

PING KANG
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EDUCATION

- 01/2017-12/2022 Ph.D. Iowa State University, Ames IA, USA**
Major: Genetics (GPA: 3.87)
- 01/2008-08/2009 M.S. Eastern Kentucky University, Richmond, KY, USA**
Major: Mathematics and Statistics (GPA: 3.90)
- 02/2000-02/2002 Graduate Certificates Program at East China Normal University, Shanghai, China**
Major: Educational Psychology
- 09/1993-07/1997 B.S. East China Normal University, Shanghai, China**
Major: Biology

PROFESSIONAL POSITIONS

- 07/2021-present Iowa State University, Ames IA, USA**
Research Scientist III
Conduct independent projects studying the role of insect hormone PTTH in the regulation of lifespan and innate immunity.
- 01/2016-7/2021 Iowa State University, Ames IA, USA**
Assistant Scientist II
Conduct independent projects to investigate the role of Kr-h1 transcription factor in lipolysis, and perform genome-wide association study to dissect natural variation in autophagy regulation.
- 12/2009-11/2015 Brown University, Providence RI, USA**
Research Assistant
Assist with *Drosophila* aging research, data record/entry/ analysis, Mentor the student research projects.
- 01/2008-05/2009 Eastern Kentucky University, Richmond, KY, USA**
Graduate Teaching Assistant
Instruct Math labs and tutor students in Math tutoring center

07/1997-01/2004 Xin Long Middle School, Shanghai, China

Biology science teacher and psychology instructor (07/1997-08/2002)

Director of teaching and researching of Grade Six (08/2002-08/2003)

Director of school teaching and instruction (08/2003-01/2004)

MANUSCRIPTS IN PREPARATION

Genome-wide association analysis reveals genetic architecture underlying natural variation of autophagy regulation in *Drosophila*. To be submitted to *Frontiers in Aging*

Ping K., Axelle W., Mark B., Qiuhan J., Anne-Claire J., Nezis I., Wen H., Trudy M., Hua B.

PTTH regulates lifespan through innate immunity pathway in *Drosophila Melanogaster*. To be submitted to *The Proceedings of the National Academy of Sciences (PNAS)*.

Ping K., Peiduo L, Jinoh K, Marie B, Ankur K, Ting M, MaryJane S, Michael B. O, JoAnne P, Hua Bai

PUBLICATIONS

Kang P. 2023. Hormonal regulation of aging and homeostasis in *Drosophila melanogaster*. ProQuest (PhD thesis)

Miao T, Kim J, **Kang P.**, Fujiwara H, Hsu FF, Bai H. 2022. Acetyl-CoA-mediated autoacetylation of fatty acid synthase as a metabolic switch of de novo lipogenesis in *Drosophila*. *The Proceedings of the National Academy of Sciences (PNAS)*.

Birnbaum A, Sodders M, Bouska M, Chang K, **Kang P.**, McNeill E, Bai H. 2021. FOXO regulates neuromuscular junction homeostasis during *Drosophila* aging. *Frontiers in Aging Neuroscience*. doi.org/10.3389/fnagi.2020.567861.

Huang K, Miao T, Chang K, Kim J, **Kang P.**, Jiang Q, Simmonds AJ, Di Cara F, and Bai H. 2020. Impaired peroxisomal import in *Drosophila* oenocytes causes cardiac dysfunction by inducing upd3 as a peroxikine. *Nature Communications*. doi:10.1038/s41467-020-16781-w

Chang K#, **Kang P#.**, Liu Y, Huang K, Miao T, Sagona AP, Nezis IP, Bodmer R, Ocorr K, Bai H. 2019. TGF β -INHB/activin signaling regulates age-dependent autophagy and cardiac health through inhibition of MTORC2. *Autophagy*. (# co-first author)

Kang P., Chang K, Liu Y, Bouska M, Birnbaum A, Karashchuk G, Thakore R, Zheng W, Post S, Brent C, Li S, Tatar M & Bai H. 2017. *Drosophila* Kruppel homolog 1 represses lipolysis through interaction with dFOXO. *Scientific Reports*.

Zheng W, Rus F, Hernandez A, **Kang P**, Goldman W, Tatar M. 2018. Dehydration triggers ecdysone-mediated recognition-protein priming and elevated anti-bacterial immune responses in *Drosophila* Malpighian tubule renal cells. *BMC Biology*.

Bai H, Post S, **Kang P**, Tatar M. 2015. *Drosophila* longevity assurance conferred by reduced insulin receptor substrate *chico* requires 4E-BP. *PLoS One*.

Bai H, **Kang P**, Hernandez AM, Tatar M. 2013. Activin signaling targeted by insulin/dFOXO regulates aging and muscle proteostasis in *Drosophila*. *PLoS Genetics*. 9(11): e1003941.

