

CONTACT	Andrew Basinski Stevens Point, WI 54481	Email: abasinski [at] uidaho [dot] edu Website: https://54481andrew.github.io/
EDUCATION	Ph.D., Mathematics University of Utah <i>Adviser: Fred Adler</i> <i>Thesis Title: Information-Use Strategies in Ants</i> B.S., Biology University of Wisconsin-Stevens Point B.S., Mathematics University of Wisconsin-Stevens Point	August, 2016 Spring, 2009 Spring, 2009
APPOINTMENTS	Post-Doctoral Associate with Chris Remien and Scott Nuismer. Department of Mathematics, University of Idaho, Moscow, ID 83844	October, 2016 - Present
RESEARCH EXPERIENCE	Machine vision, machine learning, disease forecasting models, epidemiological models, spatial ecology, ODE and PDE numerical simulation and analysis, stochastic models, agent-based simulation	
PUBLICATIONS	<ul style="list-style-type: none"> • Basinski AJ, Fichet-Calvet, EJ, Sjodin, AR, et al. Bridging the gap: Using reservoir ecology and human sero-surveys to estimate Lassa incidence in West Africa. <i>bioRxiv</i> (2020). • Layman NC, Tuschhoff BM, Basinski AJ, et al. Suppressing evolution in genetically engineered systems through repeated supplementation. <i>Evolutionary Applications</i> (2020). • Schreiner CL, Nuismer SL, Basinski AJ. When to vaccinate a fluctuating wildlife population: is timing everything? <i>Journal of Applied Ecology</i> 57.2 (2020). • Nuismer SL, Remien CH, Basinski AJ, et al. Bayesian estimation of Lassa virus epidemiological parameters: implications for spillover prevention using wildlife vaccination. <i>PLoS Neglected Tropical Diseases</i> 14.9 (2020). • Basinski AJ, Nuismer SL, Remien CH. A little goes a long way: Weak vaccine transmission facilitates oral vaccination campaigns against zoonotic pathogens. <i>PLoS Neglected Tropical Diseases</i> 13.3 (2019). • Smithson MW, Basinski AJ, Nuismer SL, Bull JJ. Transmissible vaccines whose dissemination rates vary through time, with applications to wildlife. <i>Vaccine</i> 37.9 (2019). 	

PUBLICATIONS (CONTINUED)	<ul style="list-style-type: none"> • Varrelman TJ, Basinski AJ, Remien CH, Nuismer SL. Transmissible vaccines in heterogeneous populations: Implications for vaccine design. <i>One Health</i> 7 (2019). • Nuismer SL, May RH, Basinski AJ, Remien CH. Controlling epidemics with transmissible vaccines. <i>PloS One</i> 13.5 (2018). • Basinski AJ, Varrelman TJ, Smithson MW, et al. Evaluating the promise of recombinant transmissible vaccines. <i>Vaccine</i> (2017). 	
CONFERENCES	<p>MIDAS Meeting, Washington DC, US April, 2018 <i>Talk:</i> The benefits and challenges of using transmissible vaccines in zoonotic vaccination campaigns</p> <p>Society for Mathematical Biology, SLC, UT, US July, 2017 <i>Poster:</i> Evaluating the Promise of Recombinant Transmissible Vaccines</p> <p>Science Day, SLC, UT, US Nov., 2013/2014 <i>Talk:</i> Can Ants Do Calculus?</p> <p>Society for Mathematical Biology, Tempe, AZ, US June, 2014 <i>Talk:</i> The effects of colony structure on resource collection ability</p> <p>Univ. Utah Biology Retreat, SLC, UT, US Oct., 2013 <i>Poster:</i> The Consequences of Owning Multiple Homes: Polydomy in Ants</p>	
SCIENTIFIC COMPUTING	R, Mathematica, Python, C++, L ^A T _E X, Linux systems, Matlab, Github	
TEACHING EXPERIENCE	<p>Math In Medicine (Math 4600) Spring, 2015</p> <p>Calculus III (Math 2210) Fall, 2014</p> <p>Glendale Middle School Advanced Science Fall, 2011 - Spr., 2012</p> <p>Calculus I (Math 1210) Fall, 2010</p> <p>Business Calculus (Math 1210) Spr., 2011, Spr., 2010 Fall, 2009</p>	
TEACHING ASSISTANT EXPERIENCE	<p>Calculus II (Math 1320) Spring, 2016</p> <p>PDE's for Engineers (Math 3140) Fall, 2015</p> <p>Math in Medicine (Math 4600) Spr., 2013, Spr., 2014</p> <p>Math Models In Biol (Biol 5910) Fall, 2013</p> <p>Math Biology I (Math 5110) Fall, 2012</p>	
STUDENT REASEARCH	Mentor for Courtney Schreiner (wildlife vaccination)	2018-

AWARDS, HONORS, FELLOWSHIPS	Graduate Teaching Fellowship , Mathematics	Fall, 2009 - Spr., 2011
		Fall, 2014 - 2016
	RTG Teaching Fellowship in Math. Biology	Fall, 2012 - Spr., 2014
	SCIF Grant	Summer, 2012
	WEST Fellowship	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	<ul style="list-style-type: none"> • Available upon request 	