

**CURRICULUM VITAE of  
John Louis Rinn Jr., PhD**

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**EDUCATION AND TRAINING:**

**Bachelor of Science in Chemistry**, University of Minnesota, Duluth, MN, 1999  
Honors: Cum Laude

**Master of Philosophy in Molecular Biophysics and Biochemistry**, Yale University, New Haven, CT, 2001  
Advisor: Dr. Michael Snyder

**Doctor of Philosophy in Molecular Biophysics and Biochemistry**, Yale University, New Haven, CT, 2004  
Advisor: Dr. Michael Snyder

**Post-doctoral Associate**, Stanford University, Palo Alto, CA, 2004-2007  
Advisor: Dr. Howard Chang

**ACADEMIC APPOINTMENTS:**

**Assistant Professor**, Pathology, Harvard Medical School, Boston, MA, 2008 – 2017

**Associate Member**, Broad Institute, Cambridge, MA, 2008-2011

**Principal Investigator**, Harvard Stem Cell Initiative, Boston, MA, 2009-2017

**Senior Associate Member**, Broad Institute, Cambridge, MA, 2011-2017

**Alvin And Esta Starr Professor**, Stem Cell and Regenerative Biology, Harvard University, 2015-2017

**Visiting Professor**, Stem Cell and Regenerative Biology, Harvard University, 2017-2019

**Leslie Orgel Professor of RNA Science**, University of Colorado Boulder, 2017-present

**Marvin H. Caruthers Endowed Chair for Early-Career Faculty**, 2017-present

**PROFESSIONAL AFFILIATIONS:**

**Scientific Advisory Board**, Sigma Aldrich, 2009-2011

**Scientific Advisory Board**, SUNY Albany RNA Institute, 2011-2019

**Scientific Advisory Board**, RNA Central, 2012-2017

**Scientific Advisory Board**, RaNA, 2012-2017

**Scientific Advisory Board**, GENCODE, 2013-2021

**Scientific Advisory Board**, Haya Therapeutics, 2021-present

**HONORS AND RECOGNITIONS:**

1999	Casmir Illunda Award for Best Senior Thesis
2002	AAAS Biovision Fellowship
2003	McDougal Fellowship
2004	Yale University School of Arts and Sciences Commencement Marshall

2005-2007	Damon Runyon Cancer Foundation Fellowship
2008-2011	Smith Family Foundation Fellowship
2009-2012	Damon Runyon-Rachleff Innovation
2009-2012	Searle Scholar Fellowship
2009	Popular Science Magazine “Brilliant Ten”
2009-2014	NIH Innovator Award
2010	Merkin Next Generation Fellow
2012	PopTech Science Fellow
2014	National Academy of Science Sackler Colloquium Speaker
2014	National Academy of Science Distinctive Voices Speaker
2014	Thompson Reuters Most Influential Scientist
2016-2022	HHMI Faculty Scholars
2020	Web of Science Top 1% Most Influential Scientists
2023	Best Geneticists in the world (Rank 643) Research.com

### **PATENTS:**

- 1) Segal, E, Kertesz, M, Chang, HY, **Rinn, J**, Adler, A, Wan, Y. (Withdrawn) *Methods of predicting pairability and secondary structures of RNA molecules* (World Patent WO 2010/109463 A2). World Intellectual Property Organization.
- 2) Ting, A, Kaewsapsak, P, Shechner, DM, **Rinn, JL**. (2017) *Methods for isolating endogenous nucleic acids from subcellular compartments without fractionation* (U.S. Patent No. US 2017/0227531 A1). U.S. Patent and Trademark Office.
- 3) **Rinn, JL**, Schechner, DM. (2021) *Methods of making and using guide RNA for use with Cas9 systems* (U.S. Patent No. US 10,920,221 B2). U.S. Patent and Trademark Office.
- 4) Friendewey, D, Gong, G, Lai KV, **Rinn, JL**, Valenzuela DM. (2018) *LincRNA-deficient non-human animals* (AU 2017200283 B2). Australian Patent Office.
- 5) Dumbovic, G, **Rinn, J**, Caruthers, M, Jastrzebska, K, Langner, HK. (Pending) *Method for retaining splicing RNAs in the nucleus based on chemically modified antisense oligonucleotides* (World Patent WO 2021/155120 A1). World Intellectual Property Organization.

