#### Deborah Sue Wagner, PharmD, FASHP Clinical Associate Professor of Pharmacy University of Michigan College of Pharmacy Clinical Associate Professor of Anesthesiology Department of Anesthesiology, Pediatric Anesthesiology 4-911 Mott Children's Hospital, SPC 4245 1540 E. Hospital Dr. Ann Arbor, MI 48109-4245 (734) 936-0739 (734) 763-2435 debbiew@med.umich.edu

## **Education and Training**

Dates	Institution	Field of Study	Degree Obtained
9/1980-4/1982	University of Michigan	Pharmacy	PharmD
	Ann Arbor, Michigan		
9/1971-4/1976 University of Michigan		Pharmacy	Bachelor of Science
	Ann Arbor, Michigan		

## **Certificates and Licensure**

Expires 6/30/2019: State of Michigan Pharmacy #022848

## Academic Appointments and Clinical Appointments

09/2016-present	Clinical Professor of Anesthesiology University of Michigan Medical School, Ann Arbor, Michigan
09/2016-present	Clinical Profess of Pharmacy, University of Michigan College of Pharmacy, Ann Arbor, Michigan
09/2008-9/2016	Clinical Associate Professor of Anesthesiology University of Michigan Medical School, Ann Arbor, Michigan
09/2004-9/2016	Clinical Associate Professor of Pharmacy, University of Michigan College of Pharmacy, Ann Arbor, Michigan
07/2006-present	Pediatric Safety Coordinator, Office of Clinical Affairs, University of Michigan Health System, Ann Arbor, Michigan
05/2002-09/2008	Clinical Assistant Professor of Anesthesiology, University of Michigan Health System, Department of Anesthesiology
05/2000-09/2004	Clinical Assistant Professor of Pharmacy, University of Michigan College of Pharmacy
01/1994-05/2000	Clinical Instructor II of Pharmacy, University of Michigan College of Pharmacy

08/1998-05/2002	Clinical Instructor II, Department of Anesthesiology, University of Michigan Medical School					
07/1994-05/2000	Clinical Pharmacist/Instructor, Operating Room Pharmacy, University of Michigan Hospital, Ann Arbor, Michigan					
01/1994-06/1994	Clinical Pharmacist, Home Medication Infusion Department, University of Michigan Hospital, Ann Arbor, Michigan					
11/1988-12/1993	Senior Staff Pharmacist, St. Joseph Mercy Hospital, Ann Arbor, Michigan					
11/1986-11/1988	Manager, McAuley Pharmacy, Brighton, Michigan					
1986-1989	Pharmacy Consultant, Foster Medical Corporation, Ann Arbor, Michigan					
11/1985-11/1986	Senior Staff Pharmacist, St. Joseph Mercy Hospital, Ann Arbor, Michigan					
02/1984-11/1985	Manager, Pharmacist, Hira's Pharmacy N. Territorial Family Practice Clinic, Dexter, Michigan					
05/1983-02/1984	Pharmacist, Travacare Pharmacy, Travenol Laboratories, Detroit, Michigan					
11/1976-08/1984	Staff Pharmacist, Central Pharmacy Department, University of Michigan Hospital, Ann Arbor, Michigan					
05/1981-08/1981	Drug Consultant, Drug Consultants Inc., Rochester, Michigan					

## Honors and Awards

1982	Rho Chi Society
1986	Outstanding Young Women of America
1998	Super Star-Quality Team Award, Arrest Cart Drug Box Replenishment Team, University of Michigan Health System
2001	National Hospital Quality Award Sedation Guidelines for Use of Propofol in Pediatric Patients, University of Michigan Health System, Abbott Laboratories
2001	Anesthesia Certificate of Excellence, University of Michigan Health System
2008	25yr Continuous Community Service Award, Huron valley Ambulance Association, Washtenaw County, Michigan
2010	Fellow of the American Society of Health-System Pharmacists, AJHP
2010	Evan Newport Hope Team Winner: The Poke Plan Campaign
2011	North American Thrombosis Forum (NATF) DVTeamCare Hospital Award, VTE Executive Committee, University of Michigan Health System

2011	Finalist 2011 ASHP Award for Excellence in Medication Safety					
2012	ASHP Section of Inpatient Care Practitioners, In the Spotlight					
2014	2014 UMHS Learning Catalyst Award, The Poke Program, C.S. Mott Children's Hospital					
2014	ISMP "Cheers" Award, University of Michigan Hospitals and Health Systems, Standardization of Pediatric Oral Compounded Solutions					
2015	Kosaka Third Place Award, International Anesthesia Research Society, A Phase I Study of Dexmedetomidine Bolus and Infusion in Corrective Infant Cardiac Surgery: Safety and Pharmacokinetics					
2017	HEMS Recognition for EMS Pharmacy System in Southeastern Michigan					
2017	SMSHP Student Research Award Recipient; Nada Rida					
2017	McGlone PharmD Investigations Award: Victoria Butterfield					
2018	Anesthesia Patient Safety Foundation 2 <sup>nd</sup> Place Medication Safety Award					

