

Stanford




Peter K. Jackson

Professor of Microbiology and Immunology (Baxter Labs)

Microbiology & Immunology - Baxter Laboratory

 NIH Biosketch available Online

 Curriculum Vitae available Online

CONTACT INFORMATION

• Administrator Contact

Kathy Shaw - Administrator

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Bio

ACADEMIC APPOINTMENTS

- Professor, Microbiology & Immunology - Baxter Laboratory
- Member, Bio-X
- Member, Maternal & Child Health Research Institute (MCHRI)
- Member, Stanford Cancer Institute
- Faculty Fellow, Stanford ChEM-H

HONORS AND AWARDS

- Merck Fellow, Life Sciences Research Foundation (1991)
- Baxter Award, Baxter Foundation (1997)
- Hume Faculty Scholar, Stanford University (1999)
- Lutje-Stubbs Scholar, Stanford University (1998)
- William Cohen Lecturer, Dana-Farber Cancer Institute (1999)
- Scholar, Kirsch Foundation (2003)
- Pluto Society, AAUP (2005)
- Staff Scientist, Genentech (2005-2013)
- Fellow, American Association for the Advancement of Science (2008)

PROFESSIONAL EDUCATION

- Fellow, Harvard Medical School , Cell Biology, Cell Cycle (1994)
- Fellow, UCSF , Biochemistry & Biophysics (1993)
- Graduate Student, Whitehead Institute, MIT , Cancer Biology (1989)
- Ph.D., Harvard University , Biophysics (1989)
- B. A., Yale College , Mathematics, Economics (1982)

LINKS

- Jackson Lab Website: <http://med.stanford.edu/jacksonlab.html>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Cell cycle control of DNA replication in embryonic and somatic cells: cyclins and the cell cycle in *Xenopus* embryos.

Teaching

COURSES

2017-18

- Proteomics, Protein Interaction Maps, and Systems Biology: BIOS 267 (Win)

2015-16

- Cancer Biology Journal Club: CBIO 280 (Win)

STANFORD ADVISEES

Postdoctoral Faculty Sponsor

Marcelo Chávez, Chien Ting Wu

Postdoctoral Research Mentor

Marcelo Chávez

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Cancer Biology (Phd Program)
- Microbiology and Immunology (Phd Program)

Publications

PUBLICATIONS

- **EZH2 Inactivates Primary Cilia to Activate Wnt and Drive Melanoma.** *Cancer cell*
Jackson, P. K.
2018; 34 (1): 3-5
- **Guanine Nucleotide Exchange Assay Using Fluorescent MANT-GDP.** *Bio-protocol*
Kanie, T., Jackson, P. K.
2018; 8 (7)
- **Linking AP/MS-driven protein-protein interaction networks and combination CRISPR/sgRNA screens defines new Kras effectors and target candidates for non-small cell lung cancer**
Kelly, M. R., Kyuho, H., Jeng, E. E., Morgans, D., Kostyrko, K., Simpson, D., Gwinn, D., Sweet-Cordero, A., Bassik, M. C., Jackson, P. K.
AMER ASSOC CANCER RESEARCH.2017
- **Identification of novel KRAS-synthetic lethal targets for treatment of KRAS-dependent Non-Small Cell Lung Cancer**
Kostyrko, K., Simpson, D., Broyde, J., Kelly, M., Califano, A., Honig, B., Jackson, P., Sweet-Cordero, A.
AMER ASSOC CANCER RESEARCH.2017
- **NEURAL PRECURSOR CELL: GLIOMA INTERACTIONS MEDIATE TUMOR COLONIZATION OF THE SUBVENTRICULAR ZONE BY DIPG**
Qin, E. Y., Cooper, D., Abbott, K., MacKay, A., Jones, C., Vogel, H., Jackson, P., Monje, M.
OXFORD UNIV PRESS INC.2017: 7

