Tim Stearns

Professor and Head of Laboratory
Dean of Graduate and Postgraduate Studies
Vice President of Education
The Rockefeller University
1230 York Avenue, Box #177, New York, NY 10065
tstearns@rockefeller.edu; (212) 327-8728

Education

11/88	Ph.D., Department of Biology, Advisor: David Botstein, MIT
6/84	B.S. in Genetics, Cornell University

Postdoctoral training

1/90 - 7/93	Postdoctoral fellow, Advisor: Marc Kirschner, UCSF
12/88 - 12/89	Postdoctoral fellow, Advisor: David Botstein, Genentech, Inc.

Academic appointments

9/22 – present	Professor Head of Laboratory, The Rockefeller University
8/07 – 8/22	Professor Dept. of Biology, Stanford University Dept. of Genetics, Stanford University School of Medicine
8/00 - 8/07	Associate Professor Dept. of Biology, Stanford University Dept. of Genetics, Stanford University School of Medicine
8/93 - 8/00	Assistant Professor Dept. of Biology, Stanford University

Administrative appointments

9/22 – present	Dean of Graduate and Postgraduate Studies and Vice President of Education, The Rockefeller University
1/22 – 8/22	Acting Dean of Research, Stanford University
6/20 – 12/21	Senior Associate Vice Provost of Research, Stanford University
9/14 - 8/20	Chair, Dept. of Biology, Stanford University

Teaching

<u>Rockefeller</u>	Experiment & Theory Cell Biology
<u>Stanford</u>	Bio 35 Sustainability and Civilization Bio 61 Science as a Creative Process Bio 45 Introduction to Research in Cell and Molecular Biology

Bio/Gene 203 Advanced Genetics
Bio 10 The Study of Life
Bio 30N Unraveling the Human Genome
Bio 52: I, Biologist: Diversity Improves Science of Biology
Bio 54 Genes, Genomes and Proteins
Bio 55 Advanced Independent Research Laboratory
Bio 71SI The Science of Cooking
Bio 103 Seminar in Biological Sciences
Bio 105 Genes, Genomes and Proteins
Bio 116 Macromolecules
Bio 129 Cellular Dynamics
Bio 132/232 Advanced Imaging Lab in Biophysics
Bio 193 Biological Sciences Seminar for Undergraduates
Bios 200 Foundations of Experimental Biology
Bio 214 Graduate Cell Biology
Gene 204 Advanced Genetics II

Ghana 2013	Workshop on Cell Biology of Parasites, sponsored by ASCB and Howard Hughes Medical Institute
Tanzania 2010	Workshop on Teaching Cell Biology, sponsored by ASCB and Carnegie Corporation (organizer)
Ghana 2009	Workshop on Cell Biology of Parasites, sponsored by ASCB and Carnegie Corporation
Chile 2000	Yeast Genetics Course, sponsored by the National Academy of Sciences and Howard Hughes Medical Institute
CSHL 1997-2000	Yeast Genetics Course, Cold Spring Harbor Laboratory
South Africa 1996	Imaging Cellular Dynamics Course, sponsored by UNESCO and the International Cell Research Organization

Awards

HHMI Professor, 2002-present
Frank Lee and Carol Hall Professor of Biology endowed chair, 2009-2022
Alma Howard lectureship, McGill University 2012
Hoagland Award, Stanford University, 2009
Stanford School of Medicine Award for Graduate Teaching, 2002, 2007, 2009, 2013
H&S Dean's Award for Distinguished Teaching, 1997, 2005
Terman Fellowship, 1997-2000
American Cancer Society Junior Faculty Research Award, 1995-1998

Searle Scholars Award, 1995-1998
Helen Hay Whitney postdoctoral fellowship, 1990-1993
Cornell Tradition Scholarship, 1983-1984

National service and memberships

JASON, member (advisor to gov't on science, security and technology), 2001-present
Defense Science Board, Biotechnology Task Force co-chair, 2023-present
NIH Advisory Committee to the Deputy Director for Intramural Research, 2024-present

Lawrence Livermore National Lab, Science and Technology Committee, 2019-2023
G7 Countries Working Group on Research Integrity and Security, 2022-2023
SLAC, Scientific Policy Committee, 2020-2022
National Academies of Science, Research of Concern Panel, 2017
PCAST Working Group on Biosecurity, 2016
Iran-US-France National Academies science exchange, 2009
Biological Sciences Experts Group, National Intelligence Council, 2007-2011
Defense Sciences Study Group, Institute for Defense Analyses, 2000-2001