### **PUBLICATIONS:**

Includes peer-reviewed primary research articles, reviews, and book chapters

**h-index: 99, i-index: 159**

1. Martone, R., Euskirchen, G., Bertone, P., Hartman, S., Royce, T. E., Luscombe, N. M., **Rinn, J.L.**, Nelson, F. K., Miller, P., Gerstein, M., Weissman, S., and Snyder, M. (2003) Distribution of NF-κB-binding sites across human chromosome 22. *Proc National Acad Sci*. **100**, 12247–12252
2. **Rinn, J.L.**, Euskirchen, G., Bertone, P., Martone, R., Luscombe, N. M., Hartman, S., Harrison, P. M., Nelson, F. K., Miller, P., Gerstein, M., Weissman, S., and Snyder, M. (2003) The transcriptional activity of human Chromosome 22. *Gene Dev*. **17**, 529–540
3. Euskirchen, G., Royce, T. E., Bertone, P., Martone, R., **Rinn, J.L.**, Nelson, F. K., Sayward, F., Luscombe, N. M., Miller, P., Gerstein, M., Weissman, S., and Snyder, M. (2004) CREB Binds to Multiple Loci on Human Chromosome 22. *Mol Cell Biol*. **24**, 3804–3814
4. Bertone, P., Stolc, V., Royce, T. E., Rozowsky, J. S., Urban, A. E., Zhu, X., **Rinn, J.L.**, Tongprasit, W., Samanta, M., Weissman, S., Gerstein, M., and Snyder, M. (2004) Global Identification of Human Transcribed Sequences with Genome Tiling Arrays. *Science*. **306**, 2242–2246

5. **Rinn,J.L.**, Rozowsky, J. S., Laurenzi, I. J., Petersen, P. H., Zou, K., Zhong, W., Gerstein, M., and Snyder, M. (2004) Major Molecular Differences between Mammalian Sexes Are Involved in Drug Metabolism and Renal Function. *Dev Cell*. **6**, 791–800
6. O’Geen, H., Squazzo, S. L., Iyengar, S., Blahnik, K., **Rinn,J.L.**, Chang, H. Y., Green, R., and Farnham, P. (2005) Genome-Wide Analysis of KAP1 Binding Suggests Autoregulation of KRAB-ZNFs. *Plos Genet. preprint*, e89
7. **Rinn,J.L.**, and Snyder, M. (2005) Sexual dimorphism in mammalian gene expression. *Trends Genet.* **21**, 298–305
8. **Rinn,J.L.**, Bondre, C., Gladstone, H. B., Brown, P. O., and Chang, H. Y. (2006) Anatomic Demarcation by Positional Variation in Fibroblast Gene Expression Programs. *Plos Genet.* **2**, e119
9. Lan, F., Bayliss, P. E., **Rinn,J.L.**, Whetstine, J. R., Wang, J. K., Chen, S., Iwase, S., Alpatov, R., Issaeva, I., Canaani, E., Roberts, T. M., Chang, H. Y., and Shi, Y. (2007) A histone H3 lysine 27 demethylase regulates animal posterior development. *Nature.* **449**, 689–694
10. **Rinn,J.L.**, Kertesz, M., Wang, J. K., Squazzo, S. L., Xu, X., Brugmann, S. A., Goodnough, L. H., Helms, J. A., Farnham, P. J., Segal, E., and Chang, H. Y. (2007) Functional Demarcation of Active and Silent Chromatin Domains in Human HOX Loci by Noncoding RNAs. *Cell.* **129**, 1311–1323
11. O’Geen, H., Squazzo, S. L., Iyengar, S., Blahnik, K., **Rinn,J.L.**, Chang, H. Y., Green, R., and Farnham, P. J. (2007) Genome-Wide Analysis of KAP1 Binding Suggests Autoregulation of KRAB-ZNFs. *Plos Genet.* **3**, e89
12. Khavari, T. A., and **Rinn,J.L.** (2007) Ras/Erk MAPK Signaling in Epidermal Homeostasis and Neoplasia. *Cell Cycle.* **6**, 2928–2931
13. **Rinn,J.L.**, Wang, J. K., Allen, N., Brugmann, S. A., Mikels, A. J., Liu, H., Ridky, T. W., Stadler, H. S., Nusse, R., Helms, J. A., and Chang, H. Y. (2008) A dermal HOX transcriptional program regulates site-specific epidermal fate. *Gene Dev.* **22**, 303–307
14. **Rinn,J.L.**, Wang, J. K., Liu, H., Montgomery, K., Rijn, M. van de, and Chang, H. Y. (2008) A Systems Biology Approach to Anatomic Diversity of Skin. *J Invest Dermatol.* **128**, 776–782
15. Su, M. A., Giang, K., Žumer, K., Jiang, H., Oven, I., **Rinn,J.L.**, DeVoss, J. J., Johannes, K. P. A., Lu, W., Gardner, J., Chang, A., Bubulya, P., Chang, H. Y., Peterlin, B. M., and Anderson, M. S. (2008) Mechanisms of an autoimmunity syndrome in mice caused by a dominant mutation in Aire. *J Clin Invest.* **118**, 1712–1726
16. Guttman, M., Amit, I., Garber, M., French, C., Lin, M. F., Feldser, D., Huarte, M., Zuk, O., Carey, B. W., Cassady, J. P., Cabili, M. N., Jaenisch, R., Mikkelsen, T. S., Jacks, T., Hacohen, N., Bernstein, B. E., Kellis, M., Regev, A., **Rinn,J.L.**, and Lander, E. S. (2009) Chromatin signature reveals over a thousand highly conserved large non-coding RNAs in mammals. *Nature.* **458**, 223–227
17. Somervaille, T. C. P., Matheny, C. J., Spencer, G. J., Iwasaki, M., **Rinn,J.L.**, Witten, D. M., Chang, H. Y., Shurtleff, S. A., Downing, J. R., and Cleary, M. L. (2009) Hierarchical Maintenance of MLL Myeloid Leukemia Stem Cells Employs a Transcriptional Program Shared with Embryonic Rather Than Adult Stem Cells. *Cell Stem Cell.* **4**, 129–140
18. Mace, K. A., Restivo, T. E., **Rinn,J.L.**, Paquet, A. C., Chang, H. Y., Young, D. M., and Boudreau, N. J. (2009) HOXA3 Modulates Injury-Induced Mobilization and Recruitment of Bone Marrow-Derived Cells. *Stem Cells.* **27**, 1654–1665

