NSF BIOGRAPHICAL SKETCH

NAME: Wang, Yong

NSF ID:

POSITION TITLE & INSTITUTION: Professor, Penn State

A. PROFESSIONAL PREPARATION

INSTITUTION	LOCATION	MAJOR / AREA OF STUDY	DEGREE (if applicable)	YEAR YYYY
Jilin University	Changchun	Environmental Chemistry	BS	1995
Chinese Academy of Sciences	Dalian	Chemical Engineering	MS	1998
Duke University	Durham	Biomedical Engineering	PHD	2004

B. APPOINTMENTS

2016 - Professor, Penn State
2013 - 2016 Associate Professor, Penn State
2011 - 2012 Associate Professor, University of Connecticut
2006 - 2011 Assistant Professor, University of Connecticut
2004 - 2006 Postdoctoral Research Associate, Duke University

C. PRODUCTS

Products Most Closely Related to the Proposed Project

1. Shi P, Zhao N, Coyne J, Wang Y. DNA-templated Synthesis of Biomimetic Cell Wall for Nanoencapsulation and Protection of Mammalian Cells. Nature communications. 2019 May 20; 10:2223.
2. Lai J, Abune L, Zhao N, Wang Y. Programmed Degradation of Hydrogels with a Double-Locked Domain. Angew Chem Int Ed Engl. 2019 Feb 25;58(9):2820-2825. PubMed PMID: 30569555; PubMed Central PMCID: PMC6379111.
3. Shi P, Zhao N, Lai J, Coyne J, Gaddes ER, Wang Y. Polyvalent Display of Biomolecules on Live Cells. Angew Chem Int Ed Engl. 2018 Jun 4;57(23):6800-6804. PubMed PMID: 29380466; PubMed Central PMCID: PMC5976537.
4. Wang Y. Programmable hydrogels. Biomaterials. 2018 Sep;178:663-680. PubMed PMID: 29549970; PubMed Central PMCID: PMC6054804.
5. Chen N, Zhang Z, Soontornworajit B, Zhou J, Wang Y. Cell adhesion on an artificial extracellular matrix using aptamer-functionalized PEG hydrogels. Biomaterials. 2012 Feb;33(5):1353-62. PubMed PMID: 22079002.

Other Significant Products, Whether or Not Related to the Proposed Project

1. Chen N, Shi X, Wang Y. Molecularly Regulated Reversible DNA Polymerization. Angew Chem Int Ed Engl. 2016 Jun 1;55(23):6657-61. PubMed PMID: 27100911; PubMed Central PMCID: PMC4884157.
2. Li S, Gaddes ER, Chen N, Wang Y. Molecular encryption and reconfiguration for remodeling of dynamic hydrogels. Angew Chem Int Ed Engl. 2015 May 11;54(20):5957-61. PubMed PMID: 25808026.
3. Battig MR, Huang Y, Chen N, Wang Y. Aptamer-functionalized superporous hydrogels for sequestration and release of growth factors regulated via molecular recognition. Biomaterials. 2014 Sep;35(27):8040-8. PubMed PMID: 24954732.
4. Zhang Z, Chen N, Li S, Battig MR, Wang Y. Programmable hydrogels for controlled cell catch and release using hybridized aptamers and complementary sequences. J Am Chem Soc. 2012 Sep 26;134(38):15716-9. PubMed PMID: 22970862.
5. Battig MR, Soontornworajit B, Wang Y. Programmable release of multiple protein drugs from aptamer-functionalized hydrogels via nucleic acid hybridization. J Am Chem Soc. 2012 Aug 1;134(30):12410-3. PubMed PMID: 22816442.

D. SYNERGISTIC ACTIVITIES

1. Awards/Honors: NSF CAREER Award (2010); NSF INSPIRE Award (2012); Fellow of American Institute for Medical and Biological Engineering (2017)
2. Editorial Boards: ACS Biomaterials Science & Engineering; Journal of Tissue Science & Engineering; Scientific Reports.
3. Professional Societies: Biomedical Engineering Society; Society for Biomaterials