Associate Editor, Molecular Biology of the Cell, 1998-2007
Associate Editor, Genetics, 2001-2008
Editorial Board, Journal of Cell Biology, 2015-2017
Editorial Board, BMC Cell Biology, 2004-2015
Editorial Board, Cilia, 2011-2019
Editorial Board, Cellular Logistics, 2010-2018

Miller Institute Advisory Board, UC Berkeley, 2017-2022
Advisory Board, Bard College-Smolny College, Russia 2016-2021
Scientific Advisory Board, Temasek Life Sciences Lab, Singapore, 2010-2012

NIH NCSD Study Section, member, 2016 – 2021 (chair, 2019-2021)
NIH NCSD Study Section, ad hoc, 2015
NIH NDT Study Section, ad hoc, 2008
NIH CTY Study Section, ad hoc, 1999, 2000
NIH CDF-2 Study Section, ad hoc, 2005
NIH CDF-4 Study Section, ad hoc, 2003
NCI intramural program evaluation, 2013, 2014
Lawrence Livermore National Lab Biosecurity review panel, 2018
Cancer Research UK review committee, 2012, 2015
HHMI Education Grant reviewer, 2006, 2013
HHMI Professor Competition reviewer, 2014
UC Multicampus Research Program reviewer, 2009

Chair, Education Committee, Genetics Society of America, 2004-2005
Chair, Education Committee, American Society for Cell Biology, 2006-2008

International Affairs Committee, American Society for Cell Biology, 2009-2014
Public Affairs Committee, American Society for Cell Biology, 2013-2017
National Academy of Sciences – Focus Group on Higher Education, 2005

Visiting committee, Bard College, 2023
Visiting committee, Institute of Advanced Study, Warwick, UK, 2023
Visiting committee, Harvard Molecular and Cellular Biology, 2022
Chair, Visiting committee, Smolny College, St. Petersburg, Russia, 2012
Visiting committee, UC Irvine, 2008

Co-organizer, The Microtubule Cytoskeleton in Development and Disease meeting, 2013
Co-organizer, Keystone Cilium and Human Disease meeting, 2010
Co-organizer, FASEB Chromosome Segregation meeting, 2004
Session chair, ASCB Meeting Minisymposium, 2004, 2010, 2020
Session chair, Cell Polarity and Signaling Gordon Conference, 2014

University service

Rockefeller

Kavli Neuroscience Institute steering committee, 2024-present
Friday Lecture Series committee, 2023-present
EM Resource Center scientific advisory committee, 2023-present
Bioimaging Resource Center scientific advisory committee, 2023-present
Insight Lectures committee, 2023-present
Faculty Club advisory committee, 2022-present

Stanford

Chair, Biology Department, 2014-2020
Associate Chair, Biology Department, 2011-2014
Chair, Stanford Faculty Senate, 2019-2020
Faculty Senate Representative, 2005-2009, 2014-16, 2018-20, 2021-23
School of Sustainability, Dean Search Committee, 2021-2022
Limited Submission Awards Committee (chair), 2021-2022
Research Development Office, Faculty Director, 2020-2022
Global Engagement Review Program, Faculty Committee, 2020-2022
COVID-19 Research Continuity Group (chair, Labs working group), 2020-2022
COVID Vaccine and Testing Oversight Committee, 2020-2022
Ethics Hub Advisory Board, 2019-2022
Graduate Fellowships Faculty Advisory Committee (GFFAC), 2014-2022
Cell Sciences Imaging Facility Board, 2008-2022
H&S Natural Sciences Appointments and Promotions Committee, 2014-2020
Committee on Review of Undergraduate Majors (C-RUM) (chair), 2013-2019
Executive committee, Cell and Molecular Biology training grant, 2010-2019
Ethics, Society & Technology Committee, 2019
Redefining the Future of the Major Committee, 2018-2019

