Curriculum Vitae

Jiffin K. Paulose

Dept. of Biology
University of Kentucky
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EDUCATION

Doctor of Philosophy, Biology, Texas A&M University,
College Station, TX May 13, 2016

Bachelor of Science, Biology, Texas A&M University,
College Station, TX May 8, 2003

TEACHING EXPERIENCE

Dept. of Biology, Texas A&M University

- Introductory Biology Laboratory, Teaching Assistant, 8/2004-1/2005
- Human Anatomy and Physiology Laboratory, Teaching Assistant, 1/2005-9/2005
- Quantitative Biology Seminar, Teaching Assistant, 9/2005-9/2007

Dept. of Biology, University of Kentucky

- Comparative Neuroscience, Teaching Assistant, 1/2011 – 8/2011
- Biology 103 Basic Ideas of Biology, Instructor, 8/2011 – 5/2016
- Biology 199 Research Experience in Biology 1/2016 – Present

PROFESSIONAL EXPERIENCE/CERTIFICATIONS

Sr. Academic Coordinator, Dept. of Biology, U. of Kentucky
Lexington, KY 6/2014-5/2016

- Developed software-based, peer-reviewed writing assignments for introductory non-majors biology courses
- Instructed faculty on implementation of Calibrated Peer Review software
- Provided technical and curriculum assistance to instructors-on-record

Laboratory Manager, Texas Agricultural Experiment Station,
College Station, TX 5/2003-8/2004

- Assisted in general laboratory protocols: Restriction digests, PCR reactions, gel electrophoresis
- Maintained laboratory stocks of *Anopheles gambiae* and *Aedes egyptii*
- Maintained financial records and budgeting of laboratory funds
- Oversaw purchasing and maintenance of laboratory equipment and supplies
- Supervised laboratory workers

Comparative Medicine Program, Texas A&M University
College Station, TX

- Certified in Small Animal Handling and Anesthesia
- Certified in Small Animal Surgery and Post-operative Care

ACADEMIC HONORS & AWARDS

- Travel Award, Circadian Rhythms in GI Health and Disease Conference, Rush Med. Ctr., Chicago, Il, 2016
- Excellence Award, Society for Research on Biological Rhythms Biennial Conference, Palm Harbor, FL, 2016
- Condor Instruments Excellence Award, Society for Research on Biological Rhythms Biennial Conference, Palm Harbor, FL, 2016
- 1st Prize Oral Presentation, Society of Post-Doctoral Scholars Annual Symposium, Lexington, KY, 2016
- Teaching Fellowship, Dept. of Biology, Texas A&M University, 2004
- Nina Ansari Scholarship, Texas A&M University, 1999-2002

SERVICE

- Member, American Society for Microbiology
- Member, Society for Research on Biological Rhythms, 2008-Current
- Member, Executive Committee, U. of KY Society of Post-Doctoral Scholars, 2016-2017
- Member, Faculty Search Committee, Dept. of Biology 2005
- Member, Graduate Review and Admissions Committee, Dept. of Biology, 2007
- Chapter Advisor, Delta Epsilon Psi, 2004-2008
- Chapter Advisor, Delta Phi Omega, 2006-2008
- Maxwell Elementary Science Fair Judge 2010-2
- Ashland Elementary Science Fair Judge 2012-7

- Booker T Washington Career Week Speaker 2015-6
- Coventry Oak Elementary Invention Convention Judge 2017
- Member, Institutional Biosafety Committee, Hera Biolabs 2015-Current
- Fayette County Schools R.E.A.L. Men Read Program, 2017-Current

SEMINAR PRESENTATIONS

- Biennial Meeting of the Society for Research on Biological Clocks, 2018
    - Poster Presentation: "Circadian Rhythms of Bioluminescence of *Enterobacter aerogenes* in a Heterologous Host in Vivo"
- Society of Post-Doctoral Scholars annual meeting, 2017, Amelia Island, FL
    - Poster Presentation: "Formal properties of the circadian clock in *Enterobacter aerogenes*, a human gut commensal bacterium"
- Research in the Southeast Region 2017, Murfreesboro, TN
    - ASM, KY-TN Branch Invited Oral Presentation: "Formal properties of the *Enterobacter aerogenes* circadian clock"
- "From cells to clinic": third meeting of the Center for Circadian Biology, UCSD San Diego, CA, 2017
    - Poster presentation: "Formal properties of the *Enterobacter aerogenes* circadian clock"
- Society of Post-Doctoral Scholars annual meeting, 2016, Lexington, KY
    - Oral Presentation: "A human gut bacterium express circadian rhythms and swarming response to melatonin
- Biennial Meeting of the Society for Research on Biological Clocks, 2016, Tampa, FL
    - Oral Presentation: "A human gut bacterium express circadian rhythms and swarming response to melatonin"
    - Poster Presentation: Aging and the gastrointestinal clock: influence of melatonin on the gut microbiome"
- Circadian Rhythms in GI Health and Diseases, 2016, Chicago, IL
    - Oral Presentation: "A human gut bacterium express circadian rhythms and swarming response to melatonin"
    - Poster Presentation: "Aging and the gastrointestinal clock: influence of melatonin on the gut microbiome"
- Research in the Southeast Region, 2015, Lexington, KY
    - Oral Presentation: "A human gut bacterium is sensitive to melatonin and expresses circadian rhythms"
- Biennial Meeting of the Society for Research on Biological Clocks, 2010, Destin, FL
    - Poster Presentation: "Photic entrainment in cultured chick astrocytes: effects on clock gene expression, metabolism, and opsins"

