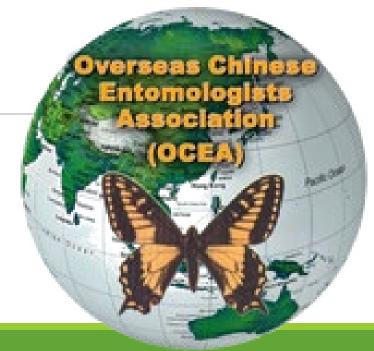


OVERSEAS CHINESE ENTOMOLOGISTS ASSOCIATION (OCEA) HIGHLIGHTS

Ting Li Vice President of OCEA

DEPARTMENT OF BIOLOGICAL SCIENCES
ALABAMA STATE UNIVERSITY



Agenda

TUESDAY, November 7, 2023 07:00 PM Introduction (Fang Zhu) 07:10 PM OCEA Highlights (Ting Li) Treasurer Report (Fang Zhu) 07:30 PM 07:35 PM Career Development Strategies (Fang Zhu) Research talk "The genomic basis of evolutionary novelties in a leafhopper" 07:50 PM (Zheng Li, NSF fellow at University of Texas at Austin) 08:10 PM Introducing New Officers (President, Ting Li; vice President, Hongmei Li-Byarlay; Secretary, Hua Yan) Donation and Membership Fee (HM Li) 08:15 PM 08:30 PM Self-introduction and open discussion (Attendees) 09:00 PM Closing remarks

Outline

1 About OCEA and Acknowledgements

2 News and Achievement Highlights

3 Job Announcements

About OCEA

- CEA is a non-profit organization dedicated to promoting scholarly exchange and collaboration among Chinese entomologists around the world
- ➤ OCEA was established in 1998 and we meet annually during the annual meeting of the Entomological Society of America
- ➤ Our membership is about 200. We have a WeChat social media group and a mail list, through which members conduct their communications.

OCEA new website: www.theocea.org



OCEA 2016 Group Photo at Orlando, FL



OCEA 2017 Group Photo at Denver, CO



OCEA 2022 Group Photo at Vancouver, Canada

President: Fang (Rose) Zhu (Penn State University)



Fang Zhu (left) and Xuguo Zhou (right)

Acknowledgements

★ OCEA founders and early contributors: Drs. Dangsheng Liang, Zhiyong Huang, Barry Bai, Tongxian Liu, Haobo Jiang, Changlu Wang, etc.

Previous and current officers including presidents, vice presidents, treasurers, secretaries 1998-2022 (www.theocea.org)

--Current officers:

President and Treasurer: Fang (Rose) Zhu (Penn State University) (2022-2023)

Former president: Dr. Qian Sun (2021-2022)

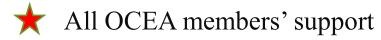
Dr. Xuguo Zhou (2020-2021)

Dr. Changlu Wang (2018-2019)

Vice president: Ting Li (Alabama State University) (2022-2023)

Secretary: Hongmei Li-Byarlay (Central State University) (2022-2023)

Website Manager: Qian (Karen) Sun (Louisiana State University) (2021-2023)



Apologies for not including all information from all labs of OCEA members

News and Achievement Highlights

- Highlighted publications
- Grants
- Awards
- Promotions
- Mentorship
- New positions

Research Entomologist Jian Chen

Former OCEA President 2011-2012

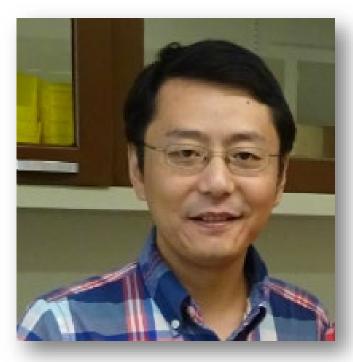
- Lead Scientist for the ARS ant project in Stoneville, Mississippi.