- **Drebrin restricts rotavirus entry by inhibiting dynamin-mediated endocytosis** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Li, B., Ding, S., Feng, N., Mooney, N., Ooi, Y. S., Ren, L., Diep, J., Kelly, M. R., Yasukawa, L. L., Patton, J. T., Yamazaki, H., Shirao, T., Jackson, et al
2017; 114 (18): E3642-E3651
- **The CEP19-RABL2 GTPase Complex Binds IFT-B to Initiate Intraflagellar Transport at the Ciliary Base.** *Developmental cell*
Kanie, T., Abbott, K. L., Mooney, N. A., Plowey, E. D., Demeter, J., Jackson, P. K.
2017
- **Neural Precursor-Derived Pleiotrophin Mediates Subventricular Zone Invasion by Glioma.** *Cell*
Qin, E. Y., Cooper, D. D., Abbott, K. L., Lennon, J., Nagaraja, S., Mackay, A., Jones, C., Vogel, H., Jackson, P. K., Monje, M.
2017; 170 (5): 845-59.e19
- **Metabolic plasticity underpins innate and acquired resistance to LDHA inhibition** *NATURE CHEMICAL BIOLOGY*
Boudreau, A., Purkey, H. E., Hitz, A., Robarge, K., Peterson, D., Labadie, S., Kwong, M., Hong, R., Gao, M., Del Nagro, C., Pusapati, R., Ma, S., Salphati, et al
2016; 12 (10): 779-?
- **Comparative Proteomics Reveals Strain-Specific β -TrCP Degradation via Rotavirus NSP1 Hijacking a Host Cullin-3-Rbx1 Complex.** *PLoS pathogens*
Ding, S., Mooney, N., Li, B., Kelly, M. R., Feng, N., Loktev, A. V., Sen, A., Patton, J. T., Jackson, P. K., Greenberg, H. B.
2016; 12 (10)
- **Membrane trafficking regulation of intracellular ciliogenesis initiation and progression in RPE-1 cells and photoreceptors**
Insinna, C., Lu, Q., Ott, C., Lippincott-Schwartz, J., Jackson, P., Westlake, C.
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2016
- **The ciliopathy-associated CPLANE proteins direct basal body recruitment of intraflagellar transport machinery** *NATURE GENETICS*
Toriyama, M., Lee, C., Taylor, S. P., Duran, I., Cohn, D. H., Bruel, A., Tabler, J. M., Drew, K., Kelly, M. R., Kim, S., Park, T. J., Braun, D. A., Pierquin, et al
2016; 48 (6): 648-?
- **The primary cilium as a cellular receiver: organizing ciliary GPCR signaling.** *Current opinion in cell biology*
Hilgendorf, K. I., Johnson, C. T., Jackson, P. K.
2016; 39: 84-92
- **p73 anc FoxJ1: Programming Multiciliated Epithelia** *TRENDS IN CELL BIOLOGY*
Jackson, P. K., Attardi, L. D.
2016; 26 (4): 239-40
- **Calcium contradictions in cilia** *NATURE*
Norris, D. P.
2016; 531 (7596): 582
- **Smoothed determines beta-arrestin-mediated removal of the G protein-coupled receptor Gpr161 from the primary cilium** *JOURNAL OF CELL BIOLOGY*
Pal, K., Hwang, S., Somatilaka, B., Badgandi, H., Jackson, P. K., DeFea, K., Mukhopadhyay, S.
2016; 212 (7): 861-875
- **Systems and structural biology approaches to elucidate new effectors in KRAS mutant tumors**
Broyde, J., Simpson, D., Wah, D. A., Giorgi, F. M., Petrey, D., Alvarez, M. J., Silkov, A., Lachmann, A., Hill, D. E., Vidal, M., Jackson, P., Honig, B., Sweet-Cordero, et al
AMER ASSOC CANCER RESEARCH.2015
- **Tctex1d2 associates with short-rib polydactyly syndrome proteins and is required for ciliogenesis** *CELL CYCLE*
Gholkar, A. A., Senese, S., Lo, Y., Capri, J., Deardorff, W. J., Dharmarajan, H., Contreras, E., Hodara, E., Whitelegge, J. P., Jackson, P. K., Torres, J. Z.
2015; 14 (7): 1116-1125
- **Early steps in primary cilium assembly require EHD1/EHD3-dependent ciliary vesicle formation** *NATURE CELL BIOLOGY*
Lu, Q., Insinna, C., Ott, C., Stauffer, J., Pintado, P. A., Rahajeng, J., Baxa, U., Walia, V., Cuenca, A., Hwang, Y., Daar, I. O., Lopes, S., Lippincott-Schwartz, et al
2015; 17 (3): 228-?
- **3D spheroid model of mIMCD3 cells for studying ciliopathies and renal epithelial disorders** *NATURE PROTOCOLS*

Giles, R. H., Ajzenberg, H., Jackson, P. K.

2014; 9 (12): 2725-2731

- **Regulating Microtubules and Genome Stability via the CUL7/3M Syndrome Complex and CUL9** *MOLECULAR CELL*
Jackson, P. K.
2014; 54 (5): 713-15
- **Chk1 inhibition in p53-deficient cell lines drives rapid chromosome fragmentation followed by caspase-independent cell death** *CELL CYCLE*
Del Nagro, C. J., Choi, J., Xiao, Y., Rangell, L., Mohan, S., Pandita, A., Zha, J., Jackson, P. K., O'Brien, T.
2014; 13 (2): 303-314
- **Neuropeptide Y Family Receptors Traffic via the Bardet-Biedl Syndrome Pathway to Signal in Neuronal Primary Cilia** *CELL REPORTS*
Loktev, A. V., Jackson, P. K.
2013; 5 (5): 1316-1329
- **Supplementation of Nicotinic Acid with NAMPT Inhibitors Results in Loss of In Vivo Efficacy in NAPRT1-Deficient Tumor Models** *NEOPLASIA*
O'Brien, T., Oeh, J., Xiao, Y., Liang, X., Vanderbilt, A., Qin, A., Yang, L., Lee, L. B., Ly, J., Cosino, E., Lacap, J. A., Ogasawara, A., Williams, et al
2013; 15 (12): 1314-?
- **Identification of Preferred Chemotherapeutics for Combining with a CHK1 Inhibitor** *MOLECULAR CANCER THERAPEUTICS*
Xiao, Y., Ramiscal, J., Kowanetz, K., Del Nagro, C., Malek, S., Evangelista, M., Blackwood, E., Jackson, P. K., O'Brien, T.
2013; 12 (11): 2285-2295
- **Dependence of Tumor Cell Lines and Patient-Derived Tumors on the NAD Salvage Pathway Renders Them Sensitive to NAMPT Inhibition with GNE-618** *NEOPLASIA*
Xiao, Y., Elkins, K., Durieux, J. K., Lee, L., Oeh, J., Yang, L. X., Liang, X., Delnagro, C., Tremayne, J., Kwong, M., Liederer, B. M., Jackson, P. K., Belmont, et al
2013; 15 (10): 1137-1146
- **Combination Drug Scheduling Defines a "Window of Opportunity" for Chemopotiation of Gemcitabine by an Orally Bioavailable, Selective ChK1 Inhibitor, GNE-900** *MOLECULAR CANCER THERAPEUTICS*
Blackwood, E., Epler, J., Yen, I., Flagella, M., O'Brien, T., Evangelista, M., Schmidt, S., Xiao, Y., Choi, J., Kowanetz, K., Ramiscal, J., Wong, K., Jakubiak, et al
2013; 12 (10): 1968-1980
- **Covalent and allosteric inhibitors of the ATPase VCP/p97 induce cancer cell death.** *Nature chemical biology*
Magnaghi, P., D'alesio, R., Valsasina, B., Avanzi, N., Rizzi, S., Asa, D., Gasparri, F., Cozzi, L., Cucchi, U., Orrenius, C., Polucci, P., Ballinari, D., Perrera, et al
2013; 9 (9): 548-556
- **The Ciliary G-Protein-Coupled Receptor Gpr161 Negatively Regulates the Sonic Hedgehog Pathway via cAMP Signaling** *CELL*
Mukhopadhyay, S., Wen, X., Ratti, N., Loktev, A., Rangell, L., Scales, S. J., Jackson, P. K.
2013; 152 (1-2): 210-223
- **Our thanks to Cilia's reviewers.** *Cilia*
Beales, P., Jackson, P. K.
2013; 2 (1): 4-?
- **TTBK2 Kinase: Linking Primary Cilia and Cerebellar Ataxias** *CELL*
Jackson, P. K.
2012; 151 (4): 697-699
- **Small-molecule ligands bind to a distinct pocket in Ras and inhibit SOS-mediated nucleotide exchange activity** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Maurer, T., Garrenton, L. S., Oha, A., Pitts, K., Anderson, D. J., Skelton, N. J., Fauber, B. P., Pan, B., Malek, S., Stokoe, D., Ludlam, M. J., Bowman, K. K., Wu, et al
2012; 109 (14): 5299-5304
- **Cilia develop long-lasting contacts, with other cilia.** *Cilia*
Jackson, P. K.
2012; 1 (1): 5-?
- **Cilia - the prodigal organelle.** *Cilia*
Beales, P., Jackson, P. K.