## Teaching (see attached appendix A and B)

## **Teaching Philosophy and Summary**

As a clinical practice faculty at the COP and the University of Michigan Medical School my teaching responsibilities have spanned the continuum of didactic, clinical and research education. This has encompassed PharmD students, Pediatric Pharmacy Practice specialty residents, anesthesiology residents and fellows, nurse midwives, nurse practitioners, as well as some nonmedical specialties. My basic philosophy is that every opportunity affords a teaching moment that should instill enthusiasm and passion for the subject being taught. Since 2005 when I accepted the role of the Pediatric Safety Coordinator in the Office of Clinical Affairs the majority of my strictly didactic teaching was replaced with a focus on the PharmD investigations course. As this course is a prerequisite for graduation from the COP I believe it is the perfect venue for teaching students to work collaboratively and think independently while conceptualizing and developing their research project. I instill in them not only the value of the project but also it applicability to direct patient care. They also learn how to prepare a final manuscript worthy of publication in a high tiered journal. These projects also have given the students and exposure to areas in the specialty of anesthesiology that are not taught in the pharmacy curriculum yet are largely pharmacology based. Despite being a required, for credit course, no formal preceptor evaluation exists for the course at this time but I am continuously referred by past students to the upcoming year for PharmD investigation projects.

Sharing an APPY rotation as well with the Medication Safety Officer has been a great collaboration as well for teaching students not only about medication safety but also basic safety skills such as Failure Mode Assessment, Just Culture, and Root Cause Analysis. This rotation highlights the impact pharmacists can have in ensuring medication safety and working towards process improvement in the medication management system of complex health care organizations. It's an area that I am extremely passionate about and believe that future generations of pharmacists will be held to a much higher accountability for medication safety. Additionally, for the past 10 years I have provided a rotation site for the pediatric specialty residency program. My site is a hybrid rotation that focuses on pediatric pain management as well as the administrative side of pediatric patient safety. Residents are exposed to risk management and safety issues that arise as well as the opportunity to round with the pediatric acute pain service that is a component of the Department of Pediatric Anesthesiology. This gives the resident a

broad scope to see both sides of issues that affect patient care and I believe lays a strong foundation to see hospital leadership from the ground up as well as the top down. My philosophy here is to always challenge the resident to think "what if" and to understand the root cause of events that happen within complex health care systems.

As my practice area of specialty involves both pediatric and obstetric anesthesiology subjects I have been sought after yearly to teach pharmacology of medications used in pregnancy and lactation as well as pain management in labor. In the setting of small classrooms this environment lends itself to an open teaching format that is often discussion based with pro/con issues highlighted. In essence not much different than the current team based learning in selected courses currently in the COP curriculum. The classes are engaging and an opportunity for multidisciplinary sharing of ideas and practice occurs. My position has also afforded me the opportunity to mentor and teach medical students in the summer biomedical research program. This program matches medical students with preceptors to develop a research project that can be completed during the summer semester. This is challenging as the project must provide adequate background education to the student as well as the creation of a succinct project within the time constraints. Both students I have mentored have gone on to have their work presented and/or published. Again the ability to work collaboratively in a multidisciplinary role is one of my strongest assets as an educator. In an age of increasing recognition of pharmacists in the scope of medical care I bring unique talents and knowledge to students and the profession.

My approach to all teaching has been to instill in students critical thinking and to broaden their foundation of knowledge. In 2010, I was nominated for the Colleges most prestigious "Teaching Excellence Award" The nomination itself was an honor and despite not receiving the award the recognition amongst the incredibly talented other nominees at the COP was humbling. I have a passion for educating all practitioners of various specialties in the area of anesthesiology practice and believe that one should always be willing to share knowledge and aid others in life long skills of continued learning.

## 2 Didactic Teaching

Course # and Title	Year/Semester	Role: Coordinator, Lecturer, Both	Brief Course Description	Students: PharmD, Graduate or Undergraduate (#)	Student Contact Hrs.
N677	Winter 2021	Lecturer	Pharmacology	Graduate (15)	4
IOE 481	Fall 2020	Advisor	CW Administration	Graduate (5)	2
COVID- APPE	Winter 2020	Guest Lecturer	4 Wk Rotation	Graduate (42)	2
IOE 481	2020 Winter	Advisor	CW Administration	Graduate (4)	2
P569	2020 Winter	Advisor	PharmD Investigations	Graduate (4)	1
P569	2019 Fall	Advisor	PharmD Invesigations	Graduate (2)	1
P680	2019 Fall	Advisor	Seminar	PharmD (1)	2
N677	2019 Winter	Lecturer	Pharmacology	Graduate (15)	4
P569	2019 Winter	Advisor	PharmD Investigations	Graduate (2)	1
P680	2018 Fall	Advisor	Seminar	PharmD(2)	2
N546	2018 Fall	Lecturer	Pharmacology	Graduate (12)	4
P569	2018 Fall	Advisor	PharmD Investigations	Graduate (3)	1
P680	2017 Fall	Advisor	Seminar	PharmD	2

Description of what the individual teaches and teaching load for ALL courses taught at UM for the past 6 years.