 Lab website: https://www.ars.usda.gov/people-locations/person/?person-id=35260
- Publications (2022-2023)
 Published >6 peer-reviewed articles in Insects, Toxins, Molecules, Front.
 Plant Science, etc.
- Patent applications filed: Research consistently supported by USDA ARS (2020-2021), NSF (2022-2024) grants, etc.
- External funding: Served as a Co-PI for an NSF fund entitled "African lungfish CtxA, a toxin for skin defense during estivation". ARS received \$40,000.
- Services: Member of ARS Chemical Patent Committee. Member of Federal Interagency Committee on ITAP.



USDA-ARS

Professor Zhiqiang Cheng



University of Hawaii at Manoa

• Lab website: https://cms.ctahr.hawaii.edu/cheng

- Publications (2022-2023)
 - Published 5 peer-reviewed articles in Pedosphere, Biodiversity Data Journal, Plant Protection Science, Florida Entomologist, and Journal of Economic Entomology.
- Grants: On average, ~\$250,000/year from USDA, etc.
- **Promotion:** Dr. Cheng was promoted to full professor effective August 2023.
- Graduated student achievements in recent two years

 Mason Russo (Western IPM Center 2023 Student Fellowship \$1,000 for travel);

Kenneth Choi (team member, 2021 ESA National Champions of the Entomology Games Competition).

Professor Ke Dong



Duke University

• Lab website: https://kedonglab.biology.duke.edu/people/

• Publications (2022-2023)
Published 9 peer-reviewed articles in Nature, ACS Infectious Diseases, Insect Biochemistry and Molecular Biology, Pesticide Biochemistry and Physiology, etc.

 Graduated students and student achievements in recent two years

Wilson Valbon (Ph.D), a postdoc, recently accepted a Research Entomologist position at Bayer Crop Science

Regents Professor and Endowed Chair in Biotechnology Haobo Jiang Former OCEA President 2013-2014



Oklahoma State University

Two GRA positions are open in Dr. Jiang's lab in the OSU Department of Entomology and Plant Pathology.

- Lab website: https://experts.okstate.edu/haobo.jiang
- Publications (2022-2023)

 Twelve peer-reviewed articles in Genes (1), IBMB (4), Front Immunol (2), Insect Sci (1), Nat Comm (1), J Innate Immunity (2), and Science Advances (1). IF: 3.2–16.6 (6.7)
- •Grants and patents/Awards
 NIH NIAID R21 grant: \$416,000, 2023.10 to 2025.9
- •Graduated students and student achievements in recent two years
 Zelong Miao, Qiao Jin, and Tisheng Shan obtained Ph.D. degrees;
 Dr. Shan has won Chinese Government Award for Outstanding Selffinanced Students Abroad

