Curriculum vitae

Duojia (DJ) Pan, Ph.D.

Current Appointments:

Investigator, Howard Hughes Medical Institute
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Research Statement:

I have a long-standing interest in understanding the molecular mechanisms underlying growth control and tissue homeostasis. My laboratory tackles this question using a combination of *Drosophila* and mouse genetics, biochemistry, cell and chemical biology approaches. Early work from my laboratory elucidated the molecular function of the Tsc1 and Tsc2 tumor suppressor proteins, linking Tsc1/Tsc2 to Rheb and TOR signaling. This work contributed to the eventual approval of mTOR inhibitors for the treatment of Tuberous Sclerosis syndrome. Much of our more recent work has focused on the Hippo pathway, which controls organ size in all animals. Using *Drosophila* as a genetic model, we have systematically decoded, in a stepwise manner, the key molecular components of the Hippo pathway, including its core kinase cascade, the downstream transcriptional machinery, and upstream regulators. We further established a conserved role for Hippo signaling in mammalian tissue growth, regeneration and tumorigenesis. Besides our efforts on the Hippo pathway, we are continuing forward genetic screens in *Drosophila* to discover novel growth regulators and interrogating their physiological function in mammals.

Education and Training:

1984-1988	B.S. Honors Biochemistry, Peking University
1988-1989	China-United States Biochemistry Examination and Application (CUSBEA)
1989-1993	Ph.D., Biological Chemistry, UCLA School of Medicine (advisor: Albert Courey)
1993-1998	Postdoctoral Fellowship, UC Berkeley (advisor: Gerald Rubin)

Professional Experience:

1998-2004	Assistant Professor of Physiology, UT Southwestern Medical Center
2004-2004	Associate Professor of Physiology, UT Southwestern Medical Center
2004-2009	Associate Professor of Molecular Biology & Genetics, Johns Hopkins University School of Medicine
2008-	Investigator, Howard Hughes Medical Institute
2009-2016	Professor of Molecular Biology & Genetics, Johns Hopkins University School of Medicine

2016- Professor and Chairman, Department of Physiology, UT Southwestern Medical Center

Professional memberships:

Genetics Society of America
American Cancer Society
American Association for the Advancement of Science

Honors and Awards:

1988-1989 China-United States Biochemistry Examination and Application (CUSBEA) Scholarship
1993-1996 Postdoctoral Fellowship of the Jane Coffin Childs Memorial Fund for Medical Research
1998-2004 Virginia Murchison Linthicum Scholar in Medical Science, UT Southwestern
2001-2005 American Heart Association National Scientist Development Award
2003-2006 American Cancer Society Research Scholar
2006-2008 Leukemia & Lymphoma Society Scholar
2012 Fellow, American Association for the Advancement of Science
2013 Paul Marks Prize for Cancer Research
2016- The Fouad A. and Val Imm Bashour Distinguished Chair in Physiology
2022 Passano Award
2023 Member, National Academy of Sciences, USA

Advisory and Editorial Board:

2004-2010 Tuberous Sclerosis Alliance, International Scientific Advisory Board
2006-2016 "Faculty of 1000" member
2010-2016 Advisory Committee, Baltimore Polycystic Kidney Research Center
2010- Advisory Committee, Harvard Hamartoma Research Center
2012-2014 Elections committee, Fly Board
2012- *eLife*, Board of Reviewing Editors
2015-2020 Standing Member, American Cancer Society Extramural Council
2016 co-organizer, Keystone symposium "Molecular and Cellular Basis of Growth and Regeneration"
2016-2019 Scientific Advisory Board, Peloton Therapeutics, Inc.
2016-2022 Endowed Scholar Selection Committee, UT Southwestern Medical Center
2018 Organizer, the 9th Xiamen Winter Symposium on the Hippo Signaling in Development & Disease
2019- Scientific Advisory Board, Jane Coffin Childs Memorial Fund for Medical Research
2021- Board of Directors, Genetics Society of America

Patents:

1. "New KUZ polypeptides, members of the ADAM family of metalloprotease - useful in neural partitioning and development"

