Curriculum Vitae and Bibliography

Name: Rong Li

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Johns Hopkins University School of Medicine
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Citizenship: USA

Education

1984-1988	B.S. and M.S (Combined) (Molecular Biochemistry and Biophysics)	Yale University
1988-1992	Ph.D. (Biochemistry & Biophysics)	University of California, San Francisco

Postdoctoral Training

1993-1994	Postdoctoral fellow (Molecular Cell Biology)	University of California, Berkeley

Academic Appointments

Dec 1994 – Dec 1999	Assistant Professor	Department of Cell Biology Harvard Medical School
Jan 2000 – June 2005	Associate Professor	Department of Cell Biology Harvard Medical School
July 2005 – June 2015	Investigator	Rong Li Laboratory Stowers Institute for Medical Research
Jan 2006 – June 2015	Professor (affiliated)	Department of Molecular and Integrative Physiology University of Kansas School of Medicine
July 2015 – present	Bloomberg Distinguished Professor	Department of Cell Biology, Johns Hopkins School of Medicine

		Department of Chemical and Biomolecular Engineering, Johns Hopkins University
July 2015 - June 2020	Director	Center for Cell Dynamics, Institute for Basic Biomedical Sciences, Johns Hopkins University
July 2019 - present	Distinguished Professor	Department of Biological Sciences, National University of Singapore
July 2019 - present	Director	Mechanobiology Institute, National University of Singapore

Professional Memberships

1998 – present	American Association for the Advancement of Science
1998 – Present	American Society for Cell Biology
2013 – Present	Biophysical Society

Awards and Honors

1988	Phi Beta Kappa, *Summa Cum Laude*, Distinction in Major, Yale University
1993 – 1994	Damon Runyon-Walter Winchell Cancer Research Fellowship
1995 – 1997	Medical Foundation New Investigator Award
1997 – 1998	The Funds for Discovery Exploratory Award
1998 – 2000	Giovanni Armenise/Harvard Foundation Award
1999 – 2001	Hoechst Marion Roussel Research Award
2000	Biological and Biomedical Sciences Mentoring Award, Harvard Medical School
2004 – 2005	The Alexander and Margaret Stewart Trust Pilot Project Program Award
2010 – 2011	William B. Neaves Award, Stowers Institute for Medical Research
2019	Sandra B. Matur Senior Leadership Award, American Society for Cell Biology

Extramural Services (non-confidential)

2001 – 2007	Member, American Cancer Society, Cell Cycle and Growth Control Study Section
2008 – 2012	Member, NIH, Nuclear and Cytoplasmic Structure/Function and Dynamics Study Section
2008 –	Associate Editor, BMC-Cell Biology
2009 –	Associate Editor, Molecular Biology of the Cell
2009 – 2015	Editor, Development
2010	Program Committee, American Society for Cell Biology Annual Meeting
2011	Selection Committee Chairperson, American Society for Cell Biology Bernfield Award and Gilula Award
2012	Selection Committee member, American Society for Cell Biology, Early Career Life Scientist Award

2012 – 2015 Editorial Board Member, Biophysical Journal
2012 – 2013 Guest Editor, Seminars in Cell and Developmental Biology
2016 Program Committee, American Society for Cell Biology Annual Meeting
2016 – 2018 Senior Scientific Advisor, United Nations Office of Project Services
2017 – 2018 Advisory Board, NIH P30 PKD Center at Univ. Maryland and Johns Hopkins
Team Science Award Selection Committee, AACR

Local and International Teaching

1996 – 2004 Instructor, Cell Biology, Harvard Medical School, graduate core course
2000 – 2003 Course Director, Cell Biology, Harvard Medical School, graduate core course
2003 – 2004 Instructor, Unsolved Mysteries in Cell Biology, Harvard Medical School, upper level graduate course
2003 Course co-director/Instructor, Experimental Biology for Theoreticians, the Bauer Center for Genomic Research
2004 Instructor, Physiology Course, Marine Biological Laboratory, Woods Hole
2006 Course director/ instructor, Summer invited lecture series on Frontiers of Cell Biology, Chinese Academy of Sciences, China
2007 Invited faculty, EMBL Cell Biology course, Heidelberg, Germany
2007 Invited faculty, Systems Neurobiology Spring School, Nara Institute of Science and Technology, Japan
2008 Invited faculty, Bio2000 Spring course, Shanghai and Beijing, China
2012 Guest Lecturer, Cold Spring Harbor Laboratory Yeast Genetics course

