



Gerald Crabtree

Department of Pathology Professor in Experimental Pathology and Professor of Developmental Biology

CONTACT INFORMATION

- **Alternate Contact**

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Bio

ACADEMIC APPOINTMENTS

- Professor, Pathology
- Professor, Developmental Biology
- Member, Bio-X
- Member, Cardiovascular Institute
- Member, Stanford Cancer Institute

ADMINISTRATIVE APPOINTMENTS

- Member, National Academy of Sciences, (1997- present)
- Investigator, HHMI, (1988-2021)

HONORS AND AWARDS

- Director's Award, National Institutes of Health (1984)
- Investigator, Howard Hughes Medical Institute (1988 to present)
- Member, National Academy of Sciences (1997)
- Merit Award, National Institutes of Health (2000)
- Outstanding Inventor, Stanford University (2004)
- Laureate in Chemistry with Stuart Schreiber, Thomas Scientific (2006)
- David Korn Professorship, Stanford University (2008)
- Faculty Mentor of the Year, Stanford University (2008)
- Javits Neuroscience Investigator Award, National Institutes of Health (2013)
- Fellow, American Association for the Advancement of Science (2015)

LINKS

- www.crablab.com: www.crabtreelab.com

- Personal Web site: <http://crablab.stanford.edu/>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

We are interested in the role of chromatin regulation in development and human cancer. Recent studies have show that over 20% of all human cancers have mutations in the subunits of an ATP-dependent chromatin regulatory complex we discovered several years ago. The genes behave as tumor suppressors and sometimes as oncogenes. We hope to understand the fundamental mechanisms used by these complex to prevent cancer.

These same chromatin remodeling complexes are frequently mutated in a variety of human neurologic diseases, reflecting their roles in the development of the nervous system. It appears that these specialized roles in the nervous system are due to the use of unique neural specific assemblies in the developing human and mouse brain. We hope to understand their fundamental mechanism of action through biochemical and genetic approaches in combination with genome-wide analysis and genome sequencing studies.

Finally, we are developing new ways of making conditional alleles of mammalian genes using synthetic ligands that we hope will bring about a new fusion of biochemical and genetic approaches to understanding and controlling fundamental biologic processes. Recently we have developed an effective way of both assaying and modifying chromatin regulation in living cells.

Teaching

COURSES

2019-20

- Cellular and Clinical Aspects of Cancer: CBIO 242 (Spr)

2018-19

- Cellular and Clinical Aspects of Cancer: CBIO 242 (Spr)

2017-18

- Cellular and Clinical Aspects of Cancer: CBIO 242 (Spr)

STANFORD ADVISEES

Med Scholar Project Advisor

Yesde Son

Postdoctoral Faculty Sponsor

Sherry Lin

Doctoral Dissertation Advisor (AC)

Samuel Kim, Wendy Wenderski

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Cancer Biology (Phd Program)
- Chemical and Systems Biology (Phd Program)
- Developmental Biology (Phd Program)
- Immunology (Phd Program)