2012; 1 (1): 1-?

- **The STARD9/Kif16a Kinesin Associates with Mitotic Microtubules and Regulates Spindle Pole Assembly** *CELL*
Torres, J. Z., Summers, M. K., Peterson, D., Brauer, M. J., Lee, J., Senese, S., Gholkar, A. A., Lo, Y., Lei, X., Jung, K., Anderson, D. C., Davis, D. P., Belmont, et al
2011; 147 (6): 1309-1323
- **An ARL3-UNC119-RP2 GTPase cycle targets myristoylated NPHP3 to the primary cilium** *GENES & DEVELOPMENT*
Wright, K. J., Baye, L. M., Olivier-Mason, A., Mukhopadhyay, S., Sang, L., Kwong, M., Wang, W., Pretorius, P. R., Sheffield, V. C., Sengupta, P., Slusarski, D. C., Jackson, P. K.
2011; 25 (22): 2347-2360
- **Live-Cell Microscopy Reveals Small Molecule Inhibitor Effects on MAPK Pathway Dynamics** *PLOS ONE*
Anderson, D. J., Durieux, J. K., Song, K., Alvarado, R., Jackson, P. K., Hatzivassiliou, G., Ludlam, M. J.
2011; 6 (8)
- **Deubiquitinase USP37 Is Activated by CDK2 to Antagonize APC(CDH1) and Promote S Phase Entry** *MOLECULAR CELL*
Huang, X., Summers, M. K., Pham, V., Lill, J. R., Liu, J., Lee, G., Kirkpatrick, D. S., Jackson, P. K., Fang, G., Dixit, V. M.
2011; 42 (4): 511-523
- **Mapping the NPHP-JBTS-MKS Protein Network Reveals Ciliopathy Disease Genes and Pathways** *CELL*
Sang, L., Miller, J. J., Corbit, K. C., Giles, R. H., Brauer, M. J., Otto, E. A., Baye, L. M., Wen, X., Scales, S. J., Kwong, M., Huntzicker, E. G., Sfakianos, M. K., Sandoval, et al
2011; 145 (4): 513-528
- **Do cilia put brakes on the cell cycle?** *NATURE CELL BIOLOGY*
Jackson, P. K.
2011; 13 (4): 340-342
- **Sensitivity to antitubulin chemotherapeutics is regulated by MCL1 and FBW7** *NATURE*
Wertz, I. E., Kusam, S., Lam, C., Okamoto, T., Sandoval, W., Anderson, D. J., Helgason, E., Ernst, J. A., Eby, M., Liu, J., Belmont, L. D., Kaminker, J. S., O'Rourke, et al
2011; 471 (7336): 110-114
- **A novel acetylation of beta-tubulin by San modulates microtubule polymerization via down-regulating tubulin incorporation** *MOLECULAR BIOLOGY OF THE CELL*
Chu, C., Hou, F., Zhang, J., Phu, L., Loktev, A. V., Kirkpatrick, D. S., Jackson, P. K., Zhao, Y., Zou, H.
2011; 22 (4): 448-456
- **Primary cilia membrane assembly is initiated by Rab11 and transport protein particle II (TRAPP II) complex-dependent trafficking of Rabin8 to the centrosome** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Westlake, C. J., Baye, L. M., Nachury, M. V., Wright, K. J., Ervin, K. E., Phu, L., Chalouni, C., Beck, J. S., Kirkpatrick, D. S., Slusarski, D. C., Sheffield, V. C., Scheller, R. H., Jackson, et al
2011; 108 (7): 2759-2764
- **The tubby family proteins** *GENOME BIOLOGY*
Mukhopadhyay, S., Jackson, P. K.
2011; 12 (6)
- **TULP3 bridges the IFT-A complex and membrane phosphoinositides to promote trafficking of G protein-coupled receptors into primary cilia** *GENES & DEVELOPMENT*
Mukhopadhyay, S., Wen, X., Chih, B., Nelson, C. D., Lane, W. S., Scales, S. J., Jackson, P. K.
2010; 24 (19): 2180-2193
- **Candidate exome capture identifies mutation of SDCCAG8 as the cause of a retinal-renal ciliopathy** *NATURE GENETICS*
Otto, E. A., Hurd, T. W., Airik, R., Chaki, M., Zhou, W., Stoetzel, C., Patil, S. B., Levy, S., Ghosh, A. K., Murga-Zamalloa, C. A., van Reeuwijk, J., Letteboer, S. J., Sang, et al
2010; 42 (10): 840-?
- **APC/C-Cdc20 targets E2F1 for degradation in prometaphase** *CELL CYCLE*
Peart, M. J., Poyurovsky, M. V., Kass, E. M., Urist, M., Verschuren, E. W., Summers, M. K., Jackson, P. K., Prives, C.