Patent Numbers: WO9808933-A; EP963432-A; WO9808933-A1; AU9741649-A; US5935792-A; EP963432-A1; AU723836-B; JP2000517185-W; US6190876-B1; US6319704-B1; US6399350-B1; US2002127621-A1; CA2263883-C

2. "Modulating angiogenesis in a vertebrate animal involves specifically modulating the activity of Drosophila Kuzbanian in the animal"
Patent Numbers: WO200234289-A; WO200234289-A1; AU200220098-A; US6436629-B1; US2002132778-A1; EP1333856-A1; JP2004522702-W; US6872750-B2; AU2002220098-B2; US2005171024-A1

3. "A Tumor Suppressor Designated Hippo"
Patent Number 7556942

4. "Compositions and Methods for Targeting Activin Signaling to Treat Cancer"
International Patent Application No.: PCT/US17/17354
U.S. Serial No. 62/293,915 filed February 11, 2016

5. "Inhibition of YAP for breaking tumor immune tolerance"
International Patent Application No.: PCT/US2016/017697
U.S. Serial No. 15/549,943, filed August 9, 2017

Keynote and named lectures (since 2010):

Keynote speaker, Texas A&M Health Science Center Research Day Symposium, 2010
Keynote Speaker, the Sixth Biannual London Fly Meeting, 2013
Distinguished Lecture, Fox Chase Cancer Center, 2014
Distinguished Lecture, Genomics Institute of the Novartis Research Foundation, 2014
Keynote speaker, International Conference on Hippo signaling, Xiamen, 2014
Danny Thomas Lecture, St. Jude Children's Research Hospital, 2015
Dean's lecture, Johns Hopkins School of Medicine, 2015
Keynote speaker, Keystone Symposium on Hippo signaling, 2015
University Lecture, UT Southwestern Medical Center, 2016
Abraham Eisenstark Lectureship, University of Missouri, 2017
Ramon and Victoria Lim Lectureship, University of Iowa, 2018
Clarenburg Lectureship, Kansas State University, 2019
Keynote speaker, National Conference on Hippo signaling, Tianjin, 2019
Keynote speaker, National Conference on Hippo signaling, Wuhan, 2021
Keynote speaker, Society of Chinese Bioscientists in America annual meeting, 2021

Primary research articles:

1. **Pan, D.**, Huang, J.D., and Courey, A.J. (1991) Functional analysis of the Drosophila *twist* promoter reveals a *dorsal*-binding ventral activator region. *Genes Dev.* 5: 1892-1901.
2. **Pan, D.** and Courey, A.J. (1992) The same *dorsal* binding site mediates both activation and repression in a context-dependent manner. *EMBO J.* 11: 1837-1842.
3. **Pan, D.**, Valentine, S.A. and Courey, A.J. (1994) The bipartite *D. melanogaster twist* promoter is reorganized in *D. virilis*. *Mech. Dev.* 46: 41-53.