Publications

PUBLICATIONS

- **LSH mediates gene repression through macroH2A deposition.** *Nature communications*
Ni, K., Ren, J., Xu, X., He, Y., Finney, R., Braun, S. M., Hathaway, N. A., Crabtree, G. R., Muegge, K.
2020; 11 (1): 5647
- **CHD8 dosage regulates transcription in pluripotency and early murine neural differentiation.** *Proceedings of the National Academy of Sciences of the United States of America*
Sood, S., Weber, C. M., Hodges, H. C., Krokhotin, A., Shalizi, A., Crabtree, G. R.
2020
- **Loss of the neural-specific BAF subunit ACTL6B relieves repression of early response genes and causes recessive autism.** *Proceedings of the National Academy of Sciences of the United States of America*
Wenderski, W., Wang, L., Krokhotin, A., Walsh, J. J., Li, H., Shoji, H., Ghosh, S., George, R. D., Miller, E. L., Elias, L., Gillespie, M. A., Son, E. Y., Staahl, et al
2020
- **Chemical Inhibitors of a Selective SWI/SNF Function Synergize with ATR Inhibition in Cancer Cell Killing.** *ACS chemical biology*
Chory, E. J., Kirkland, J. G., Chang, C. Y., D'Andrea, V. D., Gourisankar, S., Dykhuizen, E. C., Crabtree, G. R.
2020
- **Chromatin state as a mechanism of anthracycline response in breast cancer**
Seoane, J. A., Kirkland, J. G., Caswell-Jin, J. L., Crabtree, G. R., Curtis, C.
AMER ASSOC CANCER RESEARCH.2019
- **Chromatin regulators mediate anthracycline sensitivity in breast cancer.** *Nature medicine*
Seoane, J. A., Kirkland, J. G., Caswell-Jin, J. L., Crabtree, G. R., Curtis, C.
2019
- **Cyclosporin A Specifically Inhibits Function of Nuclear Proteins Involved in T Cell Activation (Reprinted from Science vol 246, pg 1617, 1989)** *JOURNAL OF IMMUNOLOGY*
Emmel, E. A., Verweij, C. L., Durand, D. B., Higgins, K. M., Lacy, E., Crabtree, G. R.
2018; 201 (11): 3149–52
- **Nucleosome Turnover Regulates Histone Methylation Patterns over the Genome.** *Molecular cell*
Chory, E. J., Calarco, J. P., Hathaway, N. A., Bell, O., Neel, D. S., Crabtree, G. R.
2018
- **Rapid chromatin repression by Aire provides precise control of immune tolerance** *NATURE IMMUNOLOGY*
Koh, A. S., Miller, E. L., Buenostro, J. D., Moskowitz, D. M., Wang, J., Greenleaf, W. J., Chang, H. Y., Crabtree, G. R.
2018; 19 (2): 162-+
- **Chemically induced proximity in biology and medicine.** *Science (New York, N.Y.)*
Stanton, B. Z., Chory, E. J., Crabtree, G. R.
2018; 359 (6380)
- **Small Molecule Targeting of Specific BAF (mSWI/SNF) Complexes for HIV Latency Reversal.** *Cell chemical biology*
Marian, C. A., Stoszko, M., Wang, L., Leighty, M. W., de Crignis, E., Maschinot, C. A., Gatchalian, J., Carter, B. C., Chowdhury, B., Hargreaves, D. C., Duvall, J. R., Crabtree, G. R., Mahmoudi, et al
2018
- **Dominant-negative SMARCA4 mutants alter the accessibility landscape of tissue-unrestricted enhancers.** *Nature structural & molecular biology*
Hodges, H. C., Stanton, B. Z., Cermakova, K., Chang, C. Y., Miller, E. L., Kirkland, J. G., Ku, W. L., Veverka, V., Zhao, K., Crabtree, G. R.
2018; 25 (1): 61–72
- **Tethering of Lsh at the Oct4 locus promotes gene repression associated with epigenetic changes** *EPIGENETICS*
Ren, J., Hathaway, N. A., Crabtree, G. R., Muegge, K.
2018; 13 (2): 173–81