Mentoring

Recipient of the 2000 Mentoring Award of the Biological and Biomedical Sciences Graduate Program, Harvard Medical School; trained 17 PhD students and 18 postdoctoral fellows, many of whom have assumed independent or leadership positions in academia and industry.

Major awards received by former trainees:

Guangbo Chen (graduate student) – ASCB Kaluza Price for Excellence in Graduate Research, 1st Price, 2015
Chuankai Zhou (graduate student) – ASCB Norton Gilula Award, 2015
Giulia Rancati (postdoc) – EMBO Young Investigator Award, 2016

Invited Presentations (past 10 years)

Symposium Presentations, Keynotes, and named lectures

American Society for Cell Biology Annual Meeting, Symposium on the Cell Cycle and the Cytoskeleton (2001)
American Society for Cell Biology Annual Meeting, Symposium on the Cell Identity (2021)

Cold Springs Harbor Conference on Cellular Dynamics & Models, Keynote (2017)
French Society for Cell Biology Annual Meeting, "Building the Cell", Paris, Keynote (2016)
Gordon Research Conference on Cell Polarity Signaling, Keynote (2018)
Genetic Society of Israel Annual Meeting, Tel Aviv, Keynote (2015)
International Cell Cycle Meeting, Trieste, Italy, Keynote (2019)
MBL Physiology Tay Hayashi Endowed lecture, Woods Hole (2017)
Mid-Atlantic Mitosis Meeting 2017: From Kinetochores to Cancer, Keynote (2017)
Northwestern University, Molecular and Cell Biology Retreat, Keynote (2011)
Society of Experimental Biology and the Biochemical Society, on "Cell Polarity: Mechanisms and Modeling", Valencia, Spain, Keynote (2013)
Watkins Visiting Professorship Lecture, Wichita State University (2012)

Seminars and Grand Rounds

Baylor College of Medicine (2012)
Bloomberg School of Public Health (2015)
Cancer Genomics & Development Biology Master Class, Utrecht University, Netherlands (2013)
Cancer Research UK, London, England (2013)
CNRS-Gif-sur-Yvette, France (2009, 2012, 2013)
CNRS-Grenoble, France (2012)
Columbia University Medical School (2009, 2017)
Cornell Medical School (2018)
Duke Medical School (2014)
Francis Crick Institute, London (2016)
Federal Institute of Technology, Lausanne, Switzerland (2016)
Fudan University, Shanghai, China (2017)
IFOM-IEO Campus, Milan, Italy (2013)
Institut Curie, Paris, France (2013)
Institut Jacques Monod, Paris, France (2012)
Institute of Biophysics, Chinese Academy of Science (2011, 2016)
Institute of Chemical Physics, Chinese Academy of Science (2016)
Institute of Molecular Biology, Academia Sinica, Taipei, Taiwan (2011)
Institute of Molecular Cell Biology, A'STAR, Singapore (2019)
IST Austria (2021)
Johns Hopkins School of Medicine (2013)
Johns Hopkins School of Medicine Pathology (2015 Grand rounds, 2019 YID Guest speaker)
Johns Hopkins University Institute of Computational Medicine (2015)
MD Anderson Cancer Center (2012)
Massachusetts General Hospital Cancer Center (2015)
Memorial Sloan Kettering Cancer Center (2013)
Methodist Hospital Cancer Center, Houston (2016)
Moffitt Cancer Center (2018)
National Institute of Health (2015, 2017)