4. **Pan, D.** and Rubin, G.M. (1995) cAMP-dependent protein kinase and *hedgehog* act antagonistically in regulating *decapentaplegic* transcription in *Drosophila* imaginal discs. *Cell* 80: 543-552.
5. Rooke, J., **Pan**, **D.**, Xu, T., and Rubin, G.M. (1996) KUZ, a conserved metalloprotease-disintegrin protein with two roles in *Drosophila* neurogenesis. *Science* 273: 1227-1231.
6. Fambrough, D., **Pan**, **D.**, Rubin, G.M., and Goodman, C.S. (1996) The cell surface metalloprotease/disintegrin Kuzbanian is required for axonal extension in *Drosophila*. *Proc. Natl. Acad. Sci. USA* 93: 13233-13238.
7. **Pan, D.** and Rubin, G.M. (1997) Kuzbanian controls proteolytic processing of Notch and mediates lateral inhibition during *Drosophila* and vertebrate neurogenesis. *Cell* 90: 271-280.
8. **Pan, D.** and Rubin, G.M. (1998) Targeted expression of *teashirt* induces ectopic eyes in *Drosophila*. *Proc. Natl. Acad. Sci. USA* 95: 15508-15512.
9. Mumm, J., Schroeter, E.H., Saxena, M.T, Tian, X., Griesemer, A., **Pan**, **D.**W.J. Ray, and R. Kopan. (2000) Ligand induced "ectodomain shedding" regulates gamma-secretase-like proteolytic activation of Notch1. *Mol. Cell* 5, 197-206.
10. Gao, X., Neufeld, T. P., and **Pan, D.** (2000) Drosophila PTEN regulates cell growth and proliferation through PI3K-dependent and -independent pathways. *Dev. Biol.* 221, 404-418.
11. Gao, X. and **Pan, D.** (2001) TSC1 and TSC2 tumor suppressors antagonize insulin signaling in cell growth. *Genes Dev.* 15: 1383-1392.
12. Gao, X., Zhang, Y., Arrazola, P., Hino, O., Kobayashi, T., Yeung, R.S., Ru, B. and **Pan, D.** (2002) Tsc tumor suppressor proteins antagonize amino-acid-TOR signaling. *Nature Cell Biol.* 4: 699-704.
13. Zhang, Y., Gao, X., Saucedo, L.J., Ru, B., Edgar, B.A., and **Pan, D.** (2003) Rheb is a direct target of the tuberous sclerosis tumor suppressor proteins. *Nature Cell Biol.* 5, 578-581.
14. Saucedo, L.J., Gao, X., Chiarelli, D.A., Li, L., **Pan, D.**, and Edgar, B.A. (2003) Rheb promotes cell growth as a component of the insulin/TOR signaling network. *Nature Cell Biol.* 5, 566-571.
15. Wu, S., Huang, J., Dong, J., **Pan, D**. (2003) *hippo* encodes a Ste-20 family protein kinase that restricts cell proliferation and promotes apoptosis in conjunction with *salvador* and *warts*. *Cell* 114, 445-456.
16. Dong, J. and **Pan D.** (2004) Tsc2 is not a critical target of Akt during normal *Drosophila* development. *Genes Dev.* 18: 2479-2484.
17. Cygnar, K.D., Gao, X., **Pan, D.**, and Neufeld, T. (2005) The phosphatase subunit Tap42 functions independently of TOR to regulate cell division and survival in *Drosophila*. *Genetics* 170, 733-740.
18. Huang, J., Wu, S., Barrera, J., Matthews, K., and **Pan, D.** (2005) The Hippo signaling pathway coordinately regulates cell proliferation and apoptosis by inactivating Yorkie, the *Drosophila* homologue of YAP. *Cell* 122, 421-434.
19. Zhang, Y., Billington, C.J. Jr., **Pan, D.**, and Neufeld, T.P. (2006) *Drosophila* Target of Rapamycin Kinase Functions as a Multimer. *Genetics* 172, 355-362.
20. Dong, J., Feldman, G., Huang, J., Wu, S., Zhang, N., Comerford, S. A., Gayyed, M. F., Anders, R. A., Maitra, A., and **Pan, D.** (2007) Elucidation of a universal size-control mechanism in *Drosophila* and mammals. *Cell* 130, 1120-1133.

