Stanford

Tim Stearns

Professor of Biology, Emeritus

Curriculum Vitae available Online

CONTACT INFORMATION

- **Alternate Contact**

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Bio

BIO

Tim Stearns is an Emeritus Professor who, as of Sept. 2022, is Professor and Head of Laboratory, and Dean of the Graduate School at The Rockefeller University in New York City. He previously held the Frank Lee and Carol Hall Professorship in the Department of Biology at Stanford, was chair of the Department 2014-2020, and was Senior Associate Vice Provost of Research. He also held appointments in the Department of Genetics in Stanford Medical School, the Stanford Cancer Institute, and Bio-X, and was a Faculty Fellow in Chem-H, and an affiliated faculty member of the Center for International Security and Cooperation. Stearns is a member of JASON, a group that advises the government on matters of science, technology and national security and has also been an advisor to the National Academies of Science, the White House, and the Defense Science Board. Stearns received a B.S. from Cornell University, a Ph.D. from MIT, and did a postdoctoral fellowship at the University of California, San Francisco. His research concerns the mechanism and regulation of cell division, the organization of signaling pathways within cells, and cell biology of fungal pathogens. Stearns was named an HHMI Professor in 2002, for his work in science education, and has taught international laboratory workshops in South Africa, Chile, Ghana, and Tanzania. He was chair of the NCSD Study Section at NIH, and has served on the editorial boards of several journals.

ACADEMIC APPOINTMENTS

- Emeritus Faculty, Acad Council, Biology
- Member, Bio-X

ADMINISTRATIVE APPOINTMENTS

- Acting Dean of Research, VPDoR, (2022-2022)
- Senior Associate Vice Provost of Research, VPDoR, (2020-2022)
- Chair, Dept. of Biology, (2014-2020)

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

We use the tools of genetics, microscopy, and biochemistry to understand fundamental questions of cell biology: How are cells organized by the cytoskeleton? How do the centrosome and cilium control cell control cell signaling? How is cell division coordinated with duplication of the centrosome, and what goes wrong in cancer cells defective in this coordination?

Teaching

COURSES

2022-23

- Genetics and Developmental Biology Training Camp: DBIO 200, GENE 200 (Aut)

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Biology (School of Humanities and Sciences) (Phd Program)
- Cancer Biology (Phd Program)
- Genetics (Phd Program)

Publications

PUBLICATIONS

- **Molecular architecture of the ciliary base in mammalian multiciliated cells.** *bioRxiv : the preprint server for biology*
  McCafferty, C. L., Brunet, M., van den Hoek, H., Buss, G., Mercey, O., Van der Stappen, P., Ritz, D., Müller, A., Righetto, R., Guichard, P., Hamel, V., Stearns, T., Engel, et al
  2026

- **The luminal ring protein C2CD3 acts as a radial in-to-out organizer of the distal centriole and appendages.** *PLoS biology*
  Bertiaux, E., Louvel, V., McCafferty, C. L., van den Hoek, H., Batman, U., Mukherjee, S., Bournonville, L., Mercey, O., Méan, I., Righetto, R. D., Müller, A., Van der Stappen, P., Buss, et al
  2025; 23 (12): e3003519

- **Dynamic remodeling of centrioles and the microtubule cytoskeleton in the lifecycle of chytrid fungi** *MOLECULAR BIOLOGY OF THE CELL*
  Long, A. F., Vasudevan, K., Swafford, A. J. M., Venard, C. M., Stajich, J. E., Fritz-Laylin, L. K., Feldman, J. L., Stearns, T.
  2025; 36 (12): mbcE24120577

- **Centriole biogenesis is seeded by CEP152-CEP63-PCNT aggregates propagating outside the centriole through the Alström syndrome protein ALMS1.** *bioRxiv : the preprint server for biology*
  Ozaki, K., Chang, T. B., Yang, W. Q., Shulman, A., Izquierdo, D., Jane, W. N., Wang, W. J., Stearns, T., Luders, J., Yang, T. T., Tsou, M. B.
  2025

