### **PROMOTION REPORT - INDIVIDUAL** (September 1, 2010 - September 30, 2015)

## Candidate for promotion to: Full Professor Submission date of last successful promotion: Fall 2010

## I. GENERAL INFORMATION

Faculty Name: Barbara Bennie Department: Mathematics	Faculty Na	me: Barbara Bennie	Department: Mathematics
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### Education

Ph D, University of Minnesota, Statistics. (2006).

BA, Bethel University, Mathematics, Secondary Education. (2001).

## **II. NARRATIVES**

## A. Combined Teaching, Scholarship, and Service Narrative

Download File (bbennie/promotion/Promotion Narrative (7) v3-3.docx)

## **III. TEACHING**

## A. Teaching Schedule

### Spring 2015

			New Format			
		New Course	for Existing		Number of	Delivery
Course & Section	Title	Prep.	Course	Enrollment	Credit Hours	Mode
CEI - Cooperative	Cooperative Educ Internship	No		3	2	
Education and Internships						
450-29						
MTH - Mathematics 145-20	Elem Statistics	No		37	4	
Download F	ile (bbennie/schteach/MATH 145 S	Spring 2015 Sylla	<u>bus-1.pdf)</u>			
MTH - Mathematics 145-22	Elem Statistics	No		34	4	

## Fall 2014

	New Course	for Existing		Number of	Delivery
	Prep.	Course	Enrollment	Credit Hours	Mode
ve Educ Internship	No		2	2	
al Data Analysis	No		14	3	
2	ve Educ Internship al Data Analysis	Prep. ve Educ Internship No al Data Analysis No	ve Educ Internship No	Prep.         Course         Enrollment           ve Educ Internship         No         2           al Data Analysis         No         14	Prep.         Course         Enrollment         Credit Hours           ve Educ Internship         No         2         2           al Data Analysis         No         14         3

<u>wnload File (bbennie/schteach/MTH 443 Fall 2014 Syllabus-1.pdf)</u>

## Spring 2014

			New Format			
		New Course	for Existing		Number of	Delivery
Course & Section	Title	Prep.	Course	Enrollment	Credit Hours	Mode
MTH - Mathematics 145-13	Elem Statistics	No		40	4	
MTH - Mathematics 145-15	Elem Statistics	No		39	4	

### Fall 2013

		New Course	New Format for Existing		Number of	Delivery
Course & Section	Title	Prep.	0	Enrollment	Credit Hours	Mode
MTH - Mathematics 145-07	Elem Statistics	No		38	4	
MTH - Mathematics 145-08	Elem Statistics	No		41	4	
MTH - Mathematics 441-01	Math Statistics I	Yes		16	3	

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# Spring 2013

Course & Section MTH - Mathematics 145-10	Title	New Course Prep.	New Format for Existing Course	Enrollment 38	Number of Credit Hours	Delivery Mode
	le (bbennie/schteach/MATH 145 S	-	bus-1 ndf)	30	4	
<u>Download Fi</u>		Spring 2013 Sylla	<u>ous-r.pur)</u>			

MTH - Mathematics 145-11 Elem Statistics	No	38	4	
MTH - Mathematics 245-01 Probability & Statistics	No	41	4	

Download File (bbennie/schteach/MATH 245 Spring 2013 Syllabus-2.pdf)

### Fall 2012

			New Format			
		New Course	for Existing		Number of	Delivery
Course & Section	Title	Prep.	Course	Enrollment	Credit Hours	Mode
MTH - Mathematics 145-10	Elem Statistics	No		40	4	
Download Fi	ile (bbennie/schteach/MATH 145 F	all 2012 Syllabus	<u>s-1.pdf)</u>			
MTH - Mathematics 145-12	Elem Statistics	No		39	4	
MTH - Mathematics 443-1	Categorical Data Analysis	No		3	3	
Download E	ila (hhannia/aahtaaah/MTH 442 Ea	11 2012 Cullaburg	1 ndf)			

Download File (bbennie/schteach/MTH 443 Fall 2012 Syllabus-1.pdf)

## Spring 2012

			New Format			
		New Course	for Existing		Number of	Delivery
Course & Section	Title	Prep.	Course	Enrollment	Credit Hours	Mode
MTH - Mathematics 145-07	Elem Statistics	No		38	4	
MTH - Mathematics 145-10	Elem Statistics	No		40	4	
MTH - Mathematics 447-01	Nonparametric Stat	No		10	3	

Download File (bbennie/schteach/MTH 447 Spring 2012 Syllabus-1.pdf)

## Fall 2011

		New Format for Existing		Number of	Delivery
Title	Prep.	Course	Enrollment	Credit Hours	Mode
Elem Statistics	No		38	4	
Elem Statistics	No		41	4	
Correltn Rgres Ana	Yes		9	3	
	Title Elem Statistics Elem Statistics	TitleNew CoursePrep.Elem StatisticsNoElem StatisticsNo	TitlePrep.CourseElem StatisticsNoElem StatisticsNo	New Course Prep.for Existing CourseEnrollmentElem StatisticsNo38Elem StatisticsNo41	New Course Prep.for Existing CourseNumber of EnrollmentElem StatisticsNo384Elem StatisticsNo414

Download File (bbennie/schteach/MTH 445 Fall 2011 Syllabus-1.doc)

### Spring 2011

			New Format				
		New Course	for Existing		Number of	Delivery	
Course & Section	Title	Prep.	Course	Enrollment	Credit Hours	Mode	
MTH - Mathematics 145-21	Elem Statistics	No		38	4		
Download F	Download File (bbennie/schteach/MTH 145 Spring 2011 Syllabus-1.pdf)						
MTH - Mathematics 145-22	Elem Statistics	No		38	4		

### Fall 2010

			New Format			
		New Course	for Existing		Number of	Delivery
Course & Section	Title	Prep.	Course	Enrollment	Credit Hours	Mode
MTH - Mathematics 145-10	Elem Statistics	No		40	4	
MTH - Mathematics 145-5	Elem Statistics	No		39	4	
MTH - Mathematics 443-1	Categorical Data Analysis	Yes		3	3	
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#### **Non-Credit Instruction Taught**

Workshop, WI Department of Health Services, 20 participants, Professional. (January 2015).

Workshop, Ashley Furniture, 12 participants, Professional. (November 2014).

#### Grants

Baumann, Douglas (Co-Principal), Reineke, David M (Co-Principal), Morris, Samuel (Co-Principal), Bennie, Barbara (Supporting), Bingham, Melissa (Supporting), Young, Judy (Supporting), "Innovation and Consistency in MTH 145: Elementary Statistics" (Funded), UW-L Grant, \$15000. (July 1, 2014 - June 30, 2015).