21. Lam-Himlin, D.M., Daniels, J.A., Gayyed, M.F., Dong, J., Maitra, A., **Pan, D.**, Montgomery, E.A., Anders, R.A. (2007) The hippo pathway in human upper gastrointestinal dysplasia and carcinoma: a novel oncogenic pathway. *Int J Gastrointest Cancer* 37, 103-9
22. Wu, S., Liu, Y., Zheng, Y., Dong, J., and **Pan, D.** (2008) The TEAD/TEF family protein Scalloped mediates transcriptional output of the Hippo growth-regulatory pathway. *Dev. Cell*, 14, 388-98.
23. Steinhardt, A.A , Gayyed, M.F., Klein, A.P., Dong, J., Maitra, A., **Pan, D.**, Montgomery, E.A., A. Anders, R.A. (2008) Expression of Yes-Associated Protein, YAP, in Common Solid Tumors. *Human Pathology* 39, 1582-1589.
24. Alarcón, C., Zaromytidou, A.I., Xi, Q., Gao, S., Yu, J., Fujisawa, S., Barlas, A., Miller, A.N., Manova-Todorova, K., Macias, M.J., Sapkota, G., **Pan, D.**, and Massagué, J. (2009) CDK8/9 drive Smad transcriptional action, turnover, and YAP interactions in BMP and TGFβ pathways. *Cell*, 139: 757-769.
25. Yu, J., Zheng, Y., Dong, J., Klusza, S., Deng, W-M., and **Pan, D.** (2010) Kibra functions as a tumor suppressor protein that regulates Hippo signaling in conjunction with Merlin and Expanded. *Dev. Cell*, 18: 288-99.
26. Tian W, Yu J, Tomchick D, **Pan D***, Luo X* (2010). Structural and functional analysis of the YAP-binding domain of human TEAD2. *Proc. Natl. Acad. Sci. USA*, 107: 7293-7298. * co-corresponding author.
27. Ling, C., Zheng, Y., Yin, F., Yu, J., Huang, J., Hong, Y., Wu, S., and **Pan, D.** (2010) The apical transmembrane protein Crumbs functions as a tumor suppressor that regulates Hippo signaling by binding to Expanded. *Proc. Natl. Acad. Sci. USA*, 107: 10532-10537.
28. Zhang, N., Bai, H., David, K.K., Dong, J., Zheng Y., Cai, J., Giovannini, M., Liu, P., Anders, A.A., and **Pan, D.** (2010) The Merlin/NF2 tumor suppressor functions through the YAP oncoprotein to regulate tissue homeostasis in mammals. *Dev. Cell*, 19: 27-38.
29. Cai, J., Zhang, N., Zheng, Y., de Wilde, R.F., Maitra, A., and **Pan, D.** (2010) The Hippo signaling pathway restricts the oncogenic potential of an intestinal regeneration program. *Genes Dev.*, 24: 2383-2388.
30. Bai,H., Gayyed, M.F., Lam-Himlin, D.M., Klein, A.P., Nayar, S.K., Xu, Y., Khan, M., Argani, P., **Pan, D.**, and Anders, R.A. (2012) Expression of Yes-associated protein modulates Survivin expression in primary liver malignancies. *Hum. Pathol.* 43: 1376-1385.
31. Sebé-Pedrós, A., Zheng, Y., Ruiz-Trillo, I., and **Pan, D.** (2012) Premetazoan origin of the Hippo signaling pathway. *Cell Reports*, 1: 13-20.
32. Bai, H., Zhang, N., Xu, Y., Chen, Q., Khan, M., Potter, J.J., Nayar, S.K., Cornish, T., Alpini, G., Bronk, S., **Pan, D.**, and Anders, R.A. (2012) Yes-associated protein regulates the hepatic response after bile duct ligation. *Hepatology*, 56: 1097-1107.
33. Liu-Chittenden, Y., Huang, B., Shim, J.S., Chen, Q., Lee, S-J, Anders, R.A., Liu, J.O. and **Pan, D.** (2012) Genetic and pharmacological disruption of the TEAD-YAP complex suppresses the oncogenic activity of YAP. *Genes Dev.*, 26: 1300-1305.
34. Del Re, D.P., Yang, Y., Nakano, N., Cho, J., Zhai, P., Yamamoto, T., Zhang, N., Yabuta, N., Nojima, H., **Pan, D.**, and Sadoshima, J. (2013) Yes-associated protein isoform 1 (Yap1) promotes cardiomyocyte survival and growth to protect against myocardial ischemic injury. *J. Biol. Chem.* 288: 3977-3988.

