Tieli (Tilly) Wang

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PROFESSIONAL PREPARATION

Fox Chase Cancer Center, Department of pharmacology, Postdoctoral Fellow, 1999 – 2001. SUNY at Stony Brook, Biochemistry and Biophysics, Ph.D, 1999 Iowa State University, Chemistry, M.S. 1995 Jilin University, China, Chemistry, M.S. 1987 Jilin University, China, Chemistry, B.S. 1984

APPOITNMENTS

| August 2015 – Present | Professor of Chemistry and Biochemistry |
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| | California State University Dominguez Hills, Department of |
| | Chemistry and Biochemistry |
| August 2010 – August 2015 | Associate Professor of Chemistry and Biochemistry |
| | California State University Dominguez Hills, Department of |
| | Chemistry and Biochemistry |
| August 2005 – August 2010 | Assistant Professor of Chemistry and Biochemistry |
| | California State University Dominguez Hills, Department of |
| | Chemistry and Biochemistry |
| August 2014 – December 2014 | Visiting associate professor, Mount Sinai Medical School, |
| | Department of Pharmacology and Systems Therapeutics |
| June 2001 – August 2005 | Beckman Fellow, Beckman Research Institute of the City of |
| | Hope, Department of Pharmacology and Radiation Oncology |

SELECTED PUBLICATIONS

- 1. Wang, T. (2017) Proteomics for post-translational modification studies of histone and its implication in brain cancer therapeutic development. European Cancer Summit, Sept., Rome, Italy.
- 2. Wang, T. (2016) Chromatin-Associated Proteins as Potential Targets for Drug Development. The 14th Annual Congress of International Drug Discovery Science & Technology. Nov., Nanjing, China
- 3. Diaz, AJ., Mura, H., Nyuwen, L., Coello, D., Sheva, S., Nava and Wang, T. (2016) Histone methylation by temezolomide; a classic DNA methylating anticancer drug. (Supplement). World Biomedical Frontiers. ISSN 2328 0166.
- 4. **Wang, T.,** Pickard, A. and Gallo, J. (2016) Histone methylation by temezolomide; a classic DNA methylating anticancer drug. Anticancer Research 36: 3289 3300.
- 5. **Wang, T.**, Diaz, A.J. and Yen, Y. (2014) The role of Peroxiredoxin II in chemoresistance of breast cancer cells. Breast cancer: targets and therapy. 6: 73-80.
- 6. Diaz, AJ., Tamae, D., Li, JJ., Yen, Y. and **Wang, T**. (2013) Enhanced radiation response in MCF-7 radioresistant breast cancer cells by targeting Peroxiredoxin II. Breast cancer: targets and therapy. 5, 87-101.
- 7. Mao, Y., Jeong, M., Wang, T. and Ba, Y. (2011) Threonine side chain conformations of type I Antifreeze Protein in Interacting with Ice. J of Solid State NMR. 39, 7-13.
- 8. Wang, T. Enhanced instruction in the classroom. (2010) eVoice journal. http://voice.acsup.org/
- 9. Liu, X., Mao, Y., Mathias, E., Ma, C., Franco, O., Ba, Y., Kornfield, JA, **Wang, T.**, Xue, L., Zhou, BS, Yen, Y. (2008) Study the property of double-ended fluoroalkyl poly(ethylene glycol) hydrogel as a depot for hydrophobic drug delivery using electron paramagnetic resonance technique and cell proliferation assay. J. of Sol. Gel Sci. Technol. 45: 269-278.