Diversity and Inclusion Committee, H&S, 2017-2018
Subcommittee on University Honors (S-UH), 2014-2017
Undergraduate Advisory Council, 2016-2018
Thinking Matters Governance Board, 2012-2014
Natural Sciences Curriculum Committee, 2012-2014
Stanford Institute for Chemical Biology Search Committee, 2013
SLAC LCLS Search Committee, 2012-2013
Cancer Biology Program Steering Committee, 2007-2012
Chair, Committee on Graduate Admissions and Policy, 2004-2006
Co-chair, Committee on Graduate Admissions and Policy, 2001-2003
VSC Advisory Committee, 2005-2008
H&S Dean Search Committee, 2001
Animal Research (A-PLAC), 1996-99
Radiological Safety, 1994-97

Departmental committee service

Stanford

Biology Research Building Design (Bass Biology), 2012-2018 (opened 11/18)
Science Teaching and Learning Center Building Design (Sapp Center), 2011-2017
Chair, Curriculum Committee (Genetics), 2012-13
Faculty Searches (Biology), 1996-97, 2002, 2003, 2004 (chair), 2007
Chair, Faculty Search (Genetics), 2010
Chair, Undergrad Core Lab Course Redesign, 2008-11
Chair, Graduate Studies, 2002-2005
Graduate Admissions, 1994-96, 1998-2001 (chair)
Undergraduate Studies, 1993-94, 1996-98
Seminars, 1994-95, 2000-01
Safety, 1996-97 (chair)

Publications

1. Stearns, T. and Botstein, D. (1988) Unlinked noncomplementation: isolation of new conditional-lethal mutations in each of the tubulin genes of *Saccharomyces cerevisiae*. Genetics 119:249-260.

2. Botstein, D., Segev, N., Stearns, T., Hoyt , M. A., Holden, J. and Kahn, R. A. (1988) Diverse biological functions of small GTP-binding proteins in yeast. Cold Sp. Harb. Sym. Quan. Biol. 53: 629-636.

3. Holm, C., Stearns, T. and Botstein, D. (1989) DNA topoisomerase II must act at mitosis to prevent nondisjunction and chromosome breakage. Mol. Cell. Biol. 9: 159-168.

4. Pringle, J. R., Preston, R. A., Adams, A. E. M., Stearns, T., Drubin, D. G., Haarer, B. K. and Jones, E. W. (1989) Fluorescence microscopy methods for yeast. Methods Cell Biol. 31: 357-435.

5. Hoyt, M. A., Stearns, T. and Botstein, D. (1990) Chromosome instability mutants of *Saccharomyces cerevisiae* that are defective in microtubule-mediated processes. Mol. Cell. Biol. 10: 223-234.

6. Stearns T., Hoyt, M. A. and Botstein, D. (1990) Yeast mutants supersensitive to antimicrotubule drugs define three genes that affect microtubule function. Genetics 124:251-62.

7. Stearns, T. (1990) The yeast microtubule cytoskeleton: genetic approaches to structure and function. Cell Motil. Cytoskel. 15:1-6.

8. Barnes, G., Drubin, D. G. and Stearns, T. (1990) The cytoskeleton of *Saccharomyces cerevisiae*. Curr. Opin. Cell Biol. 2:109-15.

9. Stearns, T., Ma, H. and Botstein, D. (1990) Manipulating the yeast genome using plasmid vectors. Methods Enzymol. 185:280-296.

10. Stearns, T., Willingham, M. C., Botstein, D. and Kahn, R. A. (1990) ADP-ribosylation factor is functionally and physically associated with the Golgi complex. Proc. Natl. Acad. Sci. 87:1238-42.

11. Stearns, T., Kahn, R. A., Botstein, D. and Hoyt, M. A. (1990) ADP-ribosylation factor is an essential protein in yeast and is encoded by two genes. Mol. Cell. Biol. 10:6690-6699.

12. Stearns, T., Evans, L. and Kirschner, M. (1991) Gamma-tubulin is a highly conserved component of the centrosome. Cell 65:825-836.

13. Cande, Z. W. and Stearns, T. (1991) At the heart of the organizing center. Curr. Biol. 1:254-256.

14. Hyman, A. A. and Stearns, T. (1992) Spindle positioning and cell polarity. Curr. Biol. 2:469-471.

15. Stearns, T. (1992) Cellular structures: Molecules of the cytoskeleton. Science 257:1422.

16. Dunn, B., Stearns, T. and Botstein, D. (1993) Specificity domains distinguish the ras-related GTPases SEC4 and YPT1. Nature 362:563-565.

