## Christopher M. Hadad Current Research Funding (December 11, 2018)

## **Current Research Support**

Collaborative Research: The chemistry of lignin's photochemical transformation in the environment: implications for global carbon cycling

National Science Foundation (CHE-1609889)

P. G. Hatcher (PhD, Old Dominion, lead PI), S. Myneni (PhD, Princeton, co-PI), <u>C. M. Hadad</u> (PhD, co-PI)

\$180,000 (total costs for OSU)

8/1/2016 - 7/31/2019

SusChEM: Tunable molecular mimics of MoS<sub>2</sub> edge sites for electrocatalytic hydrogen production

National Science Foundation (CHE-1566106)

Y. Wu (PhD, lead PI) and <u>C. M. Hadad</u> (PhD, co-lead PI)

\$427,000 (total costs)

9/1/2016 - 8/31/2019

Development of BPA-free coatings for extended shelf life of canned foods
National Institute of Food and Agriculture (20176701726469)
M. A. Pascall (PhD, lead PI), G. S. Frankel (PhD, co-PI), C. M. Hadad (PhD, co-PI)
\$454,964 (total costs)
6/1/2017 – 5/31/2020

Preparation of Aza-Peptide Ketones as Protease Inhibitors
Technology Commercialization Office, Ohio State University
O. Dogan Ekici (PhD, lead PI) and <u>C. M. Hadad</u> (PhD, co-PI)
\$100,000 (total costs)
12/1/2018 – 5/31/2019

Development of a novel treatment for organophosphorus chemical nerve agent poisoning Ralph and Marian Falk Medical Research Trust Catalyst Awards Program (20012328)

<u>C. M. Hadad</u> (PhD, lead PI), C. A. McElroy (PhD, co-I), C. S. Callam (PhD, co-I) \$300,000 (total costs)

11/30/2018 – 11/29/2019

## **Pending Grant Submissions**

Development and evaluation of biodegradable polypropylene for food packaging
National Institute of Food and Agriculture, in review
M. A. Pascall (PhD, lead PI), <u>C. M. Hadad</u> (PhD, co-PI), V. B. Alvarez (PhD, co-PI), J. Li
(PhD, co-PI), Y. Xia (PhD, co-PI)
\$998,231 (total costs)
6/1/2019 – 5/31/2023

The Safety and Eco-Friendly Evaluation of a Biodegradable Polypropylene Film Developed for Food Packaging Applications

US Department of Agriculture, AFRI program, in review

M. A. Pascall (PhD, lead PI), <u>C. M. Hadad</u> (PhD, co-PI), J. Li (PhD, co-PI), Y. Xia (PhD, co-PI) \$499,998 (total costs)

6/1/2019 - 5/31/2022

Improved Therapeutics for the Resurrection of the Aged Form of Acetylcholinesterase National Institutes of Health (CounterACT), in review

C. M. Hadad (PhD, lead PI), C. A. McElroy (PhD, co-I), C. S. Callam (PhD, co-I), C. L. Cadieux (PhD, co-I, USAMRICD)

\$1,292,835 (total costs)

07/01/2019 - 06/30/2022

Tunable molecular mimics of MoS<sub>2</sub> edge sites for electrocatalytic hydrogen production National Science Foundation, in review

Y. Wu (PhD, lead PI) and C. M. Hadad (PhD, co-lead PI)

\$524,007 (total costs)

9/1/2019 - 8/31/2022

Novel Compounds to Treat the Toxicological Causes Associated with Organophosphate Pesticide Poisoning

National Institutes of Environmental Health Sciences (1-R01-ES030826-01), in review C. M. Hadad (PhD, lead PI), C. A. McElroy (PhD, co-I), C. S. Callam (PhD, co-I), J. M. McGuire (co-I, ECBC)

\$2,367,892 (total costs)

07/01/2019 - 06/30/2024

## **Recently Ended Grant Support**

Reactivation of Aged Acetylcholinesterase: Design and Development of Novel Therapeutics against Exposure to Organophosphorus Chemical Nerve Agents

National Institutes of Health (CounterACT, 1U01–NS087983)

C. M. Hadad (PhD, lead PI), O. Dogan Ekici (PhD, co-PI), R. J. Yoder (PhD, co-PI), C. A. McElroy (PhD, co-PI)

\$1,129,636 (total costs)

8/15/2014 - 7/31/2017

Gated molecular baskets as new dynamic hosts for investigating the recognition and hydrolysis of toxic organophosphorus compounds

Defense Threat Reduction Agency (HDTRA1-11-1-0042)

J. D. Badjic (PhD, lead PI) and C. M. Hadad (PhD, co-PI)

\$2,407,303 (total costs)

8/22/2011 - 8/21/2017

Rational engineering and modification of PON1 and OPH for altered substrate specificity and improved drug-like properties (Subcontract from Center for Catalytic Bioscavenger Medical Defense Research II: Discovery, Formulation and Preclinical Evaluation)

National Institutes of Health, Center of Excellence Proposal (U54-NS058183)

D. M. Cerasoli (USAMRICD) and T. J. Magliery (OSU), lead PIs

T. J. Magliery (lead PI for Project 2 of CoE), <u>C. M. Hadad</u>, and P. G. Wang (Georgia State) \$2,914,666 (total costs for OSU)

10/01/2012 - 9/30/2015

Catalytic Antibody Vaccine Development for Nerve Agent Hydrolysis

Defense Threat Reduction Agency (HDTRA1-13-C-0062)

\$171,575 (total costs for OSU as sub-contract from MRIGlobal)

8/19/2013 - 8/18/2014

D. Read (PhD, MRIGlobal, lead PI), C. M. Hadad (PhD, PI at OSU), C. A. McElroy (PhD, co-I)

Reactivation of Aged Nerve Agent-AChE Adducts

Defense Threat Reduction Agency, sub-contract from USAMRICD (Sean Palmer, lead PI)

C. M. Hadad

\$471,834 (total costs for sub-contract)

5/14/2010 - 5/13/2013

Biodistribution of Biological Agents by Electron Paramagnetic Resonance Imaging

Defense Threat Reduction Agency

C. M. Hadad

\$589,328 (total costs)

6/14/2010 - 5/13/2013

Ultrafast Time-Resolved Studies of Reactive Intermediates

National Science Foundation (DMR-1212842)

C. M. Hadad (PhD, lead PI) with M. S. Platz (PhD)

\$634,000 (total costs)

9/1/2012 - 8/31/2016

Ultrafast Time-Resolved Studies of Reactive Intermediates

National Science Foundation (CHE-0743258)

C. M. Hadad with M. S. Platz

\$820,000 (total costs)

2/1/2008 - 1/31/2013