2010; 9 (19): 3956-3964

- **A Chemosensitization Screen Identifies TP53RK, a Kinase that Restrains Apoptosis after Mitotic Stress** *CANCER RESEARCH*
Peterson, D., Lee, J., Lei, X. C., Forrest, W. F., Davis, D. P., Jackson, P. K., Belmont, L. D.
2010; 70 (15): 6325-6335
- **A Specific Form of Phospho Protein Phosphatase 2 Regulates Anaphase-promoting Complex/Cyclosome Association with Spindle Poles** *MOLECULAR BIOLOGY OF THE CELL*
Torres, J. Z., Ban, K. H., Jackson, P. K.
2010; 21 (6): 897-904
- **Individuals with mutations in XPNPEP3, which encodes a mitochondrial protein, develop a nephronophthisis-like nephropathy** *JOURNAL OF CLINICAL INVESTIGATION*
O'Toole, J. F., Liu, Y., Davis, E. E., Westlake, C. J., Attanasio, M., Otto, E. A., Seelow, D., Nurnberg, G., Becker, C., Nuutinen, M., Karppa, M., Ignatius, J., Uusimaa, et al
2010; 120 (3): 791-802
- **Navigating the Deubiquitinating Proteome with a CompPASS** *CELL*
Jackson, P. K.
2009; 138 (2): 222-224
- **High-throughput generation of tagged stable cell lines for proteomic analysis** *PROTEOMICS*
Torres, J. Z., Miller, J. J., Jackson, P. K.
2009; 9 (10): 2888-2891
- **Biochemical analysis of the Anaphase Promoting Complex: activities of E2 enzymes and substrate competitive (pseudosubstrate) inhibitors.** *Methods in molecular biology (Clifton, N.J.)*
Summers, M. K., Jackson, P. K.
2009; 545: 313-330
- **A BBSome Subunit Links Ciliogenesis, Microtubule Stability, and Acetylation** *DEVELOPMENTAL CELL*
Loktev, A. V., Zhang, Q., Beck, J. S., Searby, C. C., Scheetz, T. E., Bazan, J. F., Slusarski, D. C., Sheffield, V. C., Jackson, P. K., Nachury, M. V.
2008; 15 (6): 854-865
- **New ligands for melanocortin receptors** *20th Conference of the Pennington-Biomedical-Research-Center*
Kaelin, C. B., Candille, S. I., Yu, B., Jackson, P., Thompson, D. A., Nix, M. A., Binkley, J., Millhauser, G. L., Barsh, G. S.
NATURE PUBLISHING GROUP.2008: S19-S27
- **The unique N terminus of the UbcH10 E2 enzyme controls the threshold for APC activation and enhances checkpoint regulation of the APC** *MOLECULAR CELL*
Summers, M. K., Pan, B., Mukhyala, K., Jackson, P. K.
2008; 31 (4): 544-556
- **Cdc2 and Mos regulate Emi2 stability to promote the meiosis I-meiosis II transition** *MOLECULAR BIOLOGY OF THE CELL*
Tang, W., Wu, J. Q., Guo, Y., Hansen, D. V., Perry, J. A., Freel, C. D., Nutt, L., Jackson, P. K., Kornbluth, S.
2008; 19 (8): 3536-3543
- **The hunt for cyclin** *CELL*
Jackson, P. K.
2008; 134 (2): 199-202
- **Stopping replication, at the beginning** *NATURE CHEMICAL BIOLOGY*
Jackson, P. K.
2008; 4 (6): 331-332
- **The nucleolar phosphatase Cdc14B is dispensable for chromosome segregation and mitotic exit in human cells** *CELL CYCLE*
Berdougo, E., Nachury, M. V., Jackson, P. K., Jallepalli, P. V.
2008; 7 (9): 1184-1190
- **Emi1 protein accumulation implicates misregulation of the anaphase promoting complex/cyclosome pathway in ovarian clear cell carcinoma** *MODERN PATHOLOGY*

