Stanford



Aaron F. Straight

Pfeiffer and Herold Families Professor, Professor of Biochemistry and, by courtesy, of Chemical and Systems Biology

CONTACT INFORMATION

- **Administrative Contact**

  Maria D. Arzate - Administrative Associate

  Email mdarzate@stanford.edu

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Bio

ACADEMIC APPOINTMENTS

- Professor, Biochemistry
- Professor (By courtesy), Chemical and Systems Biology
- Member, Bio-X
- Member, Maternal & Child Health Research Institute (MCHRI)
- Faculty Fellow, Sarafan ChEM-H
- Member, Stanford Cancer Institute
- Member, Wu Tsai Neurosciences Institute

ADMINISTRATIVE APPOINTMENTS

- Chairperson, Department of Biochemistry, (2019- present)
- Chairperson, Basic Science Chairs, (2021-2023)
- Senator, Stanford University Faculty Senate, (2019-2020)
- Chairperson, Committee on Graduate Admissions and Policy, (2017-2018)

HONORS AND AWARDS

- Elected Member, American Academy of Arts and Sciences (2026)
- AAAS Elected Fellow, American Association for the Advancement of Science (2024)
- ASCB Lifetime Fellow, American Society for Cell Biology (2022)
- Mayent-Rothschild Institute Curie Award, Institute Curie (2019)
- Stanford Faculty Excellence in Teaching Award, Stanford Medical School (2014)
- American Cancer Society Research Scholar, American Cancer Society (2011-2014)
- Gordon Family Scholar of the Damon Runyon Foundation, Damon Runyon Cancer Research Foundation (2005-2007)
- Damon Runyon Postdoctoral Fellow, Damon Runyon Cancer Research Foundation (1998-2001)

- Dartmouth College Senior Fellow, Dartmouth College (1989)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- External Scientific Advisor, 4D Nucleome Project - NIH Common Fund (2015 - 2020)
- Fellowship Award Committee, Damon Runyon Cancer Research Foundation (2018 - present)
- Scientific Advisory Board, LifeTime Initiative (2018 - present)

PROFESSIONAL EDUCATION

- BA, Dartmouth College , Biology (1989)
- Ph.D., University of California at San Francisco , Biochemistry (1998)
- Post-Doctoral Fellow, Harvard Medical School , Cell Biology (2003)

PATENTS

- Aaron Straight. "United States Patent WO/2022/256469 METHODS FOR MEASURING PROTEIN-DNA INTERACTIONS WITH LONG-READ DNA SEQUENCING", THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY, Aug 12, 2022

LINKS

- Straight Lab: http://straightlab.stanford.edu

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Our goal is to understand how chromosomes are faithfully transmitted during cell division and how chromosomes are structured and organized in the nucleus. Many cellular processes act on the chromosome to specialize different chromosomal domains for unique functions. One of the best examples of a specialized chromatin domain is the eukaryotic centromere and kinetochore that forms at a single site on each human chromosome and ensures the proper segregation of the genome during each cell division cycle. The laboratory studies the genetic and epigenetic mechanisms that control the formation of centromeres. Cells use a variety of different mechanisms to change the function of chromosomes. We have also focused on understanding how RNAs that associate with chromosomes regulate the reorganization of chromatin into silent heterochromatic domains. Our recent efforts have been directed at understanding how long range interactions between chromosomes are used to organize the genome within the nucleus and to control gene expression and chromosome dynamics. We are also studying complex repeat domains in the human genome and how repetitive sequences are controlled by epigenetic silencing and boundaries. We use a combination of microscopy to extract quantitative information about the behavior of chromosomes in living cells, biochemical reconstitution to assemble chromatin and chromosomes in vitro, genetics to manipulate the chromosome segregation process in order to study how chromosome-distribution systems function in eukaryotes, and computation and genomics to explore complex genomes.