35. Bossuyt, W., Chen, C.L., Chen, Q., Sudol, M., McNeill, H., **Pan, D.**, Kopp, A., and Halder, G. (2013) An evolutionary shift in the regulation of the Hippo pathway between mice and flies. *Oncogene*. Epub ahead of print on 4/8/2013, doi: 10.1038/onc.2013.82
36. Koontz, L.M., Liu-Chittenden Y., Yin, F., Zheng, Z., Yu, J., Huang, B., Chen, Q., and **Pan, D.** (2013) The Hippo effector Yorkie controls normal tissue growth by antagonizing scalloped-mediated default repression. *Dev. Cell*, 25: 388-401.
37. Yu, F.X., Zhang, Y., Park, H.W., Jewell, J.L., Chen, Q., Deng, Y., **Pan,D.**, Taylor,S.S., Lai,Z.C., and Guan,K.L. (2013) Protein kinase A activates the Hippo pathway to modulate cell proliferation and differentiation. *Genes Dev.*, 27: 1223-1232.
38. Ni, L., Li, S., Yu, J., Min, J., Brautigam, C.A., Tomchick, D.R., **Pan, D.**, and Luo, X. (2013) Structural basis for autoactivation of human Mst2 kinase and its regulation by RASSF5. *Structure*, 21: 1757-1768.
39. Yin, F., Yu, J., Zheng, Y., Chen, Q., Zhang, N., and **Pan, D.** (2013) Spatial organization of Hippo signaling at the plasma membrane mediated by the tumor suppressor Merlin/NF2. *Cell*, 154: 1342-1355.
40. Shao, D., Zhai, P., Del Re, D., Sciarretta, S., Yabuta, N., Nojima, H., Lim, D-S., **Pan, D.**, and Sadoshima, J. (2014) A Functional Interaction between Hippo-YAP Signaling and FoxO1 Mediates the Oxidative Stress Response. *Nat. Commun.*, 5: 3315.
41. Gurda, G.T., Zhu, Q., Bai, H., Devadason, A., **Pan, D.**, Schwarz, K., and Anders, R.A. (2014) The utility of Yes-associated protein (YAP) expression in the diagnosis of persistent neonatal cholestatic liver disease. *Hum. Pathol*., 45:1057-1064.
42. Chen, Q., Zhang, N., Gray, R.S., Li, H., Ewald, A.J., Zahnow, C.A., and **Pan, D.** (2014) A temporal requirement for Hippo signaling in mammary gland differentiation, growth, and tumorigenesis. *Genes Dev.*, 28: 432-437.
43. Qing, Y., Yin, F., Wang, W., Zheng, Y., Guo, P., Schozer, F., Deng, H., and **Pan, D.** (2014) The Hippo effector Yorkie activates transcription by interacting with a histone methyltransferase complex through Ncoa6. *eLife*, Jul 15:e02564. doi: 10.7554/eLife.02564.
44. Alder, O., Cullum, R., Lee, S., Kan, A.C., Wei, W., Yi, Y., Garside, V.C., Bilenky, M., Griffith, M., Morrissy, A.S., Robertson, G.A., Thiessen, N., Zhao, Y., Chen, Q., **Pan, D.**, Jones, S.J., Marra, M.A., and Hoodless, P.A. (2014) Hippo signaling influences HNF4A and FOXA2 enhancer switching during hepatocyte differentiation. *Cell Reports*, 9: 261-271.
45. Deng, H., Wang, W., Yu, J., Zheng, Y., Qing, Y., and Pan, D. (2015) Spectrin regulates Hippo signaling by modulating cortical actomyosin activity. *eLife*, Mar 31:e06567. doi: 10.7554/eLife.06567.
46. Chen, Q., Zhang, N., Xie, R., Wang, W., Cai, J., Choi, K.S., David, K.K., Huang, B., Yabuta, N., Nojima, H., and **Pan, D.** (2015) Homeostatic control of Hippo signaling activity revealed by an endogenous activating mutation in YAP. *Genes Dev.*, 29: 1285-1297.
47. Moroishi, T., Park, H.W., Qin, B., Chen, Q., Meng, Z., Plouffe, S.W., Taniguchi, K., Yu, F.X., Karin, M., **Pan, D.**, and Guan, K.L. (2015) A YAP/TAZ-induced feedback mechanism regulates Hippo pathway homeostasis. *Genes Dev.*, 29: 1271-1284.
48. Ni, L., Zheng, Y., Hara, M., **Pan, D.** and Luo, X. (2015) Structural basis for Mob1-dependent activation of the core Mst-Lats kinase cascade in Hippo signaling. *Genes Dev.*, 29: 1416-1431.