- Research in the Southeast Region, 2009, Nashville, TN
    - Poster Presentation: "Real-time measurement of circadian rhythms in embryonic stem cells"
- Biennial Meeting of the Society for Research on Biological Clocks, 2008, Destin, FL
    - Poster Presentation: "Towards the beginning of time: rhythms in embryonic stem cells"
- Annual Meeting of the Southeastern and Central Texas Society for Clocks (SECTS for Clocks), 2008, College Station, TX
    - Oral Presentation: "Towards the beginning of time: clock gene expression in embryonic stem cells"
- Annual Meeting of the Society for Mathematical Biology, 2007, San Jose, CA
    - Poster Presentation: "Undergraduate Program in Biological and Mathematical Sciences (UBM)"
    - Participated in panel discussion on interdisciplinary curriculum development
- 72nd Symposium, Cold Spring Harbor Laboratory, 2007, CSHL, NY
    - Poster Presentation: "Circadian rhythms in stem cells"
- Biennial Meeting of the Society for Research on Biological Clocks, 2006, Destin, FL
    - Poster Presentation: "Melatonin stimulates growth of primary chick astrocytes in culture"

PUBLICATIONS

- **Paulose, J. K.,** Cassone, C. V, and V. M. Cassone (2018) Aging, Melatonin Biosynthesis and Circadian Clockworks in the Gastrointestinal System of the Laboratory Mouse. Physiol. Genomics. doi: 10.1152/physiolgenomics.00095.2018

- Cassone, V. M., **Paulose, J. K.,** and C. E. Harpole (2017) Aging and the circadian control of the gastrointestinal system: from the brain to the gut microbiome (and back). In S. M. Jazwinski, V. P. Belancio, and S. M. Hill (Eds.), *Circadian Rhythms and Their Impact on Aging* (pp. 83-102). Cham, Switzerland: Springer International.

- Cassone, V. M., **Paulose, J. K.**, Harpole, C. E., Li, Y., and M. Whitfield-Rucker (2017) Avian Circadian Organization. Biological Timekeeping: Clocks, Rhythms, and Behavior. Springer 10.1007/978-81-322-3688-7

- **Paulose, J. K.** and V. M. Cassone (2016) The Melatonin-Sensitive Circadian Clock of the Enteric Bacterium *Enterobacter aerogenes*. Gut Microbes DOI: 10.1080/19490976.2016.1208892.

- **Paulose, J. K.**, J. M. Wright, A. G. Patel, and V. M. Cassone (2016) Human Gut Bacteria Are Sensitive to Melatonin and Express Endogenous Circadian Rhythmicity. PLoS One 11(1):e0146643.

- Collett, J. A., **J. K. Paulose**, V. M. Cassone, and J. L. Osborne (2015) Kidney-Specific Reduction of Oxidative Phosphorylation Genes Derived from Spontaneously Hypertensive Rat. PLoS One 10(8):e0136441.

- **Paulose, J. K.**, E. B. Rucker, and V. M. Cassone (2015) Analysis of circadian rhythms in embryonic stem cells. Methods Mol. Biol. 1235:73-9.

- Wang, G., C. E. Harpole, **J. K. Paulose**, and V. M. Cassone (2014) The role of the pineal gland in the photoperiodic control of bird song frequency and repertoire in the house sparrow, *Passer domesticus*. Horm. Behav. 65(4):372-379.

- **Paulose, J. K.**, E. B. Rucker, and V. M. Cassone (2012) Toward the beginning of time: circadian rhythms in metabolism precede rhythms in clock gene expression in mouse embryonic stem cells. PLoS One 7(11):e49555.

- Malloy, J. N., **J. K. Paulose**, and V. M. Cassone (2012) Circadian rhythms of gastrointestinal function are regulated by both central and peripheral oscillators. Am. J. Physiol. Gastrointest Liver Physiol. 303(4):G461-73.

- **Paulose, J. K.**, J. L. Peters, S. P. Karaganis, and V. M. Cassone (2009) Pineal melatonin acts as a circadian zeitgeber and growth factor in chick astrocytes. J. Pineal Res. 46:286-294.

- Cassone, V. M., **J. K. Paulose**, M. G. Whitfield-Rucker, and J. L. Peters (2009) Time's arrow flies like a bird: Two paradoxes for avian circadian biology. Gen. Comp. Endocrinol. 1;163(1-2).