Teaching

COURSES

2026-27

- Biochemistry Department Minicourse: BIOC 202 (Aut)
- Currents in Biochemistry: BIOC 257 (Aut)
- The Giving Tree: DESIGN 44N (Spr)

2025-26

- Biochemistry Department Minicourse: BIOC 202 (Aut)

- Currents in Biochemistry: BIOC 257 (Aut)

2024-25

- Biochemistry Department Minicourse: BIOC 202 (Aut)
- Currents in Biochemistry: BIOC 257 (Aut)

2023-24

- Biochemistry Mini-Course: BIOC 202 (Aut)
- Currents in Biochemistry: BIOC 257 (Aut)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Lynette Chan, Usman Enam, Gyu Kim, Rosa Lee, Hugo Mendez, Ellen Morgan, Diego Pomales-Matos, Cindy Sandoval Espinoza, Jia Zheng Woo

Postdoctoral Faculty Sponsor

Eline Hendrix, Lucas Murray, Nancy Paniagua, Annie Trinh

Doctoral Dissertation Advisor (AC)

Vali Engles, Samantha Johnson, Jacob Schwartz

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Biochemistry (PhD Program)
- Chemical and Systems Biology (PhD Program)

Publications

PUBLICATIONS

- **Haplotype-resolved DiMeLo-seq maps centromeric chromatin in a complete diploid human genome.** *Cell genomics*
  Xu, Y., Loucks, H., Menendez, J., Ryabov, F., Lucas, J. K., Cechova, M., Morina, L., Xu, E., Dubocanin, D., Chittenden, C., Asri, M., Violich, I., Ortiz, et al
  2026: 101324
- **Structure and function of the outer kinetochore.** *Nature reviews. Molecular cell biology*
  Musacchio, A., Huis In 't Veld, P. J., Brown, R. R., Straight, A. F.
  2026
- **Structure and function of the centromere and inner kinetochore.** *Nature reviews. Molecular cell biology*
  Brown, R. R., Huis In 't Veld, P. J., Musacchio, A., Straight, A. F.
  2026
- **Haplotype-resolved centromeric chromatin organization from a complete diploid human genome.** *bioRxiv : the preprint server for biology*
  Xu, Y., Loucks, H., Menendez, J., Ryabov, F., Lucas, J. K., Cechova, M., Morina, L., Xu, E., Dubocanin, D., Chittenden, C., Asri, M., Violich, I., Ortiz, et al
  2026
- **Phosphorylation of Xenopus M18BP1 governs centromeric localization and CENP-A nucleosome assembly.** *EMBO reports*
  Brown, R. R., Schwartz, J. P., Ghadri, L., Straight, A. F.
  2026
- **Integrated analysis of multimodal long-read epigenetic assays.** *bioRxiv : the preprint server for biology*
  Marcus, J., Dixon-Luinenburg, O., Gamarra, N., Schwartz, J. P., Rozenwald, M., Maslan, A., Urnov, F. D., Straight, A. F., Altemose, N., Ioannidis, N. M., Streets, A.
  2025