Download File (dbaumann/congrant\_teaching/MTH\_145\_CRG\_Report\_07Feb14-1.pdf)

Baumann, Douglas (Principal), Bennie, Barbara (Principal), Eager, Eric (Principal), Peirce Jr, James P (Principal), Sandland, Gregory (Principal), "New Mathematical Biology Minor and Supporting Courses"(Funded), UW-L Grant, \$15000. (July 1, 2014 - June 30, 2015). Download File (dbaumann/congrant teaching/MathBioMinorCRG-1.pdf)

Bennie, Barbara (Co-Principal), Hulett, Heather A (Co-Principal), "Teaching Innovation Grant. Read & Reflect: Making Statistics Real"(Funded), UW-L Faculty Development Grant, \$2992. (July 2010 - June 2011). Download File (bennie.barb/congrant\_teaching/Teaching InnovationBennieHulett-1.pdf)

Wendt, Theodore (Co-Principal), Bennie, Barbara (Co-Principal), "Mathematical Modeling Contests: Recruiting and Preparing Teams and Improving Student Learning Outcomes." (Funded), UW System Grant, \$350. (August 2010 - December 2010). Download File (wendt.theo/congrant\_teaching/Bennie-Wendt-CDG-1.pdf)

## **B. Additional Teaching Evidence**

T1: Dr. David Reineke observed my teaching before I earned tenure and again in Spring 2015. This letter summarizes his observations. *Download File (bbennie/promotion/Bennie Teaching - Promo to Full-1.pdf)* 

T2: This is a summary, reflection, and action plan tied to assessment data collected in MTH 441. Download File (bbennie/promotion/MTH 441 Assessment Results-1.pdf)

T3: An initial draft for a Master's program in Statistics that I authored in April 2013. *Download File (bbennie/promotion/Stats master plan-1.pdf)* 

### **IV. SCHOLARSHIP**

## A. Intellectual Contributions

### Published and Accepted

### 1. Conference Proceeding

Sallmen, S. M., Bennie, B. (2010). Investigating Student Views of Relevancy in Introductory Astronomy. Green Bay, WI: Proceedings of 20th Annual Wisconsin Space Conference (WSGC). (Published: December 2010).

Type of Review	Type of Review Acceptance Rate Author Workload Author Ordering Audience of Circulation									
None	%	Sallmen, Shauna	First author major	State						
M90% contributor										
Bennie, Barbara-10%										
Download File (sallmen.s	Download File (sallmen.shau/intellcont/WSGC Proceedings Sallmen-1.pdf)									

#### 2. Journal Article, Academic Journal

Peirce Jr, J. P., Sandland, G., Bennie, B., Haro, R. J. Modeling and analysis of a temperature-driven outbreak of waterfowl disease in the Upper Mississippi River. *To appear in Ecological Modelling*. (Accepted: September 2015).

Type of Review	Acceptance Rate	Author Workload	Author Ordering	Audience of Circulation
Peer-reviewed	%	Peirce Jr, James P. Sandland, Gregory Bennie, Barbara Haro, Roger J.	First author major contributor	International

Download File (jpeirce/intellcont/btpaper\_embedded-1.pdf)

#### 3. Journal Article, Professional Journal

Trombetta, L., Bennie, B., Goodrick, A., England, R., Broghammer, M., Zinneker, H. (2014). Liver Biopsy Performed During Laparoscopic Cholecystectomy in Patients with Pre-Operative Imaging Evidence of Fatty Liver. *Gundersen Medical Journal*. (Published: October (4th Quarter/Autumn) 2014). http://www.gundersenhealth.org/upload/docs/Research/MedJournal/Vol8no2-Medical-Journal.pdf

_	Journal.pui				
	Type of Review	Acceptance Rate	Author Workload	Author Ordering	Audience of Circulation
	Peer-reviewed	%	Trombetta, Leroy-50%	First author major	
			Bennie, Barbara-20%	contributor	
			Goodrick, Adam-10%		
			England, Ronald-10%		
			Broghammer, Matthew-		
			5%		
			Zinneker, Hans-5%		

### Works in Progress

#### 1. Journal Article, Academic Journal

Bennie, B. Strategic Market Games with Random Endowments. Annals of Finance. (Submitted: July 20, 2015).

Type of Review	Acceptance Rate	Author Ordering	Audience of Circulation
Peer-reviewed	25%	Bennie, Barbara- 100%	
		10070	

Download File (bbennie/intellcont/noncyclic manuscript 07-20-15-1.pdf)

### **Other Scholarly Activities**

### 1. Paper presented at academic conference

Peirce Jr, J. P. (Presenter & Author), Sandland, G. (Co-Author), Bennie, B. (Co-Author), Haro, R. J. (Co-Author), Society for Mathematical Biology, Atlanta, GA, "Predicting the population size of an invasive host during a temperature-driven outbreak of waterfowl disease", https://www.openconf.org/SMB15/modules/request.php?

module=oc\_program&action=program.php&p=program. (Date Presented: July 1, 2015).

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Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
	International	Oral	No			
		Presentation				

Sandland, G. (Presenter & Author), Peirce Jr, J. P. (Co-Author), Haro, R. J. (Co-Author), Bennie, B. (Co-Author), American Society of Parasitologists, Omaha, NE, "AN INTRODUCTION TO THE COLLABORATION ON RIVERINE ECOLOGY (CORE) PROGRAM AND ITS UTILITY AS A MODEL FOR UNDERGRADUATE RESEARCH IN MATHEMATICAL PARASITOLOGY", http://amsocparasit.org/sites/default/files/Program.Final\_.2015.indexed-v3.pdf, Abstract. (Date Presented: June 26, 2015, Date Accepted: February 20, 2015, Date Submitted: February 15, 2015).

Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
	International	Oral	No		Invited	
		Presentation				

Ernie, K. (Presenter & Author), Hofacker, E. (Author Only), Serros, S. (Author Only), Bennie, B. (Author Only), Joint Mathematics Meeting, "Impacting Change in the Common Core Era through a Mathematics Partnership". (Date Presented: January 12, 2015).

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Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
	National	Oral				
		Presentation				

Download File (bbennie/present/1106-k5-212-1.pdf)

Serros, S. (Presenter & Author), Ernie, K. (Author Only), Hofacker, E. (Author Only), Bennie, B. (Author Only), Joint Mathematics Meetings, "Rich Mathematical Tasks Aligned with Common Core Math Standards". (Date Presented: January 12, 2015).

Meeting	Scope	Format of	Published in	Refereed	Invited or	Published			
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?			
National Oral									
Presentation									
Download	Download File (bhennie/present/1106-k5-213-1 pdf)								

Peirce Jr, J. P. (Presenter & Author), Sandland, G., Bennie, B., O'Driscoll, M., Joint Mathematics Meeting, Mathematical Association of America & American Mathematical Society, San Antonio, TX, "Modeling and analysis of a temperature-driven outbreak of waterfowl disease in the Upper Mississippi River", http://jointmathematicsmeetings.org/jmm. (Date Presented: January 12, 2015, Date Accepted: August 2014, Date Submitted: August 2014).

