
BIOGRAPHICAL SKETCH

NAME Channing Joseph Der	POSITION TITLE Professor
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EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)*

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of California, Los Angeles	BS	1975	Biology
University of California, Irvine	Ph.D.	1981	Microbiology
Harvard Medical School & Dana-Farber Cancer Institute	Postdoc	1981-1985	Pathology

POSITIONS AND HONORS:

Positions and Employment

1976 -1981	Graduate Student, University of California, Irvine (advisor: E.J. Stanbridge).
1981 -1985	Postdoctoral Fellow, Harvard Medical School, Department of Pathology, and the Dana-Farber Cancer Institute (advisor: G.M. Cooper).
1985 -1992	Staff Scientist, La Jolla Cancer Research Foundation, La Jolla, CA
1992 -1995	Associate Professor, University of North Carolina, Chapel Hill, NC.
1995 - present	Professor, Dept. of Pharmacology, University of North Carolina, Chapel Hill, NC
1998 - present	Director, NIH Cancer Cell Biology Training Grant

Other Experience and Professional Memberships

1992 -1996	Member, NIH Pathology B Study Section
1993 -1995	Consultant, Bristol-Myers Squibb
1994	Consultant, Pfizer
1996 - 2000	Editorial Board, Journal of Biological Chemistry
1998 - present	Editorial Board, Molecular and Cellular Biology
1998 - present	Board of Advisors, Children's Tumor Foundation
1999 - 2003	Susan G. Komen Breast Cancer Review Panel
1999 - 2002	Associate Editor, Cancer Research
2000 - present	Editorial Board, Cancer Letters
2001 - present	Member, Faculty of 1000
2004 - present	Editorial Board, Molecular Cancer Therapeutics
2006 - 2008	DOD Neurofibromatosis Research Program Integration Panel
2008 - present	Editorial Board, Oncogene
2008 - present	Scientific Advisory Board, Lustgarten Foundation for Pancreatic Cancer Research

Honors

1983 -1985	Damon Runyon-Walter Winchell Postdoctoral Fellowship
1990 -1995	American Cancer Society Faculty Research Award
2006	Sarah Graham Kenan Distinguished Professor

B. PUBLICATIONS (Selected publications from 292 total):

- Lim, K.-H., Baines, A.T., Fiordalisi, J.J., Shipitsin, M., Feig, L.A., Cox, A.D., Der, C.J. and Counter, C.M. (2005). Activation of RalA is critical for Ras-induced tumorigenesis of human cells. *Cancer Cell*, 7, 533-545.
- Chenette, E.J., Mitin, N.Y. and Der, C.J. (2006). Multiple sequence elements facilitate Chp Rho GTPase subcellular localization, membrane association and transforming activity. *Mol. Biol. Cell*, 17, 3108-3121.
- Rossmann, K.R., Der, C.J. and Sonddek, J. (2005). GEF means go: guanine nucleotide exchange factors for Rho GTPases. *Nature Rev. Mol. Cell Biol*, 6, 167-180.

