Tan Weihong (M.D.)

Academic qualifications:

M. Sc.	1985	Chinese Academy of Sciences, China
Ph. D.	1987-1992	University of Michigan, Ann Arbor, Michigan

Previous academic positions held:

1996 to 2001 to 2003：Assistant, Associate and Full Professor, Department of Chemistry, Univ of Florida
2004 to 2007：U. of Florida Research Foundation Professor, College of Liberal Arts and Sciences
2014 to 2016: Associate Editor, Analytical Chemistry, ACS

Present academic position:

1996 to now: Faculty Member, McKnight Brain Institute, Center for Structural Biology
1999-now: Adjunct Distinguished Professor, Dept. of Chem, Hunan University
2001 to now: Associate Director, Center for Research at the Interface of Bio/Nano
2001 to now: Faculty Member, Health Cancer Center, Univ. of Florida
2002 to now: Faculty Member, UF Genetics Institute
2005-now: Adjunct Distinguished Professor, Dept. of Biomedical Eng. Hunan University
2008 to now: Professor, Department of Physiology and Functional Genomics, University of Florida
2008 to now: V. T. and Louis Jackson Professor, College of Liberal Arts and Sciences, U. of Florida
2008 to now: Member, Moffitt Cancer Center and Research Institute, Tampa, Florida,
2012 to now: University Distinguished Professor, University of Florida
2017 to now: Associate Editor, Journal of American Chemical Society, ACS

Previous relevant research work:

Focuses mainly on molecular sciences for biomedical studies and applications.
(Tan research group-https://tan.chem.ufl.edu/publications/)

Publication records:

Section A-Five most representative publications in the recent five years (* Corresponding Author)

1. Mingxu You, YifanLyu, Da Han, LipingQiu, Qiaoling Liu, Tao Chen, Cuichen Sam Wu, Lu Peng, Liqin Zhang, Gang Bao, and **Weihong Tan**, DNA Q1 probe for monitoring dynamic and transient molecular encounters on live cell membranes, Nature Nanotechnology, 12, 5, 453-459, 2017.
2. Liqin Zhang, Shuo Wan, Ying Jiang, Yanyue Wang, Ting Fu, Qiaoling Liu, Zhijuan Cao, LipingQiu，**Weihong Tan**, Molecular elucidation of disease biomarkers at the interface of chemistry and biology, Journal of the American Chemical Society, 139, 2532-2540, 2017.
3. Yongbo Peng, Zilong Zhao, Teng Liu, Xiong Li, Xiaoxiao Hu, Xiaoping Wei, Xiaobing Zhang and **Weihong Tan**, Smart human serum albumin-As2O3 nanodrug with self-amplified folate receptor-targeting ability for chronic myeloid leukemia treatment, Angewandte Chemie, International Edition, 56, 2017.
4. Defang Li, Jin Liu, Baosheng Guo, Chao Liang, Lei Dang, Cheng Lu, X He, Hilda Y S Cheung, Liang Xu, C. Lu, Bing He, Biao Liu, Atik Badshah Shaikh, Fangfei Li, Luyao Wang, Zhijun Yang, Doris Wai-Ting Au, Songlin Peng, Zong-Kang Zhang, Baoting Zhang, Xiaohua Pan, Airong Qian, Peng Shang, Lianbo Xiao, Baohong Jiang, Chris Kong-Chu Wong, Jiake Xu, ZhaoxiangBian, Zicai Liang, Dean Guo, Hailong Zhu, **Weihong Tan**, Aiping Lu, and Ge Zhang, Osteoclast-derived exosomal miR-214-3p inhibits osteoblastic bone formation, Nature Communications,7, 10872, 2016.
5. Da Han, Cuichen Wu, Mingxu You, Tao Zhang, Shuo Wan, Tao Chen, Liping Qiu, Zheng, Hao Liang and **Weihong Tan**, A cascade reaction network mimicking the basic functional steps of acquired immune response, Nature Chemistry, 2015, 7, 835-841.

Section B - Five representative publications beyond the recent five-year period with the latest publication entered first