N640	2017 Fall	Lecturer	Pharmacology	Graduate	4
P569	2017 Fall	Advisor	PharmD Investigations	Graduate(3)	1
P569	2017 Winter	Advisor	PharmD Investigations	Graduate (2)	1
P569	2016 Fall	Advisor	PharmD Investigations	PharmD(4)	1
P569	2016 Winter	Advisor	PharmD Investigations	PharmD(4)	1
N540/546	2016 Fall	Lecturer	Pharmacology	Graduate	4
N640	2016 Winter	Lecturer	Pharmacology	Graduate	4
P569	2015 Fall	Advisor	PharmD Investigations	Graduate	1
N540/546	2015 Fall	Lecturer	Pharmacology	Graduate	4
N640	2015/Winter	Lecturer	Pharmacology	Graduate	4
P569	2015/winter	Advisor	PharmD investigations	PharmD (6)	1
N540/546	2014/fall	Lecturer	Pharmacology	Graduate	4
P569	2014/fall	Advisor	PharmD Investigations	PharmD (7)	1
P680	2014/fall	Advisor	Seminar	PharmD (1)	2
P569	2014/winter	Advisor	PharmD Investigations	PharmD (7)	1
N640	2014/winter	Lecturer	Pharmacology	Graduate	4
P690	2013 fall	Preceptor	Advanced Pharmacy Practice	PharmD (1)	2
N540/546	2013 fall	Lecturer	Pharmacology	Graduate	4
P569	2013 fall	Advisor	PharmD Investigations	PharmD (6)	1
N640	2013 winter	Lecturer	Pharmacology	Graduate	4
P569	2013 winter	Advisor	PharmD Investigations	PharmD (6)	1
P680	2012 fall	Advisor	Seminar	PharmD (2)	2
P569	2012 fall	Advisor	PharmD Investigations	PharmD (10)	1
N540/546	2012 fall	Lecturer	Pharmacology	Graduate	4
IOE 481	2012 fall	Advisor	Engineering Design	Undergraduate (3)	4
P569	2012 winter	Advisor	PharmD Investigations	PharmD (10)	1
N640	2012 winter	Lecturer	Pharmacology	Graduate	4
IOE 481	2012 winter	Advisor	Engineering Design	Undergraduate (3)	4
P680	2011 fall	Advisor	Seminar	PharmD (1)	2
P569	2011 fall	Advisor	PharmD Investigations	PharmD (8)	1
N540/546	2011 fall	Lecturer	Pharmacology	Graduate	4
P569	2011 winter	Advisor	PharmD Investigations	PharmD (8)	1
N640	2011 winter	Lecturer	Pharmacology	Graduate	4
P570	2010 fall	Advisor	Independent Study	PharmD (1)	2
P569	2010 fall	Advisor	PharmD Investigations	PharmD (3)	1
N540/546	2010 fall	Lecturer	Pharmacology	Graduate	4
IOE 481	2010 winter	Advisor	Engineering Design	Undergraduate (4)	4

N640	2010 winter	Lecturer	Pharmacology	Graduate	4
P569	2010 winter	Advisor	PharmD Investigations	PharmD (3)	1
P569	2009 fall	Advisor	PharmD Investigations	PharmD (2)	1
N540/546	2009 fall	Lecturer	Pharmacology	Graduate	4
IOE 481	2009 fall	Advisor	Engineering Design	Undergraduate (4)	4
P569	2009 winter	Advisor	PharmD Investigations	PharmD (1)	1
N640	2009 winter	Lecturer	Pharmacology	Graduate	4

## **3** Experiential Teaching

	IPPEs	P4 Studer	nt Rotations	Resident Rotations		Graduate Student Rotations	
Year	# of Students	# of Blocks	# of Students	# of Blocks	# of Residents	# of Semesters	# of Students
2020				1	1		
2018				1	1		
2017	2			1	1		
2016				1	1		
2015	5			1	1		
2014		1	1	1	1		
2013				1	1	2	2
2012						2	1
2011				1	1	2	1
2010						2	1

## 4 Mentoring

List all PharmD students, graduate students, postdoctoral fellows, resident who were mentored.

Year(s)	Trainee/Mentee	Description*	Mentee's Current Position
2020	Amima Mamhood	Research	Student
2020	Jenna Salter	Research	Student
2020	Amanda Harris, Callum Drause, Jordan Cerio, Pryia Desai, Tyler Spurr	IOE 481	Faculty Advisor
2020	Kaitlynn Hughes	PGY2 administrative rotation	Faculty
2020	Mo Fung	PGY 1 Writing Project	Faculty
2019	Gabriella Brathwait, William Crowley, Jacob Lawson, Ronald Scott	IOE 481	Faculty Advisor
2019	Jenna Salter	Research	Student

