

# **Rosalie Maltby**

Curriculum vitae

University of Oklahoma Department of Biology  
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Norman, OK 73019  
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## **EDUCATION**

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2012. Master of Science, Microbiology. University of Oklahoma. Norman, OK  
2008. Bachelor of Science. University of Oklahoma. Norman, OK

## **PROFESSIONAL APPOINTMENTS**

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2019. Faculty. Neural Systems and Behavior Advanced Research Training Course, Marine Biological Laboratory  
2017-2018. Teaching Assistant, Neural Systems and Behavior Advanced Research Training Course, Marine Biological Laboratory  
2017-2018. Search Committee Member. Director of Bands College of Fine Arts, University of Oklahoma  
2012-present. Scientist/Researcher I Department of Biology, University of Oklahoma.

## **PUBLICATIONS** (Surname Rodgers prior to 2009)

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Markham M.R., Y. Ban, A.G. McCauley, **R. Maltby**. 2016. Energetics of Sensing and Communication in Electric Fish: A Blessing and a Curse in the Anthropocene? *Integr. Comp. Biol.* 56(5): 889-900.  
**Maltby, R.**, M. Leatham-Jensen, T. Gibson, P.S. Cohen, T. Conway. 2013. Nutritional Basis for Colonization Resistance by Human Commensal *Escherichia coli* Strains HS and Nissle 1917 against *E. coli* O157:H7 in the Mouse Intestine. *PLoS One*. 8(1): e53957.  
Jones, S.A., T. Gibson, **R. Maltby**, F. Chowdhury, V. Stewart, P.S. Cohen, T. Conway. 2011. Anaerobic Respiration of *Escherichia coli* in the Mouse Intestine. *Infect Immun*. 79(10):4218-4226  
Jones, S.A., M. Jorgensen, F. Chowdhury, **R. Rodgers**, J. Hartline, M. Leatham, C. Struve, K. Krogfelt, P.S. Cohen, T. Conway. 2008. Glycogen and Maltose Utilization by *Escherichia coli* O157:H7 in the Mouse Intestine. *Infect Immun*. 76(6):2531-2540  
D'souza, A, B.T. Kurien, **R. Rodgers**, J. Shenoi, S. Kurono, H. Matsumoto, K. Hensley, S. Nath, R.H. Schofield. 2008. Detection of Catalase as a major protein target of the lipid peroxidation product 4-HNE and the lack of its genetic association as a risk factor in SLE. *BMC Med Genet*. 9:62.

## **PUBLISHED CONFERENCE ABSTRACTS**

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- Maltby, R.**, M. Nourbakhsh-Rey, M.R. Markham. 2018. Metabolism Sensing Mechanisms in the Electric Organ Cells of a Weakly Electric Fish. *Integrative and Comparative Biology* 58, P2-81
- Ban, Y., B.E. Smith, **R. Maltby**, C. Connolly, M.R. Markham. 2016. Spatial uncoupling between sodium activated potassium channels and voltage gated sodium channels in electrocytes of the weakly electric fish *Eigenmannia virescens*. *Integrative and Comparative Biology* 56, E11-E11
- Markham, M.R., **R. Maltby**, H.L. Riedmann, P.M. Sinnett, Y. Ban. 2016. Energetic adaptations and constraints in active sensory and communication signals. *Integrative and Comparative Biology* 56, E137-E137
- Riedmann, H.L., E.N. Ahadizadeh, **R. Maltby**, M.R. Markham. 2014. Comparative analysis of Na<sup>+</sup>/K<sup>+</sup> ATPase alpha subunits from the electric organs of weakly electric fish with low and high discharge rates. *Integrative and Comparative Biology* 54, E338-E338

### **AWARDS AND HONORS**

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2003. Sir Alexander Fleming Scholar. Oklahoma Medical Research Foundation.

### **CAMPUS/DEPARTMENTAL TALKS**

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2012. *The nutritional niche of the human commensal Escherichia coli HS in the mouse intestine*. Master's Thesis Defense. University of Oklahoma Department of Botany and Microbiology.
2011. *Escherichia coli HS: Potential probiotic*. University of Oklahoma. Department of Botany and Microbiology Seminar.
2009. *Carbon nutrition of the human commensal Escherichia coli HS in the mouse intestine*. University of Oklahoma. Department of Botany and Microbiology Seminar.

### **PROFESSIONAL AFFILIATIONS**

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2016, 2017-present. Society for Integrative and Comparative Biology  
2008-2012. American Society for Microbiology

### **TEACHING EXPERIENCE**

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**Graduate Student Teaching Assistantship.** University of Oklahoma.  
Department of Botany and Microbiology  
Introduction to Microbiology Lab. Fall 2011.  
Ecology and Pathogenic Microbiology Lab. Spring 2012, 2011, 2009, 2008  
Pathogenic Microbiology and Immunology. Fall 2009.  
Introduction to Molecular Biology. Fall 2009.  
Fundamentals of Microbiology Lab. Spring 2009, Fall 2008.

### **COMMUNITY SERVICE**

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2019. Oklahoma Wesley Foundation Board of Directors, Vice President.

2017. Oklahoma Wesley Foundation Executive Council Director Search Committee  
2017-2018. Oklahoma Wesley Foundation Board of Directors, Secretary.  
2011-2013. Bridgeview United Methodist Church, Laity Leader.  
2011-2012. Bridgeview United Methodist Church Finance Committee, member.  
2010-2012. Oklahoma Wesley Foundation Board of Directors, Secretary.  
2006-2010. Oklahoma Wesley Foundation Board of Directors Member.