6. Yifan Lyu, Cuichen Wu, Charles Heinke, Da Han, Ren Cai, I-Ting Teng, Yuan Liu, Hui Liu, Xiao-Bing Zhang, Qiaoling Liu, **Weihong Tan**, Constructing smart protocells with built-in DNA computational core to eliminate exogenous challenge, Journal of the American Chemical Society, 2018
7. Hong Liang, Shan Chen, Peipei Li, Liping Wang, Jingying Li, Juan Li, Huang-Hao Yang, **Weihong Tan**, Nongenetic Approach for Imaging Protein Dimerization by Aptamer Recognition and Proximity-Induced DNA Assembly, Journal of the American Chemical Society, 2018, 140(12), 4186-4190
8. Qian Dong, Xuewei Wang, Xiaoxiao Hu, Langqiu Xiao, Liang Zhang, Lijuan Song, Minglu Xu, Yuxiu Zou, Long Chen, Zhuo Chen, **Weihong Tan**, Simultaneous Application of Photothermal Therapy and an Anti‐inflammatory Prodrug using Pyrene–Aspirin‐Loaded Gold Nanorod Graphitic Nanocapsules, Angewandte Chemie, 2018, 130(1), 183-187
9. Kasipandi Vellaisamy, Guodong Li, Chung-Nga Ko, Hai-Jing Zhong, Sarwat Fatima, Hiu-Yee Kwan, Chun-Yuen Wong, Wai-Jing Kwong, **Weihong Tan**, Chung-Hang Leung, Dik-Lung Ma Cell imaging of dopamine receptor using agonist labeling iridium (iii) complex, Chemical Science, 2018
10. Chao Liang, Baosheng Guo, Heng Wu, Ningsheng Shao, Defang Li, Jin Liu, Lei Dang, Cheng Wang, Hui Li, Shaohua Li, Wing Ki Lau, Yu Cao, Zhijun Yang, Cheng Lu, Xiaojuan He, D W T Au, Xiaohua Pan, Bao-Ting Zhang, Changwei Lu, Hongqi Zhang, Kinman Yue, Airong Qian, Peng Shang, Jiake Xu, Lianbo Xiao, Zhaoxiang Bian, **Weihong Tan**, Zicai Liang, Fuchu He, Lingqiang Zhang, Aiping Lu & Ge Zhang Aptamer-functionalizing lipid nanoparticles targeting osteoblasts as a novel RNA interference-based bone anabolic strategy, Nature Medicine, 21, 288-294 (2015).

Award:

Elected to the Chinese Academy of Sciences, 2015
HHMI Distinguished Mentor Award, 2014
University Postdoc Mentor Award, 2014
ACS Florida Achievement Award, American Chemical Society Florida Section, 2012[6]
Iddles Lecturer for 2012, University of New Hampshire, 2012
University of Florida Distinguished Professor, University of Florida, 2012 to now
Howard Hughes Medical Institute Distinguished Mentor Award, University of Florida, 2010
Senior Fellow Award, Japan Society of Science and Technology, Tokyo University, 2010
National Distinguished experts, China, 2009 to now
V. T. and Louis Jackson Professor, Endowed Chair Professorship at University of Florida, 2008 to now

Patent:

US patent:

1. Nongenetic Approach for Imaging Protein Dimerization by Aptamer Recognition and Proximity-Induced DNA Assembly. Liang, H; Chen, S; Li, PP; Wang, LP; Li, JY; Li, J; Yang, HH; **Tan, WH**. Journal of the American Chemical Society, 4186-4190. DOI: 10.1021/jacs.7b11311
2. Fluorinated DNA micelles: synthesis and properties. Zou, JM; Jin, Ch; Wang, RW; Kuai, HL; Zhang, LL; Zhang, XB; Li, J; Qiu, LP; **Tan, WH**.
   Analytical Chemistry, 6843-6850. DOI:10.1021/acs.analchem.8b01005
3. DNA-based dynamic reaction network. Fu, T; Lyu, YF; Liu, H; Peng, RZ; Zhang, XB; Ye, M; **Tan, WH**. Analyst, accepted

China patent:

1. 一种检测胰腺导管癌的核酸适配体、试剂盒及方法。**谭蔚泓**、赵子龙、武晓秋、叶茂、白华荣 发明专利, 201510066356X

2. 一种检测赭曲霉素A的胶体金免疫试剂盒及其制备方法。常荣山、**谭蔚泓**，发明专利, ZL 201410031991X

3. 一种核酸适配体制备治疗多发性骨髓瘤的药物或制品的用途，刘静、**谭蔚泓**、叶茂、宋建辉、戴红娟，发明专利, ZL 2013103430098

4. 一种具有光磁双重加密功能的纳米材料及其制备方法和应用，陈卓、聂祥坤、**谭蔚泓**、徐逸婷，发明专利, ZL 2013104161898

5. 一种金石墨烯复合纳米材料的制备方法，陈卓、边霞、谭蔚泓，发明专利, ZL 2013107295076
6. 一种检测黄曲霉素B1的胶体金免疫试剂盒及其制备方法，常荣山、**谭蔚泓**，发明专利, ZL 2014100321591
7. 一种核酸适配体及其制备治疗白血病的药物或制品的用途，**谭蔚泓**、叶茂、刘静、宋建辉、戴红娟，发明专利, ZL 2013103447281
8. 基于核酸适配体的层析法检测试剂盒及其制备方法和检测方法，**谭蔚泓**、常荣山、蒋健晖，发明专利, ZL 2013100127510
9. 一种用于外周血中循环癌细胞的特异性捕获的装置及方法，**谭蔚泓**、蒋健晖、陈卓、吕一帆，发明专利, ZL 2012101931459
10. 核酸适体及其衍生物的用途，谭蔚泓、上官棣华，发明专利, ZL 2009100830800
11. 一种检测组氨酸标签重组蛋白的核酸适配体分子信标探针及其检测方法，**谭蔚泓**、张晓兵、谭晓红、丁玎，发明专利, ZL 201210193143X
12. 一种用于靶向治疗的核酸载药系统及其制备方法，**谭蔚泓**、朱贵志，发明专利, ZL 2012101931444