- **Rapid and reversible epigenome editing by endogenous chromatin regulators** *NATURE COMMUNICATIONS*
Braun, S. G., Kirkland, J. G., Chory, E. J., Husmann, D., Calarco, J. P., Crabtree, G. R.
2017; 8: 560
- **Chd8 Mutation Leads to Autistic-like Behaviors and Impaired Striatal Circuits** *CELL REPORTS*
Platt, R. J., Zhou, Y., Slaymaker, I. M., Shetty, A. S., Weisbach, N. R., Kim, J., Sharma, J., Desai, M., Sood, S., Kempton, H. R., Crabtree, G. R., Feng, G., Zhang, et al
2017; 19 (2): 335-350
- **The BAF45a/PHF10 subunit of SWI/SNF-like chromatin remodeling complexes is essential for hematopoietic stem cell maintenance** *EXPERIMENTAL HEMATOLOGY*
Krasteva, V., Crabtree, G. R., Lessard, J. A.
2017; 48: 58-71
- **A General Non-Radioactive ATPase Assay for Chromatin Remodeling Complexes.** *Current protocols in chemical biology*
Stanton, B. Z., Hodges, C., Crabtree, G. R., Zhao, K.
2017; 9 (1): 1-10
- **TOP2 synergizes with BAF chromatin remodeling for both resolution and formation of facultative heterochromatin.** *Nature structural & molecular biology*
Miller, E. L., Hargreaves, D. C., Kadoch, C., Chang, C., Calarco, J. P., Hodges, C., Buenrostro, J. D., Cui, K., Greenleaf, W. J., Zhao, K., Crabtree, G. R.
2017
- **Dynamics of BAF-Polycomb complex opposition on heterochromatin in normal and oncogenic states** *NATURE GENETICS*
Kadoch, C., Williams, R. T., Calarco, J. P., Miller, E. L., Weber, C. M., Braun, S. M., Pulice, J. L., Chory, E. J., Crabtree, G. R.
2017; 49 (2): 213-222
- **Smarca4 ATPase mutations disrupt direct eviction of PRC1 from chromatin** *NATURE GENETICS*
Stanton, B. Z., Hodges, C., Calarco, J. P., Braun, S. M., Ku, W. L., Kadoch, C., Zhao, K., Crabtree, G. R.
2017; 49 (2): 282-288
- **The BAF45a/PHF10 subunit of SWI/SNF-like chromatin remodeling complexes is essential for hematopoietic stem cell maintenance.** *Experimental hematology*
Krasteva, V., Crabtree, G. R., Lessard, J. A.
2017; 48: 58–71.e15
- **DNA binding drives the association of BRG1/hBRM bromodomains with nucleosomes.** *Nature communications*
Morrison, E. A., Sanchez, J. C., Ronan, J. L., Farrell, D. P., Varzavand, K., Johnson, J. K., Gu, B. X., Crabtree, G. R., Musselman, C. A.
2017; 8: 16080
- **The BAF chromatin remodelling complex is an epigenetic regulator of lineage specification in the early mouse embryo.** *Development*
Panamarova, M., Cox, A., Wicher, K. B., Butler, R., Bulgakova, N., Jeon, S., Rosen, B., Seong, R. H., Skarnes, W., Crabtree, G., Zernicka-Goetz, M.
2016; 143 (8): 1271-1283
- **The Many Roles of BAF (mSWI/SNF) and PBAF Complexes in Cancer.** *Cold Spring Harbor perspectives in medicine*
Hodges, C., Kirkland, J. G., Crabtree, G. R.
2016; 6 (8)
- **Generation of BAF53b-Cre transgenic mice with pan-neuronal Cre activities** *GENESIS*
Zhan, X., Cao, M., Yoo, A. S., Zhang, Z., Chen, L., Crabtree, G. R., Wu, J. I.
2015; 53 (7): 440-448
- **Mammalian SWI/SNF chromatin remodeling complexes and cancer: Mechanistic insights gained from human genomics.** *Science advances*
Kadoch, C., Crabtree, G. R.
2015; 1 (5)
- **Generation of BAF53b-Cre transgenic mice with pan-neuronal Cre activities.** *Genesis (New York, N.Y. : 2000)*
Zhan, X., Cao, M., Yoo, A. S., Zhang, Z., Chen, L., Crabtree, G. R., Wu, J. I.
2015; 53 (7): 440–48
- **The Role of BAF (mSWI/SNF) Complexes in Mammalian Neural Development** *AMERICAN JOURNAL OF MEDICAL GENETICS PART C-SEMINARS IN MEDICAL GENETICS*