- 10. Zhang, Y., Zhou, J., **Wang, T.**, and Cai, L. (**2007**) High level glucose increases mutagenesis in human lymphoblastoid cells. Int. J. Biol. Sci. 2007, 3: 375-379.
- 11. Shao, J., Zhou, B., Di Bilio, AJ., Zhu, LJ., Wang, T., Qi, C., Shih, J., Yen, Y. (2006) A Ferrous-triapine complex mediates formation of reactive oxygen species that inactivate human ribonucleotide reductase. Mol Cancer Ther. 5:586-92
- 12. Xue, L., Zhou, B., Liu, X., Wang, T., Shih, J., Qi, C., Yen, Y. (2006) Structurally dependent redox property of ribonucleotide reductase subunit p53R2. *Cancer Research*, 66 (4): 1900-1905.
- 13. **Wang, T***., Tamae, D., Shiverly, J.E., Lee, T. and Li, J. J. (2005) The role of Prx II in radioresistant MCF-7 breast cancer cells. *Cancer Research*, 65(22):10338-46.
- 14. **Wang, T**., Hu, YC., Tamae, D., Ozeki, M., Gao, Q., Gius, D., and Li, JJ. (**2005**) Co-activation of NFκB and Erk in protection cells from radiation toxicity. *J Biol Chem.*, Vol. 280, Issue 13, 12593-12601.
- 15. **Wang, T.,** Guo, G., Wong, J., and Li, JJ. (2004) Expression of ErbB2 enhances radiation induced NFκB activation. *Oncogene*. 23, 535-545.
- 16. Guo, G, Yan-Sanders, Y., Lyn-Cook, B. D, Wang, T., Tamae, D., and Li, JJ. (2003) NFκB mediated manganese superoxide dismutase in radiation induced adaptive responses. *Mol. Cell. Biol.*, 23, 2362-2378.
- 17. **Wang, T.,** and Li, J. J. (2002) NFκB activation and cell adaptive response. *Int. J. Immunopharm.*, 2(11), 1509-1618.
- 18. **Wang, T.,** Arifoglu, P., Ronai, Z., and Tew, KD. (**2001**) Probing the interaction between Glutathion S Transferase P1-1 and c-Jun BH2 terminal kinase. J, Biol, Chem., 276(24): 20999-21003.
- 19. Ruscoe, JE., Rosario, LA., Wang, T., Gaté L., Arifoglu, P., Wolf, CR, Herderson, CJ, Ronai, Z., and Tew, KD. (2001) Pharmacological or genetic manipulation of glutathione s-transferase p1-1 (GSTπ) influences cell proliferation pathways. *J. Pharmacol. Exp. Ther.* 298(1): 339-345.
- 20. **Wang, T.**, Dowal L., El-Maghrabi, R., Rebecchi, M and Scarlata, S. (2000) The Pleckstrin homology domain of phospholipase $C β_2$ links the binding of Gβγ to activation of the catalytic core. *J. Biol. Chem.*, 275(11), 7466-7469.
- 21. **Wang, T.**, Pentyala, S., Elliott, JT., Rebecchi, M. and Scarlata S. (**1999**) Selective Interaction of C2 Domain of Phospholipase C- β 1, β 2 with Active G α _q Subunits: An Alternative Function for C2 Signaling Modules. *Proc. Natl. Acad. of Sci., USA.*, 96: 7843-7846.
- 22. **Wang, T.**, Pentyala, S., Rebecchi M. and Scarlata, S. (**1999**) Differential Association of the Pleckstrin Homology Domains of Phospholipase C-β1, β2 and Phospholipase C-δ to Lipid Bilayers and the βγ Subunits of G Proteins. *Biochem.*, 38(5),1517-1524.

RESEARCH LEADERSHIP

- 2017: CSUPERB Presidential Commission Scholarship grant
- 2012 2017: NSF#HRD-0802628 LSAMP student training Award
- 2013: Keck foundation Award
- 2011: CSUPERB Howell Research Scholarship Award
- 2008: CSUPERB Programmatic Infrastructure Development Grants
- 2007: CSUDH RSCAAP mini grant
- 2007: CSUDH RSCAAP summer fellowship Award
- 2001: Arnold Beckman Foundation Beckman Fellowship Award

LEADERSHIP AND PROFESSIONALISM: SYNERGISTIC ACTIVITIES

| 2014 - 2020 | Associate Director of the Comprehensive Colleges and Universities Constituency, Sigma Xi, |
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| | The scientific Research Society |
| 2016 - 2020 | Chair, Department of Chemistry and Biochemistry, CSU Dominguez Hills |
| 2010 - 2013 | Executive committee member of Southern California American Chemical Society |
| 2009 - 2013 | CSUPERB grant review committee |
| 2008 - 2010 | CSUPERB Nagal Undergraduate Research Award Review Committee |

COMMITMENT TO DIVERSITY AND INCLUSIVENESS

As a professor, an important part of my responsibilities is to foster and facilitate excellence in student mentoring. CSUDH serves a very diverse student clientele the majority of which are from groups that are underrepresented in academia and in the sciences. Many of my students are new immigrants to the US and to California from Mexico, and Central and South America, many of whom live in nearby Compton and other parts of South Central Los Angeles. It is becoming increasingly important to develop effective methods for effectively mentoring students with diverse ethnic and socioeconomic backgrounds and learning styles. I have committed to instill these students with the skills they need to efficiently acquire knowledge. I have supervised undergraduate and graduate students with diverse backgrounds over the past decade and encouraged them to get interested in science and STEM education.

