PROMOTION REPORT - INDIVIDUAL

(August 1, 2011 - September 14, 2015)

Candidate for promotion to: Associate Professor

I. GENERAL INFORMATION

Faculty		
Name:	Jennifer Docktor	Department: Physics & Astronomy

Education

Ph D, University of Minnesota, Physics. (2009).

MS, University of Minnesota, Physics. (2006).

BS, North Dakota State University, Physics and Physics Education. (2004).

II. NARRATIVES

A. Combined Teaching, Scholarship, and Service Narrative

<u>Download File (jdocktor/promotion/2015-10-11_Docktor_Narrative-3.pdf)</u>

III. TEACHING

A. Teaching Schedule

Fall 2015

Fall 2015						
Course & Section	Title	New Course Prep.	New Format for Existing Course	Enrollment	Number of Credit Hours	Delivery Mode
BIO - Biology 469-01	Teaching and Learning Science in the Secondary School	No	No	1	4	Classroom / Field Experience
<u>Dowr</u>	<u>lload File (jdocktor/schteach</u>	<u>h/Science 469</u>	<u>9 Syllabus Fai</u>	<u>II 2015-3.pdf)</u>		
CHM - Chemistry 469-01	Teaching and Learning Science in the Secondary School	No	No	2	4	Classroom / Field Experience
Down	nload File (jdocktor/schteacl	h/Science 469	Syllabus Fai	II 2015-2.pdf)		
PHY - Physics 106-01	Physical Science for Educators	No	No	20	4	Lecture/Lab
Down	nload File (jdocktor/schteacl	h/Physics 106	handout Fall	2015-1.pdf)		
PHY - Physics 106-02	Physical Science for Educators	No	No	30	4	Lecture/Lab
<u>Dowr</u>	lload File (jdocktor/schteacl	h/Physics 106	handout Fall	<u> 2015-2.pdf)</u>		
PHY - Physics 453-01	Topics in Physics and Astronomy	Yes	No	3	3	Independen t Study
PHY - Physics 469-01	Teaching and Learning Science in the Secondary School	No	No	3	4	Classroom / Field Experience
<u>Dowr</u>	load File (jdocktor/schteach	h/Science 469	Syllabus Fa	<u>II 2015-1.pdf)</u>		
PHY - Physics 498-01	Physics and Astronomy	Yes	No	1	3	Independen

Resea	irch			t Study
110000	11 01 1			t Olday

Summer 2015

Course & Section	Title	New Course	New Format for Existing	Enrollment	Number of Credit Hours	Delivery Mode
Course & Section	ritte	Prep.	Course	Enrollment	nours	Wode
PHY - Physics 453-01	Special Topics in Physics	Yes	No	1	3	Independen
	& Astronomy					t Study

Download File (jdocktor/schteach/PHY453_Syllabus_Summer2015-1.pdf)

Spring 2015

Course & Section	Title	New Course Prep.	New Format for Existing Course	Enrollment	Number of Credit Hours	Delivery Mode
BIO - Biology 469-01	Teaching and Learning	No	No	3	4	Classroom /
	Science in the Secondary School					Field Experience
Down	nload File (jdocktor/schteacl	h/Science 469	9 Syllabus Sp	ring 2015-1.p	<u>df)</u>	
PHY - Physics 106-01	Physical Science for Educators	No	No	30	4	Lecture/Lab
Dowr	nload File (jdocktor/schteacl	h/Physics 106	Syllabus Spi	ring 2015-1.pd	df)	
PHY - Physics 453-2	Special Topics in Physics & Astronomy: Curriculum and Assessment	Yes	No	1	2	Independen t Study
<u>Dowr</u>	nload File (jdocktor/schteacl	h/PHY453_Sy	/llabus_Spring	g2015-1.pdf)		
PHY - Physics 453-4	Special Topics in Physics & Astronomy (TA credit)	No	No	1	3	Independen t Study

Fall 2014

Course & Section	Title	New Course Prep.	New Format for Existing Course	Enrollment	Number of Credit Hours	Delivery Mode
BIO - Biology 469-01	Teaching and Learning Science in the Secondary	No	No	2	4	Classroom / Field
	School					Experience
	<u>lload File (jdocktor/schteach</u>	<u> 1/Science 469</u>	<u>9 Syllabus Fa</u>	<u>II 2014-1.pdf)</u>		
PHY - Physics 104-01	Fundamental Physics II	No	No	83	4	Classroom
<u>Dowr</u>	load File (jdocktor/schteach	h/Physics 104	Syllabus Fal	<u> 2014-1.pdf)</u>		
PHY - Physics	Fundamental Physics II	Yes	No	27	1	Laboratory
104-12-L	Laboratory					
<u>Dowr</u>	load File (jdocktor/schteach	h/2014_Fall_1	104Lab_Sylla	bus_Docktor-	1.pdf)	
PHY - Physics 106-01	Physical Science for	No	No	29	5	Lecture/Lab
	Educators					
<u>Dowr</u>	load File (jdocktor/schteach	h/Physics 106	Syllabus Fal	l 2014-1.pdf)		
PHY - Physics 106-02	Physical Science for	No	No	31	5	Lecture/Lab
	Educators					
<u>Dowr</u>	lload File (jdocktor/schteach	h/Physics 106	Syllabus Fal	I 2014-2.pdf)		
PHY - Physics 453-01	Special Topics in Physics	No		4	3	Independen
	and Astronomy					t Study
,		_		4	3	•

Download File (jdocktor/schteach/PHY453_Syllabus_Fall2014-1.pdf)

Spring 2014

		New Course	New Format for Existing		Number of Credit	Delivery
Course & Section	Title	Prep.	Course	Enrollment	Hours	Mode

BIO - Biology 469-01	Teaching and Learning	No	No	4	4	Classroom /		
	Science in the Secondary					Field		
	School					Experience		
Down	nload File (jdocktor/schteacl	h/Science+46	9+Syllabus+S	Spring+2014-1	1.pdf)			
PHY - Physics 106-01	Physical Science for	No	No	40	5	Lecture/Lab		
	Educators							
Down	nload File (jdocktor/schteacl	h/Physics 106	handout Spr	ing 2014-1.pc	<u>lf)</u>	_		
PHY - Physics 453-03	Special Topics in Physics	Yes	No	1	3	Independen		
-	& Astronomy					t Study		
Down	Download File (jdocktor/schteach/PHY453_Syllabus_Spring2014-1.pdf)							
PHY - Physics 498-05	Phys & Ast Research	No		1	3			

Fall 2013

Course & Section	Title	New Course Prep.	New Format for Existing Course	Enrollment	Number of Credit Hours	Delivery Mode
BIO - Biology 469-01	Teach & Learn Sci Sec School	No	No	2	4	Classroom / Field Experience
<u>Dowr</u>	nload File (jdocktor/schteacl	h/Science 469	9 Syllabus Fai	<u>II 2013 Versio</u>	<u>n 2-1.pdf)</u>	
CHM - Chemistry 469-01	Teach & Learn Sci Sec School	No	No	1	4	Classroom / Field Experience
Dowr	nload File (jdocktor/schteacl	h/Science 469	9 Syllabus Fai	II 2013 Versio	n 2-3 ndf)	ZXPONONOO
PHY - Physics 104-01		Yes	No	56	4	Classroom
<u>Dowr</u>	nload File (jdocktor/schteacl	h/Physics 104	[‡] Syllabus Fal	<u>Il 2013-1.pdf)</u>		
PHY - Physics 106-01	Physcl Sci Educatr	No	No	40	5	Lecture/Lab
<u>Dowr</u>	nload File (jdocktor/schteacl	h/Physics 106	handout Fall	2013-1.pdf)		
PHY - Physics 453-05	Special Topics in Physics & Astronomy	Yes	No	2	3	Independen t Study
<u>Dowr</u>	nload File (jdocktor/schteacl	h/PHY453_S _J	/llabus_Fall20	013-1.pdf)		
PHY - Physics 469-01	Teach & Learn Sci Sec School	No	No	1	4	Classroom / Field Experience
<u>Dowr</u>	nload File (jdocktor/schteacl	h/Science 469	9 Syllabus Fai	II 2013 Versio	n 2-2.pdf)	
PHY - Physics 498-07	Phys & Ast Research	No		2	3	

Summer 2013

Course & Section	Title	New Course Prep.	New Format for Existing Course	Enrollment	Number of Credit Hours	Delivery Mode
C-I - Curriculum and	Issues & Trends	No		1	1	
Instruction 715-733	Education					
C-I - Curriculum and	Issues & Trends	No		2	2	
Instruction 715-734	Education					
C-I - Curriculum and	Issues & Trends	No		3	2	
Instruction 715-736	Education					

Spring 2013

Course & Section	Title	New Course Prep.	New Format for Existing Course	Enrollment	Number of Credit Hours	Delivery Mode
BIO - Biology 469-01	Teaching & Learning Science in the Secondary School	No	No	2	4	Classroom / Field Experience

Download File (jdocktor/schteach/Science 469 Syllabus Spring 2013 Version 4-1.pdf)

CHM - Chemistry	Teaching & Learning	No	No	1	4	Classroom /	
469-01	Science in the					Field	
	Secondary School					Experience	
Download File (jdocktor/schteach/Science 469 Syllabus Spring 2013 Version 4-2.pdf)							
PHY - Physics 106-01	Physical Science for	No	No	40	4	Lecture/Lab	
-	Educators						
Download File (jdocktor/schteach/Physics 106 handout Spring 2013-1.pdf)							
PHY - Physics 498-06	Phys & Ast Research	No		3	3		