- Son, E. Y., Crabtree, G. R.
2014; 166 (3): 333-349
- **Essential role of BRG, the ATPase subunit of BAF chromatin remodeling complexes, in leukemia maintenance** *BLOOD*
Buscarlet, M., Krasteva, V., Ho, L., Simon, C., Hebert, J., Wilhelm, B., Crabtree, G. R., Sauvageau, G., Thibault, P., Lessard, J. A.
2014; 123 (11): 1720-1728
 - **Murine esBAF chromatin remodeling complex subunits BAF250a and Brg1 are necessary to maintain and reprogram pluripotency-specific replication timing of select replication domains** *EPIGENETICS & CHROMATIN*
Takebayashi, S., Lei, I., Ryba, T., Sasaki, T., Dileep, V., Battaglia, D., Gao, X., Fang, P., Fan, Y., Esteban, M. A., Tang, J., Crabtree, G. R., Wang, et al
2013; 6
 - **Creating a neural specific chromatin landscape by npBAF and nBAF complexes.** *Current opinion in neurobiology*
Staahl, B. T., Crabtree, G. R.
2013; 23 (6): 903-913
 - **The BAF Complex Interacts with Pax6 in Adult Neural Progenitors to Establish a Neurogenic Cross-Regulatory Transcriptional Network** *CELL STEM CELL*
Ninkovic, J., Steiner-Mezzadri, A., Jawerka, M., Akinci, U., Messerdotti, G., Petricca, S., Fischer, J., von Holst, A., Beckers, J., Lie, C. D., Petrik, D., Miller, E., Tang, et al
2013; 13 (4): 403-418
 - **Reprogramming human fibroblasts to neurons by recapitulating an essential microRNA-chromatin switch** *CURRENT OPINION IN GENETICS & DEVELOPMENT*
Tang, J., Yoo, A. S., Crabtree, G. R.
2013; 23 (5): 591-598
 - **Exome sequencing to identify de novo mutations in sporadic ALS trios.** *Nature neuroscience*
Chesi, A., Staahl, B. T., Jovicic, A., Couthouis, J., Fasolino, M., Raphael, A. R., Yamazaki, T., Elias, L., Polak, M., Kelly, C., Williams, K. L., Fifita, J. A., Maragakis, et al
2013; 16 (7): 851-855
 - **Kinetic Analysis of npBAF to nBAF Switching Reveals Exchange of SS18 with CREST and Integration with Neural Developmental Pathways.** *journal of neuroscience*
Staahl, B. T., Tang, J., Wu, W., Sun, A., Gitler, A. D., Yoo, A. S., Crabtree, G. R.
2013; 33 (25): 10348-10361
 - **BAF complexes facilitate decatenation of DNA by topoisomerase IIa.** *Nature*
Dykhuisen, E. C., Hargreaves, D. C., Miller, E. L., Cui, K., Korshunov, A., Kool, M., Pfister, S., Cho, Y., Zhao, K., Crabtree, G. R.
2013; 497 (7451): 624-627
 - **BAF complexes facilitate decatenation of DNA by topoisomerase IIa.** *Nature*
Dykhuisen, E. C., Hargreaves, D. C., Miller, E. L., Cui, K., Korshunov, A., Kool, M., Pfister, S., Cho, Y., Zhao, K., Crabtree, G. R.
2013; 497 (7451): 624-627
 - **Exome sequencing to identify de novo mutations in sporadic ALS trios.** *Nature neuroscience*
Chesi, A., Staahl, B. T., Jovicic, A., Couthouis, J., Fasolino, M., Raphael, A. R., Yamazaki, T., Elias, L., Polak, M., Kelly, C., Williams, K. L., Fifita, J. A., Maragakis, et al
2013; 16 (7): 851-855
 - **Proteomic and bioinformatic analysis of mammalian SWI/SNF complexes identifies extensive roles in human malignancy.** *Nature genetics*
Kadoch, C., Hargreaves, D. C., Hodges, C., Elias, L., Ho, L., Ranish, J., Crabtree, G. R.
2013; 45 (6): 592-601
 - **From neural development to cognition: unexpected roles for chromatin** *NATURE REVIEWS GENETICS*
Ronan, J. L., Wu, W., Crabtree, G. R.
2013; 14 (5): 347-359
 - **The neuron-specific chromatin regulatory subunit BAF53b is necessary for synaptic plasticity and memory** *NATURE NEUROSCIENCE*
Vogel-Ciernia, A., Matheos, D. P., Barrett, R. M., Kramar, E. A., Azzawi, S., Chen, Y., Magnan, C. N., Zeller, M., Sylvain, A., Haettig, J., Jia, Y., Tran, A., Dang, et al

2013; 16 (5): 552-?