MENTORING

I have committed to the student mentoring and encouraged them to advance to their professional careers. The following conference presentations by my students are a demonstrated record of my research and mentoring experiences.

Selected conference presentations by students:

- 1. Pena, L., Nava, M. Diaz, A., Still, P. and Wang, T. (2018) Prepare substrate for in-vitro histone demethylase assay. CSUDH Student Research Day, Carson, CA.
- 2. Thomas, C.M., Diaz, A., Haggerty, C., O'Keefe, B.R., Wang, T., Herbert, B. and Still, P. (2018) NMR methods in the structure elucidation of bioactive alkaloids from Mostuea Brunonis. CSUDH Student research day, Carson, CA.
- 3. Diaz, A.J., Hugo Mora, H., Nava, M., Coello, D. Nyuge L., Saif, S and Wang, T. (2017) Histone methylation by TMZ in Triple Negative Breast Cancer Cells. CSUDH Student Research Day, Carson, CA.
- 4. Saif, S., Al, N., Nava, M., Pena, L., Thangavel, A. and Wang T. (2017) Protection of Nε-amino group for selective reaction of chlorambucil and histone peptide. CSUDH Student Research Day, Carson, CA.
- 5. Mora H., Nava, M., Saif, S., Coello, D., Nuugen, L., Diaz, A., Still, P. and Wang, T. (2017) Histome methylation status by temozolomide in tumor cells. Southern California Undergraduate Research Conference, UCLA, CA.
- 6. Mora, H., Diaz, A.J., Saif, S., Nava, M., Pena, L., Nyugen L. and Wang, T. (2016) Therapeutic benefit of Temozolomide through methylation of histone protein. Southern California Undergraduate Research Conference, CSULB, CA.
- 7. Mora H., Diaz, A.J., Pu, L., Thangavel A. and Tieli Wang. (2016) Biosynthesis of Chlorambucil-RNA Complex for targeted cancer therapy. CSUDH Student Research Day.
- 8. Diaz, A.J., Hugo Mora, H., Still, P., Choi, HK, Herbert, D. and Wang, T. (2016) Determine the IC50 of TMZ after EGCG treatment in triple negative breast cancer cells. CSUDH Student Research Day.
- 9. Saif, S., Mora, H., Diaz, A.J., Thangavel, A. and Wang, T. (2016) Study of anticancer drug temozolomide and its metabolites-DNA interaction. SCCUR conference, Long Beach, CA.
- 10. Brooks B. and Wang T. (2015) Alkylation of aminoacids by anticancer drug chlorambucil. ACS West Regional Conference. San Marcos, CA.
- 11. Diaz, A.J. and Wang, T. (2015) The effect of chlorambucil and chlorambucil-tempol anticancer drugs on breast cancer cell chemoresistance in MCF-7 breast cancer cells by. CSU Dominguez Hills Student Research Day.
- 12. Diaz, A.J., De La Cruz, N., Chun, H., and Ba, Y. and Wang, T. (2014) The effect of glutathione on the cellular cytotoxicity of chlorambucil, chlorambucil-tempol and ionizing radiation in MCF-7 breast cancer cells. CSU Dominguez Hills Student Research Day.
- 13. De La Cruz, N., Pu, L., and Ba, Y. and Wang, T. (2014) Development of Targeted Cancer Therapeutics using Chlorambucil-siRNA Complexes. CSU Dominguez Hills Student Research Day.
- 14. Diaz, A.J., Chun, H., and **Wang, T.** (2012) Ionizing radiation induces cellular toxicity by inhibition of Ca²⁺ efflux. Southern California American Chemical Society Conference.
- 15. Kohanbash, M, Zamani, P and **Wang, T.** (2012) Optimization of recombinant AFP expression in the *E. Coli* system. CSU Dominguez Hills Student Research Day.