17. Stearns, T. and Kirschner, M. (1994) In vitro reconstitution of centrosome assembly and function: the central role of gamma-tubulin. Cell 76:623-638.

18. Kahn, R. A., Clark, J., Rulka, C., Stearns, T., Zhang, C-j., Randazzo, P. and Cavenagh, M. (1994) Mutational analysis of *Saccharomyces cerevisiae ARF1*. J. Biol. Chem. 270:143-150.

19. Stearns, T. (1995) Green fluorescent protein: the green revolution. Curr. Biol. 5:262-264.

20. Stearns, T. (1995) The form and the substance. Nature Medicine 1:19-20.

21. Murphy, S. M. and Stearns, T. (1996) Microtubule nucleation takes shape. Curr. Biol. 6:642-644.

22. Marschall, L. G., Jeng, R. L., Mulholland, J. and Stearns, T. (1996) Analysis of Tub4p, a yeast gamma-tubulin-like protein: implications for microtubule-organizing center function. J. Cell Biol. 134:443-454.

23. Mogensen, M. M., Mackie, J. B., Doxsey, S. J., Stearns, T. and Tucker, J. B. (1997) Centrosomal deployment of gamma-tubulin and pericentrin: Evidence for a microtubule-nucleating domain and a minus-end docking domain in certain mouse epithelial cells. Cell Motil. Cytoskel. 36:276-290.

24. Vogel, J. M., Stearns, T., Rieder, C. L. and Palazzo, R.E. (1997) Centrosomes isolated from *Spisula solidissima* oocytes contain rings and an unusual stoichiometric ratio of alpha/beta tubulin. J. Cell Biol. 137:193-202.

25. Botstein, D., Amberg, D., Huffaker, T., Mulholland, J., Adams, A., Drubin, D. and Stearns, T. (1997) The yeast cytoskeleton, in "The Molecular and Cellular Biology of the Yeast *Saccharomyces cerevisiae*: Cell cycle and cell biology. Vol. 3." Cold Spring Harbor Press. pg. 1-90.

26. Leask, A., Obrietan, K. and Stearns, T. (1997) Synaptically-coupled central nervous system neurons lack centrosomal gamma-tubulin. Neuroscience Letters 229:17-20.

27. Carminati, J. and Stearns, T. (1997) Microtubules orient the yeast spindle through dynein-dependent interactions with the cell cortex. J. Cell Biol. 138:629-641.

28. Tian, G., Lewis, S.A., Feierbach, B., Stearns, T., Rommelaere, H., Ampe, C. and Cowan, N.J. (1997) Tubulin subunits exist in an activated conformational state generated and maintained by protein cofactors. J. Cell Biol. 138:821-832.

29. Stearns, T. (1997) Motoring to the finish: kinesin and dynein work together to orient the yeast mitotic spindle. J. Cell Biol. 138:957-960.

30. Marschall, L. G. and Stearns, T. (1997) Anatomy of an organizing center. Curr. Biol. 7:R754-R756.

31. Stearns, T. and Winey, M. (1997) The cell center at 100: a meeting report. Cell, 91:303-309.

32. Adams, A., Gottschling, D. E., Kaiser, C. A. and Stearns, T. (1997) "Methods in Yeast Genetics". Cold Spring Harbor Press. 178 pp.

33. Leask, A. and Stearns, T. (1998) Expression of amino- and carboxy-terminal gamma and alpha-tubulin mutants in cultured epithelial cells. J. Biol. Chem. 273:2661-2668.

34. Cho R.J., Fromont-Racine M., Wodicka L., Feierbach B., Stearns T., Legrain P., Lockhart D.J. and Davis, R.W. (1998) Parallel analysis of genetic selections using whole genome oligonucleotide arrays. Proc. Natl. Acad. Sci. 1998 95:3752-3757.

35. Tucker, J. B., Mogensen, M. M., Henderson, C. G., Doxsey, S. J., Wright, M. and Stearns, T. (1998) Nucleation and capture of large cell-associated microtubule arrays that are not located near centrosomes in certain cochlear epithelial cells. J. Anat. 192:119-130.

36. Murphy, S. M., Urbani, L. and Stearns, T. (1998) The mammalian gamma-tubulin complex contains homologs of the yeast spindle pole body components Spc97p and Spc98p. J. Cell Biol. 141:663-674.