National Technical University, Singapore (2019)
Northwestern University, Feinberg School of Medicine (2009, 2016)
Oklahoma Medical Research Foundation (2011)
Princeton University (2012)
Rockefeller University (2017)
Sanford-Burnham Medical Research Institute (2014)
Stanford University (2010, 2016)
University of California, Davis (2010)
University of California, Irvine (2014, 2016)
University of California, Riverside (2010)
University of California, San Francisco (2015, 2018)
University of California, Dan Diego (2018)
University of Massachusetts, Amherst (2014)
University of Maryland (2015)
University of Missouri, Kansas City (2007) School of Dentistry (2010)
University of Pennsylvania (2011, 2016, 2018, 2021)
University of Pittsburg (2015)
University of Texas-Southwestern, Dallas, Texas (2018)
University of Toronto (2009, 2014)
University of Virginia (2016)
University of Wisconsin, Madison (2013)
Wayne State University School of Medicine (2009)
Yale School of Medicine (2011)
Yale School of Engineering (2014)
Yale Systems Biology Institute (2014)

Conference presentations

American Society for Cell Biology Annual Meeting (2011) (Actin Dynamics Minisymposium Chair)
American Society for Cell Biology Annual Meeting (2014) (Cell Organization and Polarity Minisymposium Chair)
Biophysical Society Annual Meeting (2013, 2015)
Biophysical Society Thematic Meeting "Weak Protein-Ligand Interactions: New Horizons in Biophysics and Cell Biology", Beijing (2012)
Biophysical Society Thematic Meeting "Actin, the Cytoskeleton, and the Nucleus", Singapore (2010)
Biophysics Symposium, University of Maryland (2012)
CNIO Frontiers Meeting "Chromosome instability and aneuploidy in cancer: from mechanisms to therapeutics", Madrid (2013)
Crick International Cancer Meeting (2019)
Dartmouth Life Sciences Symposium (2013)
EMBO conference "The DNA damage response in cell physiology and disease (2019)
EMBO Symposium on Mechanical Forces in Biology (2017)

EMBO Symposium on Tissue Self-Organization (2018)
FASEB Mitosis Meeting (2012)
FASEB Yeast Chromosome Meeting (2012)
Frontier in Cancer Science Conference, Singapore (2017)
Francis Crick Conference on Cancer, London (2019)
German Society of Cell Biology International Meeting (2014)
Gordon Research Conference on Cell Growth and Proliferation (2013)
Gordon Research Conference on Fertilization and Activation of Development (2015)
Gordon Research Conference on Mitochondria, Barga, Italy (2018)
Gordon Research Conference on Stochastic Physics in Biology (2011)
Institut de Biologie du Developpement de Marseille Luminy (IBDM) "Quantitative Biology of Signaling" Workshop, Cargèse, France (2013, 2015)
International Conference on Computational Cell Biology: from the Past to the Future, Virginia Tech (2013)
International Society for Stem Cell Research Annual Meeting (2014)
Keystone Symposia on Mitochondria Biology in Aging and Age-Related Diseases (2019)
Marshall Symposia, Cancer Research UK (2017)
MBI Conference – The Mechanobiology of Morphogenesis (2020)
NYU Genome Symposium (2017)
The Royal Society Meeting on Cell Polarity, London (2013)
Society for Mathematical Biology Annual Meeting (2012)
Tumor Biology Symposia, Lisbon, Portugal (2018)
World Congress of Nephrology, Vancouver, Canada (2011)

Peer-reviewed publications

H Index 68; >16,000 total citations (Google Scholar)

I. Research Papers

1. Narkar A, Johnson B, Bharne P, Zhu J, Padmanaban V, Biswas D, Fraser A, Iglesias PA, Ewald AJ, **Li R**. On the role of p53 in the cellular response to aneuploidy. Cell Rep *In press*
2. Ruan L, McNamara JT, Zhang X, Chang AC, Zhu J, Dong Y, Sun G, Peterson A, Chan HN, **Li R.** Solid-phase inclusion as a mechanism for regulating unfolded proteins in the mitochondrial matrix. Science Adv 6 DOI:10.1126/sciadv.abc7728
3. Wang H, Li Y, Yang J, Duan X, Kalab P, Sun S, and **Li R**. Symmetry breaking in hydrodynamic forces drive meiotic spindle rotation in mammalian oocyte. (2020) Science Adv 6 DOI:10.1126/sciadv.aaz5004
4. Duan X, Yi K, Li Y, Wang H, Mair D, Wu P, Yang J, Morales-Obregon E, Guo F, Kalab P, Wirtz, D, Sun S, and **Li R**. Dynamic organelle distribution initiates actin-based spindle migration in mouse oocytes. (2020) Nat com 11: article number 277
5. Wu PS, Gilkes DM, Philips J, Narkar A, Cheng TW, Marchand J, Lee MH, **Li R**, Wirtz D. Single-Cell Morphology Encodes Metastatic Potential. (2020) Sci Adv 6:eaaw6938.