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Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
	National	Oral	No	No	Invited	
		Presentation				

Peirce Jr, J. P. (Presenter & Author), Sandland, G. (Author Only), Bennie, B. (Author Only), Haro, R. J. (Author Only), Ecological Society of America, Sacramento, CA, "Outbreak of waterfowl disease in the Upper Mississippi River with temperature dependent transmission rates", http://eco.confex.com/eco/2014/webprogram/start.html. (Date Presented: August 13, 2014).

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ſ	Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
	Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
ſ		National	Poster			Accepted	

Bennie, B. (Presenter & Author), Haro, R. J. (Co-Author), Midwest Mathematical Biology Conference, UW-L, La Crosse, "Game theoretic modeling of foraging behaviors of larval caddisflies", http://www.uwlax.edu/conted/mmbc/index.html. (Date Presented: May 17, 2014).

	Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
Regional Bastar Accounted	Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
Regional Postel Accepted		Regional	Poster			Accepted	

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Peirce Jr, J. P. (Presenter & Author), Sandland, G. (Co-Author), Bennie, B. (Co-Author), Haro, R. J. (Co-Author), Midwest Mathematical Biology Conference, UW-L, La Crosse, "Outbreak of Waterfowl Disease in the Upper Mississippi River with Temperature Dependent Transmission Rates", http://www.uwlax.edu/conted/mmbc/index.html. (Date Presented: May 17, 2014).

Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
	Regional	Poster			Accepted	

Sandland, G., Peirce Jr, J. P., Bennie, B., Haro, R. J., Midwest Mathematical Biology Conference, UW-La Crosse, La Crosse, WI, "Facilitating cross-talk between undergraduates in Biology and Mathematics: lessons from the Collaboration on Riverine Ecology (CORE) program.", http://www.uwlax.edu/conted/mmbc/, Abstract. (Date Presented: May 17, 2014, Date Accepted: April 30, 2014, Date Submitted: April 21, 2014).

Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
		Poster	Yes		Accepted	No

Peirce Jr, J. P. (Presenter & Author), Sandland, G. (Co-Author), Bennie, B. (Co-Author), Haro, R. J. (Co-Author), 19th Annual Faculty Reseatch Day, UW-L, La Crosse, "Predicting Population Sizes during an Outbreak of Waterfowl Disease in the Upper Mississippi River Using Temperature Dependent Transmission Rates". (Date Submitted: January 24, 2014).

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	Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
	Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
		Local	Oral				
			Presentation				

Weeks, A. (Co-Author/Co-Presenter), Peot, R. (Co-Author/Co-Presenter), Bennie, B., Haro, R. J., Peirce Jr, J. P., Sandland, G., NIMBioS Undergraduate Research Conference at the Interface of Biology and Mathematics, National Institute for Mathematical and Biological Synthesis (NIMBioS), Knoxville, TN, "Assessing the Parasite Manipulation Hypothesis in an Invasive Host (Bithynia tentaculata)", http://www.nimbios.org/education/URC\_abstracts\_2013.pdf, Abstract. (Date Presented: November 17, 2013, Date Accepted: October 11, 2013, Date Submitted: Sentember 25, 2013)

Accepted. October 11, 2013, Date Submitted. September 25, 2013).						
Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
	National	Oral	Yes		Accepted	No
		Presentation				

Ziegler, E. (Presenter & Author), Kerswill, S. (Co-Author), Bennie, B., Haro, R. J., Peirce Jr, J. P., Sandland, G., NIMBioS Undergraduate Research Conference at the Interface of Biology and Mathematics, National Institute for Mathematical and Biological Synthesis (NIMBioS), Knoxville, TN, "Maximizing Reproduction in Bithynia tentaculata with a Parasite Infection.", http://www.nimbios.org/education/URC\_abstracts\_2013.pdf, Abstract. (Date Presented: November 17, 2013, Date Accepted: October 11, 2013, Date Submitted: September 25, 2013).

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Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
	National	Oral	Yes		Accepted	No
		Presentation				

Weeks, A. (Co-Author/Co-Presenter), Peot, R. (Co-Author/Co-Presenter), Bennie, B., Haro, R. J., Peirce Jr, J. P., Sandland, G., Seven Rivers Undergraduate Research Symposium, Viterbo, La Crosse, WI, "Assessing the role of parasite manipulation on Bithynia tentaculata", http://www.viterbo.edu/uploadedFiles/academics/undergrad\_research/Abstract%20Book.pdf, Abstract. (Date Presented: November 8, 2013, Date Accepted: October 25, 2013, Date Submitted: October 22, 2013).

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Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
	Regional	Oral	Yes		Accepted	No
		Presentation				

Ziegler, E. (Presenter & Author), Kerswill, S. (Co-Author), Sandland, G., Bennie, B. (Co-Author), Haro, R. J. (Co-Author), Peirce Jr, J. P., Seven Rivers Undergraduate Research Symposium, Viterbo, La Crosse, WI, "Maximizing reproduction in Bithynia tentaculata with a parasite infection", http://www.viterbo.edu/uploadedFiles/academics/undergrad\_research/Abstract%20Book.pdf, Abstract. (Date Presented: November 8, 2013, Date Accepted: October 25, 2013, Date Submitted: October 22, 2013).

Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
	Regional	Oral	Yes		Accepted	
	-	Presentation				

Kressin, A. J. (Co-Author/Co-Presenter), Frankki, S. (Co-Author/Co-Presenter), Bennie, B. (Co-Author), Haro, R. J. (Co-Author), Peirce Jr, J. P. (Co-Author), Sandland, G. (Co-Author), National Conference on Undergraduate Research, La Crosse, WI, "ASSESSING INFECTION PATTERNS IN NATIVE AND INVASIVE SNAILS EXPOSED TO A LOCAL PARASITE SPECIES",

http://www.cur.org/ncur_2013/, Abstract. (Date Presented: April 12, 2013).							
Meeting	Scope	Format of	Published in	Refereed	Invited or	Published	
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?	
	National	Poster	Yes		Accepted		

Wolf, R. (Co-Author/Co-Presenter), Hines, K. (Co-Author/Co-Presenter), Bennie, B. (Co-Author), Haro, R. J. (Co-Author), Peirce Jr, J. P. (Co-Author), Sandland, G. (Co-Author), National Conference on Undergraduate Research, La Crosse, WI, "EXAMINING UNDERLYING BEHAVIORS OF AN AQUATIC HOST (BITHYNIA TENTACULATA) AND A PARASITE (CYATHOCOTYLE BUSHIENSIS) BY DIGITALLY TRACKING THE HOSTS' MOVEMENT", http://www.cur.org/ncur\_2013/, Abstract. (Date Presented: April 11, 2013).

ſ	Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
	Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
		National	Poster	Yes		Accepted	

Frankki, S. (Co-Author/Co-Presenter), Kressin, A. J. (Co-Author/Co-Presenter), Bennie, B. (Co-Author), Haro, R. J. (Co-Author), Peirce Jr, J. P. (Co-Author), Sandland, G. (Co-Author), National Conference on Undergraduate Research, La Crosse, WI, "INVESTIGATING PARASITE TRANSMISSION AMONG NATIVE AND INVASIVE SPECIES IN THE UPPER MISSISSIPPI RIVER", http://www.cur.org/ncur\_2013/, Abstract, (Date Presented; April 11, 2013).