- **MicroRNAs: regulators of neuronal fate** *CURRENT OPINION IN CELL BIOLOGY*
Sun, A. X., Crabtree, G. R., Yoo, A. S.
2013; 25 (2): 215-221
- **Reversible Disruption of mSWI/SNF (BAF) Complexes by the SS18-SSX Oncogenic Fusion in Synovial Sarcoma** *CELL*
Kadoch, C., Crabtree, G. R.
2013; 153 (1): 71-85
- **Rethinking our intellectual origins: response to Kalinka et al.** *TRENDS IN GENETICS*
Crabtree, G. R.
2013; 29 (3): 127-129
- **ACTL6a enforces the epidermal progenitor state by suppressing SWI/SNF-dependent induction of KLF4.** *Cell stem cell*
Bao, X., Tang, J., Lopez-Pajares, V., Tao, S., Qu, K., Crabtree, G. R., Khavari, P. A.
2013; 12 (2): 193-203
- **Our fragile intellect: response to Dr Mitchell** *TRENDS IN GENETICS*
Crabtree, G.
2013; 29 (2): 60-62
- **Our fragile intellect. Part II** *TRENDS IN GENETICS*
Crabtree, G. R.
2013; 29 (1): 3-5
- **Our fragile intellect. Part I** *TRENDS IN GENETICS*
Crabtree, G. R.
2013; 29 (1): 1-3
- **The BAF53a subunit of SWI/SNF-like BAF complexes is essential for hemopoietic stem cell function** *BLOOD*
Krasteva, V., Buscarlet, M., Diaz-Tellez, A., Bernard, M., Crabtree, G. R., Lessard, J. A.
2012; 120 (24): 4720-4732
- **Screening for Inhibitors of an Essential Chromatin Remodeler in Mouse Embryonic Stem Cells by Monitoring Transcriptional Regulation** *JOURNAL OF BIOMOLECULAR SCREENING*
Dykhuisen, E. C., Carmody, L. C., Tolliday, N., Crabtree, G. R., Palmer, M. A.
2012; 17 (9): 1221-1230
- **Dynamics of inherently bounded histone modification domains** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Hodges, C., Crabtree, G. R.
2012; 109 (33): 13296-13301
- **Medulloblastoma exome sequencing uncovers subtype-specific somatic mutations** *NATURE*
Pugh, T. J., Weeraratne, S. D., Archer, T. C., Krummel, D. A., Auclair, D., Bochicchio, J., Carneiro, M. O., Carter, S. L., Cibulskis, K., Erlich, R. L., Greulich, H., Lawrence, M. S., Lennon, et al
2012; 488 (7409): 106-110
- **Neonatal beta Cell Development in Mice and Humans Is Regulated by Calcineurin/NFAT** *DEVELOPMENTAL CELL*
Goodyer, W. R., Gu, X., Liu, Y., Bottino, R., Crabtree, G. R., Kim, S. K.
2012; 23 (1): 21-34
- **Dynamics and Memory of Heterochromatin in Living Cells** *CELL*
Hathaway, N. A., Bell, O., Hodges, C., Miller, E. L., Neel, D. S., Crabtree, G. R.
2012; 149 (7): 1447-1460
- **BAF53A enforces the epidermal progenitor state by re-targeting the SWI/SNF/BAF chromatin remodeling complex away from differentiation gene promoters** *75th Annual Meeting of the Society-for-Investigative-Dermatology*
Bao, X., Tang, J., Tao, S., Qu, K., Crabtree, G. R., Khavari, P. A.
NATURE PUBLISHING GROUP.2012: S63-S63