6. Drutovic P, Duan X, **Li R**, Kalab P, Solc P. RanGTP and importin β regulate meiosis I spindle assembly and function in mouse oocytes (2020) EMBO J 39:e101689

7. Thompson DJ, …, **Li R**, … Perry JRB. Genetic predisposition to mosaic Y chromosome loss in blood is associated with genomic instability in other tissues and susceptibility to non-haematological cancers. (2019) Nature 575:652-657

8. Puddu F, Herzog M, Selivanova A, Wang S, Zhu J, Gordon M, Millan-Zambrano G, Ayestaran I , Salguero I, **Li R**, Kupiec M, and Jackson SP. Genome architecture and stability in the absence of any single gene. (2019) Nature 573:416-420

9. Tsai HJ, Nelliat AR, Kucharavy, A., Choudhury MI, Bradford WD, Cook ME, Kim J, Sun SX, Schatz MC, **Li R**. Hypo-osmotic-like stress underlies general cellular defects of aneuploidy. (2019) Nature 570: 117-121.

10. Paul P, Ramachandran S, Xia S, Unruh JR, Conkright-Fincham J, **Li R**. Dopamine receptor antagonists as potential therapeutic agents for ADPKD. (2019) PLoS ONE 14:e0216220

11. Kucharavy A, Rubinstein B, Zhu J and **Li R**. Robustness and Evolvability of Heterogeneous Cell Populations. (2018) Mol Bio Cell 29:1400-1409

12. Mulla WA, Seidel CW, Zhu J, Tsai HJ, Smith S, Singh P, Bradford WD, McCroskey S, Neliat A, Conkright J, Peak A, Malanowski K, Perera A, **Li R**. Aneuploidy as a cause of impaired chromatin silencing and mating-type specification in budding yeast. (2017) Elife pii: e27991. doi: 10.7554/eLife.27991

13. McDonald NA, Lind AL, Smith SE, **Li R**, Gould KL. Nanoscale architecture of the *Schizosaccharomyces pombe* contractile ring. (2017) Elife pii: e28865

14. Anderson KL,Page C, Swift MF, Suraneni P, Janssen MEW, ollard TD, **Li R**, Volkmann N, Hanein D. Nano-scale actin-network characterization of fibroblast cells lacking functional Arp23 complex. (2017) J Struct Bio 197:312-321.

15. Singh P, Ramachandran SK, KimB, Biswas D, Ha T, Iglesias P, **Li R**. Sphingolipids facilitate age asymmetry of membrane proteins in dividing yeast cells. (2017) Mol Bio Cell 28:2712-2722. *Research Highlight in FASEB J*

16. Ruan L, Zhou C, Jin E, Kucharavy A, Zhang Y, Wen Z, Florens L, **Li R**. Cytosolic proteostasis through importing of misfolded proteins into mitochondria. (2017) Nature 543:443-446. *Highlighted in Nature News&Views; Alzhforum Research News*

17. Wang P-S, Chou F-S, Ramachandran S, Xia S, Chen H-Y, Guo F, Suraneni P, Maher B, **Li R**. Crucial Roles of the Arp2/3 Complex during Mammalian Corticogenesis. (2016) Development 143:2741-2752

18. Potapova TA, Seidel CW, Box AC, Rancati G, **Li R**. Transcriptome analysis of tetraploid cells identifies cyclin D2 as a facilitator of adaptation to genome doubling in the presence of p53. (2016) Mol Bio Cell 27:3065-3084