Fall 2012

Course & Section	Title	New Course Prep.	New Format for Existing Course	Enrollment	Number of Credit Hours	Delivery Mode
BIO - Biology 469-1	Teaching & Learning	Yes	Yes	4	4	Classroom /
	Science in the					Field
	Secondary School					Experience
<u>Dowr</u>	<u>lload File (jdocktor/schteact</u>	h/Science 469	9 Syllabus Fai	<u> </u>	<u> </u>	
PHY - Physics 106-1	Physical Science for	No	No	38	4	Lecture/Lab
	Educators					
Download File (jdocktor/schteach/Physics 106 handout Fall 2012-1.pdf)						
PHY - Physics 453-1	Topics/Phys & Ast	No		3	3	

Summer 2012

Course & Section	Title	New Course Prep.	New Format for Existing Course	Enrollment	Number of Credit Hours	Delivery Mode
C-I - Curriculum and	Understand Diverse	No		2	1	
Instruction 630-730	Learrners					
C-I - Curriculum and	Understand Diverse	No		9	2	
Instruction 630-731	Learrners					
C-I - Curriculum and	Understand Diverse	No		8	2	
Instruction 630-732	Learrners					

Spring 2012

Course & Section	Title	New Course Prep.	New Format for Existing Course	Enrollment	Number of Credit Hours	Delivery Mode
PHY - Physics 106-01	Physical Science for Educators	No	No	40	4	Lecture/Lab

Download File (jdocktor/schteach/Physics 106 handout Spring 2012-1.pdf)

Fall 2011

Course & Section	Title	New Course Prep.	New Format for Existing Course	Enrollment	Number of Credit Hours	Delivery Mode
PHY - Physics	Fund Physics I	Yes	No	29	0	Laboratory
103-13L	-					
Download File (jdocktor/schteach/PHY103_Fall2011_Syllabus-1.pdf)						

Lecture/Lab

PHY - Physics 106-1 Physcl Sci Educatr Yes Download File (jdocktor/schteach/Physics 106 handout Fall 2011-1.pdf)

Non-Credit Instruction Taught

Workshop, 30 participants, Academic. (June 17, 2013 - June 28, 2013).

Workshop, 30 participants, Academic. (June 18, 2012 - June 29, 2012).

Guest Lecture, School District of La Crosse - Central High School, Professional. (August 2011 - January 2012).

B. Additional Teaching Evidence

Teaching Appendix 1: Innovative Teaching. This appendix describes significant course development and pedagogy activities in the course PHY106, including creating a spiral-bound "workbook" for the course, incorporating research on children's ideas in science for each topic, and examples of how I utilize a variety of formative assessment strategies.

Download File (jdocktor/promotion/01 Teaching Appendix 1 Innovative Teaching-1.pdf)

Teaching Appendix 2: Direct Measures of Student Learning. This appendix includes sample assessments and student performance from the courses PHY106: Physical Science for Educators and PHY104: Fundamental Physics II.

Download File (jdocktor/promotion/02_Teaching Appendix 2 Direct Measures-1.pdf)

Teaching Appendix 3: Indirect Measures of Student Learning. This appendix includes survey responses from the course PHY106: Physical Science for Educators. Included is a summary of responses to an introductory course survey at the beginning of a semester, and a Student Assessment of Learning Gains administered at the end of the semester.

Download File (jdocktor/promotion/03_Teaching Appendix 3 Indirect Measures-1.pdf)

Teaching Appendix 4: Samples of Student Work. In this appendix, I include examples of how I provide feedback on student writing. The first example is a house wiring group project report from the course PHY106: Physical Science for Educators. The second example is feedback on a planning commentary from a student's pre-student teaching portfolio in the course BIO/CHM/PHY469: Teaching and Learning Science in the Secondary School. Download File (jdocktor/promotion/04 Teaching Appendix 4 Sample Student Work-1.pdf)

Teaching Appendix 5: Course Observations.

Download File (jdocktor/promotion/05 Teaching Appendix 5 Course Observations-1.pdf)

IV. SCHOLARSHIP

A. Intellectual Contributions

Published and Accepted

1. Book, Chapter in Scholarly Book-New

Ross, B., Mestre, J., Docktor, J. (2014). *Understanding How to Teach Physics Understanding* (pp. 92-110). Washington University in St. Louis Libraries. (Submitted: January 4, 2013, Accepted: October 2013, Published: November 2014).

Type of Review	Acceptance Rate	Author Workload	Author Ordering	Audience of Circulation
				Circulation
Editorial Board	%	Ross, Brian-60% Mestre, Jose-20% Docktor, Jennifer-20%	First author major contributor	

Download File (jdocktor/intellcont/CH5_Physics_Understanding-1.pdf)

2. Case Study in Book-New

Docktor, J., Sudhakaran, G. R. (2015). Building a Thriving Undergraduate Physics Teacher Education Program at the University of Wisconsin - La Crosse: Recruitment and Retention (pp. 97-104). College Park, MD: American Physical Society. (Submitted: September 9, 2013, Accepted: August 2014, Published: August 27, 2015).

http://www.phystec.org/webdocs/EffectivePracticesBook.cfm

Type of Review	Acceptance Rate	Author Workload	Author Ordering	Audience of
				Circulation

Peer-reviewed	%	Docktor, Jennifer	First author major	
		Sudhakaran,	contributor	
		Gubbi R.		

Download File (jdocktor/intellcont/2013TTEP_DocktorSudhakaran-1.pdf)

3. Journal Article, Professional Journal

Docktor, J., Strand, N., Mestre, J., Ross, B. (2015). Conceptual Problem Solving in High School Physics. *Physical Review Special Topics - Physics Education Research*, 11(020106). (Submitted: September 20, 2013, Accepted: July 2015, Published: September 1, 2015). http://dx.doi.org/10.1103/PhysRevSTPER.11.020106

Type of Review	Acceptance Rate	Author Workload	Author Ordering	Audience of Circulation
Peer-reviewed	%	Docktor, Jennifer Strand, Natalie Mestre, Jose Ross, Brian	First author major contributor	

Download File (idocktor/intellcont/PhysRevSTPER.11.020106 wSM-1.pdf)

Docktor, J., Mestre, J. (2014). Synthesis of Discipline-based Education Research in Physics. *Physical Review Special Topics - Physics Education Research*, *10*(020119), 1-58. (Submitted: August 8, 2013, Accepted: June 2014, Published: September 16, 2014).

http://journals.aps.org/prstper/abstract/10.1103/PhysRevSTPER.10.020119

Type of Review	Acceptance Rate	Author Workload	Author Ordering	Audience of Circulation
Peer-reviewed	%	Docktor, Jennifer-75% Mestre, Jose-25%	First author major contributor	

Download File (idocktor/intellcont/2014-09-16 PhysRevSTPER.10.020119-1.pdf)

Docktor, J., Mestre, J. P., Ross, B. H. (2012). Impact of a Short Intervention on Novices' Problem Categorization Criteria. *Physical Review Special Topics - Physics Education Research*, 8(2), http://prst-per.aps.org/abstract/PRSTPER/v8/i2/e020102. (Submitted: August 5, 2011, Published: July (3rd Quarter/Summer) 25, 2012).

		······· , ==, == ·=,·		
Type of Review	Acceptance Rate	Author Workload	Author Ordering	Audience of
				Circulation
Peer-reviewed	%	Docktor, Jennifer-70% Mestre, Jose P20% Ross, Brian H10%	First author major contributor	International

Download File (idocktor/intellcont/e020102-1.pdf)

Works in Progress

1. Journal Article, Professional Journal

Docktor, J., Dornfeld, J., Frodermann, E., Hsu, L., Jackson, K. Allen, Mason, A., Ryan, Q., Yang, J., Heller, K. Assessing Problem Solving in the Classroom: A Problem-Solving Rubric with Application to Introductory Physics. *Physical Review Special Topics - Physics Education Research*. (Submitted: May 15, 2015).

Type of Review	Acceptance Rate	Author Ordering	Audience of Circulation
Peer-reviewed	%	Docktor, Jennifer	
		Dornfeld, Jay	
		Frodermann, Evan	
		Hsu, Leon	
		Jackson, K. Allen	
		Mason, Andrew	
		Ryan, Qing	
		Yang, Jie	
		Heller, Ken	

1. Paper presented at academic conference

Litster, M. (Co-Presenter), Kosiak, J. J. (Co-Presenter), Hertel, J. (Co-Presenter), Docktor, J. (Co-Presenter), 17th Annual UWL Conference on Teaching and Learning, Center for Advancing Teaching & Learning, University of Wisconsin-La Crosse, "Enhancing Student Learning through Formative Assessment". (Date Presented: September 1, 2015).

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

Docktor, J. (Presenter & Author), Mestre, J. (Co-Author), Gire, E. (Co-Author), Rebello, N. S. (Co-Author), 2015 Physics Education Research Conference (PERC), College Park, Maryland, "Using Eye Tracking Technology to Study Motion Graphs",

http://www.aapt.org/Conferences/sm2015/. (Date Presented: July 29, 2015, Date Submitted: June 1, 2015).

ſ	Meeting Type	Scope	Format of	Published in	Refereed	Invited or	Published
			Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
I		International	Poster			Accepted	

Download File (jdocktor/present/2015-07-28_Eyetracking_poster_v2-1.pdf)

Docktor, J., 2015 American Association of Physics Teachers (AAPT) Summer Meeting, American Association of Physics Teachers, College Park, Maryland, "Mentoring Future Physics Teachers at the University of Wisconsin - La Crosse",

http://www.aapt.org/Conferences/sm2015/. (Date Presented: July 28, 2015, Date Submitted: March 1, 2015).