- 1. Oppert et al. 2022. The genome of *Rhyzopertha dominica* (Fab.) (Coleoptera: Bostrichidae): adaptation for success. *Genes* 13, 446. (IF: 3.2)
- 2. Jin et al. 2022. Cleavage activation and functional comparison of *Manduca sexta* serine protease homologs SPH1a, SPH1b, SPH4, and SPH101 in conjunction with SPH2. *Insect Biochem. Mol. Biol.* 144, 103762. (IF: 3.8)
- 3. Wang et al. 2022. The *Micrococcus luteus* infection activates a novel melanization pathway of cSP10, cSP4, and cSP8 in *Helicoverpa armigera*. *Insect Biochem. Mol. Biol*. 145, 103775. (IF: 3.8)
- 4. Chen et al. 2022. Nitric oxide-induced calcineurin A mediates antimicrobial peptide production through the IMD pathway. *Front. Immunol*. 13, 905419. (IF: 7.3)
- 5. Wang et al. 2022. A mechanistic analysis of bacterial recognition and serine protease cascade initiation in larval hemolymph of *Manduca sexta*. *Insect Biochem. Mol. Biol.* 148, 103818. (IF: 3.8)
- 6. Miao et al. 2022. Genome-wide identification, classification, and expression profiling of serine esterases and other esterase-related proteins in the tobacco hornworm, *Manduca sexta*. *Insect Sci*. 30, 338–350. (IF: 4.0)
- 7. Kariyawasam et al. 2022. Preferential binding of DAP-PGs by major peptidoglycan recognition proteins found in cell-free hemolymph of *Manduca sexta*. *Insect Biochem. Mol. Biol*. 148, 103827. (IF: 3.8)
- 8. Yin et al. 2022. Dual roles and evolutionary implications of P26/poxin in antagonizing intracellular cGAS-STING and extracellular melanization immunity. *Nat. Comm.*, 13, 6934. (IF: 16.6)
- 9. Shan et al. 2022. Serine protease networks mediate immune responses in extra-embryonic tissues of eggs in the tobacco hornworm, *Manduca sexta*. *J. Innate Immun*., 15, 365–379. (IF: 5.3)
- 10. Jin et al. 2023. Two clip-domain serine protease homologs, cSPH35 and cSPH242, act as a cofactor for prophenoloxidase-1 activation in *Drosophila melanogaster*. *Front. Immunol*. 14, 1244792 (IF: 7.3)
- 11. Miao, Z., Xiong, C., Wang, Y., Shan, T., Jiang, H., 2024. Identification of immunity-related genes distinctly regulated by *Manduca sexta* Spätzle-1/2 and *Escherichia coli* peptidoglycan. *J. Innate Immun*., in press (IF: 7.3)
- 12. Shan, T., Wang, Y., Bhattarai, K., Jiang, H., 2024. An evolutionarily conserved serine protease network mediates melanization and Toll activation in *Drosophila*. *Sci. Adv.*, in press (IF: 13.6)

President and Founder of Apex Bait Technologies, Inc. Dangsheng Liang The 1st OCEA President 1998-1999



Apex Bai Technologies, Inc.

Company website: https://www.apexbait.com/

Current Grant Supports

NIH: Development of a novel gel bait for the control of mosquitoes in urban environments. \$250,000.00

USDA: Snulex: A Semiochemical Lure and Phagostimulant Enhanced Novel Bait for Controlling Snails and Slugs. \$133,000.00

USDA: APEX-FLB: A Safe and Inexpensive Formulation for the Control of Stable

Fly in Livestock Industries. \$650,000.00

Job opening (if applicable)

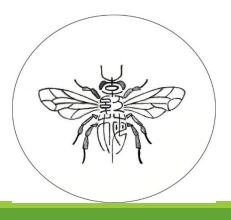
Entomologist: with experience in behavior of flies and mosquitoes preferred. Chemical Ecologist: with strong background in organic chemistry and experience working with insects.

All applicants with MS or Ph.D. degrees welcome. We can apply for H1-b for outstanding foreign applicants.

Associate Professor Hongmei Li-Byarlay



Central State University (CSU) in Ohio



• Lab website: https://sites.google.com/view/libyarlaybee

Publications (2020-2022)

Published 7 peer-reviewed articles in BMC Genomics, Insectes Sociaux, Applied Entomology and Zoology, Journal of advanced research, & Ecotoxicology and Environmental Safety.

• Grants and patents/awards

- → USDA NIFA Evans-Allen grant
- → USDA Capacity Building Grant
- → USDA NEXTGEN Training grant
- → 2023 Association for Women in Science Zenith Award
- → 2023 John V. Osmun Alumni Professional Achievement Award, Purdue University
- → 2023 Presidential Faculty of Excellence in Teaching, Research, and Service, CSU
- → President-Elect of International Branch, ESA, 2023

Graduated students and student achievements in recent two years

- 2 students are in graduate school or medical schools
- 3 undergrad students are the first author or co-authors in our peer-reviewed publications

We are hiring a postdoc and welcome visiting scholars!