19. Vargas P, Maiuri P, Bretou M, SáezP, Pierobon P, Maurin M, Chabaud M, Lankar D, Obino D, Terriac E, Raab M, Thiam HR, Brocker T, Kitchen-Goosen SM, Alberts A,

Sunareni P, Xia S, **Li R**, Voituriez R, Piel M, Lennon-Duménil AM. Innate Control of Actin Nucleation Determines Two Distinct Migration Behaviours In Dendritic Cells. (2016) Nat Cell Bio 18:43-53

20. Potapova TA, Unruh JR, Box AC, Bradford WD, Seidel CW, Slaughter BD, Sivagnanam S, Wu Y, **Li R.** Karyotyping human and mouse cells using probes from single-sorted chromosomes and open source software. (2015) Biotechniques. 59:335-346.

21. Li Y, Wang PS, Lucas G, **Li R**, Yao L. ARP2/3 complex is required for directional migration of neural stem cell-derived oligodendrocyte precursors in electric fields. (2015) Stem Cell Res Ther 21;6:41

22. Zhu J, Heinecke D, Mulla W, Bradford WD, Rubinstein B, Box A, Haug JS and **Li R**. Single-cell based quantitative assay of chromosome transmission fidelity. (2015) G3 30:1043-1056

23. Chen G, Mulla WA, Kucharavy A, Tsai HJ, Rubinstein B, Conkright J, McCroskey S, Bradford WD, Weems L, Haug JS, Seidel CW, Berman J and **Li R**. Targeting the adaptability of heterogeneous aneuploids. (2015) Cell 160:771-784

24. Suraneni, P, Gogelson, Ben, Rubinstein, B, Noguera, P., Volkmann, N., Hanein, D., Mogilner, A, **Li, R.** A mechanism of leading edge protrusion in the absence of the Arp2/3 complex. (2015) Mol Bio Cell. E14-07-1250

25. Zhou C, Slaughter BD, Unruh JR, Guo F, Yu Z, Mickey K, Narkar A, Ross TR, McClain M and **Li R**. Organelle-based aggregation and retention of damaged proteins in asymmetrically dividing cells. (2014) Cell 159:530-542. *Highlighted in Cell Preview*

26. Li G, Li M, Zhang Y, Wang D, **Li R**, Guimerà R, Gao J, Zhang MQ. ModuleRole: a tool for modulization, role determination and visualization in protein-protein interaction networks. (2014) PLoS One 9(5):e94608

27. Three-dimensional reconstructions of actin filaments capped by Arp2/3 complex. Volkmann N, Page C, **Li R**, Hanein D. (2014) Eur J Cell Biol. 93:179-83

28. Smith SE, Rubinstein B, Mendes Pinto I, Slaughter BD, Unruh JR, **Li R**. Independence of symmetry breaking on Bem1-mediated autocatalytic activation of Cdc42. (2013) J Cell Biol 202:1091-1106

29. Yi K, Rubinstein B, Unruh JR, Guo F, Slaughter BD, and **Li R.** Sequential actin-based pushing forces drive meiosis I chromosome migration and symmetry breaking in oocytes. (2013) J Cell Biol 200:567-576

30. Slaughter BD, Unruh JR, Das A, Smith SE, Rubinstein B and **Li R.** Non-uniform membrane diffusion enables steady-state cell polarization via vesicular trafficking. (2013) Nat Com 4:1380.