2019	Rachel Wolfe	Seminar	Student
2019	Jenn Salter	Summer Intern Project	Student
2018	Madeline Lipp	PGY1	Resident
2017	Abigail Schauble	PGY2	Resident
2016	Jessika Richards	PGY2	PCTU Clinical Specialist C&W Hospital
2015	Lisa Scherkenbach, Pharm D	PGY2	PICU Clinical Specialist C&W Hospital
2014	Emily Israel, Pharm D	PGY2	Graduated
2013	Justina Damiani, Pharm D	PGY2	Chicago, Ill
2010- 2013	Terri Voepel-Lewis	PhD, University of Michigan School of Nursing	Pediatric Research Coordinator Pediatric Anesthesiology University of Michigan Hospitals
2013	Bess Connors	Summer Biomedical Research Student,	University of Michigan Medical School
2011	Jennifer Hemberg	UROP	Medical School
2009- 2010	Hannah Yu	Research Assistant	Department of Anesthesiology
2009- 2010	Lori Burnham	Mentor	MiChart Willow UMHS
2012	Breanna Luckett	IOE	
2012	Donald Rysdyk	IOE	
2012	Samantha Vincenti	IOE	
2009	Michael Bagliebter	IOE	
2009	Brandon Barnett	IOE	
2009	Matt Cooper	IOE	
2009	Julian Stauffer	IOE	
2014	Josh Clark	Seminar Advisor	Medical School
2012	April Qian	Seminar Advisor	Industry-east coast
2012	Irwin Lau	Seminar Advisor	California
2011	Kylee Funk	Seminar Advisor	Minnesota COP faculty
2015	Katie Johnson	Research	Student
2015	Henry Tran	Research	Student
2015	Victoria Butterfield	Research	Student
2015	Ashley Wolf	Research	Student
2015	Christina Sienkowski	Research	Student
2016	Nathan Lake	Summer Intern project	Student
2016	Humaira Nawer	Summer Intern project	Student
2016	Humaira Nawer	Research	Student
2016	Allison Golom	Research	Student
2017	Genevra Gulera	Summer Intern project	Student
2017	Nada Rida	Summer Intern project	Student
2017	Cecilia Li	Research	Student
2017	Josh Clark	Seminar Advisor	Student

Miguel Caraballo		
iniguer europaine	Research	Denver, CO
Joy Lee	Research	
John Sindlee	Research	COP UMHS
Vera Vulaj	Research	
-	Research	
-		
Anthony Ellis	Research	Retail California
Courtney Kilborn	Research	Staff UMHS
Alicia Giloglly	Research	Staff UMHS
Roxanne Nanos	Research	University of Oklahoma
Jessica Fong	Research	Kaiser Permanente
Irwin Lau	Research	
Sara Brown	Research	
April Qian	Research	
		University of Minnesota
Rylee Fullk	Research	University of Minnesota
Berni Marini	Research	UMHS
Sara Berman	Research/Independent Study	
Idan Hananawa	Research	Beaumont Hospital
Mai Tran	Reserach	
Luba Burman	Research	Chicago, Ill
Devon Grey	Research	
-	Research	
	John Sindlee Vera Vulaj Mohamad Yassine Thoraya Youness Anthony Ellis Courtney Kilborn Alicia Giloglly Roxanne Nanos Jessica Fong Irwin Lau Jessica Fong Irwin Lau Sara Brown April Qian Kylee Funk Berni Marini Sara Berman Idan Hananawa Mai Tran	John SindleeResearchVera VulajResearchMohamad YassineResearchThoraya YounessResearchAnthony EllisResearchCourtney KilbornResearchAlicia GilogllyResearchAlicia GilogllyResearchJessica FongResearchIrwin LauResearchSara BrownResearchKylee FunkResearchBerni MariniResearchSara BermanResearch/Independent StudyIdan HananawaResearchMai TranResearchLuba BurmanResearchDevon GreyResearch

\*Descriptions: Pharm.D. Investigations, Pharm.D. Seminar, Master's Student, Ph.D. Student, Resident, Postdoctoral Fellow.

# **Summary of Teaching at Previous Institutions (if applicable):** Not applicable

## **Didactic Teaching**

1/2020-4/2021	Faculty Preceptor –IOE 481 Program
2014-2018	ECMO Specialist Training Course: Drug Interaction with ECMO Circuit Components, University of Michigan Hospital, Ann Arbor, MI
3/2013-8/2013	Summer Biomedical Research Faculty

