

CONTACT	Andrew Basinski 232 N Lilly st Moscow, ID 83843	Phone: 715-252-7270 Email: abasinski@uidaho.edu
EDUCATION	<b>Ph.D., Mathematics</b> University of Utah <i>Adviser: Fred Adler</i> <i>Thesis Title: Information-Use Strategies in Ants</i>	August, 2016
	<b>B.S., Biology</b> University of Wisconsin-Stevens Point	Spring, 2009
	<b>B.S., Mathematics</b> University of Wisconsin-Stevens Point	Spring, 2009
RESEARCH EXPERIENCE	Epidemiological models, spatial ecology, ODE and PDE numerical simulation and analysis, stochastic models, agent-based simulation	

## PUBLICATIONS

- **Basinski AJ**, Nuismer SL, Remien CH. A little goes a long way: Weak vaccine transmission facilitates oral vaccination campaigns against zoonotic pathogens. PLoS neglected tropical diseases 13.3 (2019).
- Smithson MW, **Basinski AJ**, Nuismer SL, Bull JJ. Transmissible vaccines whose dissemination rates vary through time, with applications to wildlife. Vaccine 37.9 (2019).
- Varrelman TJ, **Basinski AJ**, Remien CH, Nuismer SL. Transmissible vaccines in heterogeneous populations: Implications for vaccine design. One Health 7 (2019).
- Nuismer SL, May RH, **Basinski AJ**, Remien CH. Controlling epidemics with transmissible vaccines. PloS One 13.5 (2018).
- **Basinski AJ** et al. Evaluating the promise of recombinant transmissible vaccines. Vaccine (2017).

## PUBLICATIONS

## In PROGRESS

- **Basinski AJ**, Nuismer SL. Forecasting the risk of Lassa from rodent reservoirs across West Africa. In progress.
- Schreiner CL, **Basinski AJ**, Nuismer SL. When to vaccinate a fluctuating wildlife population: is timing everything? Journal of Applied Ecology. Manuscript under review.

## CONFERENCES

<b>MIDAS Meeting</b> , Washington DC, US	April, 2018
<i>Talk:</i> The benefits and challenges of using transmissible vaccines in zoonotic vaccination campaigns	
<b>Society for Mathematical Biology</b> , SLC, UT, US	July, 2017
<i>Poster:</i> Evaluating the Promise of Recombinant Transmissible Vaccines	
<b>Science Day</b> , SLC, UT, US	Nov., 2013/2014
<i>Talk:</i> Can Ants Do Calculus?	
<b>Society for Mathematical Biology</b> , Tempe, AZ, US	June, 2014
<i>Talk:</i> The effects of colony structure on resource collection ability	
<b>Univ. Utah Biology Retreat</b> , SLC, UT, US	Oct., 2013
<i>Poster:</i> The Consequences of Owning Multiple Homes: Polydomy in Ants	

SCIENTIFIC COMPUTING	R, Mathematica, Python, C++, L <sup>A</sup> T <sub>E</sub> X, Linux systems, Matlab, Github	
TEACHING EXPERIENCE	<b>Math In Medicine</b> (Math 4600) <b>Calculus III</b> (Math 2210) <b>Glendale Middle School</b> Advanced Science <b>Calculus I</b> (Math 1210) <b>Business Calculus</b> (Math 1210)	Spring, 2015 Fall, 2014 Fall, 2011 - Spr., 2012 Fall, 2010 Spr., 2011, Spr., 2010 Fall, 2009
TEACHING ASSISTANT EXPERIENCE	<b>Calculus II</b> (Math 1320) <b>PDE's for Engineers</b> (Math 3140) <b>Math in Medicine</b> (Math 4600) <b>Math Models In Biol</b> (Biol 5910) <b>Math Biology I</b> (Math 5110)	Spring, 2016 Fall, 2015 Spr., 2013, Spr., 2014 Fall, 2013 Fall, 2012
STUDENT REASEARCH	Courtney Schreiner (wildlife vaccination)	2018-
AWARDS, HONORS, FELLOWSHIPS	<b>Graduate Teaching Fellowship</b> , Mathematics <b>RTG Teaching Fellowship</b> in Math. Biology <b>SCIF Grant</b> <b>WEST Fellowship</b>	Fall, 2009 - Spr., 2011 Fall, 2014 - 2016 Fall, 2012 - Spr., 2014 Summer, 2012 Fall, 2011 - Spr., 2012

ACADEMIC  
SERVICE

**Journal Reviews** for Oecologia, PLOS ONE, Journal of Theoretical Biology. F1000 member. 2013 - 2016

Designed and ran Society of Math Biology booth at **USA Science and Engineering Festival** in Washington D.C. April, 2014

REFERENCES

- Scott Nuismer (snuismer@uidaho.edu)  
Office: (208) 885-4096  
Mathematics, University of Idaho
- Chris Remien (cremien@uidaho.edu)  
Office: (208) 885-5901  
Biology, University of Idaho
- Fred Adler (adler@math.utah.edu)  
Math office: (801) 581-6848  
Biology office: (801) 585-6202  
Biology and Mathematics, University of Utah