31. Mendes Pinto I, Rubinstein B, Kucharavy A, Unruh JR, **Li R.** Actin depolymerization drives actomyosin ring contraction during budding yeast cytokinesis. (2012) Dev Cell 22(6):1247-1260

32. Suraneni P, Rubinstein B, Unruh JR, Durnin M, Hanein D, **Li R.** The Arp2/3 complex is required for lamellipodia extension and directional fibroblast cell migration. (2012) J Cell Biol 16; 197(2):239-51. *Cover story and comment in In Focus.*

33. Das A, Slaughter BD, Unruh JR, Bradford WD, Alexander R, Rubinstein B, **Li R.** Flippase-mediated phospholipid asymmetry promotes fast Cdc42 recycling in dynamic maintenance of cell polarity. (2012) Nat Cell Biol 14(3):304-10. *Reported in ScienceDaily*

34. Chen G, Bradford WD, Seidel CW, **Li R.** Hsp90 stress potentiates rapid cellular adaptation through induction of aneuploidy. (2012) Nature 482:246-250. *Reported in The Scientist and New Scientist*

35. Zhu J, Pavelka N, Bradford WD, Rancati G, **Li R.** Karyotypic determinants of chromosome instability in aneuploid budding yeast. (2012) PLoS Genet 8(5):e1002719 *Highlighted in New & Noteworthy at Saccharomyces Genome Database (SGD).*

36. Xu XP, Rouiller I, Slaughter BD, Egile C, Kim E, Unruh JR, Fan X, Pollard TD, **Li R**, Hanein D, Volkmann N. Three-dimensional reconstructions of Arp2/3 complex with bound nucleation promoting factors. (2011) EMBO J 31:236-47.

37. Zhou C, Slaughter BD, Unruh JR, Eldakak A, Rubinstein B, **Li R.** Motility and segregation of Hsp104-associated protein aggregates in budding yeast. (2011) Cell 147:1186-96. PMCID:PMC3237388 *Reported in The Scientist*

38. Yi K, Unruh JR, Deng M, Slaughter BD, Rubinstein B, **Li R.** Dynamic maintenance of asymmetric meiotic spindle position through Arp2/3-complex-driven cytoplasmic streaming in mouse oocytes. (2011) Nat Cell Biol 13:1252-8. *Highlighted in NCB News & Views*.

39. Gao JT, Guimerà R, Li H, Pinto IM, Sales-Pardo M, Wai SC, Rubinstein B **Li R.** Modular coherence of protein dynamics in yeast cell polarity. (2011) Proc Natl Acad Sci USA 108:7647-52.

40. Potapova TA, Sivakumar S, Flynn JN, **Li R**, Gorbsky GJ. Mitotic progression becomes irreversible in prometaphase and collapses when Wee1 and Cdc25 are inhibited. (2011) Mol Biol Cell 22:1191-206.

41. Pavelka N, Rancati G, Zhu J, Bradford WD, Saraf A, Florens L, Sanderson BW, Hattem GL, **Li R**. Aneuploidy confers quantitative proteome changes and phenotypic variation in budding yeast. (2010) Nature 468:321-5. *Highlighted in Nature New & Views*.

42. Eldakak A, Rancati G, Rubinstein B, Paul P, Conaway V, **Li R**. Asymmetrically inherited multidrug resistance transporters are recessive determinants in cellular replicative ageing. (2010) Nat Cell Biol 12:799-805. *Reported in Nature News and ScienceNews*

43. Bosl W, **Li R**. The role of noise and positive feedback in the onset of autosomal dominant diseases. (2010) BMC Syst Biol 4:93.

44. Xia S, Li X, Johnson T, Seidel C, Wallace DP, **Li R.** Polycystin-dependent fluid flow sensing targets histone deacetylase 5 to prevent the development of renal cysts. (2010) Development 1075-84. *Highlighted in In This Issue.*

45. Slaughter BD, Das A, Schwartz JW, Rubinstein B **Li R.** Dual modes of Cdc42 recycling fine-tune polarized morphogenesis. (2009) Dev Cell 17:823-835.

46. Wai SC, Gerber SA, **Li R.** Multisite phosphorylation of the guanine nucleotide exchange factor Cdc24 during yeast cell polarization. (2009) PLoS One 4:e6563.

47. Deng M, Gao J, Suraneni P, **Li R.** Kinetochore-independent chromosome poleward movement during anaphase of meiosis II in mouse eggs. (2009) PLoS One 4:e5249.