49. Cai, J., Maitra, A., Anders, R.A., Taketo, M.M., and **Pan, D.** (2015) beta-Catenin destruction complex-independent regulation of Hippo-YAP signaling by APC in intestinal tumorigenesis. *Genes Dev.*, 29: 1493-1506.
50. Zheng, Y., Wang, W., Liu, B., Deng, H., Uster, E., and **Pan, D.** (2015) Identification of Happyhour/MAP4K as alternative Hpo/Mst-like kinases in the Hippo kinase cascade. *Dev. Cell*, 34: 642-655.
51. Liu, B., Zheng, Y., Yin, F., Yu, J., Silverman, N., and **Pan, D.** (2016) Toll receptor-mediated Hippo signaling controls innate immunity in *Drosophila*. *Cell*, 164: 406-419.
52. Das, A., Fischer, R.S., **Pan, D.**, and Waterman CM. (2016). YAP nuclear localization in the absence of cell-cell contact is mediated by a filamentous actin-dependent, myosin II- and phospho-YAP-independent pathway during extracellular matrix mechanosensing. *J. Biol. Chem.*, 291: 6096-6110.
53. Merino, V., Nguyen, N., Jin, K., Sadik, H., Cho, S., Korangath, P., Han, L., Foster, Y., Zhou, X., Zhang, Z., Connolly, R., Stearns, V., Ali, S., Adams, C., Chen, Q., **Pan, D.**, Huso, D., Ordentlich, P., Brodie, A., and Sukumar, S. (2016) Combined treatment with epigenetic, differentiating, and chemotherapeutic agents cooperatively targets tumor-initiating cells in triple negative breast cancer. *Cancer Research*, 76(7):2013-2024.
54. Chan, P., Han, X., Zheng, B., DeRan, M., Yu, J., Jarugumilli, G.K., Deng, H., **Pan, D.**, Luo, X. and Wu, X. (2016) Autopalmitoylation of TEAD proteins regulates transcriptional output of the Hippo pathway. *Nature Chem. Biol*, 12: 282-289.
55. Bai, H., Zhu, Q., Surcel, A., Luo, T., Ren, Y., Guan, B., Liu, Y., Wu, N., Joseph, N.E., Wang, T.L., Zhang, N., **Pan, D.**, Alpini, G., Robinson, D.N., and Anders, R.A. (2016) Yes-associated protein impacts adherens junction assembly through regulating actin cytoskeleton organization. *Am. J. Physiol. Gastointest Liver Physiol.* 311(3):G396-411.
56. Matsuda, T., Zhai, P., Sciarretta, S., Zhang, Y., Jeong, J.I., Ikeda, S., Park, J.Y., Hsu, C.P., **Pan, D**., Sadoshima, J., and Del Re, D.P. (2016) NF2 activates Hippo signaling and promotes ischemia/reperfusion injury in heart. *Circ. Res*. 119(5):596-606.
57. Mindos, T., Dun, X.P., North, K., Doddrell, R.D., Schulz, A., Edwards, P., Russell, J., Gray, B., Roberts, S.L., Shivane, A., Mortimer, G., Pirie, M., Zhang, N., **Pan, D.**, Morrison, H., and Parkinson, D.B. (2017) Merlin controls the repair capacity of Schwann cells after injury by regulating Hippo/YAP activity. *J Cell Biol.* 216(2):495-510.
58. Serafimidis, I., Rodriguez-Aznar, E., Lesche, M., Yoshioka, K., Takuwa, Y., Dahl, A., **Pan, D.**, and Gavalas, A. (2017) Pancreas lineage allocation and specification are regulated by sphingosine-1-phosphate signalling. *PLoS Biol.* 15(3):e2000949.
59. Merino, V.F., Cho, S., Liang, X., Park, S., Jin, K., Chen, Q., **Pan, D.**, Zahnow, C.A., Rein, A.R., and Sukumar, S. (2017) Inhibitors of STAT3, β-catenin, and IGF-1R sensitize mouse PIK3CA-mutant breast cancer to PI3K inhibitors. *Mol Oncol.* 11(5):552-566.
60. Wu, N., Nguyen, Q., Wan, Y., Zhou, T., Venter, J., Frampton, G.A., DeMorrow, S., **Pan, D.**, Meng, F., Glaser, S., Alpini, G., and Bai, H. (2017) The Hippo signaling functions through the Notch signaling to regulate intrahepatic bile duct development in mammals. *Lab Invest.* 97(7):843-853.
61. Zheng, Y., Liu, B., Wang, L., Lei, H., Pulgar Prieto, K.D., and **Pan, D.** (2017) Homeostatic Control of Hpo/MST Kinase Activity through Autophosphorylation-Dependent Recruitment of the STRIPAK PP2A Phosphatase Complex. *Cell Rep.* 21(12):3612-3623.