2012-present	Specialty Resident – PGY2 Residency Preceptor – Pain Management
9/2012-12/2012	Faculty Preceptor – IOE Program
3/2011-9-2011	Summer Biomedical Research Faculty
9/2010-2013	PhD Faculty Advisor Independent Study
1/2009-4/2009	Faculty Preceptor – IOE Program
9/2008-12/2008	Faculty Preceptor – IOE Program
2005-2008	Medication History P485, College of Pharmacy, University of Michigan, Ann Arbor, Michigan
2002-2007	Independent Study
2000-2005	Specialty Resident – Pediatrics Rotation PGY 2
09/1999-04/2000	Faculty Mentor, Anesthesia Residency Program, Department of Anesthesiology, University of Michigan Hospital, Ann Arbor, Michigan
08/1998-present	Instructor, PharmD Program, College of Pharmacy, University of Michigan, Ann Arbor, Michigan
06/1997-2002	Instructor, CATS (cardiac rehab program), Medsport, University of Michigan, Ann Arbor, Michigan
1997-present	P569 PharmD Research Investigations
1996-present	P680 PharmD Seminar
07/1995-present	Instructor, Midwifery Program, N546/640, School of Graduate Nursing, University of Michigan, Ann Arbor, Michigan
01/1985-2013 Clinic	cal Instructor, University of Michigan College of Pharmacy Externship Program, Ann Arbor, Michigan
09/1993-present	Faculty Instructor, Pharmacotherapeutics, P431/P620, School of Graduate Nursing, University of Michigan, Ann Arbor, Michigan
10/1993-07/2000	Instructor, "The Beat Goes On", Understanding your Medications, Michigan Heart and Vascular Institute, Ann Arbor, Michigan
10/1993	Instructor, Pharmacology Review of Antiarrhythmic Agents, Cardiac Progressive Care Core classes, St. Joseph Mercy Hospital, Ann Arbor, Michigan
10/1993	Instructor, Cardiac Medications and their Effects on EKG and Stress Testing, American College of Sports Medicine, 2-part series, St. Joseph Mercy Hospital, Ann Arbor, Michigan
Deborah Sue Wearer	5/26/2021

08/1990-06/1992	Instructor, Cardiac Medication Classes, St. Joseph Mercy Hospital, Ann Arbor, Michigan
04/1990-08/1990	Instructor, Washtenaw Community College, Respiratory Therapy Curriculum, Ann Arbor, Michigan
11/1981	Instructor, Emergency Medical Services Personnel in Washtenaw and Livingston County, Michigan
03/1981-06/1981	Instructor of Emergency Medications for nurses in Detroit area facilities for the mentally retarded
1978-1980	Instructor of cardio-pulmonary resuscitation training for nursing and pharmacy personnel Coordinator and instructor of self-medication programs for renal transplant and rehabilitation patients Provide clinical inservice educational seminars for medical and nursing staff

## Didactic Teaching Appendix A

Didactic Tea	ching 200	<u>5-2016 (</u>	( #= nun	hber of s		)										
Course	2005*	200	200	200	200	201	201	2012	201	201	2015	201	201	201	201	2020
Number		6	7	8	9	0	1		3	4		6	7	8	9	
College of											1					
Pharmacy																
P514	Х															
Pharmaceut							1									
ical Care																
P485/486	Х	Х	Х	Х												
Medication							1									
Hx																
P431/432	Х						1									
Therapeuti							1									
CS																
P680	X (1)	Х					Х	X (2)		Х	X(1)	X(2	X(1	X(2	Х	Х
Seminar		(1)					(1)			(1)		)	)	)	(1)	(1)
P690																
Advanced																
Pharmacy							1		X							
Practice									(1)							
P570		X	X			X	1									
Independen		(1)	(1)			(1)										
t Study	37 (1)	37	37	37	37	37	37	37	37	37	37(6)	37/6	37/4	37/0	37/2	37
P569	X (1)	X	X	X	X	$\mathbf{X}$	X	X	X	X	X(6)	X(6	X(4	X(2	X(2	X
PharmD		(1)	(3)	(1)	(2)	(3)	(8)	10)	(6)	(5)		)	)	)	)	(2)
Investigatio							1									
ns COVID															202	
APPY PGY 2	<b>V</b> (1)	v					X		X	v	<b>V</b> (1)	<b>V</b> (1	<b>V</b> (1		0	X
PGY 2 Pediatric	X (1)	X (1)								X (1)	X(1)	X(1	X(1			
		(1)					(1)		(1)	(1)		)	)			(1)
Specialty UMHS																
UMINS						<u> </u>			L							

Didactic Teaching 2005-2016 ( #= number of students)

<b>—</b>						I							L		1	
Department	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х			
of																
Pharmacy																
CPR																
Training																
Anesthesiol	Х	Х	Х	Х	Х	Х	Х	Х	Х		Х		Х			
ogy																
Resident/F																
aculty																
Tutorials																
University																
of																
Michigan																
Summer							Х		Х							
Biomedical							(1)		(1)							
Research 4							. /		. /							
month																
rotation																
IOE 481				Х	Х	Х		X (3)							202	
Practicum				(4)	(4)	(4)		(-)							0	
in Hospital				(-)	(-)	(-)									(4)	
Settings															(.)	
Nursing						Х	Х	X(1)	Х							
PhD						(1)	(1)	11 (1)	(1)							
Preceptor						(1)	(1)		(1)							
Nursing	X	Х	Х	X	Х	X	Х	Х	Х	Х	Х	X	X	Х		
540/546	Δ	Λ	Δ		Δ		Δ	Δ	Δ	Δ	Λ			Λ		
Nursing	X	Х	Х	X	Х	X	Х	X	Х	Х	Х	X		Х		X
640/677	Δ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ		Λ		<u>^</u>
UMHS										X	Х	X	X			
ECMO										Λ	Λ	Λ	Λ			
Specialist																
Course																

\*in 2005, 20% of my 51% pharmacy effort was transferred to the Office of Clinical Affairs as the Pediatric Safety Coordinator. At this time I was relieved of classroom didactic teaching due to the requirements of the job. The remaining portion of college of pharmacy responsibilities was shifted to more independent related experiences as well as research based focus and was agreed upon by the college of pharmacy deans. This is evident from the number of PharmD investigations, seminar students and independent study students I have worked with since this transition occurred. The remaining portion, 49% effort, is directly from the Department of Anesthesiology and the Medical School.