- **Regulation of X. laevis M18BP1 centromeric localization and CENP-A assembly.** *bioRxiv : the preprint server for biology*
  Brown, R. R., Schwartz, J. P., Ghadri, L., Straight, A. F.
  2025
- **Histone H3 lysine methyltransferase activities control compartmentalization of human centromeres.** *bioRxiv : the preprint server for biology*
  Sidhwani, P., Schwartz, J. P., Fryer, K. A., Straight, A. F.
  2025
- **Identification of chromatin-associated RNAs at human centromeres.** *bioRxiv : the preprint server for biology*
  Fryer, K., Limouse, C., Straight, A. F.
  2025
- **DiMeLo-cito: a one-tube protocol for mapping protein-DNA interactions reveals CTCF bookmarking in mitosis.** *bioRxiv : the preprint server for biology*
  Gamarra, N., Chittenden, C., Sundararajan, K., Schwartz, J. P., Lundqvist, S., Robles, D., Dixon-Luinenburg, O., Marcus, J., Maslan, A., Franklin, J. M., Streets, A., Straight, A. F., Altemose, et al
  2025
- **Independence of Centromeric and Pericentromeric Chromatin Stability on CCAN Components.** *Molecular biology of the cell*
  Biggs, R. J., Sundararajan, K., Sun, M., Hendrix, E., Straight, A. F., Marko, J. F.
  2025: mbcE24020066
- **Mapping protein-DNA interactions with DiMeLo-seq.** *Nature protocols*
  Maslan, A., Altemose, N., Marcus, J., Mishra, R., Brennan, L. D., Sundararajan, K., Karpen, G., Straight, A. F., Streets, A.
  2024
- **Conserved chromatin and repetitive patterns reveal slow genome evolution in frogs.** *Nature communications*
  Bredeson, J. V., Mudd, A. B., Medina-Ruiz, S., Mitros, T., Smith, O. K., Miller, K. E., Lyons, J. B., Batra, S. S., Park, J., Berkoff, K. C., Plott, C., Grimwood, J., Schmutz, et al
  2024; 15 (1): 579
- **Global mapping of RNA-chromatin contacts reveals a proximity-dominated connectivity model for ncRNA-gene interactions.** *Nature communications*
  Limouse, C., Smith, O. K., Jukam, D., Fryer, K. A., Greenleaf, W. J., Straight, A. F.
  2023; 14 (1): 6073
- **Epigenetic inheritance and boundary maintenance at human centromeres.** *Current opinion in structural biology*
  Sidhwani, P., Straight, A. F.
  2023; 82: 102694
- **Repression of CENP-A assembly in metaphase requires HJURP phosphorylation and inhibition by M18BP1.** *The Journal of cell biology*
  Flores Servin, J. C., Brown, R. R., Straight, A. F.
  2023; 222 (6)
- **Molecular conflicts disrupting centromere maintenance contribute toXenopushybrid inviability**
  Heald, R., Kitaoka, M., Smith, O. K., Straight, A. F.
  AMER SOC CELL BIOLOGY.2023: 169
- **A targeted, transposase-mediated, RNA-DNA proximity-ligation sequencing technique to identify centromeric chromatin associated RNAs**
  Fryer, K. A., Limouse, C., Straight, A. F.
  AMER SOC CELL BIOLOGY.2023: 1018-1019
- **Discovering mechanisms regulating centromeric boundary maintenance and genome stability**
  Sidhwani, P., Straight, A.
  AMER SOC CELL BIOLOGY.2023: 598
- **Molecular conflicts disrupting centromere maintenance contribute to Xenopus hybrid inviability.** *Current biology : CB*
  Kitaoka, M., Smith, O. K., Straight, A. F., Heald, R.
  2022

- **DiMeLo-seq: a long-read, single-molecule method for mapping protein-DNA interactions genome wide.** *Nature methods*
  Altemose, N., Maslan, A., Smith, O. K., Sundararajan, K., Brown, R. R., Mishra, R., Detweiler, A. M., Neff, N., Miga, K. H., Straight, A. F., Streets, A.
  2022
- **From telomere to telomere: The transcriptional and epigenetic state of human repeat elements.** *Science (New York, N.Y.)*
  Hoyt, S. J., Storer, J. M., Hartley, G. A., Grady, P. G., Gershman, A., de Lima, L. G., Limouse, C., Halabian, R., Wojenski, L., Rodriguez, M., Altemose, N., Rhie, A., Core, et al
  2022; 376 (6588): eabk3112
- **CENP-N promotes the compaction of centromeric chromatin.** *Nature structural & molecular biology*
  Zhou, K., Gebala, M., Woods, D., Sundararajan, K., Edwards, G., Krzizike, D., Wereszczynski, J., Straight, A. F., Luger, K.
  2022; 29 (4): 403-413
- **Complete genomic and epigenetic maps of human centromeres.** *Science (New York, N.Y.)*
  Altemose, N., Logsdon, G. A., Bzikadze, A. V., Sidhwani, P., Langley, S. A., Caldas, G. V., Hoyt, S. J., Uralsky, L., Ryabov, F. D., Shew, C. J., Sauria, M. E., Borchers, M., Gershman, et al
  2022; 376 (6588): eabl4178
- **Centromere Identity and the Regulation of Chromosome Segregation.** *Frontiers in cell and developmental biology*
  Sundararajan, K., Straight, A. F.
  2022; 10: 914249
- **The DNA-to-cytoplasm ratio broadly activates zygotic gene expression in Xenopus.** *Current biology : CB*
  Jukam, D., Kapoor, R. R., Straight, A. F., Skotheim, J. M.
  2021
- **Identification and characterization of centromeric sequences in Xenopus laevis.** *Genome research*
  Smith, O. K., Limouse, C., Fryer, K. A., Teran, N. A., Sundararajan, K., Heald, R., Straight, A. F.
  2021
- **Mapping Transcriptome-Wide and Genome-Wide RNA-DNA Contacts with Chromatin-Associated RNA Sequencing (ChAR-seq).** *Methods in molecular biology (Clifton, N.J.)*
  Limouse, C., Jukam, D., Smith, O. K., Fryer, K. A., Straight, A. F.
  2020; 2161: 115–42
- **Chromatin-Associated RNA Sequencing (ChAR-seq).** *Current protocols in molecular biology*
  Jukam, D., Limouse, C., Smith, O. K., Risca, V. I., Bell, J. C., Straight, A. F.
  2019: e87
- **CDK phosphorylation of Xenopus laevis M18BP1 promotes its metaphase centromere localization.** *The EMBO journal*
  French, B. T., Straight, A. F.
  2019
- **Chromatin-associated RNA sequencing (ChAR-seq) maps genome-wide RNA-to-DNA contacts** *ELIFE*
  Bell, J. C., Jukam, D., Teran, N. A., Risca, V. I., Smith, O. K., Johnson, W. L., Skotheim, J. M., Greenleaf, W., Straight, A. F.
  2018; 7
- **Measurement of Mesoscale Conformational Dynamics of Freely Diffusing Molecules with Tracking FCS** *BIOPHYSICAL JOURNAL*
  Limouse, C., Bell, J. C., Fuller, C. J., Straight, A. F., Mabuchi, H.
  2018; 114 (7): 1539–50
- **Constitutive centromere-associated network contacts confer differential stability on CENP-A nucleosomes in vitro and in the cell** *MOLECULAR BIOLOGY OF THE CELL*
  Cao, S., Zhou, K., Zhang, Z., Luger, K., Straight, A. F.
  2018; 29 (6): 751–62
- **Centromere and Kinetochore Assembly in Xenopus laevis Egg Extract.** *Cold Spring Harbor protocols*
  Flores Servin, J. C., Straight, A. F.
  2018