- **MicroRNA-mediated conversion of human fibroblasts to neurons** *NATURE*
Yoo, A. S., Sun, A. X., Li, L., Shcheglovitov, A., Portmann, T., Li, Y., Lee-Messer, C., Dolmetsch, R. E., Tsien, R. W., Crabtree, G. R.
2011; 476 (7359): 228-U123
- **esBAF facilitates pluripotency by conditioning the genome for LIF/STAT3 signalling and by regulating polycomb function** *NATURE CELL BIOLOGY*
Ho, L., Miller, E. L., Ronan, J. L., Ho, W. Q., Jothi, R., Crabtree, G. R.
2011; 13 (8): 903-U334
- **Engineering the ABA Plant Stress Pathway for Regulation of Induced Proximity** *SCIENCE SIGNALING*
Liang, F., Ho, W. Q., Crabtree, G. R.
2011; 4 (164)
- **ATP-dependent chromatin remodeling: genetics, genomics and mechanisms** *CELL RESEARCH*
Hargreaves, D. C., Crabtree, G. R.
2011; 21 (3): 396-420
- **Chromatin remodelling during development** *NATURE*
Ho, L., Crabtree, G. R.
2010; 463 (7280): 474-484
- **Chromatin Regulatory Mechanisms in Pluripotency** *ANNUAL REVIEW OF CELL AND DEVELOPMENTAL BIOLOGY, VOL 26*
Lessard, J. A., Crabtree, G. R.
2010; 26: 503-532
- **MicroRNA-mediated switching of chromatin-remodelling complexes in neural development** *NATURE*
Yoo, A. S., Staahl, B. T., Chen, L., Crabtree, G. R.
2009; 460 (7255): 642-U112
- **SnapShot: Ca²⁺-Calcineurin-NFAT Signaling** *CELL*
Crabtree, G. R., Schreiber, S. L.
2009; 138 (1)
- **ATP-dependent chromatin remodeling in neural development** *CURRENT OPINION IN NEUROBIOLOGY*
Yoo, A. S., Crabtree, G. R.
2009; 19 (2): 120-126
- **An embryonic stem cell chromatin remodeling complex, esBAF, is essential for embryonic stem cell self-renewal and pluripotency** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Ho, L., Ronan, J. L., Wu, J., Staahl, B. T., Chen, L., Kuo, A., Lessard, J., Nesvizhskii, A. I., Ranish, J., Crabtree, G. R.
2009; 106 (13): 5181-5186
- **An embryonic stem cell chromatin remodeling complex, esBAF, is an essential component of the core pluripotency transcriptional network** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Ho, L., Jothi, R., Ronan, J. L., Cui, K., Zhao, K., Crabtree, G. R.
2009; 106 (13): 5187-5191
- **The gene encoding early growth response 2, a target of the transcription factor NFAT, is required for the development and maturation of natural killer T cells** *NATURE IMMUNOLOGY*
Lazarevic, V., Zullo, A. J., Schweitzer, M. N., Staton, T. L., Gallo, E. M., Crabtree, G. R., Glimcher, L. H.
2009; 10 (3): 306-313
- **FK506-binding protein (FKBP) partitions a modified HIV protease inhibitor into blood cells and prolongs its lifetime in vivo** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Marinec, P. S., Chen, L., Barr, K. J., Mutz, M. W., Crabtree, G. R., Gestwicki, J. E.
2009; 106 (5): 1336-1341
- **Calcineurin/NFAT Signaling Is Required for Neuregulin-Regulated Schwann Cell Differentiation** *SCIENCE*
Kao, S., Wu, H., Xie, J., Chang, C., Ranish, J. A., Graef, I. A., Crabtree, G. R.
2009; 323 (5914): 651-654