## Scholarship

## **Research Philosophy and Summary**

My joint appointment with the medical school in the Department of Anesthesiology has afforded me the ability to collaborate on a multitude of levels in clinical research. My efforts have encompassed prospective, retrospective and transitional laboratory research studies. This has afforded me the ability to present at meetings such as the American Society of Health System Pharmacy, Society of Critical Care Medicine, American Society of Anesthesiology, the Extracorporeal Life Support Organization, the Society of Obstetric Anesthesia and Perinatology, and the American Society of Nurse Anesthetists. In 2012-2013 I was a finalist for the student research project of the year for the COP. It is not uncommon for me to have 5 or 6 different research projects undergoing at the same time. The great thing about research is that it highlights ones creativity and adds to the current body of knowledge challenging others to delve further into new therapies and options. I am extremely proud to be part of a health system that has through research endeavors led to significant advances in practice. When compared to peers on Research Gate my overall RG is 23.67 and higher than 77.5% of other members. I have clearly established myself as a leader in research related to pharmacy

practice in the operating room arena as well as patient safety endeavors. My focus is and has been on medications used for analgesia, sedations, postoperative nausea and vomiting (PONV) and more recently on surgical site infections and venous thromboembolic disorders (VTE).

I remember my first participation on a grant funded research project with a seasoned faculty anesthesiologist who was well known for pediatric studies on PONV. She invited me to be a co-PI and insisted when it came time for manuscript publication that I be first author on the paper. I will never forget that act of respect for me as a researcher and what it meant to me over the years in fostering both my own research interests but assisting others as well. To this day I strongly believe in giving recognition to others and an opportunity to build a career in research.

As I mentioned my research focus has been on perioperative issues and most recently on pediatric safety as well. I have completed many research projects in my career on PONV. (ref. 7,15,19,20,28,31,38) Albeit not glamorous it is unfortunately a frequent side effect of anesthesia and a major patient satisfaction dissatisfied. This is especially true in the realm of pediatrics as many medications are not indicated or approved for use yet continue to be used "off label" I have shown that, just as in adults, patients or caregivers would rather avoid PONV and suffer more pain in return. This led to the development of algorithms for the prevention and treatment of PONV both in adults and pediatrics and has given way to further studies with new agents such as the NK-1 antagonists. As PONV is often a complication of drugs used for analgesia and pain management the risks associated with opioid use has also been an area of interest for me. I have just shown that the use of multimodal nonopioid therapy significantly reduces the risk of opioid side effects in children. This is a pivotal work, the first of its kind in pediatrics.

The area of nonoipoid therapy as well as agents used for sedation is a current interest of mine. It is well known that pain causes anxiety which is then treated with sedatives increasing the risk of respiratory events. Studying nonopioids such as acetaminophen and dexmedetomidine are areas with great value for patient safety. Another area I have devoted time and interested to is working with the Extracorporeal Membrane Oxygenation (ECMO) laboratory at the University of Michigan to study the impact of the ECMO circuit on the clearance of drugs invitro that can be translated to studies at the bedside. My goal is to establish the University of Michigan ECMO center as the leader in the country for conducting drug clearance studies. Longitudinally over time my interest in pain and sedation management in critically ill children led me to drug clearance in extracorporeal circulation and is currently a focus of several ongoing studies. (ref. 5,6,8,43,45,46)

My other area of research interest of mine is pediatric Venous Thromboembolism (VTE). Though pediatrics are at a lower risk of VTE they still occur and can be devastating. Current trends in the United States show an increasing rate in children. My work in the adult population evaluating the accuracy of risk scoring has led me to develop a risk scoring tool for pediatrics. I have created a modified Caprini tool for pediatrics and embedded this as an electronic scoring system in our computerized physician order system. In order to gain approval to mandate risk scoring in children 13-18 years old required significant buy in from the physician stake holders but was facilitated by myself in collaboration with the Chief Medical Officer and the Executive VTE Committee for the institution. This was a major achievement and will add to the limited data on pediatric VTE's such that further interventions can be made to reduce its incidence as well as to allow us to compare results with peer institutions. (ref. 4, 42)

Lastly my collaborations with hospital leadership in quality and safety have used research to develop a new model for pharmacy technicians to deliver medications to the patient's bedside consistent with ASHP's practice model. I have been able to directly involved engineering students in health care design to measure time motion studies relative to medication delivery systems. (ref. 11,25,42)

I can honestly say that research is what I love as it directly relates to problem solving and answering questions that only yet have to be solved. I myself am amazed over time how my involvement in clinical research has transpired and I am sought after continuously to participate in various studies. My biggest problem is saying no.