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	Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
	Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
		National	Poster	Yes		Accepted	

Rittenhouse, M. (Presenter & Author), Sandland, G. (Co-Author), Bennie, B. (Co-Author), National Conference on Undergraduate Research, University of Wisconsin - La Crosse, "Assessing the role invasive-host demographics play in transmission of a parasite associated with mortality of migratory waterfowl", http://www.cur.org/ncur\_2013/, Abstract. (Date Presented: April 11, 2013, Date Accepted: January 30, 2013, Date Submitted: November 15, 2012).

Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
Type		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
	International	Oral Presentation	Yes	Yes	Accepted	

Frankki, S. (Presenter & Author), Kressin, A. J. (Author Only), Bennie, B. (Co-Author), Haro, R. J. (Co-Author), Peirce Jr, J. P. (Co-Author), Sandland, G. (Co-Author), Joint Mathematic Meetings, San Diego, CA, "Modeling the effects of multiple host species on disease transmission in the Upper Mississippi River", Abstract. (Date Presented: January 11, 2013).

	disease transmission in the opper Mississippi Niver, Abstract. (Date Frese							
Meeting	Scope	Format of	Published in	Refereed	Invited or	Published		
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?		
		Poster	Yes		Accepted			
Download	Download File (bbennie/present/Frankki Kressin JMMPoster(1)-1.pdf)							

Bennie, B. (Presenter & Author), Haro, R. J. (Co-Author), Peirce Jr, J. P. (Co-Author), Sandland, G. (Co-Author), Joint Mathematic Meetings, San Diego, CA, "UBM-Group, Collaborations on Riverine Ecology (CORE): Investigations into species invasion and

disease transmission at the interface between mathematics and biology", Abstract. (Date Presented: January 10, 2013).

 Meeting
 Scope
 Format of
 Published in
 Refereed
 Invited or
 Published

Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?	
		Poster	Yes		Invited		
Download File (bbennie/present/COREposter_JMM13-1-1.pdf)							

Kressin, A. J. (Co-Author/Co-Presenter), Frankki, S. (Co-Author/Co-Presenter), Bennie, B. (Co-Author), Haro, R. J. (Co-Author), Peirce Jr, J. P. (Co-Author), Sandland, G. (Co-Author), Seven Rivers Undergraduate Research Symposium, Viterbo University, La Crosse, WI, "Assessing transmission dynamics in native and invasive snails exposed to a local parasite species", http://www.viterbo.edu/SevenRivers.asox. (Date Presented: November 9, 2012).

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Meeting	Scope	Format of	Published in	Refereed	Invited or	Published		
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?		
		Poster						

Hines, K. (Co-Author/Co-Presenter), Wolf, R. (Co-Author/Co-Presenter), Bennie, B. (Co-Author), Haro, R. J. (Co-Author), Peirce Jr, J. P. (Co-Author), Sandland, G. (Co-Author), Seven Rivers Undergraduate Research Symposium, Viterbo University, La Crosse, WI, "Digitally tracking the movement of an aquatic host (Bithynia tentaculata) infected with a parasite (Cyathocotyle bushiensis) of conservation concern.", http://www.viterbo.edu/SevenRivers.aspx. (Date Presented: November 9, 2012).

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Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
		Poster				

Frankki, S. (Co-Author/Co-Presenter), Kressin, A. J. (Co-Author/Co-Presenter), Bennie, B. (Co-Author), Haro, R. J. (Co-Author), Peirce Jr, J. P. (Co-Author), Sandland, G. (Co-Author), Seven Rivers Undergraduate Research Symposium, Viterbo University, La Crosse, WI, "Exploring the role of invasive and native species in parasite transmission in the Upper Mississippi River", http://www.viterbo.edu/SevenRivers.aspx, Abstract. (Date Presented: November 9, 2012).

r	http://www.viterbo.edu/SevenRivers.aspx, Abstract. (Date Presented: Novem								
Meeting	Scope	Format of	Published in	Refereed	Invited or	Published			
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?			
		Poster	Yes	Yes	Accepted				

Rittenhouse, M. (Presenter & Author), Sandland, G. (Co-Author), Bennie, B. (Co-Author), Seven Rivers Undergraduate Research Symposium, Viterbo University, La Crosse, WI, "Investigating the effects of invasive snail demographics on parasite transmission in the upper Mississippi River.", Abstract. (Date Presented: November 9, 2012).

Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
	Regional	Oral	Yes	Yes	Accepted	
		Presentation				

Peirce Jr, J. P. (Co-Author/Co-Presenter), Sandland, G. (Co-Author/Co-Presenter), Haro, R. J. (Co-Author), Bennie, B. (Co-Author), Upper Midwest Invasive Species Conference, La Crosse, WI, "Combining empirical and theoretical approaches to better understand the persistence of waterfowl disease in the Upper Mississippi River", http://www.umisc2012.org/program.html, Abstract. (Date Presented: October 31, 2012, Date Accepted: May 15, 2012, Date Submitted: April 14, 2012).

Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
	Regional	Oral	Yes		Accepted	
		Presentation				

Download File (gsandland/present/Modeling talk Sandland Final-1.ppt)

Rittenhouse, M. (Presenter & Author), Jansen, M. (Co-Author), Bennie, B. (Co-Author), Haro, R. J. (Co-Author), Peirce Jr, J. P. (Co-Author), Sandland, G. (Co-Author), Upper Midwest Invasive Species Conference, La Crosse, WI, "Examining the role of host competition and juvenile susceptibility in the persistence of waterfowl disease in the upper Mississippi River", Abstract. (Date Presented: October 30, 2012, Date Accepted: May 16, 2012, Date Submitted: April 16, 2012).

					., . , .	
Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
	Regional	Poster	Yes		Accepted	

Sandland, G. (Co-Author/Co-Presenter), Peirce Jr, J. P. (Co-Author/Co-Presenter), Haro, R. J. (Co-Author), Bennie, B. (Co-Author), Mathematical Association of America's MathFest Conference, Mathematical Association of America, Madison, WI, "Developing Student Understanding of Species Invasions and Disease Transmission at the Interface Between Mathematics and Biology", http://www.maa.org/mathfest/, Abstract. (Date Presented: August 2, 2012, Date Accepted: May 2012, Date Submitted: April 2012).

Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
Type		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
	International	Oral Presentation	Yes		Accepted	

Download File (gsandland/present/mathfest2012\_talk(1)-1.pdf)

Rittenhouse, M. (Co-Author/Co-Presenter), Jansen, M. (Co-Author/Co-Presenter), Sandland, G. (Co-Author), Haro, R. J. (Co-Author), Peirce Jr, J. P. (Co-Author), Bennie, B. (Co-Author), Celebration of Student Research and Creativity Conference, UW-L, La Crosse, WI, "Investigating the role of host competition in the transmission of waterfowl disease in the upper Mississippi River", http://www.uwlax.edu/urc/files/15th%20Annual%20Booklet.pdf, Abstract. (Date Presented: April 13, 2012, Date Accepted: March 20, 2012, Date Submitted: March 12, 2012).