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- Guetgemann, I., Lehman, N. L., Jackson, P. K., Longacre, T. A.
2008; 21 (4): 445-454
- **Cell division, growth and death** *CURRENT OPINION IN CELL BIOLOGY*
Jackson, P. K., Peters, J.
2007; 19 (6): 646-48
 - **Loss of Emi1-dependent anaphase-promoting complex/cyclosome inhibition deregulates E2F target expression and elicits DNA damage-induced senescence** *MOLECULAR AND CELLULAR BIOLOGY*
Verschuren, E. W., Ban, K. H., Masek, M. A., Lehman, N. L., Jackson, P. K.
2007; 27 (22): 7955-7965
 - **Control of Emi2 activity and stability through Mos-mediated recruitment of PP2A** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Wu, J. Q., Hansen, D. V., Guo, Y., Wang, M. Z., Tang, W., Freel, C. D., Tung, J. J., Jackson, P. K., Kornbluth, S.
2007; 104 (42): 16564-16569
 - **A bacterial effector targets Mad2L2, an APC inhibitor, to modulate host cell cycling** *CELL*
Iwai, H., Kim, M., Yoshikawa, Y., Ashida, H., Ogawa, M., Fujita, Y., Muller, D., Kirikae, T., Jackson, P. K., Kotani, S., Sasakawa, C.
2007; 130 (4): 611-623
 - **Cyclin E overexpression impairs progression through mitosis by inhibiting APC(Cdh1)** *JOURNAL OF CELL BIOLOGY*
Keck, J. M., Summers, M. K., Tedesco, D., Ekholm-Reed, S., Chuang, L., Jackson, P. K., Reed, S. I.
2007; 178 (3): 371-385
 - **The END network couples spindle pole assembly to inhibition of the anaphase-promoting Complex/Cyclosome in early mitosis** *DEVELOPMENTAL CELL*
Ban, K. H., Torres, J. Z., Miller, J. J., Mikhailov, A., Nachury, M. V., Tung, J. J., Rieder, C. L., Jackson, P. K.
2007; 13 (1): 29-42
 - **A core complex of BBS proteins cooperates with the GTPase Rab8 to promote ciliary membrane biogenesis** *CELL*
Nachury, M. V., Loktev, A. V., Zhang, Q., Westlake, C. J., Peranen, J., Merdes, A., Slusarski, D. C., Scheller, R. H., Bazan, J. F., Sheffield, V. C., Jackson, P. K.
2007; 129 (6): 1201-1213
 - **Oncogenic regulators and substrates of the anaphase promoting complex/cyclosome are frequently overexpressed in malignant tumors** *AMERICAN JOURNAL OF PATHOLOGY*
Lehman, N. L., Tibshirani, R., Hsu, J. Y., Natkunam, Y., Harris, B. T., West, R. B., Masek, M. A., Montgomery, K., van de Rijn, M., Jackson, P. K.
2007; 170 (5): 1793-1805
 - **Emi2 at the crossroads - Where CSF meets MPF** *CELL CYCLE*
Hansen, D. V., Pomerening, J. R., Summers, M. K., Miller, J. J., Ferrell, J. E., Jackson, P. K.
2007; 6 (6): 732-738
 - **Translational unmasking of Emi2 directs cytostatic factor arrest in meiosis II** *CELL CYCLE*
Tung, J. J., Padmanabhan, K., Hansen, D. V., Richter, J. D., Jackson, P. K.
2007; 6 (6): 725-731
 - **A role for Cdc2- and PP2A-mediated regulation of Emi2 in the maintenance of CSF arrest** *CURRENT BIOLOGY*
Wu, Q., Guo, Y., Yamada, A., Perry, J. A., Wang, M. Z., Araki, M., Freel, C. D., Tung, J. J., Tang, W., Margolis, S. S., Jackson, P. K., Yamano, H., Asano, et al
2007; 17 (3): 213-224
 - **Putting transcription repression and protein destruction in pRb's pocket** *DEVELOPMENTAL CELL*
Verschuren, E. W., Jackson, P. K.
2007; 12 (2): 169-170
 - **Identification of Rab11 as a small GTPase binding protein for the Evi5 oncogene** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Westlake, C. J., Junutula, J. R., Simon, G. C., Pilli, M., Prekeris, R., Scheller, R. H., Jackson, P. K., Eldridge, A. G.
2007; 104 (4): 1236-1241
 - **Prophase I arrest and progression to metaphase I in mouse oocytes are controlled by Emi1-dependent regulation of APC(Cdh1)** *JOURNAL OF CELL BIOLOGY*
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- Marangos, P., Verschuren, E. W., Chen, R., Jackson, P. K., Carroll, J.
2007; 176 (1): 65-75
- **Mouse Emi2 is required to enter meiosis II by reestablishing cyclin B1 during interkinesis** *JOURNAL OF CELL BIOLOGY*
Madgwick, S., Hansen, D. V., Levasseur, M., Jackson, P. K., Jones, K. T.
2006; 174 (6): 791-801
 - **Emi1 stably binds and inhibits the anaphase-promoting complex/cyclosome as a pseudosubstrate inhibitor** *GENES & DEVELOPMENT*
Miller, J. J., Summers, M. K., Hansen, D. V., Nachury, M. V., Lehman, N. L., Loktev, A., Jackson, P. K.
2006; 20 (17): 2410-2420
 - **Developmental neurobiology - A destructive switch for neurons** *NATURE*
Jackson, P. K.
2006; 442 (7101): 365-366
 - **Overexpression of the anaphase promoting complex/cyclosome inhibitor Emi1 leads to tetraploidy and genomic instability of p53-deficient cells** *CELL CYCLE*
Lehman, N. L., Verschuren, E. W., Hsu, J. Y., Cherry, A. M., Jackson, P. K.
2006; 5 (14): 1569-1573
 - **Climbing the Greatwall to mitosis** *MOLECULAR CELL*
Jackson, P. K.
2006; 22 (2): 156-157
 - **The Evi5 oncogene regulates cyclin accumulation by stabilizing the anaphase-promoting complex inhibitor Emi1 (vol 124, pg 367, 2006)** *CELL*
Eldridge, A. G., Loktev, A. V., Hansen, D. V., Verschuren, E. W., Reimann, J. D., Jackson, P. K.
2006; 124 (6): 1301-2
 - **Dual degradation signals control Gli protein stability and tumor formation** *GENES & DEVELOPMENT*
Huntzicker, E. G., Estay, I. S., Zhen, H., Lokteva, L. A., Jackson, P. K., Oro, A. E.
2006; 20 (3): 276-281
 - **The Evi5 oncogene regulates cyclin accumulation by stabilizing the anaphase-promoting complex inhibitor Emi1** *CELL*
Eldridge, A. G., Loktev, A. V., Hansen, D. V., Verschuren, E. W., Reimann, J. D., Jackson, P. K.
2006; 124 (2): 367-380
 - **CaMKII and Polo-like kinase 1 sequentially phosphorylate the cytostatic factor Emi2/XErp1 to trigger its destruction and meiotic exit** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Hansen, D. V., Tung, J. J., Jackson, P. K.
2006; 103 (3): 608-613
 - **Inhibition of the anaphase-promoting complex by the Xnf7 ubiquitin ligase** *JOURNAL OF CELL BIOLOGY*
Casaletto, J. B., Nutt, L. K., Wu, Q. J., Moore, J. D., ETKIN, L. D., Jackson, P. K., Hunt, T., Kornbluth, S.
2005; 169 (1): 61-71
 - **A role for the anaphase-promoting complex inhibitor Emi2/XErp1, a homolog of early mitotic inhibitor 1, in cytostatic factor arrest of Xenopus eggs** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Tung, J. J., Hansen, D. V., Ban, K. H., Loktev, A. V., Summers, M. K., Adler, J. R., Jackson, P. K.
2005; 102 (12): 4318-4323
 - **Structures of the agouti signaling protein** *JOURNAL OF MOLECULAR BIOLOGY*
McNulty, J. C., Jackson, P. J., Thompson, D. A., Chai, B. X., Gantz, I., Barsh, G. S., Dawson, P. E., Millhauser, G. L.
2005; 346 (4): 1059-1070
 - **Emi1 class of proteins regulate entry into meiosis and the meiosis I to meiosis II transition in Xenopus oocytes** *CELL CYCLE*
Tung, J. J., Jackson, P. K.
2005; 4 (3): 478-482
 - **Screening of tissue microarrays for ubiquitin proteasome system components in tumors** *UBIQUITIN AND PROTEIN DEGRADATION, PT B*
Lehman, N. L., van de Rijn, M., Jackson, P. K.
2005; 399: 334-?
-