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

Download File (jdocktor/present/2015-07-28 AAPT talk invited v2-1.pdf)

Docktor, J. (Presenter & Author), Sudhakaran, G. R. (Co-Author), 2015 American Association of Physics Teachers (AAPT) Summer Meeting, American Association of Physics Teachers, College Park, Maryland, "Recruiting and Retaining Future Physics Teachers at the", http://www.aapt.org/Conferences/sm2015/. (Date Presented: July 28, 2015, Date Submitted: March 1, 2015).

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

Download File (jdocktor/present/2015-07-28 AAPT talk contributed-1.pdf)

Docktor, J. (Presenter & Author), Mestre, J. (Co-Author), Gire, E. (Co-Author), Rebello, N. S. (Co-Author), 2015 American Association of Physics Teachers (AAPT) Summer Meeting, American Association of Physics Teachers, College Park, Maryland, "Using Eye Tracking Technology to Study Motion Graphs", http://www.aapt.org/Conferences/sm2015/. (Date Presented: July 27, 2015, Date Submitted: March 1, 2015).

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

Download File (jdocktor/present/2015-07-28 Eyetracking poster v2-2.pdf)

Docktor, J., University of Cincinnati Physics Department Seminar, University of Cincinnati Physics Department, Cincinnati, Ohio, "Designing Scoring Rubrics to Assess Physics Problem Solving". (Date Presented: March 30, 2015).

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

Download File (jdocktor/present/2015-03-30 UCincinnati talk-1.pdf)

Docktor, J., UW-La Crosse Physics Department Seminar, University of Wisconsin - La Crosse Physics Department, La Crosse, Wisconsin, "Why YOU Should Teach High School Physics". (Date Presented: March 4, 2015).

Meeting Type	Scope	Format of	Published in	Refereed	Invited or	Published

	Presentation	Proceedings?	Proceedings?	Accepted	Elsewhere?
Local	Oral			Invited	
	Presentation				

Download File (jdocktor/present/2015-03-04 Physics Dept Seminar-1.pdf)

Docktor, J. (Presenter & Author), MSU - Mankato Physics and Astronomy Department Seminar, Minnesota State University - Mankato, Mankato, Minnesota, "Using Eye-tracking Technology to Study Physics Learning and Cognition". (Date Presented: February 26, 2015, Date Accepted: December 5, 2014).

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

Download File (jdocktor/present/2015-02-26 MSUMankato talk-1.pdf)

Bajracharya, R. (Presenter & Author), Thompson, J. (Co-Author), Docktor, J. (Co-Author), 2015 Conference on Research in Undergraduate Mathematics Education (RUME), Pittsburgh, Pennsylvania, "Student Visual Attention while Answering Graphically-Based Fundamental Theorem of Calculus Questions". (Date Presented: February 19, 2015).

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

Download File (jdocktor/present/2015-02-19 rume eye-tracking v4-1.pdf)

Docktor, J. (Presenter & Author), Sudhakaran, G. R. (Co-Author), 2015 Physics Teacher Education Coalition (PhysTEC) Conference, Physics Teacher Education Coalition, American Physical Society, American Association of Physics Teachers, Seattle, Washington, "Reforming Physics Teacher Education at the University of Wisconsin - La Crosse",

http://www.phystec.org/conferences/2015/. (Date Presented: February 6, 2015, Date Submitted: January 13, 2015).

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

Download File (jdocktor/present/2015-02-06 PhysTEC Poster-1.pdf)

Docktor, J. (Presenter & Author), 2015 American Association of Physics Teachers (AAPT) Winter Meeting, American Association of Physics Teachers, San Diego, California, "Preparing Future Physics Teachers at the University of Wisconsin - La Crosse",

http://www.aapt.org/Conferences/wm2015/index.cfm. (Date Presented: January 5, 2015, Date

Submitted: September 12, 2014).

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

Download File (jdocktor/present/2014-01-05_PhysTEC_Talk_V2-1.pdf)

Frodermann, E. (Presenter & Author), Docktor, J. (Co-Author), Heller, K. (Co-Author), Hsu, L. (Co-Author), Ryan, Q. (Co-Author), 2014 American Association of Physics Teachers (AAPT) Summer Meeting, American Association of Physics Teachers, Minneapolis, Minnesota, "Assessing Online Computer Coaches for Problem Solving: Educational Impact", http://www.aapt.org/Conferences/SM2014/, Abstract. (Date Presented: July 28, 2014, Date Submitted: March 3, 2014).

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

Bajracharya, R. (Presenter & Author), Docktor, J. (Co-Author), Thompson, J. (Co-Author), 2014 American Association of Physics Teachers (AAPT) Summer Meeting, American Association of Physics Teachers, Minneapolis, Minnesota, "Eye-gazing Behavior of Students Solving Graphically Based Physics Problems", http://www.aapt.org/Conferences/SM2014/. (Date Presented: July 28, 2014, Date Submitted: March 3, 2014).

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

Docktor, J. (Presenter & Author), Sudhakaran, G. R. (Co-Author), Redman, J. (Co-Author), 2014
American Association of Physics Teachers (AAPT) Summer Meeting, American Association of
Physics Teachers, Minneapolis, Minnesota, "Fostering Partnerships between Physics
Departments and K-12 Teachers", http://www.aapt.org/Conferences/SM2014/. (Date
Presented: July 28, 2014, Date Submitted: March 3, 2014).

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

Download File (jdocktor/present/2014-07-28 Docktor MSP poster-1.pdf)

Docktor, J. (Presenter & Author), Sudhakaran, G. R. (Co-Author), Redman, J. (Co-Author), 2014
American Association of Physics Teachers (AAPT) Summer Meeting, American Association of
Physics Teachers, Minneapolis, Minnesota, "Integrating the Next Generation Science
Standards into Professional Development", http://www.aapt.org/Conferences/SM2014/. (Date
Presented: July 28, 2014, Date Submitted: March 3, 2014).

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

Download File (jdocktor/present/2014-07-28_Docktor_MSP_talk-1.pdf)

Docktor, J. (Presenter & Author), Sudhakaran, G. R. (Co-Author), 2014 American Association of Physics Teachers (AAPT) Summer Meeting, American Association of Physics Teachers, Minneapolis, Minnesota, "Reforming Physics Teacher Education at the University of Wisconsin - La Crosse", http://www.aapt.org/Conferences/SM2014/. (Date Presented: July 28, 2014, Date Submitted: March 3, 2014).

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

Download File (jdocktor/present/2014-07-28 PhysTEC Poster-1.pdf)

Docktor, J. (Presenter & Author), Sudhakaran, G. R. (Co-Author), 2014 Physics Teacher Education Coalition (PhysTEC) Conference, Physics Teacher Education Coalition, American Physical Society, American Association of Physics Teachers, Austin, Texas, "Recruiting and Retaining Future Physics Teachers at the University of Wisconsin - La Crosse", http://www.phystec.org/conferences/2014/. (Date Presented: May 19, 2014, Date Submitted: March 17, 2014).

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

Download File (idocktor/present/2014-05-19 PhysTEC poster-1.pdf)

Docktor, J. (Presenter & Author), Illinois State University Physics Education Seminar, Illinois State University, Bloomington, Illinois, "Eye movements while interpreting graphical representations of motion". (Date Presented: April 9, 2014).

Meeting Type	Scop	ре	Format of Presentation	Published in Proceedings?	Refereed Proceedings?	Invited or Accepted	Published Elsewhere?
	Loca	al	Oral Presentation				

Download File (jdocktor/present/2014-04-08_ISU_Talk-1.pdf)

Sudhakaran, G. R. (Presenter & Author), Docktor, J. (Presenter & Author), Redman, J. (Presenter & Author), Mathematics and Science Partnerships (MSP) Annual Meeting, Wisconsin Department of Public Instruction, Wisconsin Dells, Wisconsin, "Preparing Wisconsin Teachers with "A LOT of Science". (Date Presented: February 4, 2014).

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

Download File (jdocktor/present/2014.02.04 MSP Dells-1.pdf)

Mestre, J. P. (Presenter & Author), Docktor, J. (Co-Author), Gire, E. (Co-Author), Rebello, S. (Co-Author), 2014 American Association of Physics Teachers (AAPT) Winter Meeting, American Association of Physics Teachers, Orlando, Florida, "Using eye tracking to explore expert-novice differences", http://aapt.org/Conferences/wm2014/. (Date Presented: January 6, 2014, Date Submitted: August 15, 2013).

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

Download File (jdocktor/present/AAPT eye tracking 1-14 copy-1.pdf)

Docktor, J. (Presenter & Author), Mestre, J. (Co-Author), 2013 Wisconsin Association of Physics Teachers (WAPT) Meeting, Wisconsin Association of Physics Teachers, Eau Claire, Wisconsin, "Eye movements while interpreting graphical representations of motion", http://www.uwec.edu/wapt/Meetings/2013/. (Date Presented: October 26, 2013, Date Submitted: October 18, 2013).

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

Download File (jdocktor/present/2013-10-26 WAPT presentations-1.pdf)

Docktor, J. (Presenter & Author), Redman, J. (Co-Author), Sudhakaran, G. R. (Co-Author), 2013 Wisconsin Association of Physics Teachers (WAPT) Meeting, Wisconsin Association of Physics Teachers, Eau Claire, Wisconsin, "Preparing Wisconsin Teachers with "A LOT of Science"", http://www.uwec.edu/wapt/Meetings/2013/. (Date Presented: October 26, 2013, Date Submitted: October 18, 2013).