- **A delta-tubulin/epsilon-tubulin/Ted protein complex is required for centriole architecture.** *eLife*
  Pudlowski, R., Xu, L., Milenkovic, L., Kumar, C., Hemsworth, K., Aqrabawi, Z., Stearns, T., Wang, J. T.
  2025; 13

- **Teach creativity in science higher education.** *Science (New York, N.Y.)*
  Yanai, I., Bogler, O., Carroll, S. B., Couch, J., Dahlberg, M. L., Fuhrmann, C. N., Kaufman, J. C., Majumdar, S., Oyler-Yaniv, J., Priestley, R. D., Stearns, T., Stern, B., Vinson, et al
  2024; 385 (6711): 837

- **Spindle assembly checkpoint-dependent mitotic delay is required for cell division in absence of centrosomes.** *eLife*
  Farrell, K. C., Wang, J. T., Stearns, T.
  2024; 12

- **MAP9/MAPH-9 supports axonemal microtubule doublets and modulates motor movement.** *Developmental cell*
  Tran, M. V., Khuntsariya, D., Fetter, R. D., Ferguson, J. W., Wang, J. T., Long, A. F., Cote, L. E., Wellard, S. R., Vazquez-Martinez, N., Sallee, M. D., Genova, M., Magiera, M. M., Eskinazi, et al
  2023
- **Calcineurin associates with centrosomes and regulates cilia length maintenance.** *Journal of cell science*
  Tsekitsidou, E., Wong, C. J., Ulengin-Talkish, I., Barth, A. I., Stearns, T., Gingras, A. C., Wang, J. T., Cyert, M. S.
  2023
- **Single-molecule imaging in the primary cilium.** *Methods in cell biology*
  Weiss, L. E., Love, J. F., Yoon, J., Comerci, C. J., Milenkovic, L., Kanie, T., Jackson, P. K., Stearns, T., Gustavsson, A.
  2023; 176: 59-83
- **Post-mitotic centriole disengagement and maturation leads to centrosome amplification in polyploid trophoblast giant cells.** *Molecular biology of the cell*
  Buss, G., Stratton, M. B., Milenkovic, L., Stearns, T.
  2022: mbcE22050182
- **Long-range migration of centrioles to the apical surface of the olfactory epithelium.** *eLife*
  Ching, K., Wang, J. T., Stearns, T.
  2022; 11
- **Investigate the origins of COVID-19.** *Science (New York, N.Y.)*
  Bloom, J. D., Chan, Y. A., Baric, R. S., Bjorkman, P. J., Cobey, S., Deverman, B. E., Fisman, D. N., Gupta, R., Iwasaki, A., Lipsitch, M., Medzhitov, R., Neher, R. A., Nielsen, et al
  2021; 372 (6543): 694
- **Hedgehog signaling and the primary cilium: implications for spatial and temporal constraints on signaling.** *Development (Cambridge, England)*
  Ho, E. K., Stearns, T.
  2021; 148 (9)
- **A not-so-simple twist of fate.** *Developmental cell*
  Long, A. F., Stearns, T.
  2021; 56 (4): 402–4
- **Assaying Cell Cycle Progression via Flow Cytometry in CRISPR/Cas9-Treated Cells.** *Methods in molecular biology (Clifton, N.J.)*
  Geisinger, J. M., Stearns, T.
  2021; 2329: 195-204
- **The nucleus serves as the pacemaker for the cell cycle.** *eLife*
  Afanzar, O., Buss, G. K., Stearns, T., Ferrell, J. E.
  2020; 9
- **Cilium Axoneme Internalization and Degradation in Chytrid Fungi.** *Cytoskeleton (Hoboken, N.J.)*
  Venard, C. M., Vasudevan, K. K., Stearns, T.
  2020
- **Transient Primary Cilia Mediate Robust Hedgehog Pathway-Dependent Cell Cycle Control.** *Current biology : CB*
  Ho, E. K., Tsai, A. E., Stearns, T. n.
  2020
- **Growth disadvantage associated with centrosome amplification drives population-level centriole number homeostasis.** *Molecular biology of the cell*
  Sala, R. n., Farrell, K. C., Stearns, T. n.
  2020: mbcE19040195
- **Centrioles are amplified in cycling progenitors of olfactory sensory neurons.** *PLoS biology*
  Ching, K. n., Stearns, T. n.
  2020; 18 (9): e3000852