#### Peer Reviewed Publications:

- Bazzell, B, Wagner D, Durant K, Callahan B. Insights on developing a field hospital formulary and medication distribution process in preparation for a second surge of COVID-19 cases. AJHP July 24, 2020 – PMID 32705115, Journal Impact Factor: 1.4 *Role: Conceptualization, Design, Analysis, Writing*
- 2. Wagner D. Perioperative Stress Dose Steroids. Hospital Pharmacists Letter and Hospital Prescribers Letter. Nov. 2019 *Role: Writing*
- Lake N, Nawer H, Wagner D. Piloting Medication Histories in a Pediatric Postanesthesia Care Unit. J. Perianesth. Nursing; 34(1): 117-23. Feb. 2019/ Journal Impact Factor: 1.83 *Role: Conceptualization*, *Design, Analysis*
- Neff M, Wagner D, Phillips B, Shanks A, Thompson A, Wilkins K, Naughton N, Voepel-Lewis T. Propofol Drug Shortage Associated with Worse Postoperative Nausea and Vomiting Outcomes Despite a Mitigation Strategy. AANA AANA-D-17-00008 April 2018 vol 86(2). Journal Impact Factor: 0.71 *Role: Conceptualization, Design, Analysis, Writing*
- Annich GM, Zaulan O, Neufeld M, Wagner D, Reynolds MM. Thromboprophylaxis in Extracorporeal Circuits: Current Pharmacological Strategies and Future Directions. Am J Cardiovasc Drugs. 2017 DOI 10:1007//s-40256-017-0229-0. Journal Impact Factor : 2.76 *Role: Writing*
- Scoville BA, *Vulaj V*, Mueller BA, Annich GM, Wagner DS. Acetaminophen clearance during ex vivo continuous renal replacement therapies. J Artif Organs. Oct 2017 DOI10.1007/s10047-017-1001-6. Journal Impact Factor: 1.35 *Role: Conceptualization, Design, Analysis, Writing, Corresponding Author*
- Keefer P, Kidwell K, Lengyel C, Warrier K, Wagner D. Variability in Threshold for Medication Error Reporting Between Physicians, Nurses, Pharmacists, and Families. Current Drug Safety 2017.12: 187-192. Journal Impact Factor: 0.46. *Role: Conceptualization, Design, Writing.*
- Baetzel A, Yang K, Thompson A, Wagner D, Nafiu O. Singl-dose intravenous acetaminophen does not reduce the need for recovery room pain treatment following pediatric ambulatory otolaryngology surgery. Pediatric Drugs. April 2017. Impact Factor : 2.147 *Role: Analysis, Writing*
- 9. Wagner DS, *Caraballo M*, Peterson Y, Waldvogel. In-vitro Effects of Sequestration on Epsiolon-Aminocaproic Acid Concentration in Extracorporeal Membrane Oxygenation. *Perfusion* 2016. Journal Impact Factor : 1.09 *Role: Conceptualization, Design, Analysis, Writing, Corresponding Author*
- Gibbons K, DeMonbrun A, Beckman EJ, Keefer, P, Wagner DS, Stewart M, Saul D, Hakel S, Liu M, Niedner. *Pediatric Blood & Cancer* wileyonlinelibrary.com DOI 10.1002/pbc.25870, 2016. Journal Impact Factor: 2.88, *Role: Conceptualization, Analysis, Writing*
- Adkins-Bley K, Clarkowski S, Wagner D, Brehmer K, Mei M, Young K. Ensuring Safe Medication Administration through Direct Observation. Quality in Primary Care 23(3):167-173, 2015. Journal Impact Factor: 3.4, Role: Conceptualization, Design, Analysis, Writing