ſ	Meeting Type	Scope	Format of Presentation	Published in Proceedings?	Refereed Proceedings?	Invited or Accepted	Published Elsewhere?
		Local		Yes	No	Accepted	

Van Calster, K. (Presenter & Author), Soltau, K. (Co-Author), Peirce Jr, J. P. (Co-Author), Sandland, G. (Co-Author), Haro, R. J. (Co-Author), Bennie, B. (Co-Author), National Conference on Undergraduate Research, NCUR, Ogden, Utah, "USING A COMBINATION OF EMPIRICAL AND THEORETICAL APPROACHES TO ASSESS A HOST-PARASITE INTERACTION OF CONSERVATION CONCERN", https://ncur.weber.edu/ncur/search/Display\_NCUR.aspx?id=62228, Abstract. (Date Presented: March 30, 2012, Date Submitted: January 2, 2012).

Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
	International	Poster	Yes	Yes	Accepted	

Bennie, B. (Presenter & Author), Joint Mathematics Meetings, Boston, MA, "Strategic Market Games with Random Endowments". (Date Presented: January 6, 2012).

	Meeting	Scope	Format of	Published in	Refereed	Invited or	Published			
	Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?			
						Accepted				
1										

Download File (bbennie/present/Bennie JMM 01-06-12-1.pdf)

Hulett, H. A., Bennie, B., Joint Meeting, American Mathematical Society and the Mathematical Association of America, Boston, MA, "Read and Reflect: Making Statistics Real". (Date Presented: January 6, 2012, Date Accepted: October 5, 2011, Date Submitted: Sentember 20, 2011)

	Submitted. September 20, 2017).								
Meeting	Scope	Format of	Published in	Refereed	Invited or	Published			
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?			
	International	Oral	No	No	Accepted				

Presentation	1		
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Jansen, M. (Co-Author/Co-Presenter), Rittenhouse, M. (Co-Author/Co-Presenter), Bennie, B. (Co-Author), Haro, R. J. (Co-Author), Peirce Jr, J. P. (Co-Author), Sandland, G. (Co-Author), Joint Mathematics Meetings, Boston, MA, "Investigating the role of host competition in the transmission of waterfowl disease in the upper Mississippi River", http://jointmathematicsmeetings.org/jmm, Abstract. (Date Presented: January 6. 2012, Date Accepted: October 2011, Date Submitted: September 2011).

Abstract. (Date Presented. January 6, 2012, Date Accepted. October 2011, Date						
Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
	International	Poster	Yes	Yes	Accepted	No
Download File (goodland/procent/Restor CORE SIR 1 ndf)						

Download File (gsandland/present/Boston\_CORE-SIR-1.pdf)

Van Calster, K. (Presenter & Author), Soltau, K. (Co-Author), Peirce Jr, J. P. (Co-Author), Sandland, G. (Co-Author), Bennie, B. (Co-Author), Haro, R. J. (Co-Author), Joint Mathematics Meetings, Boston, MA, "Using energy budgets to model host-parasite interaction along the Mississippi River", http://jointmathematicsmeetings.org/jmm, Abstract. (Date Presented: January 6, 2012, Date Accepted: October 2011, Date Submitted: September 2011).

Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
	International	Poster	Yes	Yes	Accepted	No
Download File (gsandland/present/Boston, deb, poster-1 pdf)						

Peirce Jr, J. P. (Co-Author/Co-Presenter), Sandland, G. (Co-Author/Co-Presenter), Haro, R. J. (Co-Author), Bennie, B. (Co-Author), Joint Mathematics Meetings, Boston, MA, "UBM Group: Collaborations On Riverine Ecology (CORE): investigations into species invasion and disease transmission at the interface between mathematics and biology", http://jointmathematicsmeetings.org/jmm, Abstract. (Date Presented: January 5, 2012, Date Accepted: October 2011, Date Submitted: September 2011).

Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
	International	Poster	Yes	Yes	Accepted	No

Peirce Jr, J. P. (Co-Author/Co-Presenter), Sandland, G. (Co-Author/Co-Presenter), Haro, R. J. (Co-Author), Bennie, B. (Co-Author), Joint Mathematics Meetings, Boston, MA, "Predicting the ecological outcomes of species invasions and parasite transmission in the upper Mississippi River", http://jointmathematicsmeetings.org/jmm, Abstract. (Date Presented: January 4, 2012, Date Accepted: October 2011, Date Submitted: August 2011).

Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
	International	Oral	Yes	Yes	Accepted	No
		Presentation				

Jansen, M. (Presenter & Author), Rittenhouse, M. (Presenter & Author), Bennie, B. (Author Only), Haro, R. J. (Author Only), Peirce Jr, J. P. (Author Only), Sandland, G., Seven Rivers Conference, Viterbo University, La Crosse, WI, "Understanding the effects of intraspecific competition on disease transmission in the upper Mississippi River", Abstract. (Date Presented: November 11, 2011, Date Accepted: November 6, 2011).

Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
	Regional		Yes	No	Accepted	

Soltau, K. (Presenter & Author), Van Calster, K. (Presenter & Author), Peirce Jr, J. P. (Author Only), Sandland, G., Bennie, B. (Author Only), Haro, R. J. (Author Only), Seven Rivers Conference, Viterbo University, La Crosse, WI, "Using host energy budgets to better understand outbreaks of waterfowl disease in the upper Mississippi River", Abstract. (Date Presented: November 11, 2011, Date Accepted: November 6, 2011).

2011, 2410 / 1000 / 1010 / 1010 / 1010						
Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
	Regional		Yes	No	Accepted	

Jansen, M. (Co-Presenter), Rittenhouse, M. (Co-Presenter), Soltau, K. (Co-Presenter), Van Calster, K. (Co-Presenter), Bennie, B. (Co-Author), Haro, R. J. (Co-Author), Peirce Jr, J. P. (Co-Author), Sandland, G. (Co-Author), The International Environmetrics SocietyÔøΩs Third North American Regional Meeting, La Crosse, WI, "Investigations into species invasion and disease transmission at the interface between mathematics and biology", http://www.uwlax.edu/conted/ties2011/tieshomepage.htm, Abstract. (Date Presented: July 18, 2011, Date Accepted: July 10, 2011, Date Submitted: July 10, 2011).

Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
	International	Poster	Yes		Accepted	
Download File (sandland.greg/present/Abstract for Environmetrics - 2011-1.doc)						

Download File (sandiand.greg/present/Abstract for Environmetrics - 2011-1.doc)

Bennie, B. (Presenter & Author), Hulett, H. A. (Author Only), Wisconsin Section MAA Meeting, Menomonie, WI, "Read & Reflect: Making Statistics Real". (Date Presented: April 30, 2011).