48. Rancati G, Pavelka N, Fleharty B, Noll A, Allen R, Walton K, Perera A, Staehling-Hampton K, Seidel CW, **Li R.** Aneuploidy underlies rapid adaptive evolution of yeast cells deprived of a conserved cytokinesis motor. (2008) Cell 135:879-893. *Highlighted as Featured Article of the issue with commentary.*

49. Li H, Guo F, Rubinstein B, **Li R.** Actin-driven chromosomal motility leading to symmetry breaking in mammalian meiotic oocytes. (2008) Nat Cell Biol 10:1301-08.

50. Li X, Magenheimer BS, Xia S, Johnson T, Wallace DP, Calvet JP, **Li R.** A tumor necrosis factor-alpha-mediated pathway promoting autosomal dominant polycystic kidney disease. (2008) Nat Med 14:863-868.

51. Slaughter BD, Huff JM, Wiegraebe W, Schwartz JW, **Li R.** SAM domain-based protein oligomerization observed by live-cell fluorescence fluctuation spectroscopy (2008) PLoS One 23:e1931

52. Rouiller I, Xu XP, Amann KJ, Egile C, Nickell S, Nicastro D, **Li R**, Pollard TD, Volkmann N, Hanein D. The structural basis of actin finlament branching by Arp2/3 complex. (2008) J Cell Biol 180:887-95

53. Fan X, Martin-Brown S, Florens L, **Li R.** Intrinsic capability of budding yeast cofilin to promote turnover of tropomyosin-bound actin filaments. (2008) PLoS One 3:e3641.

54. Slaughter BD, Schwartz JW, **Li R**. Mapping dynamic protein interactions in MAP kinase signaling using live-cell fluorescence fluctuation spectroscopy and imaging. (2007) Proc Natl Acad Sci USA 104:20320-5.

55. Marco E, Wedlich-Soldner R, **Li R**, Altschuler SJ, Wu LF. Endocytosis optimizes the dynamic localization of membrane proteins that regulate cortical polarity. (2007) Cell 129:411-422.

56. Deng M, Suraneni P, Schultz RM, **Li R.** The Ran GTPase mediates chromatin signaling to control cortical polarity during polar body extrusion in mouse oocytes. (2007) Dev Cell 12:301-8.

57. Lister IM, Tolliday NJ, **Li R** Characterization of the minimum domain required for targeting budding yeast myosin II to the site of cell division. (2006) BMC Biol 4:19

58. Yoo Y, Wu X, Egile C, **Li R**, Guan JL. Interaction of N-WASP with hnRNPK and its role in filopodia formation and cell spreading. (2006) J Biol Chem 281:15352-60

59. Kreishman-Deitrick M, Goley ED, Burdine L, Denison C, Egile C, **Li R**, Murali N, Kodadek TJ, Welch MD, Rosen MK. NMR analyses of the activation of Arp2/3 complex by neuronal Wiskott-Aldrich syndrome protein. (2005) Biochemistry 44:15247-56.

60. Egile, C, Rouiller I, Xu X, Volkmann N, **Li R**†, Hanein D†. Mechanism of filament nucleation and branch stability revealed by the structure of the Arp2/3 complex at actin branch junctions. (2005) PLoS Biol 3:e383. †co-corresponding authors

61. Brandman O, Ferrell JE Jr, **Li R**, Meyer T. Interlinked fast and slow positive feedback loops drive reliable cell decisions. (2005) Science 310:496-8.

62. VerPlank L, **Li R.** Cell cycle-regulated trafficking of Chs2 controls actomyosin ring stability during cytokinesis. (2005) Mol Biol Cell 16:2529-43.

63. Kowalski JR, Egile C, Gil S, Snapper SB, **Li R**, Thomas SM. Cortactin regulates cell migration through activation of N-WASP. (2005) J Cell Sci 118:79-87.

64. Pan F, Egile C, Lipkin T, **Li R.** ARPC1/Arc40 mediates the interaction of the actin-related protein 2 and 3 complex with Wiskott-Aldrich syndrome family activators. (2004) J Biol Chem 279:54629-36.

65. Frank M, Egile C, Dyachok J, Djakovic S, Nolasco M, **Li R**, Smith LG. Activation of Arp2/3 complex-dependent actin polymerization by plant proteins distantly related to Scar/WAVE. (2004) Proc Natl Acad Sci USA 101:16379-84.