1 postdoc scholar to study ecology of silflower and pollinator population

Qualifications: Experiences in ecology, entomology, behavior, evolution in plants or bees

Start date: Spring 2024

Contact: Dr. Hongmei Li-Byarlay (hli-byarlay@centralstate.edu)

We also host visiting scholars with your own funding support or work on a postdoc grant proposal (NSF or USDA) together with potential candidates.

Professor Xianchun Li



The University of Arizona

- Lab website: https://cals.arizona.edu/ento/content/xianchun-li
- Publications (2022-2023)
 Published 13 peer-reviewed articles in *Int. J. Biol. Macromol.*,
 J. Agric. Food Chem., Divers. Distrib., Toxins, Pest Manag. Sci., Insect Sci., etc.
- Grants and patents/awards
 Research consistently supported by USDA, NIH NIAID, Cotton
 Incorporate, Syngenta, Dupont, etc.
- Graduated students and student achievements in recent two years
 - Dr. Xiongya Wang, Researcher, Henan Academy of Science, China

Assistant Professor Ting Li



Alabama State University

Publications (2022-2023)
 Published ~10 peer-reviewed journal articles.

- Grants and patents/awards
 Research projects are supported by Alabama State University,
 NIH, NSF, and American Cancer Society
- •Graduated students and students in recent two years
- ~ 5 Undergraduate students 1 Master student

L.D. Newsom Endowed Professor Fangneng Huang

Former OCEA President 2016-2017



https://www.lsu.edu/departments/entomology/huangcv.html

Publications (2022-2023)

Published 8 peer-reviewed articles in Entomologia Generalis, Journal of pest science, etc.

Editor for two special issues: Frontiers in Insect Science: Focus on Fall Armyworm and Fall armyworm: Managing a significant threat to global food security. CABI.

• Graduated students and student achievements in recent two years

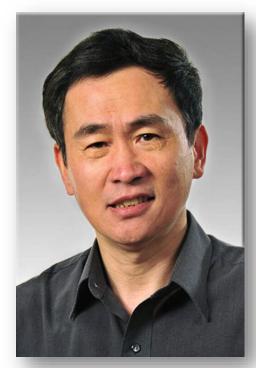
Former student, Dr. Fei Yang accepted a faculty position at the University of Minnesota



Louisiana State University

Professor Qi-sheng Song

Former OCEA President 2008-2009



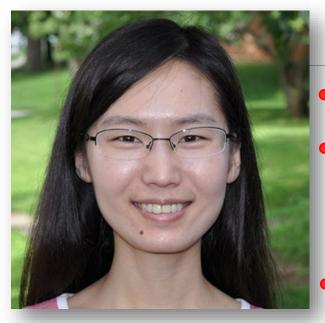
University of Missouri

- Lab website: https://cafnr.missouri.edu/person/qisheng-song/
- Publications (2022-2023)

 Published 32 peer-reviewed articles (20 with IF >3.0) in Nucleic Acids Res, Sci Total Environ, Chemosphere, IJBM, BMC Biol, Zool Res, F Cell Inf Microbiol, F Endocrinol, Ecotox Env Safety, IJMS, Toxins, etc.
- Graduated students in recent two years

 Jingjing Li, PhD, Graduated in July 2023, now postdoc in U Maryland
 Letong Yin, MS, Graduated in May 2022, now PhD student in Iowa
 State U

Assistant Professor, Qian "Karen" Sun



Louisiana State University (LSU)

Former OCEA President 2021-2022

- Lab website: https://www.qiansunlab.com
- Publications (2022-2023):

Five publications in J. Econ. Entomol., Sci. Adv., Environ. Entomol., Insects, Crop Prot.

Grant:

Louisiana Department of Agriculture and Forestry (\$50,000)

• Graduated student:

Paula Castillo, PhD, now postdoc at Tulane University

Major student achievements:

Myriel Green and Payton Floyed received undergraduate research grants from LSU (\$10,000 in total)

We are recruiting graduate students!