- **CRISPR/Cas9 treatment causes extended TP53-dependent cell cycle arrest in human cells.** *Nucleic acids research*
  Geisinger, J. M., Stearns, T. n.
  2020

- **Systematic Discovery of Short Linear Motifs Decodes Calcineurin Phosphatase Signaling.** *Molecular cell*
  Wigington, C. P., Roy, J. n., Damle, N. P., Yadav, V. K., Blikstad, C. n., Resch, E. n., Wong, C. J., Mackay, D. R., Wang, J. T., Krystkowiak, I. n., Bradburn, D. A., Tsekitsidou, E. n., Hong, et al
  2020

- **Primary cilium loss in mammalian cells occurs predominantly by whole-cilium shedding.** *PLoS biology*
  Mirvis, M., Siemers, K. A., Nelson, W. J., Stearns, T. P.
  2019; 17 (7): e3000381

- **Regulation of cilia abundance in multiciliated cells** *ELIFE*
  Nanjundappa, R., Kong, D., Shim, K., Stearns, T., Brody, S. L., Loncarek, J., Mahjoub, M. R.
  2019; 8

- **Motional dynamics of single Patched1 molecules in cilia are controlled by Hedgehog and cholesterol** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Weiss, L. E., Milenkovic, L., Yoon, J., Stearns, T., Moerner, W. E.
  2019; 116 (12): 5550-5557

- **Pocket similarity identifies selective estrogen receptor modulators as microtubule modulators at the taxane site** *NATURE COMMUNICATIONS*
  Lo, Y., Cormier, O., Liu, T., Nettles, K. W., Katzenellenbogen, J. A., Stearns, T., Altman, R. B.
  2019; 10

- **Motional dynamics of single Patched1 molecules in cilia are controlled by Hedgehog and cholesterol.** *Proceedings of the National Academy of Sciences of the United States of America*
  Weiss, L. E., Milenkovic, L., Yoon, J., Stearns, T., Moerner, W. E.
  2019

- **Revealing Nanoscale Morphology of the Primary Cilium Using Super-Resolution Fluorescence Microscopy** *BIOPHYSICAL JOURNAL*
  Yoon, J., Comerci, C. J., Weiss, L. E., Milenkovic, L., Stearns, T., Moernert, W. E.
  2019; 116 (2): 319-329

- **Pocket similarity identifies selective estrogen receptor modulators as microtubule modulators at the taxane site.** *Nature communications*
  Lo, Y. C., Cormier, O. n., Liu, T. n., Nettles, K. W., Katzenellenbogen, J. A., Stearns, T. n., Altman, R. B.
  2019; 10 (1): 1033

- **Regulation of cilia abundance in multiciliated cells.** *eLife*
  Nanjundappa, R. n., Kong, D. n., Shim, K. n., Stearns, T. n., Brody, S. L., Loncarek, J. n., Mahjoub, M. R.
  2019; 8

- **Revealing Nanoscale Morphology of the Primary Cilium Using Super-Resolution Fluorescence Microscopy.** *Biophysical journal*
  Yoon, J., Comerci, C. J., Weiss, L. E., Milenkovic, L., Stearns, T., Moerner, W. E.
  2018