- **The Power of Xenopus Egg Extract for Reconstitution of Centromere and Kinetochore Function.** *Progress in molecular and subcellular biology*
  French, B. T., Straight, A. F.
  2017; 56: 59-84
- **RNA-mediated regulation of heterochromatin** *CURRENT OPINION IN CELL BIOLOGY*
  Johnson, W. L., Straight, A. F.
  2017; 46: 102–9
- **Editorial overview: The cell nucleus: New discoveries on nuclear structure, dynamics and function.** *Current opinion in cell biology*
  Foisner, R., Straight, A. F.
  2017; 46: iv-vi
- **Form and function of topologically associating genomic domains in budding yeast** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Eser, U., Chandler-Brown, D., Ay, F., Straight, A. F., Duang, Z., Noble, W. S., Skotheim, J. M.
  2017; 114 (15): E3061-E3070
- **Variable chromatin structure revealed by in situ spatially correlated DNA cleavage mapping.** *Nature*
  Risca, V. I., Denny, S. K., Straight, A. F., Greenleaf, W. J.
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- **RNA-dependent stabilization of SUV39H1 at constitutive heterochromatin.** *eLife*
  Johnson, W. L., Yewdell, W. T., Bell, J. C., McNulty, S. M., Duda, Z. n., O'Neill, R. J., Sullivan, B. A., Straight, A. F.
  2017; 6
- **The Power of Xenopus Egg Extract for Reconstitution of Centromere and Kinetochore Function** *Centromeres and Kinetochores*
  French, B. T., Straight, A. F.
  edited by Black, B. E.
  Springer.2017: 59–84
- **Xenopus laevis M18BP1 Directly Binds Existing CENP-A Nucleosomes to Promote Centromeric Chromatin Assembly.** *Developmental cell*
  French, B. T., Westhorpe, F. G., Limouse, C. n., Straight, A. F.
  2017; 42 (2): 190–99.e10
- **Acetylation of histone H4 lysine 5 and 12 is required for CENP-A deposition into centromeres.** *Nature communications*
  Shang, W., Hori, T., Westhorpe, F. G., Godek, K. M., Toyoda, A., Misu, S., Monma, N., Ikeo, K., Carroll, C. W., Takami, Y., Fujiyama, A., Kimura, H., Straight, et al
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- **MIS12/MIND Control at the Kinetochore.** *Cell*
  Ladurner, R., Straight, A. F.
  2016; 167 (4): 889-891
- **In Vitro Kinetochore Assembly.** *Methods in molecular biology (Clifton, N.J.)*
  Miell, M. D., Straight, A. F.
  2016; 1413: 111-133
- **A cell-free CENP-A assembly system defines the chromatin requirements for centromere maintenance** *JOURNAL OF CELL BIOLOGY*
  Westhorpe, F. G., Fuller, C. J., Straight, A. F.
  2015; 209 (6): 789-801
- **Histone titration against the genome sets the DNA-to-cytoplasm threshold for the Xenopus midblastula transition.** *Proceedings of the National Academy of Sciences of the United States of America*
  Amodeo, A. A., Jukam, D., Straight, A. F., Skotheim, J. M.
  2015; 112 (10): E1086-95
- **Regulating the timing of CENP-A nucleosome assembly by phosphorylation.** *Developmental cell*
  Miell, M. D., Straight, A. F.
  2015; 32 (1): 1-2