62. Yu, J. and **Pan, D.** (2018) Validating upstream regulators of Yorkie activity in Hippo signaling through scalloped-based genetic epistasis. *Development*. 2018 Feb 21;145(4). doi: 10.1242/dev.157545.
63. Lv, Y., Kim, K., Sheng, Y., Cho, J., Qain, Z., Zhao, Y.Y., Hu, G., **Pan, D.**, Malik, A.B., Hu, G. (2018) YAP Controls Endothelial Activation and Vascular Inflammation Through TRAF6. *Circ Res.* 123:43-56.
64. Cai, J., Song, X., Wang, W., Watnick, T., Pei, Y., Qian, F., and **Pan, D**. (2018) A RhoA-YAP-c-Myc signaling axis promotes the development of polycystic kidney disease. *Genes Dev.*, 32:781-793.
65. Ni, X., Tao, J., Barbi, J., Chen, Q., Park, B.V., Li, Z., Zhang, N., Lebid, A., Ramaswamy, A., Wei, P., Zheng, Y., Zhang, X., Wu, X., Vignali, P.D.A, Yang, C., Li, H., Pardoll, D., Lu, L., **Pan, D.**, and Pan, F. (2018) YAP is essential for Treg mediated suppression of anti-tumor immunity. *Cancer Discovery*, 8:1026-1043.
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69. Tu, B., Yao, J., Ferri-Borgogno, S., Zhao, J., Chen, S., Wang, Q., Yan, L., Zhou, X., Zhu, C., Bang, S., Chang, Q., Bristow, C.A., Kang, Y., Zheng, H., Wang, H., Fleming, J.B., Kim, M., Heffernan, T.P., Draetta, G.F., **Pan, D.**, Maitra, A., Yao, W., Gupta, S., and Ying, H. (2019) YAP1 oncogene is a context-specific driver for pancreatic ductal adenocarcinoma. *JCI Insight*. doi: 10.1172/jci.insight.130811.
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71. Deng, H., Yang, L., Wen, P., Lei, H., Blount, P., and **Pan, D.** (2020) Spectrin couples cell shape, cortical tension, and Hippo signaling in retinal epithelial morphogenesis. *J Cell Biol.* Apr 6;219(4). doi: 10.1083/jcb.201907018
72. Driskill, J.H., Zheng, Y., Wu, B.K., Wang, L., Cai, J., Rakheja, D., Dellinger, M., and **Pan, D.** (2021) WWTR1(TAZ)-CAMTA1 reprograms endothelial cells to drive epithelioid hemangioendothelioma. *Genes Dev.*, 35:495-511.
73. Phillips, J.E., Santos, M., Konchwala, M., Xing, C., and **Pan, D.** (2022) Genome editing in the unicellular holozoan *Capsaspora owczarzaki* suggests a premetazoan role for the Hippo pathway in multicellular morphogenesis. *eLife*, June 6:e77598. doi: 10.7554/eLife.77598.

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Ongoing Research Support

HHMI Investigator, Pan (PI) 07/01/2008 – 08/31/2025
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