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

Docktor, J. (Presenter & Author), UW-Stevens Point Physics & Astronomy Colloquium, University of Wisconsin - Stevens Point, Stevens Point, Wisconsin, "Eye movements while interpreting graphical representations of motion". (Date Presented: October 4, 2013, Date Submitted: September 24, 2013).

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

Download File (jdocktor/present/2013-10-04 UWStevensPoint Colloquium-1.pdf)

Redman, J. (Presenter & Author), Sudhakaran, G. R. (Presenter & Author), Docktor, J. (Co-Author), 2013 Mathematics and Science Partnerships Regional Conference, U.S. Department of Education, Washington, DC, "Preparing Wisconsin Teachers with "A LOT of Science"", http://www.ed-msp.net/index.php/dowloads/?layout=edit&id=574. (Date Presented: September 10, 2013, Date Submitted: July 26, 2013).

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

Download File (idocktor/present/2013-09-10 MSP poster-1.pdf)

Docktor, J. (Presenter & Author), Mestre, J. (Co-Author), Ross, B. (Co-Author), 2013 Physics Education Research Conference (PERC), Portland, Oregon, "Teaching problem categorization using computer-based feedback", http://www.compadre.org/per/conferences/2013/. (Date Presented: July 18, 2013, Date Submitted: May 20, 2013).

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

Download File (jdocktor/present/2013-07-18 PERC poster categorization-1.pdf)

Docktor, J. (Presenter & Author), Mestre, J. (Co-Author), 2013 Physics Education Research Conference (PERC), Portland, Oregon, "Eye movements while interpreting graphical representations of motion", http://www.compadre.org/per/conferences/2013/. (Date Presented: July 17, 2013, Date Submitted: May 20, 2013).

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

Download File (jdocktor/present/2013-07-17 PERC poster eyetracking-1.pdf)

Docktor, J. (Presenter & Author), Mestre, J. (Co-Author), 2013 American Association of Physics Teachers (AAPT) Summer Meeting, American Association of Physics Teachers, Portland, Oregon, "Eye movements while interpreting graphical representations of motion",

http://www.aapt.org/Conferences/sm2013/. (Date Presented: July 17, 2013, Date Submitted: February 28, 2013).

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

Docktor, J. (Presenter & Author), Mestre, J. (Co-Author), 2013 American Association of Physics Teachers (AAPT) Summer Meeting, American Association of Physics Teachers, Portland, Oregon, "Tracking eye movements while viewing motion graphs", http://www.aapt.org/Conferences/sm2013/. (Date Presented: July 17, 2013, Date Submitted: February 28, 2013).

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

Download File (idocktor/present/2013-07-17 Docktor AAPT talk complete-1.pdf)

Docktor, J. (Presenter & Author), Sudhakaran, G. R. (Co-Author), 2013 American Association of Physics Teachers (AAPT) Summer Meeting, American Association of Physics Teachers, Portland, Oregon, "Preparing Teachers for the Next Generation Science Standards", http://www.aapt.org/Conferences/sm2013/. (Date Presented: July 15, 2013, Date Submitted: February 28, 2013).

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

Download File (jdocktor/present/2013-07-15_Docktor_AAPT_talk_small-1.pdf)

Docktor, J. (Co-Author), Geier, B. (Presenter & Author), Lawrence, K. (Presenter & Author), Horman, D. (Presenter & Author), Sudhakaran, G. R. (Co-Author), Mathematics and Science Partnerships Annual Meeting, Wisconsin Department of Public Instruction, Wisconsin Dells, Wisconsin, "Unpacking the NGSS: La Crosse School District and UW-La Crosse A LOT of Science Grant", http://tepdl.dpi.wi.gov/programs/esea-title-ii-part-b. (Date Presented: May 22, 2013).

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

Download File (jdocktor/present/2013-05-22_MSP_Presentations_small-1.pdf)

Docktor, J. (Co-Author), Kretschmer, J. (Presenter & Author), National Conference on Undergraduate Research, National Council on Undergraduate Research, La Crosse, Wisconsin, "Eye movements while interpreting graphical representations of motion". (Date Presented: April 11, 2013).

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

Download File (jdocktor/present/Kretschmer NCUR project-1.pdf)

Docktor, J. (Presenter & Author), University of Minnesota Physics Education Research Group Seminar, University of Minnesota Physics Department, Minneapolis, Minnesota, "Eye movements while interpreting graphical representations of motion". (Date Presented: March 29, 2013).

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

<u>Download File (jdocktor/present/2013-03-29_UMN_PER_Seminar-1.pdf)</u>

Docktor, J., UW-La Crosse Physics Department Seminar, University of Wisconsin - La Crosse Physics Department, La Crosse, Wisconsin, "Physics Teacher Preparation and Physics Education Research at UW-La Crosse". (Date Presented: March 13, 2013).

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

Download File (jdocktor/present/2013-03-13 STEP physics seminar-1.pdf)

Docktor, J. (Presenter & Author), Kretschmer, J. (Co-Author), Mestre, J. (Co-Author), Gire, E. (Co-Author), Rebello, S. (Co-Author), Madsen, A. (Co-Author), UW-La Crosse Faculty Research Day, UW-La Crosse, La Crosse, Wisconsin, "Eye movement patterns while studying multiple representations of physics problems",

http://www.uwlov.odu/grapts/westschops/FBeD/FBeD/20Brochure/202013.pdf (Date

http://www.uwlax.edu/grants/workshops/FReD/FReD%20Brochure%202013.pdf. (Date Presented: January 25, 2013, Date Submitted: January 4, 2013).

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

Download File (jdocktor/present/2013-01-25_Docktor_Faculty_Research_Day-1.pdf)

Docktor, J. (Presenter & Author), Sudhakaran, G. R. (Co-Author), 2013 American Association of Physics Teachers (AAPT) Winter Meeting, American Association of Physics Teachers, New Orleans, Louisiana, "Preparing teachers for the Next Generation Science Standards with "A LOT of Science", http://www.aapt.org/Conferences/wm2013/. (Date Presented: January 9, 2013, Date Submitted: October 3, 2012).

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

Download File (jdocktor/present/2013WM_Docktor_AAPT_Poster-1.pdf)

Docktor, J. (Presenter & Author), Kretschmer, J. (Co-Author), Mestre, J. (Co-Author), Gire, E. (Co-Author), Rebello, S. (Co-Author), Madsen, A. (Co-Author), 2013 American Association of Physics Teachers (AAPT) Winter Meeting, American Association of Physics Teachers, New Orleans, Louisiana, "Eye movements while interpreting graphical representations of motion", http://www.aapt.org/Conferences/wm2013/. (Date Presented: January 7, 2013, Date Submitted: October 3, 2012).

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

Download File (jdocktor/present/2013-01-07 Docktor AAPT talk-1.pdf)

Docktor, J. (Presenter & Author), Wisconsin Association of Physics Teachers Annual Meeting, Wisconsin Association of Physics Teachers (WAPT), Platteville, Wisconsin, "Eye movements while interpreting graphical representations of motion", http://www.wapt.org/. (Date Presented: October 27, 2012, Date Submitted: October 3, 2012).

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

Download File (jdocktor/present/2012-10-27 Docktor WAPT talk-1.pdf)

Docktor, J. (Presenter & Author), Wisconsin Association of Physics Teachers Annual Meeting, Wisconsin Association of Physics Teachers (WAPT), Platteville, Wisconsin, "Eye-gaze patterns while interpreting kinematics graphs", http://www.wapt.org/. (Date Presented: October 27, 2012, Date Submitted: October 3, 2012).

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

Download File (jdocktor/present/2012 Docktor PERC Poster-3.pdf)

Docktor, J. (Presenter & Author), Wisconsin Association of Physics Teachers Annual Meeting, Wisconsin Association of Physics Teachers (WAPT), Platteville, Wisconsin, "Reforming teacher professional development in preparation for the Next Generation Science Standards", http://www.wapt.org/. (Date Presented: October 27, 2012, Date Submitted: October 3, 2012).

Meeting Type	Scope	Format of Presentation	Published in Proceedings?	Refereed Proceedings?	Invited or Accepted	Published Elsewhere?
	State	Poster	Ŭ	<u> </u>	'	

Download File (jdocktor/present/2012 Docktor AAPT Poster-2.pdf)

Docktor, J. (Co-Author/Co-Presenter), Sudhakaran, G. R. (Co-Author/Co-Presenter), Redman, J. (Co-Author/Co-Presenter), Mathemathics and Science Partnerships (MSP) Annual Fall Meeting, Wisconsin Department of Public Instruction, Wisconsin Dells, Wisconsin, "A LOT of

Science", http://tepdl.dpi.wi.gov/programs/esea-title-ii-part-b. (Date Presented: October 18, 2012).

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

Download File (jdocktor/present/2012-10-18_ALOTofScience-1.pdf)

Docktor, J. (Presenter & Author), Mestre, J. (Co-Author), Gire, E. (Co-Author), Rebello, N. Sanjay (Co-Author), 2012 Physics Education Research Conference, Philadelphia, Pennsylvania, "Eye-gaze patterns while interpreting kinematics graphs",

http://www.compadre.org/per/conferences/2012/. (Date Presented: August 1, 2012).