- **The centromere: epigenetic control of chromosome segregation during mitosis.** *Cold Spring Harbor perspectives in biology*
  Westhorpe, F. G., Straight, A. F.
  2015; 7 (1)
- **The centromere: epigenetic control of chromosome segregation during mitosis.** *Cold Spring Harbor perspectives in biology*
  Westhorpe, F. G., Straight, A. F.
  2014; 7 (1)
- **Recurrent point mutations in the kinetochore gene KNSTRN in cutaneous squamous cell carcinoma** *NATURE GENETICS*
  Lee, C. S., Bhaduri, A., Mah, A., Johnson, W. L., Ungewickell, A., Aros, C. J., Nguyen, C. B., Rios, E. J., Siprashvili, Z., Straight, A., Kim, J., Aasi, S. Z., Khavari, et al
  2014; 46 (10): 1060-1062
- **Recurrent point mutations in the kinetochore gene KNSTRN in cutaneous squamous cell carcinoma.** *Nature genetics*
  Lee, C. S., Bhaduri, A., Mah, A., Johnson, W. L., Ungewickell, A., Aros, C. J., Nguyen, C. B., Rios, E. J., Siprashvili, Z., Straight, A., Kim, J., Aasi, S. Z., Khavari, et al
  2014; 46 (10): 1060-1062
- **Reply to "CENP-A octamers do not confer a reduction in nucleosome height by AFM".** *Nature structural & molecular biology*
  Miell, M. D., Straight, A. F., Allshire, R. C.
  2014; 21 (1): 5-8
- **Swapping CENP-A at the centromere.** *Nature cell biology*
  French, B. T., Straight, A. F.
  2013; 15 (9): 1028-1030
- **CENP-A confers a reduction in height on octameric nucleosomes.** *Nature structural & molecular biology*
  Miell, M. D., Fuller, C. J., Guse, A., Barysz, H. M., Downes, A., Owen-Hughes, T., Rappsilber, J., Straight, A. F., Allshire, R. C.
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- **Functions of the centromere and kinetochore in chromosome segregation.** *Current opinion in cell biology*
  Westhorpe, F. G., Straight, A. F.
  2013; 25 (3): 334-340
- **A conserved mechanism for centromeric nucleosome recognition by centromere protein CENP-C.** *Science*
  Kato, H., Jiang, J., Zhou, B., Rozendaal, M., Feng, H., Ghirlando, R., Xiao, T. S., Straight, A. F., Bai, Y.
  2013; 340 (6136): 1110-1113
- **Esperanto for histones: CENP-A, not CenH3, is the centromeric histone H3 variant** *CHROMOSOME RESEARCH*
  Earnshaw, W. C., Allshire, R. C., Black, B. E., Bloom, K., Brinkley, B. R., BROWN, W., Cheeseman, I. M., Choo, K. H., Copenhaver, G. P., DeLuca, J. G., Desai, A., Diekmann, S., Erhardt, et al
  2013; 21 (2): 101-106
- **Fluorescent protein applications in microscopy.** *Methods in cell biology*
  Johnson, W. L., Straight, A. F.
  2013; 114: 99-123
- **A cell-free system for functional centromere and kinetochore assembly** *NATURE PROTOCOLS*
  Guse, A., Fuller, C. J., Straight, A. F.
  2012; 7 (10): 1847-1869
- **Imaging nanometre-scale structure in cells using in situ aberration correction** *JOURNAL OF MICROSCOPY*
  Fuller, C. J., Straight, A. F.
  2012; 248 (1): 90-101
- **The Split Personality of CENP-A Nucleosomes** *CELL*
  Westhorpe, F. G., Straight, A. F.
  2012; 150 (2): 245-247
- **Dynamics of CENP-N kinetochore binding during the cell cycle** *JOURNAL OF CELL SCIENCE*

