

# Joseph Bak-Coleman

## PERSONAL DETAILS

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*Address* Department of Ecology and Evolutionary Biology  
Guyot Hall  
Princeton University  
Princeton, NJ, 08540

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## EDUCATION

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**Ph.D. Ecology and Evolutionary Biology** 2014-Present

*Princeton University*

Supervisors: Professor Iain Couzin, Professor Dan Rubenstein

Thesis Title: Collective wisdom in the anthropocene

**M.S. Biology** 2011-2014

*Bowling Green State University*

Supervisor: Professor Sheryl Coombs

Thesis Title: Comparing the role of the lateral line during rheotaxis in a sedentary and mobile fish species

**B.S. Neuroscience** 2005-2011

*Bowling Green State University*

## MANUSCRIPTS

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## PUBLICATIONS

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## AWARDS AND GRANTS

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**Travel Award** Flow Sensing in Air and Water

*\$2000*

2011

**Summer Research Fellowship**

Center for Undergraduate Research and Scholarship

*\$2500*

2011

**Summer Research Fellowship**

Science, Engineering, Technology Gateway Ohio

*\$3500*

2010

**Bioinformatics Scholarship**

Choose Ohio First for Bioinformatics

*\$4000 per annum*

2009-2011

## POPULAR PRESS ARTICLES

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The ignorance of the crowd. *Scientific American*, Nov. 2017

Why did Donald Trump get elected? Ask the bees. *Wired*, Dec. 2016

## SEMINARS AND CONFERENCE PARTICIPATION

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Collective Behavior, Social Media and Systemic Risk (Princeton University)	†2018
Yale Institute For Network Science (Yale University)	†2018
Distributed, Collective Computation in Biological and Artificial Systems (Janelia Farm)	2018
Integrated Behavioral Research Group (Princeton University)	2018
Metropolitan Society of Natural Historians (AMNH)	†2016
Integrated Behavioral Research Group (Princeton University)	2016
Animal Behavior Society (Bloomington, IN)	2012
International Congress of Neuroethology (College Park, MD)	2012
Ecological And Evolutionary Ecology of Fishes (Windsor, ON)	2012
J.P. Scott Seminar (BGSU)	2011
Flow Sensing in Air and Water (Bonn, Germany)	†2011
Undergraduate Honors Society Seminar (BGSU)	†2011
SETGO Symposium (BGSU)	2011
J.P. Scott Seminar (BGSU)	2010
	† invited

## TEACHING

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<b>Guest Lecturer</b> <i>Comparative Physiology</i> 2017-2018	Princeton University
<b>Assistant in Instruction</b> <i>Comparative Physiology</i> <i>Conservation Biology</i> <i>Life on Earth: Chaos and Clockwork of Biological Design</i> 2014-2018	Princeton University
<b>Instructor</b> <i>Introductory Biology</i> 2014	Owens Community College

## SERVICE TO PROFESSION

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CBSMSR Conference Organizer, Princeton  
Graduate Representative, Princeton  
ABRCMS Recruiter, Phoenix AZ  
Prospective Student Week Organizer, Princeton  
IBRG Seminar Series Organizer, Princeton  
Graduate Retreat Organizer, Princeton  
President of BGSA, BGSU

## TECHNICAL SKILLS

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Python	Advanced
Bayesian Inference	Advanced
Machine Learning	Proficient
R	Proficient
Computer Vision	Proficient
Matlab	Proficient
AWS	Proficient
Deep Learning	Familiar

## PEER REVIEW

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Animal Behavior  
Biology Open  
Journal of Experimental Biology  
Proceedings B  
PLOS Computational Biology

## REFERENCES

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**Prof. Iain Couzin**

*Max Planck Institute of Ornithology  
Department of Collective Behavior  
University of Konstanz Z8  
Konstanz, DE  
icouzin@orn.mpg.de*

**Prof. Sheryl Coombs, *Emeritus***

*Bowling Green State University  
Biology Department  
Biological Sciences Building  
Bowling Green, OH 43402  
scoombs@bgsu.edu*

**Prof. Dan Rubenstein**

*Princeton University  
Eno Hall  
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Princeton, NJ  
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