ĺ	Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
	Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
ſ		Regional	Oral			Accepted	
			Presentation				

Download File (bennie.barb/present/Bennie Spring 2011 MAA Presentation-1.pdf)

Sallmen, S. M. (Presenter & Author), Bennie, B. (Co-Author), Wisconsin Association of Physics Teachers Annual Meeting, American Association of Physics Teachers, River Falls, WI, "Investigating Student Views of Relevancy in Introductory Astronomy", http://www.uwec.edu/wapt/Meetings/2010/index.html. (Date Presented: October 30, 2010).

Meeting	Scope	Format of	Published in	Refereed	Invited or	Published
Туре		Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
	State	Oral	No		Accepted	
		Presentation				

#### 2. Editorial and Review Activities

"Journal of AOAC International", Invited Manuscript Reviewer, International, 1 items edited/reviewed. (June 2012 - December 2012).

3. Research Currently in Progress

"Math Bio working group" (On-Going) I attend weekly meetings of the math-bio working group during the academic year (although had a course conflict for the Spring 2015 semester). The group is led by E. Eager and consists of faculty from Math, Biology, and Computer Science. The group has made progress on several problems at the interface of math and biology. I am currently working on a project that uses game theory to model the foraging behavior of larval caddisflies with Roger Haro. I am also working with James Peirce, Greg Sandland, and Roger Haro on a project that incorporates water temperature into a parasite transmission model with birds and snails as hosts.

### Strategic Market Games with Bayesian Learning (On-going)

I am considering an infinite horizon cash-in-advance market economy with symmetric agents. In each stage, a representative agent receives an independent, random endowment from an unknown distribution. The agents gain information about the unknown distribution with each days observed endowment. We suppose that a central bank sets a fixed, nominal interest rate for both borrowing and investing. We compare equilibrium spending strategies and inflation rates from this context to those seen when the endowment distribution is known. Writing results.

Math & Science Partnership (MSP) Project Evaluator. (September 2012 - August 2018)

I served as the Project Evaluator for a Math Partnership Grant: "Math Transition into the Common Core Era," from 2012-2015 and am now beginning as Project Evaluator for a new Math Partnership Grant:  $\hat{O}$  and  $\Omega$  am now beginning as Project Evaluator for a new Math Partnership Grant:  $\hat{O}$  and  $\Omega$  and  $\hat{O}$  and  $\hat$ 

#### Contracts, Grants, and Sponsored Research

- Hofacker, Erick (Principal), Serros, Sherrie (Co-Principal), Ernie, Kathy (Co-Principal), Ahrendt, Susan (Co-Principal), Bennie, Barbara (Supporting), "Math Partnership: Mathematical Progressions and Habits of Mind" (Funded), External Grant, Sponsored by Department of Public Instruction, \$670000. (September 2015 August 2018).
- Eager, Eric (Principal), Bennie, Barbara (Co-Principal), Allen, Martin (Supporting), Allen, Robert (Supporting), Baines, Anita (Supporting), Baumann, Douglas (Supporting), Erickson, Richard A (Supporting), Haro, Roger J (Supporting), Peirce Jr, James P (Supporting), Sandland, Gregory (Supporting), "University of Wisconsin La Crosse REU in Mathematical Ecology"(Not Funded), External Grant, Sponsored by National Science Foundation, \$285631. (June 1, 2015 - May 31, 2018).
   Download File (eeager/congrant research/NSF REU 2014-1.pdf)
- Hofacker, Erick (Principal), Serros, Sherrie (Co-Principal), Ernie, Kathy (Co-Principal), Bennie, Barbara (Supporting), "Math Partnership: Transition to the Common Core Era"(Funded), External Grant, Sponsored by Department of Public Instruction, \$471969. (September 2012 - August 2015).
- Baumann, Douglas (Co-Principal), Bennie, Barbara (Principal), Bingham, Melissa (Co-Principal), Reineke, David M (Co-Principal), Toribio, Sherwin G (Co-Principal), Elfessi, Abdulaziz M (Co-Principal), "Incorporating Off-Campus Clients in the Statistical Consulting Center at the University of Wisconsin ÔøΩ La Crosse"(Funded), UW System Grant, \$126248. (November 4, 2013 -June 30, 2015).

Download File (dbaumann/congrant\_service/UWS Incentive Grant\_UW-La Crosse\_Statistical Consulting\_Final Application-1.pdf)

Peirce Jr, James P (Principal), Sandland, Gregory (Co-Principal), Haro, Roger J (Co-Principal), Bennie, Barbara (Co-Principal), "UBM-Group: Collaborations on Riverine Ecology (CORE)"(Funded), External Grant, Sponsored by NSF, \$236822. (October 1, 2010 -September 30, 2013).

Download File (peirce.jame/congrant\_research/UBM2010-1.pdf)

- Eager, Eric (Principal), Bennie, Barbara (Co-Principal), "Faculty/Staff Grant Development Program" (Funded), UW-L Grant, \$5000. (June 2013 August 2013).
- Eager, Eric (Principal), Bennie, Barbara (Co-Principal), Allen, Robert (Supporting), Baines, Anita (Supporting), Haro, Roger J (Supporting), Peirce Jr, James P (Supporting), Sandland, Gregory (Supporting), "University of Wisconsin La Crosse REU in Mathematical Ecology" (Not Funded), External Grant, Sponsored by National Science Foundation, \$286722.
- Bennie, Barbara (Principal), "Center for Undergraduate Research in Mathematics (CURM) Mini-grant"(Funded), External Grant, Sponsored by CURM/NSF, \$16450. (June 2010 - May 2011). Download File (bennie.barb/congrant\_research/CURM application Bennie 03-2010-1.doc)

#### Student Research

#### 1. Undergraduate Research

- Kerswill, Stephanie, Peot, Rebecca, Weeks, Alicia, Ziegler, Emily, "Collaborations on Riverine Ecology (CORE)," Completed. (January 2013 December 2013).
  - Role: I co-advised this group of math and biology majors along with J. Peirce, G. Sandland, and R. Haro. Our group met weekly from Jan 2013 May 2013, with intense research time during Summer 2013. We met weekly during Fall 2013 to finalize work and prepare for presenting results.

Significant Student Involvement: Assessing the role of parasite manipulation on an invasive host and maximizing reproduction in an invasive snail with a parasite infection.

#### Dates and Locations Presented:

National Institue for Mathematical and Biological Synthesis ÔøΩ Oral Presentation. (November 2013).

- Seven Rivers Undergraduate Research Symposium  $\hat{O}$  Poster. (November 2013).
- Frankki, Susan, Hines, Krista, Kressin, AJ, Wolf, Robert, "Collaborations on Riverine Ecology (CORE)," Completed. (January 2012 December 2012).