37. Carminati, J. and Stearns, T. (1998) Cytoskeletal dynamics in yeast. Meth. Cell Biol. 58:87-105.

38. Manandhar, G., Sutovsky, P., Joshi, H.C., Stearns, T. and Schatten, G. (1998) Centrosome reduction during mouse spermiogenesis. Dev. Biol. 203:424-434.

39. Feierbach, B., Nogales, E., Downing, K. H. and Stearns, T. (1999) Alf1p, a CLIP-170 domain-containing protein, is functionally and physically associated with a-tubulin. J. Cell Biol. 144:113-124.

40. Lacey, K. R., Jackson, P. K. and Stearns, T. (1999) Cyclin-dependent kinase control of centrosome duplication. Proc. Natl. Acad. Sci. 96:2817-2822.

41. Urbani, L., and Stearns, T. (1999) The centrosome: a primer. Curr. Biol. 9:R315-R317.

42. Freed, E., Lacey, K. R., Lyapina, S. A., Huie, P., Deshaies, R. J., Stearns, T. and Jackson, P. (1999) The SKP1 and CUL1 ubiquitin ligase components localize to the centrosome and regulate the centrosome duplication cycle. Genes Dev. 13:2242-2257.

43. Jeng, R. and Stearns, T. (1999) Gamma-tubulin complexes: size does matter. Trends Cell Biol. 9:339-342.

44. Chang, P. and Stearns, T. (2000) Delta-tubulin and epsilon-tubulin: two new human centrosomal tubulins reveal novel aspects of centrosome structure and function. Nature Cell Biol. 2:30-35.

45. Demeter, J., Lee, S.E., Haber, J.E. and Stearns, T. (2000) The DNA damage checkpoint signal in yeast is nuclear-limited. Mol. Cell 6:487-492.

46. Lee, S.E., Pellicioli, A., Demeter, J., Vaze, M., Gasch, A., Malkova, A., Brown, P., Stearns, T., Foiani, M. and Haber, J.E. (2000) Arrest, adaptation and recovery following a chromosome double-strand break in *Saccharomyces cerevisiae*. Cold Spring Harb. Symp. Quant. Biol. 65: 303-314.

47. Stearns, T. (2001) Centrosome duplication: a centriolar pas de deux. Cell 105:417-420.

48. Murphy, S.M., Preble, A.M., Patel, U.K., O'Connell, K.L., Dias, P., Moritz, M., Agard, D., Stults, J.T. and Stearns, T. (2001) GCP5 and GCP6: two new members of the human gamma-tubulin complex. Mol. Biol. Cell 12:3340-3352.

49. Click, E., Stearns, T. and Botstein, D. (2002) Systematic structure-function analysis of the small GTPase Arf1 in yeast. Mol. Biol. Cell 13:1652-1664.

50. Patel, U., and Stearns, T., (2002) Quick Guide: Gamma-tubulin. Curr. Biol. 2002 12:R408.

51. Chang, P., Giddings, T.H., Winey, M. and Stearns, T. (2003) Epsilon-tubulin is required for centriole duplication and microtubule organization. Nature Cell Biol. 5:71-76.

52. Wong, C. and Stearns, T. (2003) Centrosome Biology: A SAS-sy centriole in the cell cycle. Curr. Biol. 13:R351-352.

53. Wong, C. and Stearns, T. (2003) Centrosome number is controlled by a centrosome-intrinsic block to re-duplication. Nature Cell Biol. 5:539-544.

54. Louie, RK., Bahmanyar, S., Siemers, K.A., Votin, V., Chang, P., Stearns, T., Nelson, W.J. and Barth, A.I. (2004) Adenomatous polyposis coli and EB1 localize in close proximity of the mother centriole and EB1 is a functional component of centrosomes. J. Cell Sci. 117:1117-1128.

55. Stearns, T. (2004) The Tubulin Superfamily. In "Centrosomes in Development and Disease", ed. Erich Nigg, Wiley-VCH.

56. Stearns, T. (2004) The centrosome yields its secrets. Nature Cell Biol. 6:14.

57. Wong, C. and Stearns, T. (2005) Mammalian cells lack checkpoints for tetraploidy, centrosome number, or cell size. BMC Cell Biol. 6:6-18.