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

Download File (idocktor/present/2012 Docktor PERC Poster-2.pdf)

Docktor, J. (Presenter & Author), Mestre, J. (Co-Author), Gire, E. (Co-Author), Rebello, N. Sanjay (Co-Author), American Association of Physics Teachers Summer Meeting, Philadelphia, Pennsylvania, "Eye-gaze patterns while interpreting kinematics graphs", http://www.aapt.org/Conferences/sm2012/upload/OnsiteProgram07-12-2012.pdf. (Date Presented: July 31, 2012).

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

Download File (jdocktor/present/2012 Docktor PERC Poster-1.pdf)

Docktor, J. (Presenter & Author), Sudhakaran, G. R. (Co-Author), American Association of Physics Teachers Summer Meeting, Philadelphia, Pennsylvania, "Reforming teacher professional development in preparation for the Next Generation Science Standards", http://www.aapt.org/Conferences/sm2012/upload/OnsiteProgram07-12-2012.pdf. (Date Presented: July 31, 2012).

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

Download File (jdocktor/present/2012_Docktor_AAPT_Poster-1.pdf)

Docktor, J. (Presenter & Author), Mestre, J. P. (Co-Author), Gire, E. (Co-Author), Rebello, N. Sanjay (Co-Author), Madsen, A. (Co-Author), American Association of Physics Teachers Summer Meeting, Philadelphia, Pennsylvania, "An eye tracking analysis of physics representations", http://www.aapt.org/Conferences/sm2012/upload/OnsiteProgram07-12-2012.pdf. (Date Presented: July 31, 2012, Date Submitted: April 2, 2012).

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

Download File (jdocktor/present/2012-07-31_Docktor_AAPT_talk-1.pdf)

Docktor, J. (Co-Author), Gire, E. (Presenter & Author), Rebello, N. Sanjay (Co-Author), Mestre, J. (Co-Author), American Association of Physics Teachers Summer Meeting, Philadelphia, Pennsylvania, "Exploring representational fluency with eye-tracking", http://www.aapt.org/Conferences/sm2012/upload/OnsiteProgram07-12-2012.pdf. (Date Presented: July 31, 2012, Date Submitted: April 2, 2012).

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

Docktor, J., University of Minnesota Physics Education Research group seminar, University of Minnesota, Minnesota, Minnesota, "Eye movement patterns while studying multiple representations of physics problems". (Date Presented: March 30, 2012).

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

Download File (jdocktor/present/2012-03-30_PER_seminar-1.pdf)

Sudhakaran, G. R. (Co-Presenter), Docktor, J. (Co-Presenter), Redman, J. (Co-Presenter), Mathematics and Science Partnerships (MSP) Fall Meeting, Wisconsin Department of Public Instruction, Wisconsin Dells, Wisconsin, "A LOT of Science",

http://dpi.wi.gov/tepdl/t2bgrant.html. (Date Presented: November 8, 2011).

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

Download File (jdocktor/present/MSP Meeting Presentation 2011-1.pdf)

2. Editorial and Review Activities

- "Improving Critical Skills Using WikiS and GPS in a Physics Classroom", The Physics Teacher, Invited Manuscript Reviewer. (June 10, 2015 June 25, 2015).

 Reviewed a manuscript submitted to the journal The Physics Teacher.
- "Gender gaps and gendered action in a first-year physics laboratory", Physical Review Special Topics Physics Education Research, Invited Manuscript Reviewer. (February 5, 2015 March 7, 2015).

Reviewed a manuscript submitted to the journal Physical Review Special Topics - Physics Education Research.

"Physics Metacognition Inventory Part II: Confirmatory Factor Analysis and Rasch Analysis", Physical Review Special Topics - Physics Education Research, Invited Manuscript Reviewer. (December 10, 2014 - January 12, 2015).

Reviewed a manuscript submitted to the journal Physical Review Special Topics - Physics Education Research.

"Physics Education Research: A Research Subfield of Physics with Gender Parity", Physical Review Special Topics - Physics Education Research, Invited Manuscript Reviewer. (October 17, 2014 - November 16, 2014).

Reviewed a manuscript submitted to the journal Physical Review Special Topics - Physics Education Research.

- "Exploring the use of (Protocol Name) to develop fine-grained measures of interactive teaching in undergraduate science clsasrooms", Science Education, Invited Manuscript Reviewer. (August 18, 2014 September 15, 2014).
 - Reviewed a manuscript submitted to the journal Science Education.
- "Assessing the Presence of Interactive Teaching Techniques in Postsecondary STEM Classrooms", Science Education, Invited Manuscript Reviewer, International. (March 18, 2014 April 15, 2014).

Reviewed this manuscript submitted for publication to the international peer-reviewed journal Science Education.

- "Exploring pedagogical content knowledge of teaching assistants using the Test of Understanding Graphs in Kinematics", Physical Review Special Topics Physics Education Research, Invited Manuscript Reviewer, International, Appointed, Academic. (June 24, 2013 July 28, 2013). Reviewed a manuscript submitted to the journal Physical Review Special Topics Physics Education Research.
- "Using information processing to understand and remedy students' conceptual difficulties on Newton's second law of motion", Science Education, Invited Manuscript Reviewer, International. (September 5, 2012 October 4, 2012).

Reviewed this manuscript submitted for publication to the international peer-reviewed journal Science Education.

"Affordances of play for student agency and student-centered pedagogy", Proceedings of the 2012 Physics Education Research Conference, Invited Manuscript Reviewer, National. (July 23, 2012 - August 6, 2012).

Review this article submitted to the 2012 PERC conference proceedings.

- "Promoting children's agency and communication in an informal science program", Proceedings of the 2012 Physics Education Research Conference, Invited Manuscript Reviewer, National. (July 23, 2012 August 6, 2012).
 - Review this article submitted to the 2012 PERC conference proceedings.
- "Teaching graphs in introductory physics: Interpretation vs. construction", Proceedings of the 2012 Physics Education Research Conference, Invited Manuscript Reviewer, National. (July 23, 2012 August 6, 2012).
 - Review this article submitted to the 2012 PERC proceedings
- "Problematizing problem-solving rubrics: enhancing assessments to include blended mathematical and physical reasoning throughout the solution", Physical Review Special Topics Physics Education Research, Invited Manuscript Reviewer, International, Appointed, 1 items edited/reviewed, Academic. (March 6, 2012 April 21, 2012).

 Reviewed this article submitted to PRST-PER
- "Representational task formats and problem solving strategies in kinematics and work", Physical Review Special Topics Physics Education Research, Invited Manuscript Reviewer, International, Appointed, 1 items edited/reviewed, Academic. (November 7, 2011 March 3, 2012).
 - Reviewed this article submitted to PRST-PER and all subsequent re-submissions.
- "Students Solving Physics Problems: A Research Review from a Self-Regulation Perspective", Science Education, Invited Manuscript Reviewer, International, Appointed, 1 items edited/reviewed, Academic. (August 31, 2011 September 27, 2011).

3. Research Currently in Progress

- Docktor, Jennifer, John Thompson, Rabindra Bajracharya, "Using eye-tracking to support studies of student understanding of definite integrals and the Fundamental Theorem of Calculus in math and physics contexts", On-Going, Scholarly. (January 1, 2013).
- Docktor, Jennifer, Sudhakaran, Gubbi R, "Revitalizing physics teacher education at UW-La Crosse", On-Going, Scholarly. (August 1, 2012).
- Docktor, Jennifer, Sudhakaran, Gubbi R, Jerry Redman, "A LOT of Science: Professional development activities in physical science for K-12 teachers", On-Going, Scholarly. (January 2012).
- Docktor, Jennifer, Jose Mestre, Liz Gire, Sanjay Rebello, "Eye-gaze patterns in judging equivalence of representations in physics", On-Going, Scholarly. (October 2010).
- Docktor, Jennifer, Ken Heller, "Development and validation of a physics problem-solving assessment rubric", Physical Review Special Topics Physics Education Research, Writing Results, Scholarly. (September 2009).
- Docktor, Jennifer, Jose Mestre, Brian Ross, "Conceptual problem solving in high school physics", Writing Results, Scholarly. (August 2011).

Contracts, Grants, and Sponsored Research

- Sudhakaran, Gubbi R (Principal), Docktor, Jennifer (Co-Principal), "Seven Rivers STEM"(Not Funded), External Grant, Sponsored by U.S. Department of Education Mathematics and Science Partnerships Program, Wisconsin Department of Public Instruction, \$920809. (September 1, 2015 August 31, 2018).
- Download File (idocktor/congrant research/2015-05-21 MSP proposal UWLaCrosse-1.pdf)
- Hsu, Leon (Principal), Heller, Ken (Co-Principal), Docktor, Jennifer (Co-Principal), "C3PO: Customizable Computer Coaches for Physics Online"(Not Funded), External Grant, Sponsored by National Science Foundation, Improving Undergraduate STEM Education (IUSE), \$51416. (September 1, 2014 August 31, 2017).