- **Understanding the Words of Chromatin Regulation** *CELL*
Wu, J. I., Lessard, J., Crabtree, G. R.
2009; 136 (2): 200-206
- **Chemical rescue of cleft palate and midline defects in conditional gsk-3beta mice** *13th International Congress of the International-Society-of-Craniofacial-Surgery / Paris Distraction Symposium*
Liu, K. J., Arron, J. R., Stankunas, K., Crabtree, G. R., Longaker, M. T.
MEDIMOND S R L.2009: 7-9
- **Developmental biology: The early heart remodelled.** *Nature*
Liang, F. S., Crabtree, G. R.
2009; 459 (7247): 654-55
- **Bursting into the Nucleus** *SCIENCE SIGNALING*
Crabtree, G. R., Graef, I. A.
2008; 1 (51)
- **An EZ Mark to Miss** *CELL STEM CELL*
Ho, L., Crabtree, G. R.
2008; 3 (6): 577-578
- **Selective role of calcineurin in haematopoiesis and lymphopoiesis** *EMBO REPORTS*
Gallo, E. M., Ho, L., Winslow, M. M., Staton, T. L., Crabtree, G. R.
2008; 9 (11): 1141-1148
- **Modulation of Peripheral B Cell Tolerance by CD72 in a Murine Model** *ARTHRITIS AND RHEUMATISM*
Li, D. H., Winslow, M. M., Cao, T. M., Chen, A. H., Davis, C. R., Mellins, E. D., Utz, P. J., Crabtree, G. R., Parnes, J. R.
2008; 58 (10): 3192-3204
- **Monster protein controls calcium entry and fights infection** *IMMUNITY*
Radermacher, A. N., Crabtree, G. R.
2008; 28 (1): 13-14
- **Calcineurin sets the bandwidth for discrimination of signals during thymocyte development** *NATURE*
Gallo, E. M., Winslow, M. M., Cante-Barrett, K., Radermacher, A. N., Ho, L., McGinnis, L., Iritani, B., Neilson, J. R., Crabtree, G. R.
2007; 450 (7170): 731-U11
- **Down syndrome critical region-1 is a transcriptional target of nuclear factor of activated T cells-c1 within the endocardium during heart development** *JOURNAL OF BIOLOGICAL CHEMISTRY*
Wu, H., Kao, S., Barrientos, T., Baldwin, S. H., Olson, E. N., Crabtree, G. R., Zhou, B., Chang, C.
2007; 282 (42): 30673-30679
- **Regulation of dendritic development by NeuronSpecific chromatin remodeling complexes** *NEURON*
Wu, J. I., Lessard, J., Olave, I. A., Qiu, Z., Ghosh, A., Graef, I. A., Crabtree, G. R.
2007; 56 (1): 94-108
- **Renaming the DSCR1/Adapt78 gene family as RCAN: regulators of calcineurin** *FASEB JOURNAL*
Davies, K. J., Ermak, G., Rothermel, B. A., Pritchard, M., Heitman, J., Ahnn, J., Henrique-Silva, F., Crawford, D., Canaider, S., Strippoli, P., Carinci, P., Min, K., Fox, et al
2007; 21 (12): 3023-3028
- **An essential switch in subunit composition of a chromatin remodeling complex during neural development** *NEURON*
Lessard, J., Wu, J. I., Ranish, J. A., Wan, M., Winslow, M. M., Staahl, B. T., Wu, H., Aebersold, R., Graef, I. A., Crabtree, G. R.
2007; 55 (2): 201-215
- **Exploiting protein destruction for constructive use** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Stankunas, K., Crabtree, G. R.
2007; 104 (28): 11511-11512
- **Rescue of degradation-prone mutants of the FK506-rapamycin binding (FRB) protein with chemical ligands** *CHEMBIOCHEM*

- Stankunas, K., Bayle, J. H., Havranek, J. J., Wandless, T. J., Baker, D., Crabtree, G. R., Gestwicki, J. E.
2007; 8 (10): 1162-1169
- **Selective role of NFATc3 in positive selection of thymocytes** *JOURNAL OF IMMUNOLOGY*
Cante-Barrett, K., Winslow, M. M., Crabtree, G. R.
2007; 179 (1): 103-110
 - **Cell signaling. Nuclear actin as choreographer of cell morphology and transcription.** *Science*
Wu, J. I., Crabtree, G. R.
2007; 316 (5832): 1710-1711
 - **NFAT signaling and the invention of vertebrates** *TRENDS IN CELL BIOLOGY*
Wu, H., Peisley, A., Graef, I. A., Crabtree, G. R.
2007; 17 (6): 251-260
 - **Engineering small molecule specificity in nearly identical cellular environments** *BIOORGANIC & MEDICINAL CHEMISTRY LETTERS*
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