58. Aldaz, H., Rice, L.M., Stearns, T. and Agard, D.A. (2005) Insights into microtubule nucleation from the crystal structure of human gamma-tubulin. Nature 435:523-527.

59. Tsou, M-F. B. and Stearns, T. (2006) Controlling centrosome number: licenses and blocks. Curr. Opin. Cell Biol. 18:74-78.

60. Lüders, J. and Stearns, T. (2006) NEDD1: A targeting factor required for gamma-TuRC function in centrosomal and chromatin-mediated microtubule nucleation. Nature Cell Biol. 8:137-147.

61. Tsou, M-F.B. and Stearns, T. (2006) Mechanism limiting centrosome duplication to once per cell cycle. Nature 442:947-951.

62. Malone, A.M.D., Anderson, C.T., Tummala, P., Stearns, T. and Jacobs, C.R. Primary Cilia Mediate PGE2 Release in MC3T3-E1 Osteoblasts. Mol Cell Biomech 3:207.

63. Lüders, J. and Stearns, T. (2007) The microtubule organizing center: a reevaluation. Nature Rev Mol Cell Biol. 8:161-167.

64. Vladar, E.K. and Stearns, T. (2007) Molecular characterization of centriole assembly in ciliated epithelial cells. J. Cell Biol. 178:31-42.

65. Malone, A.M., Anderson, C.T., Tummala, P., Kwon, R.Y., Johnston, T.R., Stearns, T. and Jacobs, C.R. (2007) Primary cilia mediate mechanosensing in bone cells by a calcium-independent mechanism. Proc. Natl. Acad. Sci. 104:13325-13330.

66. Anderson, C.T. and Stearns, T. (2007). The primary cilium: what once did nothing now does everything. J Musculoskelet Neuronal Interact. 7:299.

67. Anderson, C.T., Castillo, A.B., Brugmann, S., Helms, J.A., Jacobs, C.R. and Stearns, T. (2008) Primary cilia: cellular sensors for the skeleton. Anat. Rec. 281:1074-1078.

68. Jaspersen, S.L. and Stearns, T. (2008) Exploring the pole: the EMBO conference on centrosomes and spindle pole bodies. Nature Cell Biol. 10:1375-1378.

69. Haren, L., Stearns, T. and Lüders, J. (2009) Plk1-dependent recruitment of γ-tubulin complexes to mitotic centrosomes involves multiple PCM components. PLoS ONE 4: e5976

70. Anderson, C.T. and Stearns T. (2009) Centriole age underlies asymmetric primary cilium biogenesis in mammalian cells. Curr. Biol. 19:1498-1502.

71. Tsou, M-F.B., Wang, W.J., Yule, K.A., Stearns, T. and Jallepalli, P.V. (2009) Polo kinase and separase cooperatively regulate the mitotic licensing of centriole duplication in human cells. Dev. Cell 17:344-354.

72. Stearns, T. (2009) Stem cells: A fateful age gap. Nature 461:891-892.

73. Mahjoub, M. and Stearns, T. (2010) Cep120 is asymmetrically localized to the daughter centriole and is essential for centriole assembly. J. Cell Biol. 191:331-346.

74. Hatch, E.M., Kulukian, A., Holland, A.J., Cleveland, D.W. and Stearns, T. (2010) Cep152 is a Plk4-interacting protein required for centriole duplication. J. Cell Biol. 91:721-729.

75. Lau, L., Lee, Y.L., Matis, M., Axelrod, J., Stearns, T. and Moerner, W.E. (2011) STED super-resolution microscopy in Drosophila tissue and in mammalian cells. Proc Soc Photo Opt Instrum Eng. 7910: 79101N

76. Hatch, E.M. and Stearns, T. (2011) The life cycle of centrioles. Cold Spr. Harb. Symp. Quan. Biol. 75:425-31.

77. Minear, S., O'Donnell, A.F., Ballew, A., Giaever, G., Nislow, C., Stearns, T. and Cyert, M.S. (2011) Curcumin inhibits growth of *Saccharomyces cerevisiae* through iron chelation. Eukaryotic Cell 10:1574-1581.