- **Plk1 regulates activation of the anaphase promoting complex by phosphorylating and triggering SCF beta TrCP-dependent destruction of the APC inhibitor Emi1** *MOLECULAR BIOLOGY OF THE CELL*
Hansen, D. V., Loktev, A. V., Ban, K. H., Jackson, P. K.
2004; 15 (12): 5623-5634
- **Wagging the dogma: Tissue-specific cell cycle control in the mouse embryo** *CELL*
Pagano, M., Jackson, P. K.
2004; 118 (5): 535-538
- **Xenopus Cdc14 alpha/beta are localized to the nucleolus and centrosome and are required for embryonic cell division** *BMC CELL BIOLOGY*
Kaiser, B. K., Nachury, M. V., Gardner, B. E., Jackson, P. K.
2004; 5
- **Linking tumor suppression, DNA damage and the anaphase-promoting complex** *TRENDS IN CELL BIOLOGY*
Jackson, P. K.
2004; 14 (7): 331-334
- **Can Fizzy fly solo?** *NATURE CELL BIOLOGY*
Jackson, P. K.
2003; 5 (10): 864-865
- **Prophase destruction of Emi1 by the SCF beta TrCP/Slimb ubiquitin ligase activates the anaphase promoting complex to allow progression beyond prometaphase** *DEVELOPMENTAL CELL*
Margottin-Goguuet, F., Hsu, J. Y., Loktev, A., Hsieh, H. M., Reimann, J. D., Jackson, P. K.
2003; 4 (6): 813-826
- **Control of meiotic and mitotic progression by the F box protein beta-Trcp1 in vivo** *DEVELOPMENTAL CELL*
Guardavaccaro, D., Kudo, Y., Boulaire, J., Barchi, M., Busino, L., Donzelli, M., Margottin-Goguuet, F., Jackson, P. K., Yamasaki, L., Pagano, M.
2003; 4 (6): 799-812
- **The activation of the Anaphase Promoting Complex in mitosis requires prior destruction of Emi1 by the SCFbetaTrCP/Slimb ubiquitin ligase** *Experimental Biology 2003 Annual Meeting*
Jackson, P. K., Margottin-Goguuet, F., Loktev, A., Hsu, J., Regan-Reimann, J.
FEDERATION AMER SOC EXP BIOL.2003: A1182-A1182
- **Spongiform degeneration in mahoganoid mutant mice** *SCIENCE*
He, L., Lu, X. Y., Jolly, A. F., Eldridge, A. G., Watson, S. J., Jackson, P. K., Barsh, G. S., Gunn, T. M.
2003; 299 (5607): 710-712
- **Ubiquitinating a phosphorylated Cdk inhibitor on the blades of the Cdc4 beta-propeller** *CELL*
Jackson, P. K.
2003; 112 (2): 142-144
- **Accessory proteins for melanocortin signaling - Attractin and mahogunin** *5th International Melanocortin Meeting*
He, L., Eldridge, A. G., Jackson, P. K., Gunn, T. M., Barsh, G. S.
NEW YORK ACAD SCIENCES.2003: 288-298
- **Emi-1 is upregulated in clear cell carcinomas of the ovary: A preliminary comparative analysis of protein expression using ovarian tissue arrays** *92nd Annual Meeting of the United-States-and-Canadian-Academy-of-Pathology*
Gutgemann, I., Hsiu, I., Lehman, N., Montgomery, K., Masek, M., Jackson, P., Longacre, T.
NATURE PUBLISHING GROUP.2003: 191A-191A
- **Loops and links: Structural insights into the remarkable function of the agouti-related protein** *5th International Melanocortin Meeting*
Millhauser, G. L., McNulty, J. C., Jackson, P. J., Thompson, D. A., Barsh, G. S., Gantz, I.
NEW YORK ACAD SCIENCES.2003: 27-35
- **The E3 ubiquitin ligase GREUL1 anteriorizes ectoderm during Xenopus development** *DEVELOPMENTAL BIOLOGY*
Borchers, A. G., Hufton, A. L., Eldridge, A. G., Jackson, P. K., Harland, R. M., Baker, J. C.
2002; 251 (2): 395-408