- Hsu, Leon (Principal), Heller, Ken (Co-Principal), Docktor, Jennifer (Co-Principal), "Strategies: Computers Coaching Students: Building Problem-Solving Skills in High School Physics"(Not Funded), External Grant, Sponsored by National Science Foundation, Innovative Technology Experiences for Students and Teachers (ITEST), \$53156. (July 1, 2014 June 30, 2017).
- Hsu, Leon (Principal), Heller, Ken (Co-Principal), Docktor, Jennifer (Co-Principal), "Web-based problem-solving coaches for high school physics students" (Not Funded), External Grant, Sponsored by U.S. Dept. of Education, Institute of Education Sciences (IES), \$44099. (July 1, 2014 June 30, 2017).
- Docktor, Jennifer (Principal), Sudhakaran, Gubbi R (Co-Principal), "Revitalizing Physics Teacher Education at the University of Wisconsin La Crosse"(Funded), External Grant, Sponsored by Physics Teacher Education Coalition (PhysTEC), via National Science Foundation and American Physical Society, \$152203. (August 1, 2012 July 31, 2015).
- Download File (jdocktor/congrant_research/PhysTEC_proposal_Docktor-Sudhakaran-1.pdf)
- Sudhakaran, Gubbi R (Principal), Docktor, Jennifer (Co-Principal), Hanson, Cheryl (Co-Principal), Redman, Jerry (Co-Principal), "Mathematics and Science Partnerships Program" (Funded), External Grant, Sponsored by Wisconsin Department of Public Instruction, \$156436. (August 1, 2013 July 31, 2014).
- <u>Download File (jdocktor/congrant_research/2012-05-11_2012 Renewal Final Math_Science_</u> Partnership Application (1)-1.pdf)
- Docktor, Jennifer (Co-Principal), Thompson, John (Co-Principal), Bajracharya, Rabindra (Co-Principal), "Using eye-tracking to support studies of student understanding of definite integrals and the Fundamental Theorem of Calculus in math and physics contexts"(Funded), External Grant, Sponsored by American Association of Physics Teachers (AAPT) Physics Education Research Leadership Organizing Council (PERLOC) Scholar-in-Residence Grant, \$2500. (January 1, 2013 January 1, 2014).
- Download File (jdocktor/congrant_research/scholar in residence 3-1.pdf)
- Sudhakaran, Gubbi R (Principal), Docktor, Jennifer (Co-Principal), Hanson, Cheryl (Co-Principal), Redman, Jerry (Co-Principal), "Mathematics and Science Partnerships Program"(Funded), External Grant, Sponsored by Wisconsin Department of Public Instruction, \$287752. (September 2011 August 2013).
- Download File (jdocktor/congrant_research/2011 MODIFIED MSP FINAL GRANT-1.pdf)
- Docktor, Jennifer (Principal), "Faculty Research Grant: Eye movement patterns while studying multiple representations of physics problems" (Funded), UW-L Grant, \$7650. (July 1, 2012 June 30, 2013).
- Download File (idocktor/congrant research/Docktor FRG proposal 2011-10-26-1.pdf)
- Litster, Megan (Principal), Docktor, Jennifer (Co-Principal), George, Anna (Co-Principal), "Science Educators Preparing for the Next Generation Science Standards" (Not Funded), UW System Grant, \$54670.
- Download File (mlitster/congrant research/UWS CPDG Proposal Narrative Litster-1.docx)

Student Research

1. Undergraduate Research

Welch, William, Physics & Astronomy, "Using Eye-tracking Technology to Study Multiple Representations in Physics," In-Process. (September 2015 - Present).

Role: I mentored Will as he learned to analyze eye-tracking data collected from a study on students' interpretations of kinematics graphs. He used Excel to generate pivot table output and pie charts for the eye-gaze regions on selected questions, linked it to performance data, and is currently linking this information to audio-recorded explanations of their reasoning.

Dates and Locations Presented:

-.

Flanagan, Matthew, Physics & Astronomy, "Using Eye-tracking Technology to Study Multiple Representations in Physics," In-Process. (May 2015 - Present).

Role: I mentored Matt as he learned to transcribe audio recorded explanations from a study on students' interpretation of kinematics graphs. The next step we will pursue is to analyze and classify the responses using qualitative research methods.

Dates and Locations Presented:

-.

Dielentheis, Dan, Physics & Astronomy, "Using Eye-tracking Technology to Study Multiple Representations in Physics," In-Process. (September 2013 - May 2014).

Role: I mentored Dan as he learned to analyze eye-tracking data collected from a study on students' interpretation of kinematics graphs. He used Excel to generate pivot table output and graphs regarding students' area-of-interest (AOI) eye-gaze data and combine it with their performance data.

Dates and Locations Presented:

—.

Bayer, Samuel, Physics & Astronomy, "Using Eye-tracking Technology to Study Multiple Representations in Physics," In-Process. (September 2013 - December 2013).

Role: I mentored Sam as he learned to analyze eye-tracking data collected from a study on students' interpretation of kinematics graphs. He used Excel to generate pivot table output and graphs regarding students' area-of-interest (AOI) eye-gaze data and combine it with their performance data.

Dates and Locations Presented:

—.

Johnson, Aaron, Physics & Astronomy, "Using Eye-tracking Technology to Study Multiple Representations in Physics," In-Process. (January 2013 - May 2013).

Role: I mentored Aaron as he began designing an eye-tracking study comparing physics instructional materials presented using animations versus static images. He began writing physics questions in a variety of formats and discussed issues of the study design, such as pre-post testing. We met once a week to discuss his progress.

Dates and Locations Presented:

-.

Riordan, Marissa, Physics & Astronomy, "Using Eye-tracking Technology to Study Multiple Representations in Physics," In-Process. (January 2013 - May 2013).

Role: I mentored Marissa as she began designing an eye-tracking study comparing physics instructional materials presented using animations versus static images. She began writing physics questions in a variety of formats and discussed issues of the study design, such as pre-post testing. We met once a week to discuss her progress.

Dates and Locations Presented:

—.

Kretschmer, Jacob, Physics & Astronomy, "Eye Movements While Interpreting Graphical Representations of Motion." (September 2012 - May 2013).

Role: I mentored Jacob as he analyzed eye-tracking data from a project in collaboration with the University of Illinois on the topic of kinematics graphs. He analyzed a large quantitative data set in Excel using techniques such as generating Pivot Tables and graphing, and viewed "heat maps" to draw conclusions about what aspects of the graphs experts and novices looked at. In the fall we met once a week to discuss his progress, and in the spring we met to create his poster for NCUR.

Dates and Locations Presented:

National Conference on Undergraduate Research (NCUR) – Poster. UW-La Crosse. (April 2013).

Aschenbrenner, Rachel, Educational Studies, "Physics Problem Categorization," Completed. (September 6, 2011 - December 14, 2011).

Role: I mentored Rachel as she learned some basic research techniques in physics education, including how to code statements from interview transcriptions and various quantitative data analysis techniques in Excel (sorting data using Pivot Tables, graphing data, and conducting statistical tests of significance).

Dates and Locations Presented:

_

B. Additional Scholarship Evidence

Scholarship Appendix 1: Publications. This appendix provides a list of my publications with additional notes about their contribution(s) to my research field. It also includes the first page / abstract of each publication. Download File (idocktor/promotion/06 Scholarship Appendix 1 Publications-2.pdf)

Scholarship Appendix 2: Grants. This appendix includes a list of all grant proposals I have submitted while at UW-La Crosse, including those that were externally funded, internally funded, and not funded. It also includes seven news articles from Campus News, the La Crosse Tribune newspaper, and local television stations highlighting the grant project Mathematics and Science Partnerships: A LOT of Science which funded professional development for 30 local teachers from 2011-2014.

**Download File (idocktor/promotion/07 Scholarship Appendix 2 Grants-1.pdf)

Scholarship Appendix 3: Awards. This appendix includes photos and a description of a scholarship award I received in 2015 - the School of Education Recognition of Excellence for Outstanding Achievement in Scholarship. It also includes the nomination letter from my department chair.

*Download File (idocktor/promotion/08 Scholarship Appendix 3 Awards-1.pdf)

V. SERVICE

A. Service

Department Service

Physics Dept. Five-year Plan Committee, Member. (September 2013 - Present)

Physics Dept. Inclusive Excellence Committee, Member. (September 2013 - Present)

Physics Dept. Meeting Secretary, Secretary. (September 2013 - Present)

Physics Dept. Campus Close-up Committee, Member. (August 2012 - Present)

Distinguished Lecture Series Committee, Member. (September 2011 - Present)

Plan and organize activities related to the Distinguished Lecture Series seminar given by a Nobel Laureate Physicist each fall.

Physics Dept. Assessment Committee, Member. (September 2011 - Present)

Oversee departmental program assessment activities and physics general education course assessments.

Physics Dept. Search and Screen Committee, Member. (September 2013 - April 2014) Search and Screen Committee for an IAS position in Physics Education

Physics Dept. Recruitment Committee, Member. (September 2011 - August 2013)

Annually edits the recruitment letter sent to prospective students and obtains a list of student names from ACT testing services.

Physics Dept. Bylaws Committee, Member. (May 2012 - September 2012)

To revise the Physics Dept. By-laws sections on scholarship to be more inclusive of the Physics Education faculty member.

Physics Dept. ADA Search Committee. (May 2012 - August 2012)
Search committee for a new administrative assistant for the Physics Dept. Read applications and conducted phone interviews.

University Service

1. Committee Involvement

General Education Assessment Subcommittee on Software Selection, Member. (March 2014 - Present)

Review materials from assessment software vendors, attend software demonstrations, and participate in the RFP process.

School of Education Task Force on Marketing and Recruitment, Chair. (November 1, 2013 - Present)

Examine current practices for marketing and recruitment across School of Education programs and develop a bifurcated marketing and recruitment strategy.

Gen Ed Assessment. (September 2012 - Present)

Reviewed general education course assessment tasks and rubrics and consulted with individual faculty / departments about course-embedded assessment procedures. The committee met approximately once every two weeks for one hour. From 2013-2014 I served as meeting secretary, and from 2014-2015 I served as a GEAC liaison to the General Education Committee by attending GEC meetings.