19. Khalil, A. M., Guttman, M., Huarte, M., Garber, M., Raj, A., Morales, D. R., Thomas, K., Presser, A., Bernstein, B. E., Oudenaarden, A. van, Regev, A., Lander, E. S., and **Rinn, J.L.** (2009) Many human large intergenic noncoding RNAs associate with chromatin-modifying complexes and affect gene expression. *P Natl Acad Sci Usa*. **106**, 11667–72
20. Amit, I., Garber, M., Chevrier, N., Leite, A. P., Donner, Y., Eisenhaure, T., Guttman, M., Grenier, J. K., Li, W., Zuk, O., Schubert, L. A., Birditt, B., Shay, T., Goren, A., Zhang, X., Smith, Z., Deering, R., McDonald, R. C., Cabili, M., Bernstein, B. E., **Rinn, J.L.**, Meissner, A., Root, D. E., Hacohen, N., and Regev, A. (2009) Unbiased Reconstruction of a Mammalian Transcriptional Network Mediating Pathogen Responses. *Science*. **326**, 257–263
21. Huarte, M., Guttman, M., Feldser, D., Garber, M., Koziol, M. J., Kenzelmann-Broz, D., Khalil, A. M., Zuk, O., Amit, I., Rabani, M., Attardi, L. D., Regev, A., Lander, E. S., Jacks, T., and **Rinn, J.L.** (2010) A Large Intergenic Noncoding RNA Induced by p53 Mediates Global Gene Repression in the p53 Response. *Cell*. **142**, 409–419
22. Guttman, M., Garber, M., Levin, J. Z., Donaghey, J., Robinson, J., Adiconis, X., Fan, L., Koziol, M. J., Gnirke, A., Nusbaum, C., **Rinn, J.L.**, Lander, E. S., and Regev, A. (2010) Ab initio reconstruction of cell type-specific transcriptomes in mouse reveals the conserved multi-exonic structure of lincRNAs. *Nat Biotechnol*. **28**, 503–510
23. Khavari, D. A., Sen, G. L., and **Rinn, J.L.** (2010) DNA methylation and epigenetic control of cellular differentiation. *Cell Cycle Georget Tex*. **9**, 3880–3
24. Kertesz, M., Wan, Y., Mazor, E., **Rinn, J.L.**, Nutter, R. C., Chang, H. Y., and Segal, E. (2010) Genome-wide measurement of RNA secondary structure in yeast. *Nature*. **467**, 103–107
25. Loewer, S., Cabili, M. N., Guttman, M., Loh, Y.-H., Thomas, K., Park, I. H., Garber, M., Curran, M., Onder, T., Agarwal, S., Manos, P. D., Datta, S., Lander, E. S., Schlaeger, T. M., Daley, G. Q., and **Rinn, J.L.** (2010) Large intergenic non-coding RNA-RoR modulates reprogramming of human induced pluripotent stem cells. *Nat Genet*. **42**, 1113–1117
26. Huarte, M., and **Rinn, J.L.** (2010) Large non-coding RNAs: missing links in cancer? *Hum Mol Genet*. **19**, R152-61
27. Zhu, H., Shah, S., Shyh-Chang, N., Shinoda, G., Einhorn, W. S., Viswanathan, S. R., Takeuchi, A., Grasemann, C., **Rinn, J.L.**, Lopez, M. F., Hirschhorn, J. N., Palmert, M. R., and Daley, G. Q. (2010) Lin28a transgenic mice manifest size and puberty phenotypes identified in human genetic association studies. *Nat Genet*. **42**, 626–630
28. Gupta, R. A., Shah, N., Wang, K. C., Kim, J., Horlings, H. M., Wong, D. J., Tsai, M.-C., Hung, T., Argani, P., **Rinn, J.L.**, Wang, Y., Brzoska, P., Kong, B., Li, R., West, R. B., Vijver, M. J. van de, Sukumar, S., and Chang, H. Y. (2010) Long non-coding RNA HOTAIR reprograms chromatin state to promote cancer metastasis. *Nature*. **464**, 1071–1076
29. Slack, F. J., Khalil, A. M., Huarte, M., and **Rinn, J.L.** (2010) Micronas in Development and Cancer. *Mol Medicine Medicinal Chem*. 10.1142/9781848163676\_0002
30. Koziol, M. J., and **Rinn, J.L.** (2010) RNA traffic control of chromatin complexes. *Curr Opin Genet Dev*. **20**, 142–8
31. Kellis, M., and **Rinn, J.L.** (2010) Sequences to systems. *Genome Biol*. **11**, 303
32. Broadbent, K. M., Park, D., Wolf, A. R., Tyne, D. V., Sims, J. S., Ribacke, U., Volkman, S., Duraisingh, M., Wirth, D., Sabeti, P. C., and **Rinn, J.L.** (2011) A global transcriptional analysis of *Plasmodium falciparum* malaria reveals a novel family of telomere-associated lincRNAs. *Genome Biol*. **12**, R56