66. Wedlich-Soldner R, Wai SC, Schmidt T, **Li R**. Robust cell polarity is a dynamic state established by coupling transport and GTPase signaling. (2004) J Cell Biol 166:889-900.

67. Jonsdottir GA, **Li R.** Dynamics of yeast Myosin I: evidence for a possible role in scission of endocytic vesicles. (2004) Curr Biol 14:1604-9.

68. Gouin E, Egile, C, Dehoux P, Villiers V, Adams J, Gertler F, **Li R,** Cossart P. The RickA protein of *Rickettsia conorii* activates the Arp2/3 complex. (2004) Nature 427:457-61.

69. Kreishman-Deitrick M, Egile C, Hoyt DW, Ford JJ, **Li R**, Rosen MK. NMR analysis of methyl groups at 100-500kDa: model systems and Arp2/3 complex. (2003) Biochemistry 42:8579-86.

70. Yarrow JC, Lechler T, **Li R**, Mitchison TJ. Rapid de-localization of actin leading edge components with BDM treatment. (2003) BMC Cell Biol 4:5

71. Paw BH, Davidson AJ, Zhou Y, **Li R**, Pratt SJ, Lee C, Trede NS, Brownlie A, Donovan A, Liao EC, Ziai JM, Drejer AH, Guo W, Kim CH, Gwynn B, Peters LL, Chernova MN, Alper SL, Zapata A, Wickramasinghe SN, Lee MJ, Lux SE, Fritz A, Postlethwait JH, Zon LI. Cell-specific mitotic defect and dyserythropoiesis associated with erythroid band 3 deficiency. (2003) Nat Genet 34:59-64.

72. Wedlich-Soldner R, Altschuler S, Wu L, **Li R.** Spontaneous cell polarization through actomyosin-based delivery of the Cdc42 GTPase. (2003) Science 299:1231-5.

73. Tolliday N, Pitcher M, **Li R**. Direct evidence for a critical role of myosin II in budding yeast cytokinesis and the evolvability of new cytokinetic mechanisms in the absence of myosin II. (2003) Mol Biol Cell 14:798-809.

74. Soulard A, Lechler T, Spiridonov V, Schevchenko A, **Li R**, Winsor B. Saccharomyces cerevisiae Bzz1p is implicated with type I myosins in actin patch polarization and is able to recruit actin-polymerizing machinery *in vitro*. (2002) Mol Cell Biol 22:7889-906.

75. Tolliday N, VerPlank L, **Li R.** Rho1 directs formin-mediated actin ring assembly during budding yeast cytokinesis. (2002) Curr Biol 12:1864-70.

76. Lee PL, Song S, Ro H, Park CJ, Lippincott J, **Li R**, Pringle JR, De Vergilio C, Longtine MS, Lee KS. Bni5p, a septin-interacting protein, is required for normal septin function and cytokinesis in *Saccharomyces cerevisiae*. (2002) Mol Cell Biol 22:6906-20.

77. Lechler T, Jonsdottir GA, Klee SK, Pellman D, **Li R.** A two-tiered mechanism by which Cdc42 controls the localization and activation of an Arp2/3-activating motor complex in yeast. (2001) J Cell Biol 155:261-70.

78. Volkmann N, Amann KJ, Stoilova-McPhie, S, Egile C, Winter DC, Hazelwood L, Heuser JE, **Li R**, Pollard TD, Hanein D. Structure of Arp2/3 complex in its activated state and in actin filament branch junctions. (2001) Science 293:2456-9.

79. Lippincott J, Shannon K, Shou W, Deshaies RJ, **Li R.** The Tem1 small GTPase controls actomyosin and septin dynamics during cytokinesis. (2001) J Cell Sci 114:1379-86.

80. Uruno T, Liu J, Zhang, P, Fan Yx, Egile C, **Li R**, Mueller SC, Zhan X. Activation of the Arp2/3 complex-mediated actin polymerization by cortactin. (2001) Nat Cell Biol 3:259-66.

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