- Kelly, P., Moeller, B.J., Juneja, J., Booden, M.A., Der, C.J., Daaka, Y., Dewhirst, M.W., Fields, T.A. and Casey, P.J. (2006). The G12 family of heterotrimeric G proteins promotes cancer invasion and metastasis. *Proc. Natl. Acad. Sci.*, 103, 8173-8178.
- Lim, K.H., O'Hayer, K., Adams, S.J., Kendall, S.D., Campbell, P.M., Der, C.J. and Counter, C.M. (2006). Divergent roles for RalA and RalB in malignant growth of human pancreatic carcinoma cells. *Curr. Biol*, 16, 2385-2394.
- Shields, J.M., Thomas, N.E., Cregger, M., Berger, A.J., Leslie, M., Torrice, C., Hao, H., Penland, S., Arbiser, J., Scott, G., Zhou, T., Bar-Eli, M., Bear, J.E., Der, C.J., Kaufmann, W., Rimm, D.L. and Sharpless, N.E. (2007). Lack of ERK mitogen-activated protein kinase activation and signaling demonstrates a new type of melanoma. *Cancer Res*, 67, 1502-1512.
- Campbell, P.M., Groehler, A.L., Lee, K.M., Ouellette, M.M., Khazak, V. and Der, C.J. (2007). K-Ras promotes growth transformation and invasion of immortalized human pancreatic cells by Raf and phosphatidylinositol 3-kinase signaling. *Cancer Res*, 67, 2098-2106.
- Repasky, G.A., Zhou, Y., Morita, S. and Der, C.J. (2007). Ras activation of Raf-dependent and Raf-independent signaling causes cyclooxygenase-2-mediated prostaglandin E₂ signaling required for intestinal epithelial cell transformation. *Mol. Carcinogenesis*, 46, 958-970.
- Yohe, M.E., Rossman, K.L., Gardner, O.S., Karnoub, A.E., Snyder, J.T., Gershburg, S., Graves, L.M., Der, C.J. and Sondek, J. (2007). Auto-inhibition of the Dbl-family protein Tim by an N-terminal helical motif. *J. Biol. Chem.*, 282, 13813-13823.
- Falsetti, S.C., Wang, D.A., Peng, H., Carrico, D., Cox, A.D., Der, C.J., Hamilton, A.D., Sebt, S.M. (2007). Geranylgeranyltransferase I inhibitors target RalB to inhibit anchorage-dependent growth and induce apoptosis and RalA to inhibit anchorage-independent growth. *Mol. Cell. Biol.* 27, 8003-8014.
- Hao, H., Muniz-Medina, V.M., Mehta, H., Thomas, N.E., Klazak, V., Der, C.J. and Shields, J.M. (2007). Differential roles of mutant B-Raf signaling in melanoma and colorectal carcinoma cell growth. *Mol. Cancer Res.*, 6, 2220-2229.
- Der, C.J. and Van Dyke, T. (2007). Stopping Ras in its tracks. *Cell*, 129, 855-857.
- Mitin, N., Betts, L., Yohe, M., Sondek, J., Der, C.J. and Rossman, K.L. (2007). Release of auto-inhibition of Asef by APC leads to Cdc42 activation and tumor suppression. *Nature Struct. Mol. Biol.*, 14, 814-823.
- Shutes, A., Onesto, C., Picard, V., Schweighoffer, F. and Der, C.J. (2007). Specificity and mechanism of action of EHT 1864, a novel small molecule inhibitor of Rac family small GTPases. *J. Biol. Chem.*, 282, 35666-35678.
- Cha, J.Y., Lambert, Q.T., Reuther, G.W. and Der, C.J. (2008). Involvement of fibroblast growth factor receptor 2 isoform switching in mammary oncogenesis. *Mol. Cancer Res.*, 6, 435-445.
- Healy, K.D., Shutes, A., Kim, T.H., Juliano, R.L., Bang, Y.-J. and Der, C.J.. (2008). DLC-1 suppressions non-small cell lung carcinoma growth and invasion by RhoGAP-dependent and independent mechanisms. *Mol. Carcinogenesis*, 47, 326-337.
- Reiner, D.J., Gonzalez-Perez, V., Der, C.J. and Cox, A.D. (2008). Use of *C. elegans* to evaluate inhibitors of Ras function in vivo. *Methods Enzymol.*, 439, 425-449.
- Roberts, P.J., Mitin N, Keller, P.J., Chenette, E.J., Madigan, J.P., Currin, R.O., Cox, A.D., Wilson, O., Kirschmeier, P., Der, C.J. (2008). RHO family GTPase modification and dependence on CAAX motif-signaled posttranslational modification. *J. Biol. Chem.*, 283, 25150-25163.
- Kim TY, Healy KD, Der CJ, Sciaky N, Bang YJ, Juliano RL. (2008). Effects of structure of Rho GTPase-activating protein DLC-1 on cell morphology and migration. *J. Biol., Chem.*, in press.
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