33. Adams, D. J., Berger, B., Harismendy, O., Huttenhower, C., Liu, X. S., Myers, C. L., Oshlack, A., **Rinn, J.L.**, and Walhout, A. J. M. (2011) Genomics in 2011: challenges and opportunities. *Genome Biol.* **12**, 137–137
34. Roberts, A., Trapnell, C., Donaghey, J., **Rinn, J.L.**, and Pachter, L. (2011) Improving RNA-Seq expression estimates by correcting for fragment bias. *Genome Biol.* **12**, R22
35. Cabili, M. N., Trapnell, C., Goff, L., Koziol, M., Tazon-Vega, B., Regev, A., and **Rinn, J.L.** (2011) Integrative annotation of human large intergenic noncoding RNAs reveals global properties and specific subclasses. *Gene Dev.* **25**, 1915–1927
36. Guttman, M., Donaghey, J., Carey, B. W., Garber, M., Grenier, J. K., Munson, G., Young, G., Lucas, A. B., Ach, R., Bruhn, L., Yang, X., Amit, I., Meissner, A., Regev, A., **Rinn, J.L.**, Root, D. E., and Lander, E. S. (2011) lincRNAs act in the circuitry controlling pluripotency and differentiation. *Nature.* **477**, 295–300
37. Pauli, A., **Rinn, J.L.**, and Schier, A. F. (2011) Non-coding RNAs as regulators of embryogenesis. *Nat Rev Genetics.* **12**, 136–49
38. Khalil, A. M., and **Rinn, J.L.** (2011) RNA–protein interactions in human health and disease. *Semin Cell Dev Biol.* **22**, 359–365
39. Clark, M. B., Amaral, P. P., Schlesinger, F. J., Dinger, M. E., Taft, R. J., **Rinn, J.L.**, Ponting, C. P., Stadler, P. F., Morris, K. V., Morillon, A., Rozowsky, J. S., Gerstein, M. B., Wahlestedt, C., Hayashizaki, Y., Carninci, P., Gingeras, T. R., and Mattick, J. S. (2011) The Reality of Pervasive Transcription. *Plos Biol.* **9**, e1000625
40. **Rinn, J.L.**, and Huarte, M. (2011) To repress or not to repress: This is the guardian’s question. *Trends Cell Biol.* **21**, 344–353
41. Hacisuleyman, E., Cabili, M. N., and **Rinn, J.L.** (2012) A Keystone for ncRNA. *Genome Biol.* **13**, 315
42. Cabili, M., Lander, E., Sabeti, P., Regev, A., **Rinn, J.L.**, Trapnell, C., Goff, L., Broadbent, K., and Guttman, M. (2012) Abstract IA4: Linking RNA to human health and disease. *Cancer Res.* **72**, IA4–IA4
43. Washietl, S., Will, S., Hendrix, D. A., Goff, L. A., **Rinn, J.L.**, Berger, B., and Kellis, M. (2012) Computational analysis of noncoding RNAs. *Wiley Interdiscip Rev Rna.* **3**, 759–778
44. Kretz, M., Siprashvili, Z., Chu, C., Webster, D. E., Zehnder, A., Qu, K., Lee, C. S., Flockhart, R. J., Groff, A. F., Chow, J., Johnston, D., Kim, G. E., Spitale, R. C., Flynn, R. A., Zheng, G. X. Y., Aiyer, S., Raj, A., **Rinn, J.L.**, Chang, H. Y., and Khavari, P. A. (2012) Control of somatic tissue differentiation by the long non-coding RNA TINCR. *Nature.* **493**, 231–5
45. Trapnell, C., Roberts, A., Goff, L., Pertea, G., Kim, D., Kelley, D. R., Pimentel, H., Salzberg, S. L., **Rinn, J.L.**, and Pachter, L. (2012) Differential gene and transcript expression analysis of RNA-seq experiments with TopHat and Cufflinks. *Nat Protoc.* **7**, 562–578
46. **Rinn, J.L.**, and Chang, H. Y. (2012) Genome Regulation by Long Noncoding RNAs. *Biochemistry-us.* **81**, 145–166
47. Siprashvili, Z., Webster, D. E., Kretz, M., Johnston, D., **Rinn, J.L.**, Chang, H. Y., and Khavari, P. A. (2012) Identification of proteins binding coding and non-coding human RNAs using protein microarrays. *Bmc Genomics.* **13**, 633
48. Guttman, M., and **Rinn, J.L.** (2012) Modular regulatory principles of large non-coding RNAs. *Nature.* **482**, 339–346