1 PhD student to study social behavior in termites

Qualifications: Experiences in molecular biology or chemical ecology, and interests in social insects or urban entomology

Start date: Summer or fall 2024

Contact: Dr. Qian Sun (qsun@lsu.edu); please include your

CV and a brief description of research interests.



Professor Changlu Wang

Former OCEA President 2018-2019



• Publications (2023)
Published ~10 peer-reviewed articles, book and book chapters

• Awards
Crown Leadership" award from Pest Control

PCT

CROWN LEADERSHIP AWARD

Dr. Changlu Wang

Known for his work ethic and dedication to entomology, this researcher has earned respect from his peers and the industry for his commitment to urban pest management.



Rutgers University

OCTOBER 2023

Professor Ping Wang



Cornell University

Lab website: https://blogs.cornell.edu/wang/

Postdoc position available:

- Research: to understand the molecular genetics of insect resistance to toxins from *Bacillus thuringiensis* (Bt).
- Requirement: 1) Research background in insect genetics, molecular biology and/or biochemistry; 2) Familiar with research of insect resistance to Bt toxins; 3) Experience in bioinformatics will be advantageous.

Current research grants:

- USDA AFRI Foundational Program: 2023-2026
- USDA NIFA BRAG Program: 2021-2024
- USDA AFRI Foundational Program: 2019-2023

Professor Zhiyong Xi – Founder & Chairman of Guangzhou Wolbaki Biotech Co. Ltd.

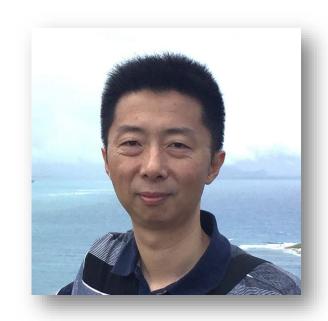


Michigan State University

- Lab website: https://mmg.natsci.msu.edu/people/faculty/xi-zhiyong/
- Publications (2022-2023)
 Published >12 peer-reviewed articles in Commun. Biol, Parasit Vectors, PNAS, Pest Manag. Sci., PLoS Negl. Trop. Dis. etc.
- Job Announcement

Postdoc and graduate student positions open in 2024

Assistant Professor Hua Yan



University of Florida

- Lab website: https://biology.ufl.edu/hua-yan/
 https://yanlab.biology.ufl.edu
- Publications (2022-2023)
 Published articles in *Science* and *Bio-protocol*.
- Grants and patents/awards

 Research supported by Federal grants such as NIH, CAMTech, etc.
- Graduated students and student achievements in recent two years
 NIH T32 fellowship to Kayli Sieber
- My lab is recruiting 1-2 PhD students

 Application deadline: December 1st, 2023

 Email me if you plan to apply: <hua.yan@ufl.edu>

University of Kentucky*

New job announcement:

Postdoc: 1

Student: 1-2

"*": C.W. Kearns, C.L. Metcalf and W. P Flint Endowed Chair in Insect Toxicology, Department of Entomology, School of Integrative Biology, University of Illinois Urbana-

Champaign (Jan. 1, 2024).

Professor Xuguo Zhou

Former OCEA President 2020-2021

- Lab website: https://entomology.ca.uky.edu/person/xuguozhou
- Publications (2022-2023)
 Published 50 plus peer-reviewed journal articles.
- **Grants and patents/awards**Thomas Poe Cooper Research Award, University of Kentucky (in recognition of outstanding career research achievement by a member of the Martin-Gatton College of Agriculture, Food and Environment faculty)