Role: I co-advised this group of math and biology majors along with J. Peirce, G. Sandland, and R. Haro. Our group met weekly from Jan 2012 - May 2012, with intense research time during Summer 2012. We met weekly during Fall 2012 to finalize work

and prepare for presenting results.
Significant Student Involvement: Exploring the role of invasive and native species in parasite transmission in the Upper Mississispip River and examining the underlying behaviors of an aquatic host and parasite by digitally tracking the hosts' movement.
Dates and Locations Presented:
National Conference on Undergraduate Research (NCUR) ÔøΩ Poster. (April 2013).
Joint Mathematics Meetings ÔøΩ Poster. (January 2013).
Seven Rivers Undergraduate Research Symposium Ôø $\Omega$ Poster. (November 2012).
Soltau, Kari, Van Calster, Kacey, Rittenhouse, Matt, Jansen, Maria. (January 2011 - December 2011). Role: I co-advised this group of math and biology majors along with J. Peirce, G. Sandland, and R. Haro. Our group met weekly from Jan 2013 - May 2013, with intense research time during Summer 2013. We met weekly during Fall 2013 to finalize work and prepare for presenting results.
Significant Student Involvement: Investigating the role of host competition in the transmission of waterfowl disease in the upper
Mississippi River and using energy budgets to model host-parasite interaction along the Mississippi River.
Dates and Locations Presented:
The International Environmetrics Society's Third North American Regional Meeting $\hat{O}$ $lpha \Omega$ Poster. (July 2011).
Seven River Undergraduate Research Symposium Ôø $\Omega$ Poster. (November 2011).
Joint Mathematics Meetings ÔøΩ Poster. (January 2012).
National Conference on Undergraduate Research (NCUR) ÔøΩ Poster. (March 2012).
UW-L's Annual Celebration of Research and Creativity $\hat{O}$ <i>σ</i> Ω Poster. (April 2012).
Upper Midwest Invasive Species Conference ÔøΩ Poster. (October 2012).
Jansen, Maria, Jens, Cassandra, Haunfelder, Ryan, Mathematics, "Confidence interval methods for comparing two population means," Completed. (September 2010 - May 2011).
Germane Honors: This team of three students received funding through the Center for Undergraduate Research in Mathematics to conduct research during the 2010-11 academic year.
Significant Student Involvement: The team investigated the performance on the independent sample t confidence interval
method in various scenarios. In particular, they focused on the accuracy of the method when working with skewed populations and relatively small sample sizes. They considered existing alternatives to the independent sample t confidence interval method
and aimed to develop a new method that performs as well or better than existing methods when working with skewed data.
Dates and Locations Presented: St. Norbert's Pi Mu Epsilon Conference ÔøΩ Oral Presentation. De Pere, WI. (November 2010).
CURM Conference ÔøΩ Oral Presentation. Provo, UT. (March 2011).
National Conference on Undergraduate Research (NCUR) ÔøΩ Poster. Ithaca, NY. (April 2011).
UW-L's Annual Celebration of Research and Creativity $\hat{O}$ poster. La Crosse, WI. (April 2011).
UW-L's Annual Celebration of Research and Creativity $\hat{O}$ or al Presentation. La Crosse, WI. (April 2011).

Math Department Seminar ÔøΩ Oral Presentation. La Crosse, WI. (December 2010).

### **B. Additional Scholarship Evidence**

R1: A few unsolicited comments from Statistical Consulting Center clients <u>Download File (bbennie/promotion/SCC Client Feedback-1.pdf)</u>

R2: Letter of support from PI Dr. Erick Hofacker from UW-River Falls regarding the Math Education projects that I have evaluated. *Download File (bbennie/promotion/Dr Bennie letter updated-2.pdf)* 

### V. SERVICE

A. Service

#### Department Service

Department assessment coordinator. (March 2013 - Present)

I oversee the assessment of both the Math and Statistics major programs. Our department has started from essentially a blank slate in formulating program student learning outcomes, a curriculum map to connect these SLOs to the major courses, and a systemic schedule for gathering and evaluating assessment data. We are on track to collect and evaluate data on direct measures of student achievement associated with all program SLOs at least one time between Spring 2014 and Fall 2015.

Retention committee, Member. (September 2012 - Present)

Served as a member of the retention committee and a classroom evaluator for two tenure track faculty each year.

Statistics Curriculum Committee, Member. (September 2006 - Present)

The committee reviews and revises the statistics curriculum including a general education course (MTH 145) and courses within our major and minor programs. We developed and implemented the Statistics major program which began in 2013. We are in the early stages of planning a Master's program in Applied Statistics.

Merit Committee, Member. (August 2015 - December 2015)

MUDAC Team Organizer/Advisor. (April 2015)

Helped to recruit, prepare, and advise two UW-L teams (7 students) for participation in the annual Midwest Undergraduate Data Analytics Competition hosted by Winona State University.

Scholarship Review Committee, Member. (March 2015) Review and rank applications for three scholarships awarded by the math department.

MTH 145 General Education Assessment. (September 2008 - May 2014)

Select a task and corresponding rubric to be used to assess a general education student learning outcome in MTH 145. Collect and evaluate assessment data from all MTH 145 instructors.

Campus close-up. (April 2014)

Represented the math department at a campus close-up event for prospective students.

MUDAC Team Organizer. (April 2014)

Helped to recruit and prepare two UW-L teams (8 students) for participation in the second annual Midwest Undergraduate Data Analytics Competition hosted by Winona State University. I did not serve as an advisor on the day of the event this year.

Merit Committee, Member. (September 2012 - December 2013)

Library Liaison. (September 2007 - August 2013)

MUDAC Team Organizer/Advisor. (April 2013)

Helped to recruit, prepare, and advise two UW-L teams (7 students) for participation in the second annual Midwest Undergraduate Data Analytics Competition hosted by Winona State University.

Math Modeling Contest Advising. (September 2006 - February 2013)

Since coming to UW-L in Fall 2006, I have recruited and prepared teams to participate in the annual COMAP Mathematical Contest in Modeling. For the 2007 and 2008 contests, I advised 1 team each year. With the support of colleagues, we have grown contest participation to 5 teams in 2009, 8 teams in the 2010 contest, 8 teams in the 2011 contest, 6 teams in the 2012 contest, and 4 teams in the 2013 contest.

Statistics Search and Screen, Member. (May 2012 - November 2012)

MUDAC Team Organizer/Advisor. (April 2012)

Helped to recruit, prepare, and advise two UW-L teams (6 students) for participation in the first annual Midwest Undergraduate Data Analytics Competition hosted by Winona State University. One UW-L team earned second place in the competition.

Scholarship Review Committee, Member. (March 2012)

Review and rank applications for three scholarships awarded by the math department.

#### **College Service**

College Assessment Committee, Member. (March 2013 - Present)

The committee established a framework for program assessment within the college, provided supporting resources to programs, and reviewed and provided feedback on associated assessment documents for all programs within the college. I convened a subcommittee for the purpose of document review approximately once per year.