78. Park, K-S., Martelotto, L.G., Peifer, M., Sos, M.L., Karnezis, A.N., Mahjoub, M.R., Bernard, K., Conklin, J., Szczepny, A., Yuan, J., Guo, R., Ospina, B., Falzon, J., Bennett, S., Brown, T.J., Markovic, A., Devereux, W.L., Ocasio, C.A., Chen, J.K., Stearns, T., Thomas, R.K., Dorsch, M., Buonamici, S., Watkins, D.N., Peacock, C.D. and Sage, J. (2011) A cell-autonomous requirement for hedgehog signaling in small cell lung cancer. Nature Med.17:1504-8.

79. Nigg, E.A. and Stearns, T. (2011) The centrosome cycle: centriole biogenesis, duplication and inherent asymmetries. Nature Cell Biol. 13:1154-1160.

80. Temiyasathit, S., Tang, J.W., Leucht, P., Anderson, C.T., Castillo, A.B., Helms, J.A., Stearns, T. and Jacobs, C.R. (2012) Mechanosensing by the primary cilium: deletion of *kif3A* reduces bone formation due to loading. PLoS One 7:e33368.

81. Lau, L. Lee, Y.L., Sahl, S.J., Stearns, T. and Moerner, W.E. (2012) STED microscopy with optimized labeling density reveals 9-fold arrangement of a centriole protein. Biophys. J. 102:2926-2935.

82. Mahjoub, M.R. and Stearns, T. (2012) Supernumerary centrosomes nucleate cilia and compromise primary cilium signaling and epithelial differentiation. Curr. Biol. 22:1628-1634.

83. Stowe, T.R., Wilkinson, C.J., Iqbal, A. and Stearns, T. (2012) A centriolar satellite complex containing Cep72 and Cep290 is required for ciliary recruitment of BBS proteins. Mol. Biol. Cell 23:3322-3335.

84. Hoh, R.A., Stowe, T.R. Turk, E. and Stearns, T. (2012) Transcriptional program of ciliated epithelial cells reveals new cilium and centrosome components and links to human disease. PLoS One 7:e52166.

85. Schaub, J. and Stearns, T. (2013) The Rilp-like proteins Rilpl1 and Rilpl2 regulate ciliary membrane content. Mol. Biol. Cell, 24:453-64.

86. Akhmanova, A. and Stearns, T. (2013) Cell architecture: putting the building blocks together. Curr Opin Cell Biol. 25:3-5.

87. Lee, J.Y. and Stearns, T. (2013) FOP is a centriolar satellite protein involved in ciliogenesis. PLoS One, 8:e58589.

88. Tan, F.E, Vladar, E.K., Ma , L., Fuentealba, L.C., Hoh, R., Espinoza, F.E., Axelrod, J.D., Alvarez-Buylla, A., Stearns, T., Kintner, C. and Krasnow, M.A. (2013) The proto-oncogene *c-myb* is expressed in post-mitotic epithelial cells and promotes centriole amplification and later steps of the multiciliogenesis program. Development, 140:4277-4286.

89. Tang, Z., Lin, M.G., Stowe, T., Chen, S., Stearns, T., Franco, B. and Zhong, Q. (2013) Autophagy promotes primary ciliogenesis by removing OFD1 from centriolar satellites. Nature, 502:254-257.

90. Hoerner, C. and Stearns, T. (2013) Remembrance of cilia past. Cell, 155:271-273.

91. Firat-Karalar, E.N., Rauniyar, N., Yates, J.R. and Stearns, T. (2014) Proximity interactions among centrosome components identify regulators of centriole duplication. Curr. Biol. 24:664-70.

92. Lee, J.Y. and Stearns, T. (2014) Centrosome proteins facilitate oncogenic signaling through dimerization and localization of kinase fusion partners. PLoS One 9:e92641.

93. Stearns, T. (2014) Journey to the center of the centrosome. Dev. Cell 28:603-604

94. Firat-Karalar, E.N. and Stearns, T. (2014) The centriole duplication cycle. Phil. Trans. R. Soc. B 369:20130460.

95. Lee, Y.L., Santé, J., Comerci, C.J., Cyge, B., Menezes, L.F., Li, F-.Q., Germino, G.G., Moerner, W.E., Takemaru, K. and Stearns, T. (2014) Cby1 promotes Ahi1 recruitment to a ring-shaped domain at the centriole-cilium interface and facilitates proper cilium formation and function. Mol Biol Cell 25:2919-2933.

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