim M, Pelton K, Clinton SK, Hai T, Hwang D, Solomon KR, Freeman MR (2012) The Response of the Prostate to Circulating Cholesterol: Activating Transcription Factor 3 (ATF3) as a Prominent Node in a Cholesterol-Sensing Network. *PLoS One*. 7(7):e39448.

22. **Kim J**, Orkin SH (2011) Embryonic Stem Cell-Specific Signatures in Cancer: Insights into Genomic Regulatory Networks and Implications for Medicine. *Genome Medicine*. 3(11):75.

21. Woo AJ, **Kim J**, Xu J, Huang H, Cantor AB (2011) Role of ZBP-89 in Human Globin Gene Regulation and Erythroid Differentiation. *Blood.* 29;118(13):3684-93.

20. **Kim J**, Woo AJ, Chu J, Snow JW, Fujiwara Y, Kim CG, Cantor AB, Orkin SH (2010) A Myc Network Accounts for Similarities between Embryonic Stem and Cancer Cell Transcription Programs. <u>*Cell*</u>. 143(2): 313-324. http://f1000.com/5900956

19. Kim K, Doi A, Wen B, Ng K, Zhao R, Cahan P, **Kim J**, Ji H, Ehrlich L, Yabuuchi A, Takeuchi A, Cunniff KC, Hongguang H, Mckinney-Freeman S, Naveiras O, Yoon T, Hanna J, Jaenisch R, Weissleder R, Orkin SH, Weissman IL, Feinberg A, and Daley GQ (2010) Epigenetic Memory in Induced Pluripotent Stem Cells. *Nature*. 467(7313):285-90. http://f1000.com/5650960

18. Bai X, **Kim J**, Yang Z, Jurynec MJ, Akie TE, Lee J, LeBlanc J, Sessa A, Jiang H, DiBiase A, Zhou Y, Grunwald DJ, Lin S, Cantor AB, Orkin SH, Zon LI (2010) TIF1gamma Controls Erythroid Cell Fate by Regulating Transcriptional Elongation. <u>*Cell*</u>. 142(1):133-143. http://f1000.com/4962956

17. Snow JW, **Kim J**, Currie CR, Xu J, Orkin SH (2010) Sumoylation Regulates Interaction of FOG1 with CTBP. *J Biol Chem*. 3;285(36):28064-75.

16. Kim J, Orkin SH (2010) Systematic Tracking of Cell Fate Changes. *Nature Biotechnology*. 28(2) 146-147.

15. Trowbridge JJ, Snow JW, **Kim J**, Orkin SH (2009) DNA Methyltransferase 1 is Essential for and Uniquely Regulates Hematopoietic Stem and Progenitor Cells. <u>*Cell Stem Cell*</u>. 5(4) 442-449. http://f1000.com/5003959

14. Hu G, **Kim J**, Xu Q, Leng Y, Orkin SH, Elledge SJ (2009) A Genome-Wide RNAi Screen Identifies a New Transcriptional Module Required for Self-Renewal. <u>*Genes and Development*</u>. 23(7): 837-848. http://f1000.com/1157873 13. **Kim J**, Cantor AB, Orkin SH, Wang J (2009) Use of In Vivo Biotinylation to Study Protein–Protein and Protein–DNA Interactions in Mouse Embryonic Stem Cells. *Nature Protocols*. 4(4) : 506-517.

12. Orkin SH, Wang J, **Kim J**, Chu J, Rao S, Theunissen TW, Shen X, Levasseur DN (2008) The Transcriptional Network Controlling Pluripotency in ES Cells. *Cold Spring Harb Symp Quant Biol*. 73:195-202.

11. Shen X, Liu Y, Hsu YJ, Fujiwara Y, **Kim J**, Mao X, Yuan GC, Orkin SH (2008) EZH1 Mediates Methylation on Histone H3 Lysine 27 and Complements EZH2 in Maintaining Stem Cell Identity and Executing Pluripotency. *Mol Cell*. 32(4): 491-502.

10. **Kim J**, Chu J, Shen X, Wang J, Orkin SH (2008) An Extended Transcriptional Network for Pluripotency of Embryonic Stem Cells. <u>*Cell*</u>. 132: 1049-1061. http://f1000.com/1104451

9. **Kim J**, Lee JH, Iyer VR (2008) Global Identification of Myc Target Genes Reveals Its Direct Role in Mitochondrial Biogenesis and Its E-Box Usage In Vivo. *PLoS ONE*. 3(3):e1798.

8. Saleque S, **Kim J**, Rooke HM, Orkin SH (2007) Epigenetic Regulation of Hematopoietic Differentiation by Gfi-1 and Gfi-1b Is Mediated by the Cofactors CoREST and LSD1. *Mol Cell*. 27(4):562-72.

7. Bhinge AA*, **Kim J***, Euskirchen G, Snyder M, Iyer VR (2007) Mapping the Chromosomal Targets of STAT1 by Sequence Tag Analysis of Genomic Enrichment (STAGE). <u>*Genome Research*</u>. 17: 910-916 (*equally contributed).

6. The ENCODE Project Consortium (2007). Identification and Analysis of Functional Elements in 1% of the Human Genome by the ENCODE Pilot Project. *Nature*. 447, 799–816.

5. Giresi PG, **Kim J**, McDaniell R, Iyer VR, Lieb JD. (2007) FAIRE (Formaldehyde Assisted Isolation of Regulatory Elements) Isolates Nucleosome-Depleted DNA from Human Chromatin. <u>*Genome Research*</u>. 17: 877-885.

4. **Kim J**, Iyer VR (2005) Identifying Chromosomal Targets of DNA-Binding Proteins by Sequence Tag Analysis of Genomic Enrichment (STAGE). *Curr Protoc Mol Biol*. Chapter 21:Unit 21.10.

3. **Kim J**, Bhinge AA, Morgan XC, Iyer VR (2005) Mapping DNA-Protein Interactions in Large Genomes by Sequence Tag Analysis of Genomic Enrichment. *Nature Methods*. 2(1): 47-53 (Epub 2004 Dec 21).

2. **Kim J**, Iyer VR (2004) Global Role of TATA Box-Binding Protein Recruitment to Promoters in Mediating Gene Expression Profiles. *Mol Cell Biol*. 24(18):8104-12. http://f1000.com/1022524

1. Kim SJ, Shin JH, **Kim J**, Kim SH, Chae JH, Park EJ, Seong RH, Hong SH, Park SD, Jeong S, Kim CG (1999) Isolation of Developmentally Regulated Novel Genes Based on Sequence Identity and Gene Expression Pattern. *Mol Cells*. 9(2):207-18.