49. Slavoff, S. A., Mitchell, A. J., Schwaid, A. G., Cabili, M. N., Ma, J., Levin, J. Z., Karger, A. D., Budnik, B. A., **Rinn, J.L.**, and Saghatelian, A. (2012) Peptidomic discovery of short open reading frame–encoded peptides in human cells. *Nat Chem Biol.* **9**, 59–64
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51. Kretz, M., Webster, D. E., Flockhart, R. J., Lee, C. S., Zehnder, A., Lopez-Pajares, V., Qu, K., Zheng, G. X. Y., Chow, J., Kim, G. E., **Rinn, J.L.**, Chang, H. Y., Siprashvili, Z., and Khavari, P. A. (2012) Suppression of progenitor differentiation requires the long noncoding RNA ANCR. *Gene Dev.* **26**, 338–343
52. Pauli, A., Valen, E., Lin, M. F., Garber, M., Vastenhouw, N. L., Levin, J. Z., Fan, L., Sandelin, A., **Rinn, J.L.**, Regev, A., and Schier, A. F. (2012) Systematic identification of long noncoding RNAs expressed during zebrafish embryogenesis. *Genome Res.* **22**, 577–591
53. Mercer, T. R., Gerhardt, D. J., Dinger, M. E., Crawford, J., Trapnell, C., Jeddelloh, J. A., Mattick, J. S., and **Rinn, J.L.** (2012) Targeted RNA sequencing reveals the deep complexity of the human transcriptome. *Nat Biotechnol.* **30**, 99–104
54. Trapnell, C., Hendrickson, D. G., Sauvageau, M., Goff, L., **Rinn, J.L.**, and Pachter, L. (2013) Differential analysis of gene regulation at transcript resolution with RNA-seq. *Nat Biotechnol.* **31**, 46–53
55. Ruscio, A. D., Ebralidze, A. K., Benoukraf, T., Amabile, G., Goff, L. A., Terragni, J., Figueroa, M. E., Pontes, L. L. D. F., Alberich-Jorda, M., Zhang, P., Wu, M., D'Alò, F., Melnick, A., Leone, G., Ebralidze, K. K., Pradhan, S., **Rinn, J.L.**, and Tenen, D. G. (2013) DNMT1-interacting RNAs block gene-specific DNA methylation. *Nature.* **503**, 371–376
56. Grossman, S. R., Andersen, K. G., Shlyakhter, I., Tabrizi, S., Winnicki, S., Yen, A., Park, D. J., Griesemer, D., Karlsson, E. K., Wong, S. H., Cabili, M., Adegbola, R. A., Bamezai, R. N. K., Hill, A. V. S., Vannberg, F. O., **Rinn, J.L.**, Project, 1000 Genomes, Lander, E. S., Schaffner, S. F., and Sabeti, P. C. (2013) Identifying Recent Adaptations in Large-Scale Genomic Data. *Cell.* **152**, 703–713
57. Sun, L., Goff, L. A., Trapnell, C., Alexander, R., Lo, K. A., Hacısuleyman, E., Sauvageau, M., Tazon-Vega, B., Kelley, D. R., Hendrickson, D. G., Yuan, B., Kellis, M., Lodish, H. F., and **Rinn, J.L.** (2013) Long noncoding RNAs regulate adipogenesis. *Proc National Acad Sci.* **110**, 3387–3392
58. Sauvageau, M., Goff, L. A., Lodato, S., Bonev, B., Groff, A. F., Gerhardinger, C., Sanchez-Gomez, D. B., Hacısuleyman, E., Li, E., Spence, M., Liapis, S. C., Mallard, W., Morse, M., Swerdel, M. R., D'Ecclesiss, M. F., Moore, J. C., Lai, V., Gong, G., Yancopoulos, G. D., Frenthewey, D., Kellis, M., Hart, R. P., Valenzuela, D. M., Arlotta, P., and **Rinn, J.L.** (2013) Multiple knockout mouse models reveal lincRNAs are required for life and brain development. *Elife.* **2**, e01749
59. Marín-Béjar, O., Marchese, F. P., Athie, A., Sánchez, Y., González, J., Segura, V., Huang, L., Moreno, I., Navarro, A., Monzó, M., García-Foncillas, J., **Rinn, J.L.**, Guo, S., and Huarte, M. (2013) Pint lincRNA connects the p53 pathway with epigenetic silencing by the Polycomb repressive complex 2. *Genome Biol.* **14**, R104–R104
60. Goff, L. A., and **Rinn, J.L.** (2013) Poly-combing the genome for RNA. *Nat Struct Mol Biol.* **20**, 1344–6
61. Chew, G.-L., Pauli, A., **Rinn, J.L.**, Regev, A., Schier, A. F., and Valen, E. (2013) Ribosome profiling reveals resemblance between long non-coding RNAs and 5' leaders of coding RNAs. *Development.* **140**, 2828–2834