- 16. Zamani, P and **Wang, T**. (2011) Expression C¹³ labeled antifreezing protein in the E. Coli system. CSU Dominguez Hills Student Research Day.
- 17. Diaz, A.J., Liao, C., and **Wang, T.** (2010) siRNA-PrxII sensitizes radioresistant breast cancer cells by altering cellular protein thiol state. 21th annual CSUPERB symposium, Santa Clara.
- 18. Diaz, A.J., Chun, H., Elami, A., Mason, AZ, **Wang, T.** (2009) PrxII has no significant role in A-T sensitive mutant cells. 20th annual CSUPERB symposium, Los Angeles.
- 19. Emoka, C., Diaz, A.J., Johnson, C., Elami, A., Mason, Z., **Wang, T.** (2008) Differential protein expression profiling between ER-negative breast cancer cells and normal cells using 2 D proteomics. Southern California Conference for Undergraduate Research.
- 20. Saenz, J., Johnson, C., Diaz, A.J., Martinez, L., Choi, HK, **Wang, T**. (2008) Molecular cloning of the PrxII gene for expression and purification of the recombinant protein. Southern California Undergraduate Research Conference in Chemistry and Biochemistry.
- 21. Saenz, J, Jiang, C., Johnson, C., Choi, HK, Yen, Y. and Wang, T. (2008) Molecular cloning of PrxII promoter. CSU Fullerton 50th Anniversary in Celebration of research: strengthening CSU's research collaborations.
- 22. Saenz, J. and Wang, T. (2006) The Role of PRXII in Radiation Resistant Breast Cancer. CSUDH student research day.

Evidence of commitment and success in mentoring students who have been advanced in their research activities.

| Name | Years | Activities |
|----------------|----------------------------|--|
| Ariana Sylvia | Fall 2016- Sp | Pharmacy school |
| | 2017 | |
| Hugo Mura | Fall 2015 - | MS- PhD program, CSULA |
| | 2017 | |
| Daniel Coello | Fall 2015 - | MS - PhD program CSULA |
| | 2017 | |
| Sheva Saif | 2016 | Ph.D. program University of Uhta |
| Luis Pena | Fall 2016 – | MS - PhD program CSU LA |
| | Sp 2018 | |
| Maria Nava | Fall 2016 – | Ph.D. University of Illinois – Urbana-Champaign |
| | Sp 2018 | |
| Anthony Diaz | Fall 2008 - | MS – PhD bridge program, Indiana-Purdue University |
| Mahyar | Fall 2011 – | Dental school |
| Kohanbash | Sp 2013 | |
| Parham Zamani | Sp 2011 – Sp 2013 | Medical school |
| Connie Liao | Sp 2009-Sp 2010 | Biotechnology graduate program, CSU Fullerton |
| Codale Johnson | Fall 2007-Sp | Clinical scientist, UCLA |
| Codate Johnson | 2008 | Chineur scientist, CCL/1 |
| Jonaton Saenz | Spring 2016 – Fall 2007 | Clinical Scientist, Cedar Sinai Hospital, Los Angeles. |

MAJOR AWARDS, FELLOWSHIPS, INVITED LECTURESHIPS, AND HONORS

| 2021 | Certificate in effective college instruction by the association of college and university educators |
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| | and the American council on education |
| 2017 | Invited speaker at European Cancer Summit |
| 2016 | Invited speaker at 14 th international conference on Drug Discovery |
| 2014 | Invited speaker at SUNY at Stony Brook |
| 2014 | Invited speaker at CSU Long Beach |
| 2009 | CSUDH phi kappa phi honor award |
| 2008 | CSUDH sigma Xi honor award |
| 2007 | Invited speaker at Colorado State University |
| 2008 | Selected participant in the 2008 current topics in genomic research at NIH |
| 2001 | Beckman Fellowship Award |
| 1999 | Sigma Xi Excellent in Research Award, State University of New York at Stony Brook |

MAJOR CAREER CONTRIBUTIONS AND LEGACY

I consider myself as a pioneer and expert in the biomedical research and education through interdisciplinary approaches as evidenced from my own education and training in chemistry, biochemistry, biophysics, biology and pharmacology, plus certificate in effective college instruction in united states.