Graduated students and students in recent two years



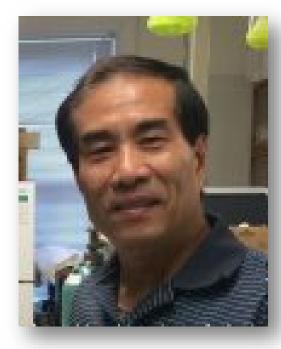
Jizhe Shi PhD in Entomology May 2023



Anugerah Fajar MS in Entomology December 2023

Senior Research Scientist Aijun Zhang

Former OCEA President 2004-2005



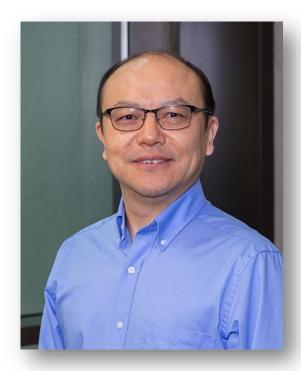
USDA-ARS

- Lab website: https://www.ars.usda.gov/people-locations/person?person-id=10282
- Publications (2022-2023)

Published 7 peer-reviewed articles

• Grants and patents/awards (2022-2023)
1 U.S. and 1 W.O. Patents. DOD DWFP WRAIR Grant

Professor Jinsong Zhu



Virginia Tech University • Lab website:

https://www.biochem.vt.edu/people/faculty/jinsong-zhu.html

Grants and patents/awards

NIH R01AI099250

Molecular mechanism of juvenile hormone action in mosquito reproduction

Graduated students and students in recent two years

1 Postdoc, 1 Ph.D. student, 1 M.S. student, 2 undergraduate students.

University Distinguished Professor Kun Yan Zhu

Former OCEA President 2010-2011



Kansas State University

- Lab website: https://entomology.k-
 state.edu/people/faculty/Zhu-Kun-Yan.html
- Publications (2022-2023):
 28 peer-reviewed articles, including one in *Annual Review of Entomology* (IF=23.8)

Editor-in-Chief, *Pesticide Biochemistry and Physiology* (to start on January 1, 2024)

Grants and contracts (2022-2023):

7 grants totaling >\$2 million (served as PI or Co-PI)

• Graduate students: currently 6. Many have received competitive grants (e.g., NIFA Pre-doctoral Fellowship) and prestigious awards (e.g., JH Comstock Award from NCB)

Assistant Professor Fang Zhu

OCEA President 2022-2023



Penn State University

- Lab website: https://sites.psu.edu/itox2018/
- **Publications (2022-2023)**Published **5** peer-reviewed articles in *Front. Insect Sci.*, *Pest Manag. Sci.*, *Insects*, etc.
- Graduated students and student achievements during 2022-2023
 - →One MS student and three undergraduate students graduated in 2023
 - →Sonu Koirala B K (PhD student) won ESA PBT Travel Award in 2023 (\$1,000); Won Ralph O. Mumma Graduate Award, Department of Entomology, Penn State, 2023-2024 (\$1,396)
 - → Casey Cruse (MS student) won 2nd place at 28th Annual GSD Research Expo, Penn State 2023 in March 2023
 - → Ziming He (Undergraduate student) won 2nd place at 28th Annual GSD Research Expo, Penn State 2023 in March 2023

Lead Scientist/Chemical Ecologist Junwei (Jerry) Zhu Former OCEA President 2017-2018



USDA ARS AMRU, Lincoln, NE

- Lab website: https://www.ars.usda.gov/people-locations/publications/?person-id=42125
- Publications (2022-2023)
 Published 6 peer-reviewed articles in Pest Management Science, Scientific Reports, J. Med Entomol. and J. Econ. Entomol., etc.
- Grants and patents/awards (2022-2023)

US patents

"Insect tape trap", 2022

"Compositions and methods for deterring oviposition by fruit flies", 2023

Awards

2022 APACE Applied Chemical Ecology Award (3rd Joint Meeting of ISCE-APACE) 2022 USDA Technology Transfer Award (Plains Area)

<u>Grants</u>

Research supported by Federal competitive grants such as NSF and USDA SBIRs, APHIS, and DWFP and US industries, etc., as well as from EU Cooperation in Sci. & Tech

New promotion

Dr. Haichuan Wang, Research Entomologist, USDA, Lincoln, NL

Dr. Chaoyang Zhao, Research Entomologist, USDA, Auburn, AL