62. Yoon, J.-H., Abdelmohsen, K., Kim, J., Yang, X., Martindale, J. L., Tominaga-Yamanaka, K., White, E. J., Orjalo, A. V., **Rinn, J.L.**, Kreft, S. G., Wilson, G. M., and Gorospe, M. (2013) Scaffold function of long non-coding RNA HOTAIR in protein ubiquitination. *Nat Commun.* **4**, 2939
63. Doolittle, W. F., Fraser, P., Gerstein, M. B., Graveley, B. R., Henikoff, S., Huttenhower, C., Oshlack, A., Ponting, C. P., **Rinn, J.L.**, Schatz, M. C., Ule, J., Weigel, D., and Weinstock, G. M. (2013) Sixty years of genome biology. *Genome Biol.* **14**, 113–113
64. Henao-Mejia, J., Williams, A., Goff, L. A., Staron, M., Licona-Limón, P., Kaech, S. M., Nakayama, M., **Rinn, J.L.**, and Flavell, R. A. (2013) The MicroRNA miR-181 Is a Critical Cellular Metabolic Rheostat Essential for NKT Cell Ontogenesis and Lymphocyte Development and Homeostasis. *Immunity.* **38**, 984–997
65. Younger, S. T., and **Rinn, J.L.** (2014) 'Lnc'-ing enhancers to MYC regulation. *Cell Res.* **24**, 643–644
66. **Rinn, J.L.**, and Ule, J. (2014) 'Oming in on RNA–protein interactions. *Genome Biol.* **15**, 401
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68. Lodato, S., Molyneaux, B. J., Zuccaro, E., Goff, L. A., Chen, H.-H., Yuan, W., Meleski, A., Takahashi, E., Mahony, S., **Rinn, J.L.**, Gifford, D. K., and Arlotta, P. (2014) Gene co-regulation by Fezf2 selects neurotransmitter identity and connectivity of corticospinal neurons. *Nat Neurosci.* **17**, 1046–1054
69. **Rinn, J.L.** (2014) lncRNAs: Linking RNA to Chromatin. *Csh Perspect Biol.* **6**, a018614
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### Keynote Speaker Lectures:

2015	<b>Keynote Speaker</b> , Genome Regulation, Cold Spring Harbor Laboratories, USA
2015	<b>Keynote Speaker</b> , ETH Annual Student Retreat, Switzerland
2020	<b>Keynote Speaker</b> , IEEE Bioinformatics and Biomedicine Conference, Virtual
2021	<b>Keynote Speaker</b> , Annual Danish RNA Society meeting, Denmark
2021	<b>Keynote Speaker</b> , HUB-IBMS-Pathology (HiP) Research Symposium, S. Africa
2023	<b>Keynote Speaker</b> , Annual Precision Genomics Meeting, Cincinnati Children's Hospital, USA
2023	<b>Keynote Speaker</b> , MD Anderson Genetics and Epigenetics (G&E) Graduate Program annual retreat, USA