Hellwig, D., Emmerth, S., Ulbricht, T., Doering, V., Hoischen, C., Martin, R., Samora, C. P., McAinsh, A. D., Carroll, C. W., Straight, A. F., Meraldi, P., Diekmann, S.
2011; 124 (22): 3871-3883

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  Moree, B., Meyer, C. B., Fuller, C. J., Straight, A. F.
  2011; 194 (6): 855-871
- **In vitro centromere and kinetochore assembly on defined chromatin templates** *NATURE*
  Guse, A., Carroll, C. W., Moree, B., Fuller, C. J., Straight, A. F.
  2011; 477 (7364): 354-U136
- **Single-molecule fluorescence experiments with real-time feedback: Tracking-FCS, tracking-FRET and tracking diffusometry** *242nd National Meeting of the American-Chemical-Society (ACS)*
  Limouse, C., Fuller, C., Zhang, K., Straight, A., Mabuchi, H.
  AMER CHEMICAL SOC.2011
- **Single molecule dynamics of chromatin fibers** *Annual Meeting of the American-Society-for-Cell-Biology (ASCB)*
  Limouse, C., Fuller, C., Straight, A., Mabuchi, H.
  AMER SOC CELL BIOLOGY.2011
- **Local Geometry and Elasticity in Compact Chromatin Structure** *BIOPHYSICAL JOURNAL*
  Koslover, E. F., Fuller, C. J., Straight, A. F., Spakowitz, A. J.
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- **Dual recognition of CENP-A nucleosomes is required for centromere assembly** *JOURNAL OF CELL BIOLOGY*
  Carroll, C. W., Milks, K. J., Straight, A. F.
  2010; 189 (7): 1143-1155
- **RB's original CIN?** *GENES & DEVELOPMENT*
  Sage, J., Straight, A. F.
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- **Image analysis benchmarking methods for high-content screen design** *JOURNAL OF MICROSCOPY-OXFORD*
  Fuller, C. J., Straight, A. F.
  2010; 238 (2): 145-161
- **Dissection of CENP-C-directed Centromere and Kinetochore Assembly** *MOLECULAR BIOLOGY OF THE CELL*
  Milks, K. J., Moree, B., Straight, A. F.
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- **Centromere assembly requires the direct recognition of CENP-A nucleosomes by CENP-N** *NATURE CELL BIOLOGY*
  Carroll, C. W., Silva, M. C., Godek, K. M., Jansen, L. E., Straight, A. F.
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- **Genome-wide analysis reveals a cell cycle-dependent mechanism controlling centromere propagation** *JOURNAL OF CELL BIOLOGY*
  Erhardt, S., Mellone, B. G., Betts, C. M., Zhang, W., Karpen, G. H., Straight, A. F.
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- **Polo-Like Kinase Controls Vertebrate Spindle Elongation and Cytokinesis** *PLOS ONE*
  Brennan, I. M., Peters, U., Kapoor, T. M., Straight, A. F.
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- **Centromeric chromatin gets loaded** *JOURNAL OF CELL BIOLOGY*
  Carroll, C. W., Straight, A. F.
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- **Fluorescent protein applications in microscopy** *DIGITAL MICROSCOPY, 3RD EDITION*
  Straight, A. F.
  2007; 81: 93-?

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  Carroll, C. W., Straight, A. F.
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  Lucas-Lopez, C., Patterson, S., Blum, T., Straight, A. F., TOTH, J., Slawin, A. M., Mitchison, T. J., Sellers, J. R., Westwood, N. J.
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- **Anillin binds nonmuscle myosin II and regulates the contractile ring** *MOLECULAR BIOLOGY OF THE CELL*
  Straight, A. F., Field, C. M., Mitchison, T. J.
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- **Kinetic mechanism of blebbistatin inhibition of nonmuscle myosin IIB** *BIOCHEMISTRY*
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- **Specificity of blebbistatin, an inhibitor of myosin II** *JOURNAL OF MUSCLE RESEARCH AND CELL MOTILITY*
  Limouze, J., Straight, A. F., Mitchison, T., Sellers, J. E.
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- **Direct observation of microtubule dynamics at kinetochores in Xenopus extract spindles: implications for spindle mechanics** *JOURNAL OF CELL BIOLOGY*
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