#### **University Service**

#### 1. Committee Involvement

Faculty Senate, Member. (May 2015 - Present)

Academic Program Review, Chair. (August 2014 ÔøΩ May 2015)

We review APR documents from programs on campus to provide feedback to the programs and to create summary reports for faculty senate. The committee met one hour each week for nearly every week in the academic year. Additionally, I attended several faculty senate meetings to present APR reports. The 2014-15 APR committee reviewed 12 programs (11 full self-studies and 1 three year progress report).

Director of the UW-L Statistical Consulting Center. (August 2014 - Present)

We provide advice and assistance in areas of sampling, experimental design, data modeling and analysis as well as interpretation and written communication of results for projects that require statistical methods. This service is outside of the UW-L campus community. Under the supervision of Mathematics Department faculty members, Statistics majors work as interns and provide statistical consulting services to area businesses and organizations.

Academic Program Review, Member. (August 2013 - Present)

We review APR documents from programs on campus to provide feedback to the programs and to create summary reports for faculty senate.

Working Group on Biennial Assessment, Member. (April 2015 - May 2015) The working group was charged by the Provost to consider the timing and structure of review and feedback associated with biennial assessment.

Faculty Development, Chair. (September 2012 - May 2013)

Faculty Development, Member. (September 2010 - May 2013) Review and make funding recommendations on Faculty Development grant applications. Review and edit committee bylaws.

ADVANCE-IT Catalyst Report, Internal reviewer. (October 2011) The ADVANCE-IT Catalyst grant was awarded to UW-L (PI Cynthia Berlin) by the NSF to gather data for assessing the participation of women faculty in science at our university. I served as an interval reviewer for the Catalyst grant final report.

CATL Advisory Group, Member. (September 2010 - May 2011) The Advisory Group, composed of instructors and a student, meets periodically with the CATL Director to provide feedback, advice and perspectives on the work and direction of CATL.

#### **Professional and Community Service**

1. Consulting/board of directors

Professional, Ecolab Research and Development, Eagan, MN, Consultant. (August 2006 - November 2010). Provided statistical advice and analysis on a variety of projects

#### 2. Other professional and community service

Moody's Mega Math Challenge, Reviewer. (March 2015).

Spent 20 to 30 hours reading and reviewing several papers submitted by teams of high school students in Moody's Mega Math Challenge. The M3 Challenge is an annual math modeling contest for high school students. This year's contest question related to the accumulation of plastic waste and improved efficiency of recycling.

Moody's Mega Math Challenge, Reviewer. (March 2014).

Spent 20 to 30 hours reading and reviewing several papers submitted by teams of high school students in Moody's Mega Math Challenge. The M3 Challenge is an annual math modeling contest for high school students. This year's contest question related to the accumulation of plastic waste and improved efficiency of recycling.

Professional, National Conference on Undergraduate Research (NCUR). (April 2013). Served as an abstract reviewer and session moderator for the 2013 NCUR

Moody's Mega Math Challenge, Reviewer. (March 2013).

Spent 20 to 30 hours reading and reviewing several papers submitted by teams of high school students in Moody's Mega Math Challenge. The M3 Challenge is an annual math modeling contest for high school students. This year's contest question related to the accumulation of plastic waste and improved efficiency of recycling.

Professional, Joint Math Meetings Undergraduate Student Poster Session, Poster judge. (January 2013). Reviewed and provided written feedback for student posters.

Council on Undergraduate Research (CUR), Councilor, Yes, elected. (June 2009 - June 2012).

Moody's Mega Math Challenge, Reviewer. (March 2012).

Spent 20 to 30 hours reading and reviewing several papers submitted by teams of high school students in Moody's Mega Math Challenge. The M3 Challenge is an annual math modeling contest for high school students. This year's contest question related to high speed rail in the U.S.

Professional, Joint Math Meetings Undergraduate Student Poster Session, Poster judge. (January 2012). Reviewed and provided written feedback for student posters.

Professional, Mathematical Modeling Contests: Recruiting and Preparing Teams and Improving Student Learning Outcomes, Workshop Organizer, Regional. (October 2, 2010).

Along with colleagues Ted Wendt and Robert Allen, I helped to organize a faculty workshop focusing on issues related to mathematical modeling and, in particular, mathematical modeling competitions. The workshop was held at UW-L.

#### Service Presentations

- Bennie, Barbara, "Update on Statistical Consulting Center expansion", WiSys, UW La Crosse. (September 5, 2014).
   Invited to present to a visiting WiSys team (team Arjun Sanga, Executive Director; David Ward, Chair, WiSys Foundation; and Regent Tim Higgins) along with other WiSys grant recipients to showcase work being done.
- Bennie, Barbara, "Progress report on Statistical Consulting Center expansion", UW Board of Regents REDI committee, UW River Falls. (April 10, 2014).

Sandland, Gregory (Co-Author/Co-Presenter), Peirce Jr, James P (Co-Author/Co-Presenter), Haro, Roger J (Co-Author), Bennie, Barbara (Co-Author), "Fostering undergraduate learning at the interface between biology and mathematics", UW-L SAH, UW-L. (January 26, 2012).

Download File (gsandland/present\_service/Scholar Day 2012-1.pdf)

#### **Professional Memberships**

Mathematical Association of America, National.

Council on Undergraduate Research, National. (September 2007 - June 2012).

### **B. Additional Service Evidence**

S1: Peer evaluation of service from Dr. Sandy Grunwald who I worked with on the APR Committee, the College of Science and Health Assessment Committee, and Working Group on Biennial Assessment. Download File (bbennie/promotion/Bennie - promotion-1.pdf)

S2: Thank you note from Provost Macpherson to the Working Group of Biennial Assessment (email sent via the working group chair, Charles Martin-Stanley). *Download File (bbennie/promotion/Working Group Thank You -1.pdf)* 

### **VI. ADDITIONAL INFORMATION**

#### A. Awards and Honors

UW-L Mathematics Department selected to receive the Regents' 2015 Teaching Excellence Award, UW Board of Regents, Teaching. (April 2015).

Nomination for a ProvostÔøΩs Teaching Excellence Award, Teaching. (June 2014).

Nomination for a ProvostÔøΩs Teaching Excellence Award, Teaching. (June 2013).

### **B. Faculty Development**

#### **Other Activities**

Teaching, Conference Program, "17th Annual UWL Conference on Teaching and Learning", United States. (September 1, 2015). Teaching, Conference Program, "16th Annual UWL Conference on Teaching and Learning", United States. (August 26, 2014). Teaching, Conference Program, "UW-L 2014 Winter Conference on Teaching & Learning", United States. (January 21, 2014). Teaching, Conference Program, "15th Annual UWL Conference on Teaching and Learning", United States. (August 27, 2013). Teaching, Conference Program, "15th Annual UWL Conference on Teaching and Learning", United States. (August 27, 2013). Teaching, Conference Program, "14th Annual UWL Conference on Teaching and Learning", United States. (August 28, 2012). Workshop, "Using Rubrics in D2L", CATL, La Crosse, WI, United States. (February 16, 2011).

#### C. Pre UW-L CV Link

Download File (bbennie/promotion/Bennie CV-1.pdf)