**Invited Speaker Lectures:**

- 2002 **Invited Speaker**, Annual Yeast Genetics and Molecular Biology Meeting, University of Wisconsin, USA
- 2006 **Invited Speaker**, Cold Spring Harbor Systems Biology Meeting, Cold Spring Harbor Laboratories, USA
- 2006 **Invited Speaker**, Federation of American Societies for Experimental Biology Transcriptional Regulation Meeting, Vermont Academy, USA
- 2007 **Invited Speaker**, Cold Spring Harbor Systems Biology Workshop, Cold Spring Harbor Laboratories, USA
- 2007 **Invited Speaker**, University of Pennsylvania, USA
- 2007 **Invited Speaker**, Columbia University, USA
- 2007 **Invited Speaker**, University of San Diego, USA
- 2007 **Invited Speaker**, Keystone Meeting on Epigenetics, USA
- 2007 **Invited Speaker**, Weizmann Institute of Genetics, Israel
- 2008 **Invited Speaker**, Cold Spring Harbor Systems Biology Workshop, Cold Spring Harbor Laboratories, USA
- 2009 **Invited Speaker**, Cold Spring Harbor Biology of Genomes, Cold Spring Harbor Laboratories, USA
- 2009 **Invited Speaker**, Society for Investigative Dermatology, Oregon, USA
- 2009 **Invited Speaker**, Abcam Epigenetics Meeting
- 2010 **Invited Speaker**, Stanford University, USA
- 2010 **Invited Speaker**, Yale University, USA
- 2010 **Invited Speaker**, Cold Spring Harbor Systems Biology Meeting, USA
- 2010 **Invited Speaker**, National Institutes of Environmental Health Safety, USA
- 2010 **Invited Speaker**, Mount Desert Biological Laboratories Stem Cell Meeting
- 2010 **Invited Speaker**, Business Innovation Factory
- 2010 **Invited Speaker**, New York University, USA
- 2010 **Invited Speaker**, Abcam: Stochastic Events in Stem Cell Differentiation and Reprogramming
- 2010 **Invited Speaker**, University of Massachusetts Worcester Medical School, USA
- 2010 **Invited Speaker**, New York Academy of Sciences, USA
- 2010 **Invited Speaker**, European Molecular Biology Organization | European Molecular Biology Laboratories Symposia on Non-coding RNA, Germany
- 2010 **Invited Speaker**, Lorne Genome Conference, Australia
- 2010 **Invited Speaker**, International Society for Computational Biology : Intelligent Systems for Molecular Biology
- 2010 **Invited Speaker**, Gurdon Institute, United Kingdom
- 2011 **Invited Speaker**, University of Pennsylvania, USA
- 2011 **Invited Speaker**, Keystone Conference: MicroRNAs and Non-Coding RNAs and Cancer/MicroRNAs and Human Disease, Canada
- 2011 **Invited Speaker**, The American Society for Molecular Biology and Biochemistry, USA
- 2011 **Invited Speaker**, Non-coding RNA, Epigenetic Memory and the Environment, England
- 2011 **Invited Speaker**, Symposium of RNA biology, Duke University, USA
- 2011 **Invited Speaker**, Genome Informatics Meeting, Cold Spring Harbor Laboratories, USA
- 2011 **Invited Speaker**, Case Western Reserve University, USA
- 2011 **Invited Speaker**, University of Minnesota, USA
- 2012 **Invited Speaker**, University of California San Diego, USA
- 2012 **Invited Speaker**, AACR Noncoding RNA in cancer meeting
- 2012 **Invited Speaker**, Keystone Symposium for Molecular Biology: ncRNA, USA
- 2012 **Invited Speaker**, Tulane University, USA
- 2012 **Invited Speaker**, National Institutes in Environmental Health Sciences, USA
- 2012 **Invited Speaker**, University of Texas Southwestern, USA
- 2012 **Invited Speaker**, Fred Hutch Institute, USA