- **Cyclin-dependent kinase control of motile ciliogenesis** *ELIFE*
  Vladar, E. K., Stratton, M. B., Saal, M. L., Salazar-De Simone, G., Wang, X., Wolgemuth, D., Stearns, T., Axelrod, J. D.
  2018; 7

- **Cilium structure, assembly, and disassembly regulated by the cytoskeleton.** *The Biochemical journal*
  Mirvis, M., Stearns, T., James Nelson, W.
  2018; 475 (14): 2329–53

- **Cilium structure, assembly, and disassembly regulated by the cytoskeleton** *BIOCHEMICAL JOURNAL*
  Mirvis, M., Stearns, T., Nelson, W.
  2018; 475: 2329-2353

- **Quantifying Nanoscale Morphological Features of the Primary Cilium Membrane using Super-Resolution Fluorescence Microscopy**
  Yoon, J., Weiss, L., Milenkovic, L., Stearns, T., Moerner, W. E.
  CELL PRESS.2018: 268A

- **The ABCs of Centriole Architecture: The Form and Function of Triplet Microtubules.** *Cold Spring Harbor symposia on quantitative biology*
  Wang, J. T., Stearns, T. n.
  2018

- **Mitosis sans Mitosis: The Mitotic Oscillator in Differentiation** *DEVELOPMENTAL CELL*
  Stratton, M., Stearns, T.
  2017; 43 (4): 385–86

- **Centriole triplet microtubules are required for stable centriole formation and inheritance in human cell** *ELIFE*
  Wang, J. T., Kong, D., Hoerner, C. R., Loncarek, J., Stearns, T.
  2017; 6

- **Using Yeast to Determine the Functional Consequences of Mutations in the Human p53 Tumor Suppressor Gene: An Introductory Course-Based Undergraduate Research Experience in Molecular and Cell Biology** *BIOCHEMISTRY AND MOLECULAR BIOLOGY EDUCATION*
  Hekmat-Scafe, D. S., Brownell, S. E., Seawell, P. C., Malladi, S., Imam, J. F., Singla, V., Bradon, N., Cyert, M. S., Stearns, T.
  2017; 45 (2): 161-178

- **Centriole triplet microtubules are required for stable centriole formation and inheritance in human cells.** *eLife*
  Wang, J. T., Kong, D. n., Hoerner, C. R., Loncarek, J. n., Stearns, T. n.
  2017; 6

- **The ABCs of Centriole Architecture: The Form and Function of Triplet Microtubules**
  Wang, J. T., Stearns, T.
  edited by Stewart, D., Stillman, B.
  COLD SPRING HARBOR LABORATORY PRESS.2017: 145-155

- **A Conversation with Tim Stearns**
  Witkowski, J., Stearns, T.
  edited by Stewart, D., Stillman, B.
  COLD SPRING HARBOR LABORATORY PRESS.2017: 409-412

- **Sperm Centrosomes: Kiss Your Asterless Goodbye, for Fertility's Sake.** *Current biology*
  Schatten, G., Stearns, T.
  2015; 25 (24): R1178-81

- **MDM1 is a microtubule-binding protein that negatively regulates centriole duplication.** *Molecular biology of the cell*
  Van de Mark, D., Kong, D., Loncarek, J., Stearns, T.
  2015; 26 (21): 3788-3802

- **Zeta-Tubulin Is a Member of a Conserved Tubulin Module and Is a Component of the Centriolar Basal Foot in Multiciliated Cells** *CURRENT BIOLOGY*
  Turk, E., Wills, A. A., Kwon, T., Sedzinski, J., Wallingford, J. B., Stearns, T.
  2015; 25 (16): 2177-2183

- **A High-Enrollment Course-Based Undergraduate Research Experience Improves Student Conceptions of Scientific Thinking and Ability to Interpret Data** *CBE-LIFE SCIENCES EDUCATION*
  Brownell, S. E., Hekmat-Scafe, D. S., Singla, V., Seawell, P. C., Imam, J. F., Eddy, S. L., Stearns, T., Cyert, M. S.
  2015; 14 (2)