- **hEmi1 links the Rb/E2F pathway to spindle abnormalities and chromosome missegregation** *42nd Annual Meeting of the American-Society-for-Cell-Biology*
Hsu, J. Y., Reimann, J. R., Sorensen, C. S., Lukas, J., Jackson, P. K.
AMER SOC CELL BIOLOGY.2002: 299A–299A
- **Control of the centriole and centrosome cycles by ubiquitination enzymes** *ONCOGENE*
Hansen, D. V., Hsu, J. Y., Kaiser, B. K., Jackson, P. K., Eldridge, A. G.
2002; 21 (40): 6209-6221
- **Disruption of centrosome structure, chromosome segregation, and cytokinesis by misexpression of human Cdc14A phosphatase** *MOLECULAR BIOLOGY OF THE CELL*
Kaiser, B. K., Zimmerman, Z. A., Charbonneau, H., Jackson, P. K.
2002; 13 (7): 2289-2300
- **The SCF ubiquitin ligase: An extended look** *MOLECULAR CELL*
Jackson, P. K., Eldridge, A. G.
2002; 9 (5): 923-925
- **E2F-dependent accumulation of hEmi1 regulates S phase entry by inhibiting APC(Cdh1)** *NATURE CELL BIOLOGY*
Hsu, J. Y., Reimann, J. D., Sorensen, C. S., Lukas, J., Jackson, P. K.
2002; 4 (5): 358-366
- **Emi1 is required for cytostatic factor arrest in vertebrate eggs** *NATURE*
Reimann, J. D., Jackson, P. K.
2002; 416 (6883): 850-854
- **Deregulated human Cdc14A phosphatase disrupts centrosome separation and chromosome segregation** *NATURE CELL BIOLOGY*
Mailand, N., Lukas, C., Kaiser, B. K., Jackson, P. K., Bartek, J., Lukas, J.
2002; 4 (4): 317-322
- **Emi1 regulates the anaphase-promoting complex by a different mechanism than Mad2 proteins** *GENES & DEVELOPMENT*
Reimann, J. D., Gardner, B. E., Margottin-Gouget, F., Jackson, P. K.
2001; 15 (24): 3278-3285
- **A new RING for SUMO: wrestling transcriptional responses into nuclear bodies with PIAS family E3 SUMO ligases** *GENES & DEVELOPMENT*
Jackson, P. K.
2001; 15 (23): 3053-3058
- **Emi1 controls S phase and genome stability by regulating the Cdh1-APC complex**
Jackson, P. K., Reimann, J., Hsu, J.
AMER SOC CELL BIOLOGY.2001: 265A
- **Triggering ubiquitination of a CDK inhibitor at origins of DNA replication** *NATURE CELL BIOLOGY*
Furstenthal, L., Swanson, C., Kaiser, B. K., Eldridge, A. G., Jackson, P. K.
2001; 3 (8): 715-722
- **Emi1 is a mitotic regulator that interacts with Cdc20 and inhibits the anaphase promoting complex** *CELL*
Reimann, J. D., Freed, E., Hsu, J. Y., Kramer, E. R., Peters, J. M., Jackson, P. K.
2001; 105 (5): 645-655
- **Cyclin E uses Cdc6 as a chromatin-associated receptor required for DNA replication** *JOURNAL OF CELL BIOLOGY*
Furstenthal, L., Kaiser, B. K., Swanson, C., Jackson, P. K.
2001; 152 (6): 1267-1278
- **Emi1, a novel F-box, zinc finger protein, regulates mitosis by inhibiting the APC regulator Cdc20**
Reimann, J. D., Freed, E., Kramer, E. R., Hsu, J. Y., Peters, J. M., Jackson, P. K.
AMER SOC CELL BIOLOGY.2000: 7A–7A
- **Novel roles for substrate phosphorylation in SCF ubiquitin ligase function**
Eldridge, A. G., Jackson, P. K.
AMER SOC CELL BIOLOGY.2000: 341A–342A

- **Cell cycle regulation by the Cdc14 phosphatase**
Kaiser, B. K., Furstenthal, L., Swanson, C., Eldridge, A. G., Jackson, P. K.
AMER SOC CELL BIOLOGY.2000: 342A
- **Cdc6 function as a substrate and chromatin-associated receptor for cyclin E/Cdk2 is required for DNA replication**
Furstenthal, L. E., Kaiser, B. K., Swanson, C. A., Jackson, P. K.
AMER SOC CELL BIOLOGY.2000: 345A
- **Characterization of a putative human homolog of Emi1, a mitotic regulator in *Xenopus laevis***
Hsu, J. Y., Reimann, J. D., Jackson, P. K.
AMER SOC CELL BIOLOGY.2000: 448A
- **The lore of the RINGs: substrate recognition and catalysis by ubiquitin ligases** *TRENDS IN CELL BIOLOGY*
Jackson, P. K., Eldridge, A. G., Freed, E., Furstenthal, L., Hsu, J. Y., Kaiser, B. K., Reimann, J. D.
2000; 10 (10): 429-439
- **Nuclear accumulation of cyclin E/Cdk2 triggers a concentration-dependent switch for the destruction of p27 (Xic1)** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Swanson, C., Ross, J., Jackson, P. K.
2000; 97 (14): 7796-7801
- **Identification of novel F-box proteins in *Xenopus laevis*** *CURRENT BIOLOGY*
Regan-Reimann, J. D., Duong, Q. V., Jackson, P. K.
1999; 9 (20): R762-R763
- **Budding yeast Cdc6p induces re-replication in fission yeast by inhibition at SCFPop-mediated proteolysis** *MOLECULAR AND GENERAL GENETICS*
Wolf, D. A., McKeon, F., Jackson, P. K.
1999; 262 (3): 473-480
- **Components of an SCE ubiquitin ligase localize to the centrosome and regulate the centrosome duplication cycle** *GENES & DEVELOPMENT*
Freed, E., Lacey, K. R., Huie, P., Lyapina, S. A., Deshaies, R. J., Stearns, T., Jackson, P. K.
1999; 13 (17): 2242-2257
- **F-box/WD-repeat proteins Pop1p and Sud1p/Pop2p form complexes that bind and direct the proteolysis of Cdc18p** *CURRENT BIOLOGY*
Wolf, D. A., McKeon, F., Jackson, P. K.
1999; 9 (7): 373-376
- **Cyclin-dependent kinase control of centrosome duplication** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Lacey, K. R., Jackson, P. K., Stearns, T.
1999; 96 (6): 2817-2822
- **Nuclear transport couples the initiation of DNA replication to nuclear formation**
Swanson, C., Kaiser, B., Jackson, P.
AMER SOC CELL BIOLOGY.1998: 361A
- **Identification of two cyclin A regulators that control DNA replication in *Xenopus* egg extracts**
Regan, J. D., Jackson, P. K.
AMER SOC CELL BIOLOGY.1998: 112A
- **Cell cycle: Oiling the gears of anaphase** *CURRENT BIOLOGY*
Wolf, D. A., Jackson, P. K.
1998; 8 (18): R636-R639
- **Cell cycle: Cull and destroy** *CURRENT BIOLOGY*
Jackson, P. K.
1996; 6 (10): 1209-1212
- **The cytostatic function of c-Abl is controlled by multiple nuclear localization signals and requires the p53 and Rb tumor suppressor gene products** *EMBO JOURNAL*