- 2012 **Invited Speaker**, The Wistar Institute, USA
- 2012 **Invited Speaker**, Memorial Sloan Kettering, USA
- 2012 **Invited Speaker**, Rockefeller University, USA
- 2012 **Invited Speaker**, University of California, Santa Cruz, USA
- 2012 **Invited Speaker**, University of Pennsylvania, USA
- 2012 **Invited Speaker**, University of Colorado, Boulder, USA
- 2012 **Invited Speaker**, Rutgers University, USA
- 2013 **Invited Speaker**, National Institute of Aging, USA
- 2013 **Invited Speaker**, Atlas Venture Capital Annual Retreat, USA
- 2013 **Invited Speaker**, Banburry Meeting on Enhancers, Cold Spring Harbor Laboratories, USA
- 2013 **Invited Speaker**, California Institute of Technology, USA
- 2014 **Invited Speaker**, National Academy of Sciences: Sackler Lecture, USA
- 2014 **Invited Speaker**, Annual RiboClub Meeting, Canada
- 2014 **Invited Speaker**, Cell Metabolism Meeting, USA
- 2014 **Invited Speaker**, University of Chicago, USA
- 2015 **Invited Speaker**, St. Jude Hospital, USA
- 2015 **Invited Speaker**, University of Massachusetts Worcester, USA
- 2015 **Invited Speaker**, Allan Foundation
- 2015 **Invited Speaker**, UPMC Non-coding Genome, France
- 2015 **Invited Speaker**, University of Utah, USA
- 2015 **Invited Speaker**, National Cancer Institute, USA
- 2015 **Invited Speaker**, Keystone Symposium Long non-coding RNAs: From evolution to function, USA
- 2015 **Invited Speaker**, Keystone Symposium: DNA Methylation, USA
- 2015 **Invited Speaker**, Merck, USA
- 2015 **Invited Speaker**, Carnegie Mellon University, USA
- 2015 **Invited Speaker**, Gold Symposium, USA
- 2015 **Invited Speaker**, Abcam: RNA Biology
- 2015 **Invited Speaker**, National Institute of Environmental Health Sciences, USA
- 2015 **Invited Speaker**, Keystone Symposium: RNA and Cancer, USA
- 2015 **Invited Speaker**, Gordon Conference: Developmental Biology, USA
- 2015 **Invited Speaker**, Gordon Conference: Cell Proliferation, USA
- 2015 **Invited Speaker**, ETH Annual Student Retreat, Switzerland
- 2015 **Invited Speaker**, Royal Society: Long non-coding RNAs evolution of new epigenetic and post-transcriptional functions, England
- 2015 **Invited Speaker**, European Molecular Biology Organization | European Molecular Biology Laboratories Symposia on Non-coding RNA, Germany
- 2015 **Invited Speaker**, University of Colorado, Boulder, USA
- 2016 **Invited Speaker**, Epigenomics 2016, Puerto Rico
- 2016 **Invited Speaker**, Keystone Symposium: Non-coding RNA and enhancers, USA
- 2016 **Invited Speaker**, Gordon Conference: Post-transcriptional Gene Regulation, USA
- 2016 **Invited Speaker**, Friedrich Miescher Institute, Switzerland
- 2016 **Invited Speaker**, Non-coding RNA from function to evolution, Switzerland
- 2016 **Invited Speaker**, Max Delbrück Center, Germany
- 2016 **Invited Speaker**, Keystone Symposium: Non-coding RNAs: From disease to targeted therapeutics, Canada
- 2017 **Invited Speaker**, Gordon Conference: From mechanism to biological impacts, USA
- 2018 **Invited Speaker**, Keystone Symposium: Cancer Epigenetics: New mechanisms, new therapies, USA
- 2018 **Invited Speaker**, Keystone Symposium: Long non-coding RNAs, USA
- 2018 **Invited Speaker**, University of Pennsylvania, USA
- 2018 **Invited Speaker**, European Molecular Biology Organization RNA: Structure meets function, Sweden
- 2018 **Invited Speaker**, ASBMB: Transcription regulation chromatin and RNA Polymerase II, USA

- 2019 **Invited Speaker**, University of Colorado Anschutz, USA
- 2019 **Invited Speaker**, Keystone Symposium: Long non-coding RNA: From molecular mechanisms to functional genetics, Canada
- 2019 **Invited Speaker**, European Molecular Biology Organization Non-coding genome, Germany
- 2019 **Invited Speaker**, Purdue University, USA
- 2019 **Invited Speaker**, University of Pittsburgh, USA
- 2020 **Invited Speaker**, Keystone Symposium: Non-coding RNAs: Mechanism, function, and therapies, Canada
- 2020 **Invited Speaker**, Cold Spring Harbor Genome Architecture, Virtual
- 2020 **Invited Speaker**, Cold Spring Harbor Non-coding RNAs, Virtual
- 2020 **Invited Speaker**, RNA Society Annual Meeting, Virtual
- 2020 **Invited Speaker**, IEEE, Japan, Virtual
- 2021 **Invited Speaker**, Telluride Conference: Physical genomics and transcriptional engineering, Virtual
- 2021 **Invited Speaker**, Cape Town Biennial Research Symposium, South Africa, Virtual
- 2021 **Invited Speaker**, AACR Special Conference on Cancer Epigenomics, USA
- 2022 **Invited Speaker**, University of California, Los Angeles, USA, Virtual
- 2023 **Invited Speaker**, Telluride Conference: Physical genomics and transcriptional engineering, USA
- 2023 **Invited Speaker**, EpiCypher 2023: Biological and Clinical Frontiers in Epigenetics, Mexico