- **Observing planar cell polarity in multiciliated mouse airway epithelial cells.** *Methods in cell biology*
  Vladar, E. K., Lee, Y. L., Stearns, T., Axelrod, J. D.
  2015; 127: 37-54

- **Cell biology. Centrioles, in absentia.** *Science (New York, N.Y.)*
  Stearns, T. n.
  2015; 348 (6239): 1091–92

- **Probing mammalian centrosome structure using BioID proximity-dependent biotinylation** *CENTROSOME & CENTRIOLE*
  Firat-Karalar, E. N., Stearns, T.
  2015; 129: 153-170
- **Cby1 promotes Ahi1 recruitment to a ring-shaped domain at the centriole-cilium interface and facilitates proper cilium formation and function** *MOLECULAR BIOLOGY OF THE CELL*
  Lee, Y. L., Sante, J., Comerci, C. J., Cyge, B., Menezes, L. F., Li, F., Germino, G. G., Moerner, W. E., Takemaru, K., Stearns, T.
  2014; 25 (19): 2919-2933
- **Cby1 promotes Ahi1 recruitment to a ring-shaped domain at the centriole-cilium interface and facilitates proper cilium formation and function.** *Molecular biology of the cell*
  Lee, Y. L., Santé, J., Comerci, C. J., Cyge, B., Menezes, L. F., Li, F., Germino, G. G., Moerner, W. E., Takemaru, K., Stearns, T.
  2014; 25 (19): 2919-2933
- **Proteomic analysis of mammalian sperm cells identifies new components of the centrosome** *JOURNAL OF CELL SCIENCE*
  Firat-Karalar, E. N., Sante, J., Elliott, S., Stearns, T.
  2014; 127 (19): 4128-4133
- **The centriole duplication cycle** *PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY B-BIOLOGICAL SCIENCES*
  Firat-Karalar, E. N., Stearns, T.
  2014; 369 (1650)
- **Proximity Interactions among Centrosome Components Identify Regulators of Centriole Duplication** *CURRENT BIOLOGY*
  Firat-Karalar, E. N., Rauniyar, N., Yates, J. R., Stearns, T.
  2014; 24 (6): 664-670
- **Centrosome-kinase fusions promote oncogenic signaling and disrupt centrosome function in myeloproliferative neoplasms.** *PloS one*
  Lee, J. Y., Hong, W., Majeti, R., Stearns, T.
  2014; 9 (3)
- **Journey to the center of the centrosome.** *Developmental cell*
  Stearns, T. n.
  2014; 28 (6): 603–4
- **Centrosome-kinase fusions promote oncogenic signaling and disrupt centrosome function in myeloproliferative neoplasms.** *PloS one*
  Lee, J. Y., Hong, W., Majeti, R., Stearns, T.
  2014; 9 (3)
- **Myb promotes centriole amplification and later steps of the multiciliogenesis program** *DEVELOPMENT*
  Tan, F. E., Vladar, E. K., Ma, L., Fuentealba, L. C., Hoh, R., Espinoza, F. H., Axelrod, J. D., Alvarez-Buylla, A., Stearns, T., Kintner, C., Krasnow, M. A.
  2013; 140 (20): 4277-4286
- **Autophagy promotes primary ciliogenesis by removing OFD1 from centriolar satellites** *NATURE*
  Tang, Z., Lin, M. G., Stowe, T. R., Chen, S., Zhu, M., Stearns, T., Franco, B., Zhong, Q.
  2013; 502 (7470): 254-?
- **Remembrance of cilia past.** *Cell*
  Hoerner, C., Stearns, T.
  2013; 155 (2): 271-273
- **Myb promotes centriole amplification and later steps of the multiciliogenesis program.** *Development*
  Tan, F. E., Vladar, E. K., Ma, L., Fuentealba, L. C., Hoh, R., Espinoza, F. H., Axelrod, J. D., Alvarez-Buylla, A., Stearns, T., Kintner, C., Krasnow, M. A.
  2013; 140 (20): 4277-4286
- **FOP Is a Centriolar Satellite Protein Involved in Ciliogenesis** *PLOS ONE*
  Lee, J. Y., Stearns, T.
  2013; 8 (3)
- **The Rilp-like proteins Rilpl1 and Rilpl2 regulate ciliary membrane content.** *Molecular biology of the cell*
  Schaub, J. R., Stearns, T.