Secondary Teacher Education Preparation (STEP) Program Committee, Member. (September 2011 - Present)

Oversee activities pertinent to the School of Education program on Secondary Teacher Education Preparation (STEP), including program admissions and course changes.

School of Education, Member. (August 2011 - Present)

The School of Education holds meetings approximately twice a month for all faculty involved in teacher education preparation. I attend these meetings and the accompanying University Supervisor meetings in conjunction with my role as a Field and Student Teacher supervisor.

School of Education Disposition Task Force, Member. (September 2012 - July 2013)

Professional and Community Service

1. Other professional and community service

Professional, American Association of Physics Teachers (AAPT) Committee on Graduate Education in Physics, Chairperson, Chair, approximately 10 hours spent for the year, Yes, appointed, Pro Bono, National. (January 1, 2015 - December 31, 2015). http://www.aapt.org/aboutaapt/organization/graduate.cfm

Professional, American Association of Physics Teachers (AAPT) Committee on Graduate Education in Physics, Chairperson, Vice Chair, approximately 10 hours spent for the year, Yes, appointed, Pro Bono, National. (January 1, 2014 - December 31, 2014). http://www.aapt.org/aboutaapt/organization/graduate.cfm

Professional, American Association of Physics Teachers (AAPT) Committee on Graduate Education in Physics, Committee Member, Member, approximately 5 hours spent for the year, Yes, appointed, Pro Bono, National. (January 1, 2013 - December 31, 2013). http://www.aapt.org/aboutaapt/organization/graduate.cfm

Professional, National Conference on Undergraduate Research, Reviewer, Pro Bono. (January 2013 - April 2013).

Reviewed abstracts for NCUR (both in physics and in education) and sorted abstracts into sessions based on topic.

Professional, National Conference on Undergraduate Research, Session Chair, approximately 6 hours spent for the year. (April 11, 2013 - April 14, 2013).

Moderated physics and engineering sessions at the 2013 National Conference on Undergraduate Research.

Service Presentations

Kosiak, Jennifer J (Presenter & Author), Hertel, Joshua (Presenter & Author), Litster, Megan (Presenter & Author), Docktor, Jennifer (Presenter & Author), "Enhancing Student Learning Through

Formative Assessment", Center for Advancing Teaching and Learning, 17th Annual UWL Conference on Advancing Teaching and Learning. (September 1, 2015).

The goal of this hands-on workshop is to introduce participants to using formative assessments in the classroom. Formative assessments can be thought of as a collection of different techniques, activities, and procedures all focused on eliciting student thinking and guiding instructional decisions. They range from quick methods of polling a class to structured academic language supports to carefully crafted activities that engage students in content. Therefore, formative assessment can be viewed as assessment for learning by providing ongoing and actionable feedback to both students and teachers rather than a summative evaluation of learning typically given at the end of an instructional segment. During this workshop, we will share a variety of formative assessment classroom techniques that we have used in our courses and how these techniques have enhanced student learning. Additionally, participants will have the opportunity to create formative assessments that can be implemented in their own classroom settings.

Download File (jdocktor/present service/Formative Assessment-1.pdf)

Docktor, Jennifer (Presenter & Author), "Science in a Digital Learning Environment", School of Education and School District of La Crosse Learning Through Technology Conference, University of Wisconsin - La Crosse. (August 20, 2015).

This session is a hands-on opportunity to explore practical ways of using technology to engage students in learning STEM (science, technology, engineering, and mathematics). Participants will conduct experiments using LabQuest 2 hand-held data collection and analysis devices from Vernier Software & Technology (www.vernier.com), graph data in real time using LoggerPro software, and try out more than 15 different sensors appropriate for teaching life science and physical science topics.

Download File (idocktor/present service/2015-08-20 Science in a Digital Learning Environment-1.pdf)

Docktor, Jennifer, "Science and Math Expo 2015", University of Wisconsin - La Crosse, CESA 4, and Gundersen Health Systems, La Crosse, Wisconsin. (May 12, 2015).

Was an abstract reviewer and poster reviewer for middle school students' science projects (grades 6-8) within the CESA #4 area.

Docktor, Jennifer (Presenter & Author), "Teaching Science with Technology", Come Take a Look: UW-La Crosse School of Education Day, La Crosse, Wisconsin. (March 11, 2015). A career in science teaching? Think about it! Science is one of the highest demand areas in the nation, and science teachers get to play with all kinds of fun toys every day. Come and take a look at different equipment and technology used to teach science and learn about why you should consider a career in science teaching!

Litster, Megan, Docktor, Jennifer, "Light Bright!", Girls in Science, University of Wisconsin - La Crosse. (June 22, 2014).

Explore the science of light and color by making a colorful butterfly using black ink, wearing special rainbow-vision glasses, bending a pencil, and building your very own kaleidoscope! Learn about how animals see and why our eyes can sometimes play tricks on us.

Download File (mlitster/present service/2014GIS-BSEbrochure-1.pdf)

Docktor, Jennifer (Coordinator/Organizer), "Eco-park Physics Fair and Demo Show", UW-La Crosse Physics Department and Eco-park, La Crosse, Wisconsin. (April 22, 2014). Coordinated a physics fair event for 385 sixth graders from three local middle schools over three days (April 22-24, 2014). I planned the equipment and activities for a whole-group demo show and 15 individual tables, and recruited more than 80 faculty and student volunteers to assist with the event.

Download File (jdocktor/present_service/2014-04-22_Physics_Fair_signs-1.pdf)

Docktor, Jennifer (Co-Author/Co-Presenter), Litster, Megan (Co-Author/Co-Presenter), George, Anna (Co-Author), Sambu, Daniel (Co-Author), "Teaching Science with Technology", UW-L School of Education, 21st Century Teaching Technology Showcase, La Crosse, Wisconsin. (February 20, 2014).

Download File (jdocktor/present_service/2014.02.20_Poster-1.pdf)

Docktor, Jennifer (Presenter & Author), Harris, Steve (Presenter & Author), Sudhakaran, Gubbi R (Co-Author), "Fostering School Partnerships with Teachers: A LOT of Science", La Crosse Rotary Club, La Crosse, Wisconsin. (October 31, 2013).

Download File (jdocktor/present_service/2013.10.31 Rotary presentation_v2-1.pdf)

Docktor, Jennifer (Presenter & Author), "Fostering School Partnerships with Teachers: A LOT of Science", School of Education Emeriti Brunch, La Crosse, Wisconsin. (October 30, 2013). Download File (jdocktor/present_service/SoE Emeriti Brunch Fall2013_Science_MSP-1.pdf)

Litster, Megan, Docktor, Jennifer, "Angry Birds Eggstravaganza", Girls and Boys in Science, University of Wisconsin - La Crosse. (June 22, 2013).

Docktor, Jennifer (Presenter & Author), "Middle School Physics Fair", Lincoln Middle School, La Crosse, Wisconsin. (May 7, 2013).

I organized a physics fair for approximately 75 sixth grade physical science students at Lincoln Middle School. This included a brief demonstration show followed by a series of demonstration "stations" or booths which students visited via timed rotation. The booths were staffed by myself and 7 student volunteers from UW-L.

Download File (jdocktor/present service/2013-05-06 Physics demo posters-1.pdf)

Docktor, Jennifer (Presenter & Author), "Blended Learning, the Flipped Classroom, and YouTube", School District of La Crescent, La Crescent High School, La Crescent, Minnesota. (February 18, 2013).

I gave two professional development presentations / interactive workshops for teachers at "La Crescent Staff Development Day". The topics included blended learning and the flipped classroom, but also instructional video resources (YouTube EDU, iTunes U, Jing screencasting, etc.)

Download File (jdocktor/present_service/2013-02-18_LaCrescent_Handout-1.pdf)

Docktor, Jennifer (Presenter & Author), "Demonstrations on Sound and Music", Longfellow Middle School, La Crosse, Wisconsin. (December 4, 2012).

I attended an advanced math class of 6th graders at Longfellow Middle School to answer their project questions about Sound and show some physics demonstrations related to Sound and Music.

Docktor, Jennifer (Presenter Only), Gerber, Daniel T (Coordinator/Organizer), "High Quality Science Trade Books for 2012", Wisconsin Society of Science Teachers, Monona Terrace in Madison, Wisconsin. (March 9, 2012).

This hands-on workshop focuses on use of quality K-12 STEM trade books to meet Wisconsin Science and ELA Common Core Standards

Docktor, Jennifer (Co-Presenter), LeDocq, Michael (Co-Presenter), "Under Pressure! Physical Science Activities in Pressure, Fluids, Sinking, & Floating", Western Wisconsin Educational Conference, La Crosse Center. (February 17, 2012).

Physical science classes are much more exciting if they include student activities and demonstrations! We will introduce low-cost activities with Pressure, Sinking, and Floating. We'll also share a few of our favorite physics demonstrations used in classes at UW-La Crosse and Western Technical College. These activities are hands-on and inquiry-based.

Download File (jdocktor/present_service/2012_WWEC_presentation-1.pdf)

Docktor, Jennifer (Presenter Only), "Do you want to be a high school physics teacher? The new Secondary Teacher Education Preparation (STEP) program in physics", Physics Department Seminar, UW - La Crosse. (February 1, 2012).

Download File (jdocktor/present service/2012-02-01 STEP physics seminar-1.pdf)

Professional Memberships

Wisconsin Society of Science Teachers, State. (February 2012 - Present).