Bai H, **Kang P**, Tatar M. 2012. *Drosophila* insulin-like peptide-6 (*dilp6*) expression from fat body extends lifespan and represses secretion of *Drosophila* insulin-like peptide-2 from the brain. *Aging Cell*. 11(6):978-85.

Lan Y., **Kang P**. 2003. How does the teacher encourage students to ask questions, and response to their questions during the class? *People Education*. Vol.13.

Lan Y., **Kang P**. 2003. The role of teachers in developing study habits of students. *Putuo Education*. Vol. 7.

CONFERENCE PRESENTATIONS

Ping Kang, MaryJane Shimell, Michael B. O'Connor, Hua Bai. 2020. Pttth regulates longevity and tissue aging through imd pathway in *Drosophila*. Cold Spring Harbor Aging Conference (virtual)

Ping Kang, MaryJane Shimell, Michael B. O'Connor, Hua Bai. 2019. Pttth regulates longevity and tissue aging through imd pathway in *Drosophila*. Midwest Aging Conference.

Ping Kang, MaryJane Shimell, Michael B. O'Connor, Hua Bai. 2019. Pttth regulates longevity and tissue aging through imd pathway in *Drosophila*. Insect Hormone Conference. Crete, Greece.

Kang P, Huang W, Mackay T and Bai H. 2018. Genome-Wide Association Analysis Reveals Novel Regulators of Basal Autophagy in *Drosophila*. 58th Annual *Drosophila* Research Conference. Philadelphia, PA.

Liu Y, **Kang P**, Bai H 2017 Genome-Wide analysis to reveal novel regulators of germline stem cell self-renewal and differentiation in *Drosophila*. Northern Iowa University Biology Research Symposium.

Mohamed F, **Kang P** and Bai H. 2016 The *Drosophila melanogaster* genetic reference panel. Iowa State University Research symposium.

Bai H, **Kang P**, Hernandez AM, Tatar M. 2014. TGF- β /Activin signaling targeted by insulin/dFOXO regulates muscle autophagy and protein homeostasis in Drosophila. Keystone Symposia. Steamboat Springs, CO.

Bai H, **Kang P**, Hernandez AM, Tatar M. 2013. TGF- β /Activin signaling, the downstream target of dFOXO, regulates longevity through muscle autophagy in Drosophila. 54th Annual Drosophila Research Conference. Washington DC.

Bai H, **Kang P**, Tatar M. 2012. Fat body-specific dilp6 over-expression extends lifespan and represses brain insulin secretion in Drosophila. The Aging, Biology of Gordon Research Conference, Ventura, CA.

Bai H, Yamamoto R, **Kang P**, Tatar M. 2011. Juvenile hormone regulation of lipid and carbohydrate metabolism in adult Drosophila. 52nd Annual Drosophila Research Conference. San Diego, CA.

Bai H, Yamamoto R, **Kang P**, Tatar M. 2010. Lifespan regulation by juvenile hormone of adult Drosophila. Molecular Genetics of Aging Conference. Cold Spring Harbor Laboratory, NY.

AWARDS

IGG travel awards at Iowa State University 2019

GPSS travel awards at Iowa State University 2019

International scholarship, Eastern Kentucky University, August 2008

International scholarship, Eastern Kentucky University, January 2009

Second place in teaching competition of Shanghai city, Shanghai, China 2002

Outstanding teacher of Xin Long Middle School, Shanghai, China 2001-2004

Outstanding student Scholarship, East China Normal University, Shanghai, China 1994

Outstanding student leadership, East China Normal University, Shanghai, China 1996

TEACHING AND MENTORING

Iowa State University

BIOL 114X

The Sky is Limit – Decoding the Genetic Mechanisms of Metabolism and Aging
(CO-Instructor 17 students)

Ames, IA

2022 Fall

Mentor for rotation graduate student

2016 – 2022

(Peiduo Liu, Ankur Kumar, Allison Birnbaum, Mark Bouska, Thomas Burns, Vishesh Bhatia, Mahsa Askary Hemmat, Jacob Zobrist)

Mentor for undergraduate students

2016-present

(Marie Bolton, Cara McCutchin, Elizabeth Quam, Qiuhan Jiang, Harper Clark, Emma Shepard, Seth Millikan, Emily Marison, Matt Weiser, Audrey Ade, Sheridan Schwartz, Fahmo Mohamed, Jazmine Real, Larsa Al Bayati)

Xin Long Middle School

Shanghai, China

(Biology science teacher and psychology instructor, Director of teaching and researching of Grade Six, Director of school teaching and instruction)

PROFESSIONAL AFFILIATION

American Statistical Association, 2008-present

Genetic Society of America 2016-present