2013; 24 (4): 453-464

- **Cell architecture: putting the building blocks together** *CURRENT OPINION IN CELL BIOLOGY*
  Akhmanova, A., Stearns, T.
  2013; 25 (1): 3-5
- **Transcriptional Program of Ciliated Epithelial Cells Reveals New Cilium and Centrosome Components and Links to Human Disease** *PLOS ONE*
  Hoh, R. A., Stowe, T. R., Turk, E., Stearns, T.
  2012; 7 (12)
- **Supernumerary Centrosomes Nucleate Extra Cilia and Compromise Primary Cilium Signaling** *CURRENT BIOLOGY*
  Mahjoub, M. R., Stearns, T.
  2012; 22 (17): 1628-1634
- **The centriolar satellite proteins Cep72 and Cep290 interact and are required for recruitment of BBS proteins to the cilium** *MOLECULAR BIOLOGY OF THE CELL*
  Stowe, T. R., Wilkinson, C. J., Iqbal, A., Stearns, T.
  2012; 23 (17): 3322-3335
- **STED Microscopy with Optimized Labeling Density Reveals 9-Fold Arrangement of a Centriole Protein** *BIOPHYSICAL JOURNAL*
  Lau, L., Lee, Y. L., Sahl, S. J., Stearns, T., Moerner, W. E.
  2012; 102 (12): 2926-2935
- **Mechanosensing by the Primary Cilium: Deletion of Kif3A Reduces Bone Formation Due to Loading** *PLOS ONE*
  Temiyasathit, S., Tang, W. J., Leucht, P., Anderson, C. T., Monica, S. D., Castillo, A. B., Helms, J. A., Stearns, T., Jacobs, C. R.
  2012; 7 (3)
- **A crucial requirement for Hedgehog signaling in small cell lung cancer** *NATURE MEDICINE*
  Park, K., Martelotto, L. G., Peifer, M., Sos, M. L., Karnezis, A. N., Mahjoub, M. R., Bernard, K., Conklin, J. F., Szczepny, A., Yuan, J., Guo, R., Ospina, B., Falzon, et al
  2011; 17 (11): 1504-U1506
- **Curcumin Inhibits Growth of Saccharomyces cerevisiae through Iron Chelation** *EUKARYOTIC CELL*
  Minear, S., O'Donnell, A. F., Ballew, A., Giaever, G., Nislow, C., Stearns, T., Cyert, M. S.
  2011; 10 (11): 1574-1581
- **The centrosome cycle: Centriole biogenesis, duplication and inherent asymmetries** *NATURE CELL BIOLOGY*
  Nigg, E. A., Stearns, T.
  2011; 13 (10): 1154-1160
- **STED Super-resolution Microscopy in Drosophila Tissue and in Mammalian Cells.** *Proceedings of SPIE--the International Society for Optical Engineering*
  Lau, L., Lee, Y. L., Matis, M., Axelrod, J., Stearns, T., Moerner, W. E.
  2011; 7910
- **STED Super-resolution Microscopy in Drosophila Tissue and in Mammalian Cells** *Conference on Reporters, Markers, Dyes, Nanoparticles, and Molecular Probes for Biomedical Applications III*
  Lau, L., Lee, Y. L., Matis, M., Axelrod, J., Stearns, T., Moerner, W. E.
  SPIE-INT SOC OPTICAL ENGINEERING.2011
- **Cep152 interacts with Plk4 and is required for centriole duplication** *JOURNAL OF CELL BIOLOGY*
  Hatch, E. M., Kulukian, A., Holland, A. J., Cleveland, D. W., Stearns, T.
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- **Cep120 is asymmetrically localized to the daughter centriole and is essential for centriole assembly** *JOURNAL OF CELL BIOLOGY*
  Mahjoub, M. R., Xie, Z., Stearns, T.
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- **The life cycle of centrioles.** *Cold Spring Harbor symposia on quantitative biology*
  Hatch, E., Stearns, T.

