

Ming-Daw Tsai, Ph.D.

Position: Distinguished Research Fellow
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Education

1968-1972 B.S. in Chemistry, National Taiwan University, Taipei
1974-1978 Ph.D. in Biochemistry & Medicinal Chemistry, Purdue Univ. (Heinz Floss)

Professional Experience

2007 - present Professor, Institute of Biochemical Sciences, National Taiwan University
2006 - present Distinguished Research Fellow, Institute of Biol. Chem., Academia Sinica
2008 - 2014 Director, Institute of Biological Chemistry, Academia Sinica
2005 - 2008 Director of Functional Genomics, GRC
2004 - 2010 Director, National Core Facilities Office, NRPGM
2003 - 2008 Distinguished Research Fellow, Genomics Research Center, Academia Sinica
2003 - 2007 Kimberly Professor of Chemistry, Ohio State University
1993 - 2007 Director, Office of Research Campus Chemical Instrument Ctr, OSU
1992 - 2007 Professor, Department of Biochemistry, OSU
1990 - 2007 Professor, Department of Chemistry, OSU
1986 - 1990 Associate Professor of Chemistry, Ohio State University
1981 - 1986 Assistant Professor of Chemistry, Ohio State University
1980 - 1981 Assistant Prof of Chemistry, Rutgers Univ. (Newark)
1978 - 1979 Postdoctoral Associate, Purdue University (with H. G. Floss)

Professional Services and Honors

2014-2018 President, Taiwan Proteomics Society
2014-2016 President, Taiwan Biophysical Society
2010-2016 Associate Editor, Biochemistry
2012, Elected to Academician, Academia Sinica
2014, Elected to Fellow, The World Academy of Science (TWAS)

Selected publication (Total number of peer reviewed papers: 277)

- 1) Wei, T.W., Wu, P.Y., Wu, T.J., Hou, H.A., Chou, W.C., Teng, C.J., Lin, C.R., Chen, J.M., Lin, T.Y., Su, H.C., Huang, C.F., Yu, C.R., Hsu, S.L., Tien, H.F., and **Tsai, M.D.** (2017) Aurora A and NF-kappaB Survival Pathway Drive Chemoresistance in Acute Myeloid Leukemia via the TRAF-Interacting Protein TIFA. *Cancer Res.* **77**, 494-508
- 2) "Structural Mechanism for the Fidelity Modulation of DNA Polymerase λ ". Mu-Sen Liu, Hsin-Yue Tsai, Xiao-Xia Liu, Meng-Chiao Ho, Wen-Jin Wu, and **Ming-Daw Tsai**, *J. Am. Chem. Soc.* **138**, 2389-2398 (2016).
- 3) Chen, E.S., Hoch, N.C., Wang, S.C., Pelliccioli, A., Heierhorst, J., and **Tsai, M.D.** (2014) Use of quantitative mass spectrometric analysis to elucidate the mechanisms of phospho-priming and auto-activation of the checkpoint kinase Rad53 in vivo. *Mol.Cell.Proteomics.* **13**, 551-565
- 4) Wu, W.J., Su, M.I., Wu, J.L., Kumar, S., Lim, L.H., Wang, C.W., Nelissen, F.H., Chen, M.C., Doreleijers, J.F., Wijmenga, S.S., and **Tsai, M.D.** (2014) How a low-fidelity DNA polymerase chooses non-Watson-Crick from Watson-Crick incorporation. *J.Am.Chem.Soc.* **136**, 4927-4937