The Wisconsin Society of Science Teachers is the largest Wisconsin organization of individuals interested in the advancement of science education. WSST's purpose is to promote, support and improve science education in the state of Wisconsin by providing leadership, advocacy, and programs to enhance the teaching and learning of science.

Wisconsin Association of Physics Teachers, State. (October 2011 - Present).

WAPT is a section of the American Association of Physics Teachers (AAPT). The goal of the WAPT is to advance and diffuse the knowledge of physics, especially as it pertains to the teaching of physics.

American Association of Physics Teachers, International. (2003 - Present).

AAPT is a strong professional physics science society dedicated to the pursuit of excellence in physical science education.

B. Additional Service Evidence

Service Appendix 1: Service to the Physics Department and School of Education. This appendix includes data evidence of my success at recruiting and retaining more students into the physics education track of the physics major, and it also describes my additional service activities as an affiliate of the School of Education.

<u>Download File (jdocktor/promotion/09_Service Appendix 1 Department and SOE-1.pdf)</u>

Service Appendix 2: Service to the Community. This appendix highlights my partnership with the La Crosse Children's Museum (including a volunteer award and news articles) and includes pictures from a physics fair and demonstration show I organized in Spring 2014 for nearly 400 local sixth graders.

*Download File (idocktor/promotion/10 Service Appendix 2 Community-1.pdf)

Service Appendix 3: Service to the Profession. This appendix includes an award I received as an Outstanding Referee for Physical Review Journals awarded by the American Physical Society in 2015, and a description of my role as chair of a national committee in the American Association of Physics Teachers organization.

<u>Download File (jdocktor/promotion/11_Service Appendix 3 Profession-1.pdf)</u>

VI. ADDITIONAL INFORMATION

A. Awards and Honors

- Recognition of Excellence for Outstanding Achievement in Scholarship Award, UW-La Crosse School of Education, Scholarship/Research. (April 26, 2015).
- 2015 Judith Bouffleur Outstanding Volunteers of the Year, Children's Museum of La Crosse, Service, Community. (April 20, 2015).
- Outstanding Referee of the Physical Review and Physical Review Letters, American Physical Society, Service, Professional. (March 9, 2015).

B. Faculty Development

Other Activities

- Teaching, Instructional-Related Conference, "17th Annual UWL Conference on Teaching and Learning", Center for Advancing Teaching and Learning, La Crosse, Wisconsin, United States, No. (September 1, 2015 Present).
- Teaching, Instructional-Related Conference, "Learning Through Technology Conference", UW-La Crosse School of Education and School District of La Crosse, La Crosse, Wisconsin, United States, No. (August 20, 2015 Present).
- Professional, Attended Conference, "Spring 2015 Wisconsin edTPA Implementation Conference", Wisconsin Department of Public Instruction and UW-La Crosse School of Education, Wisconsin Dells, Wisconsin, United States. (April 10, 2015).
- Scholarship/Research, Attended Conference, "Mathematics and Science Partnerships (MSP) Spring Meeting", Wisconsin Department of Public Instruction, Wisconsin Dells, Wisconsin, United States. (April 7, 2015).
- Scholarship/Research, Attended Conference, "2015 Physics Teacher Education Coalition (PhysTEC) Annual Conference", American Association of Physics Teachers and American Physical Society, Seattle, Washington, United States. (February 5, 2015 February 7, 2015).

- Teaching, Instructional-Related Conference, "Faculty College", UW-System Office of Professional and Instructional Development, Richland Center, Wisconsin, United States, No. (May 27, 2014 May 30, 2014).
- Scholarship/Research, Attended Conference, "2014 Physics Teacher Education Coalition (PhysTEC) Annual Conference", American Association of Physics Teachers and American Physical Society, Austin, Texas, United States. (May 19, 2014 May 20, 2014).
- Professional, Instructional-Related Conference, "Educator Symposium: Professional Learning Communities", UW-La Crosse School of Education and School District of La Crosse, La Crosse, Wisconsin, United States. (August 26, 2013 August 27, 2013).
- Teaching, Instructional-Related Conference, "Blended Learning Institute", UW-La Crosse School of Education and School District of La Crosse, La Crosse, Wisconsin, United States. (August 22, 2013 August 23, 2013).
- Teaching, Technology Training, "School of Education Technology Integration Training", Center for Advancing Teaching and Learning, University of Wisconsin- La Crosse, La Crosse, Wisconsin, United States. (June 3, 2013 June 14, 2013).
- Scholarship/Research, Attended Conference, "Mathematics and Science Partnerships (MSP) Spring Meeting", Wisconsin Department of Public Instruction, Wisconsin Dells, Wisconsin, United States. (May 22, 2013).
- Teaching, Technology Training, "Collaborative Learning Studio Training", UW-La Crosse School of Education, La Crosse, Wisconsin, United States. (May 20, 2013).
- Professional, Workshop, "Local Evaluator Training for edTPA (Teacher Performance Assessment)", UW-La Crosse School of Education, La Crosse, Wisconsin, United States. (April 5, 2013 May 17, 2013).
- Professional, Attended Conference, "Academic Language Training for the edTPA (Teacher Performance Assessment)", Wisconsin Department of Public Instruction and UW-La Crosse School of Education, Wisconsin Dells, Wisconsin, United States. (May 10, 2013).
- Teaching, Webinar, "TeachLIVE Lab Demonstration", UW-La Crosse School of Education; University of Central Florida, United States. (May 3, 2013).
- Scholarship/Research, Attended Conference, "2013 Physics Teacher Education Coalition (PhysTEC) Annual Conference", American Association of Physics Teachers and American Physical Society, Baltimore, Maryland, United States. (March 15, 2013 March 17, 2013).
- Teaching, Self-Study Program, "School of Education Book Study", UW-La Crosse School of Education, La Crosse, Wisconsin, United States. (February 8, 2013 March 8, 2013).
- Professional, Workshop, "Local Evaluator Training for edTPA (Teacher Performance Assessment)", UW-La Crosse School of Education, La Crosse, Wisconsin, United States. (January 23, 2013).
- Teaching, Workshop, "Student Teacher and University Supervisor Orientation Day", UW-La Crosse School of Education, Office of Field Experience, La Crosse, Wisconsin, United States. (January 22, 2013).
- Teaching, Instructional-Related Conference, "14th Annual Conference on Teaching and Learning", CATL, La Crosse, Wisconsin, United States. (August 28, 2012).
- Teaching, Instructional-Related Conference, "Blended Learning Institute", UW-La Crosse School of Education, School District of La Crosse, La Crosse, Wisconsin, United States. (August 20, 2012 August 21, 2012).
- Teaching, Workshop, "Student Teacher and University Supervisor Orientation Day", UW-La Crosse School of Education, Office of Field Experience, United States. (August 17, 2012).
- Professional, Attended Conference, "Professional Learning Communities at Work Institute", Solution Tree, Minneapolis, Minnesota, United States. (August 13, 2012 August 15, 2012).

- Scholarship/Research, Attended Conference, "Physics Teacher Education Coalition (PhysTEC) Leadership Council Meeting", American Association of Physics Teachers and American Physical Society, Philadelphia, Pennsylvania, United States. (July 28, 2012).
- Scholarship/Research, Attended Conference, "Mathematics and Science Partnerships Regional Conference", U.S. Department of Education, Chicago, Illinois, United States. (April 17, 2012 April 19, 2012).
- Professional, Workshop, "Progress monitoring in RTI / MTSS: Critical Tools Emerging School Practice", UW-L School of Education, La Crosse, Wisconsin, United States. (April 13, 2012).
- Teaching, Attended Conference, "WSST 2012 Meeting", Wisconsin Society of Science Teachers, Madison, Wisconsin, United States, No. (March 8, 2012 March 10, 2012).
- Professional, Attended Conference, "2012 Physics Teacher Education Coalition Conference", American Physical Society & American Association of Physics Teachers, Ontario, California, United States, No. (February 3, 2012 February 4, 2012).
- Teaching, Workshop, "AAPT New Faculty Workshop", American Physical Society & American Association of Physics Teachers, Greenbelt, Maryland, United States, No. (November 17, 2011 November 20, 2011).
- Professional, Attended Conference, "2011 WAPT Annual Meeting", Wisconsin Association of Physics Teachers, Stevens Point, Wisconsin, United States, No. (October 28, 2011 October 29, 2011).
- Teaching, Workshop, "Generating Good Discussions: Let's Give 'em Something to Talk About", UW-L, Center for Advancing Teaching & Learning, La Crosse, WI, United States, No. (September 30, 2011).
- Teaching, Attended Conference, "13th Annual UW-L Conference on Teaching & Learning", UW-L, Center for Advancing Teaching & Learning, La Crosse, WI, United States, No. (September 2, 2011).
- Professional, Workshop, "Teacher Education Day: Professional Learning Communities", UW-L, School of Education, La Crosse, WI, United States, No. (August 30, 2011).
- Professional, Attended Conference, "21st Annual Wisconsin Space Conference: Seeing Farther from Space", Wisconsin Space Grant Consortium, UW-La Crosse, and NASA, La Crosse, Wisconsin, United States, No. (August 18, 2011).
- Teaching, Technology Training, "D2L Boot Camp: An In-Depth Overview", UW-L, La Crosse, WI, United States, No. (August 16, 2011).

C. Pre UW-L CV Link

Download File (jdocktor/promotion/2015-10-28_Docktor_CV-1.pdf)