-
- Wen, S. T., Jackson, P. K., VANETTEN, R. A.
1996; 15 (7): 1583-1595
- **EARLY EVENTS IN DNA-REPLICATION REQUIRE CYCLIN-E AND ARE BLOCKED BY P21(CIP1)** *JOURNAL OF CELL BIOLOGY*
Jackson, P. K., Chevalier, S., Philippe, M., Kirschner, M. W.
1995; 130 (4): 755-769
 - **CELL-CYCLE ARREST BY TYROSINE KINASE ABL INVOLVES ALTERED EARLY MITOGENIC RESPONSE** *ONCOGENE*
Mattioni, T., Jackson, P. K., VANHUIJSDUIJNEN, O. B., Picard, D.
1995; 10 (7): 1325-1333
 - **SEPARATE DOMAINS OF P21 INVOLVED IN THE INHIBITION OF CDK KINASE AND PCNA** *NATURE*
Chen, J. J., Jackson, P. K., Kirschner, M. W., Dutta, A.
1995; 374 (6520): 386-388
 - **MITOSIS IN TRANSITION** *CELL*
King, R. W., Jackson, P. K., Kirschner, M. W.
1994; 79 (4): 563-571
 - **THE COOH TERMINUS OF THE C-ABL TYROSINE KINASE CONTAINS DISTINCT F-ACTIN AND G-ACTIN BINDING DOMAINS WITH BUNDLING ACTIVITY** *JOURNAL OF CELL BIOLOGY*
VANETTEN, R. A., Jackson, P. K., Baltimore, D., Sanders, M. C., Matsudaira, P. T., JANMEY, P. A.
1994; 124 (3): 325-340
 - **HORMONE-CONDITIONAL TRANSFORMATION BY FUSION PROTEINS OF C-ABL AND ITS TRANSFORMING VARIANTS** *EMBO JOURNAL*
Jackson, P., Baltimore, D., Picard, D.
1993; 12 (7): 2809-2819
 - **MUTATION OF A PHENYLALANINE CONSERVED IN SH3-CONTAINING TYROSINE KINASES ACTIVATES THE TRANSFORMING ABILITY OF C-ABL** *ONCOGENE*
Jackson, P. K., Paskind, M., Baltimore, D.
1993; 8 (7): 1943-1956
 - **NONMYRISTOYLATED ABL PROTEINS TRANSFORM A FACTOR-DEPENDENT HEMATOPOIETIC-CELL LINE** *MOLECULAR AND CELLULAR BIOLOGY*
Daley, G. Q., VANETTEN, R. A., Jackson, P. K., Bernards, A., Baltimore, D.
1992; 12 (4): 1864-1871
 - **POINT MUTATIONS IN THE ABL SH2 DOMAIN COORDINATELY IMPAIR PHOSPHOTYROSINE BINDING INVITRO AND TRANSFORMING ACTIVITY INVIVO** *MOLECULAR AND CELLULAR BIOLOGY*
Mayer, B. J., Jackson, P. K., VANETTEN, R. A., Baltimore, D.
1992; 12 (2): 609-618
 - **NEONATAL LETHALITY AND LYMPHOPENIA IN MICE WITH A HOMOZYGOUS DISRUPTION OF THE C-ABL PROTOONCOGENE** *CELL*
Tybulewicz, V. L., Crawford, C. E., Jackson, P. K., Bronson, R. T., Mulligan, R. C.
1991; 65 (7): 1153-1163
 - **THE NONCATALYTIC SRC HOMOLOGY REGION-2 SEGMENT OF ABL TYROSINE KINASE BINDS TO TYROSINE-PHOSPHORYLATED CELLULAR PROTEINS WITH HIGH-AFFINITY** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Mayer, B. J., Jackson, P. K., Baltimore, D.
1991; 88 (2): 627-631
 - **THE MOUSE TYPE-IV C-ABL GENE-PRODUCT IS A NUCLEAR-PROTEIN, AND ACTIVATION OF TRANSFORMING ABILITY IS ASSOCIATED WITH CYTOPLASMIC LOCALIZATION** *CELL*
VANETTEN, R. A., Jackson, P., Baltimore, D.
1989; 58 (4): 669-678
 - **N-TERMINAL MUTATIONS ACTIVATE THE LEUKEMOGENIC POTENTIAL OF THE MYRISTOYLATED FORM OF C-ABL** *EMBO JOURNAL*
Jackson, P., Baltimore, D.
1989; 8 (2): 449-456
-