2010; 75: 425-431

- **STEM CELLS A fateful age gap** *NATURE*
  Stearns, T.
  2009; 461 (7266): 891-892
- **Centriole Age Underlies Asynchronous Primary Cilium Growth in Mammalian Cells** *CURRENT BIOLOGY*
  Anderson, C. T., Stearns, T.
  2009; 19 (17): 1498-1502
- **Polo Kinase and Separase Regulate the Mitotic Licensing of Centriole Duplication in Human Cells** *DEVELOPMENTAL CELL*
  Tsou, M. B., Wang, W., George, K. A., Uryu, K., Stearns, T., Jallepalli, P. V.
  2009; 17 (3): 344-354
- **Plk1-Dependent Recruitment of gamma-Tubulin Complexes to Mitotic Centrosomes Involves Multiple PCM Components** *PLOS ONE*
  Haren, L., Stearns, T., Luders, J.
  2009; 4 (6)
- **Exploring the pole: an EMBO conference on centrosomes and spindle pole bodies** *NATURE CELL BIOLOGY*
  Jaspersen, S. L., Stearns, T.
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- **Primary cilia: Cellular sensors for the skeleton** *37th International Sun Valley Workshop on Skeletal Tissue Biology*
  Anderson, C. T., Castillo, A. B., Brugmann, S. A., Helms, J. A., Jacobs, C. R., Stearns, T.
  WILEY-BLACKWELL.2008: 1074–78
- **Primary cilia mediate mechanosensing in bone cells by a calcium-independent mechanism** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
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- **Molecular characterization of centriole assembly in ciliated epithelial cells** *JOURNAL OF CELL BIOLOGY*
  Vladar, E. K., Stearns, T.
  2007; 178 (1): 31-42
- **The molecular logic of the centrosome duplication cycle**
  Tsou, B., Stearns, T.
  FEDERATION AMER SOC EXP BIOL.2007: A93
- **Opinion - Microtubule-organizing centres: a re-evaluation** *NATURE REVIEWS MOLECULAR CELL BIOLOGY*
  Luders, J., Stearns, T.
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- **Primary cilia: Mechanosensory organelles in bone cells.** *28th Annual Meeting of the American-Society-for-Bone-and-Mineral-Research*
  Malone, A. M., Anderson, C. T., Temiyasathit, S., Tang, J., Tummala, P., Stearns, T., Jacobs, C. R.
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  Tsou, M. B., Stearns, T.
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- **Controlling centrosome number: licenses and blocks** *CURRENT OPINION IN CELL BIOLOGY*
  Tsou, M. F., Stearns, T.
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- **GCP-WD is a gamma-tubulin targeting factor required for centrosomal and chromatin-mediated microtubule nucleation** *NATURE CELL BIOLOGY*
  Luders, J., Patel, U. K., Stearns, T.
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- **Insights into microtubule nucleation from the crystal structure of human gamma-tubulin** *NATURE*

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- **Mammalian cells lack checkpoints for tetraploidy, aberrant centrosome number, and cytokinesis failure** *BMC CELL BIOLOGY*
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- **Using femtosecond laser subcellular surgery to studycell biology**
  Shen, N., Colvin, M., Genin, F., Huser, T., Cortopassi, G. A., Stearns, T., LeDuc, P., Ingber, D. E., Mazur, E.
  BIOPHYSICAL SOCIETY.2004: 520A
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