- 12. Voepel-Lewis T, Wagner DS, Tait A. Leftover prescription opioids after minor procedures: an unwitting source for accidental overdose in children. *JAMA Pediatrics* Epub: E1-E2, 2015. *Role: Analysis and Writing*
- 13. Shah GS, Christensen R, Wagner D, Pearce B, Sweeney J, Tait AR. Retrospective evaluation of antimicrobial prophylaxis in prevention of surgical site infection in the pediatric population. *Pediatric Anesthesia* 24(9): 994-8, 2014. Journal Impact Factor: 1.74, Times Cited: 2. *Role: Analysis, Writing*
- Burke CN, Nafiu O, Baldock A, Malviya S, *Lau I*, Voepel-Lewis T, Wagner D. A Retrospective Description of Anesthetic Medication Dosing in Overweight and Obese Children. *Pediatric Anesthesiology* 24(8):857-62, 2014. Journal Impact Factor: 1.74, Times Cited: 4. *Role: Conceptualization, Design, Analysis, Writing*
- 15. Marini BL, Funk K, Kraft MD, Fong J, Naanos R, Stout S, Wagner D. The effects of an informational video on patient knowledge, satisfaction and compliance with venous thromboembolism prophylaxis: A Pilot Study. Patient Education & Counseling (PEC-13-785) 96: 264-267, 2014. Journal Impact Factor: 2.60, Times Cited: 1 Role: Conceptualization, Design, Writing
- 16. Long M, Wagner D, Hubbard A, Pasko D, Baldridge P, Annich G. Safety and Efficacy of Recombinant-Activated Factor VII for Refractory Hemorrhage in Pediatric Patients on Extracorporeal Membrane Oxygenation: A Single Center Review. *Perfusion*, 2014;29(2):163-170. Journal Impact Factor: 1.08, Times Cited: 3 *Role: Analysis, Writing*
- Gillogly A, Kilbourn C, Walvogel J, Martin J, Annich G, Wagner D. In vitro Clearance of Intravenous Acetaminophen in Extracorporeal Membrane Oxygenation. *Perfusion*, March 2013; 28(2): 141-145. Journal Impact Factor: 1.08, Times Cited: 1 *Role: Conceptualization, Design, Writing*
- Voepel-Lewis T, Wagner D, Burke C, Tait AR, *Hemberg J*, Pechivanidis E, Malviya S, Talsma A. Early adjunvant use of nonopioids associated with reduced odds of serious postoperative opioid adverse events and need for rescue in children. *Paediatric Anaesthesiology*, 2013:23(2); 162-9. Journal Impact Factor: 1.74, Times Cited: 8 *Role: Writing*
- Wagner D, Pasko D, *Phillips K*, Waldvogel J, Annich G. In vitro Clearance of Dexmedetomidine in Extracorporeal Membrane Oxygenation. *Perfusion*, August. 13, 2012; 1-7. Journal Impact Factor: 1.08, Times Cited: 6 *Role: Conceptualization*, *Design*, *Analysis*, *Writing*, *Corresponding Author*
- 20. Tran, Mai, Ciarkowski, Scott, Wagner, Deborah, Stevenson, James G. A Case Study on the Safety Impact of Implementing Smart Patient-Controlled Analgesic Pumps at a Tertiary Care Academic Medical Center. *Joint Commission Journal on Quality and Patient Safety*. March 2012; 38(3), 112-119(8). Times Cited: 11 *Role: Analysis, Writing*
- Kwiatkowski JL, Johnson CE, Wagner DS. Extended Stability of Intravenous Acetaminophen in Syringes and Opened Vials. American Journal of Health-System Pharmacy, November 2012; 69: 1999-2001. Journal Impact Factor: 2.21, Times Cited: 2 Role: Conceptualization, Design, Analysis, Corresponding Author
- 22. Dickinson CJ, Wagner DS, Shaw BE, Owens TA, Pasko D, Niedner M. A Systematic Approach to Improving Medication Safety in a Pediatric Intensive Care Unit. *Critical Care Nursing Quarterly Issue, Evidence-Based Innovations Impacting Intensive Care Unit Nursing Practice,* Jan-Mar 2012; 35(1): 15-26. Times Cited: 6 *Role: Conceptualization, Analysis, Writing*

- 23. Nafiu, OO, Ramachandran SK, Wagner DS, Campbell DA, Stanley JC. Contribution of Body Mass Index to Postoperative Outcomes in Minority Patients. *Journal of Hospital Medicine*, 2011; 1-7. Journal Impact Factor: 2.08, Times Cited: 2 *Role: Writing*
- Wagner DS, Nigg A, Sturm L, Sinwell G, DePestel D. Implementation of Weight-Based Antimicrobial Dosing for Surgical site Infection Prophylaxis. *Hospital Pharmacy Journal* 2011; 46(7):494-500. Times Cited: 2 *Role: Conceptualization, Design, Analysis, Writing, Corresponding Author*
- 25. Andersen MPS, Sander SP, Nielsen OJ, Wagner DS, Sanford TJ, Wallington TJ. Inhalation Anaesthetics and Climate Change. *BJA*. 2010; 105(6):760-6. Journal Impact Factor: 4.35, Times Cited: 37 *Role: Concept, Design, Analysis, Writing, Corresponding Author*
- 26. O'Brien D and Wagner DS. PONV Management: Strategies that Work. OR Nurse, November 2009; 3(6);
  41-50. Times Cited: 3 Role: Writing, Concept
- 27. Wagner DS, Pasko D, Glenn D, Lapinski J, Callow L, Shaw B. The Medication Manager: Results of a Medication at the Bedside Pilot in a Pediatric Teaching Institution. *Joint Commission Journal of Quality* and Patient Safety; 2010; 6(2):76-9. Journal Impact Factor: 0.88, Times Cited: 3 Role: Concept, Design, Analysis, Writing, Corresponding Author
- 28. Gauger V, Voepel-Lewis T, Burke C, Kostrzewa A, Caird MS, Wagner DS, Farley F. Epidural Analgesia Compared with Intravenous Analgesia after Pediatric Posterior Spinal Fusion. *Journal of Pediatric Orthopaedics*; 2009; 29(6); 588-93. Journal Impact Factor: 1.43, Times Cited: 17 Role: Writing
- 29. Cinti SK, Wilkerson W, Holmes JG, Shlafer J, Kim C, Collins CD, Bandy K, Krupansky F, Lozon M, Bradin SA, Wright C, Goldberg J, Wagner DS, Rodgers P, Atas J, Cadwallender B. Pandemic Influenza and Acute Care Centers: Taking care of Sick Patients in a Nonhospital Setting. *Biosecurity and Bioterrorism*. 2008; 6(4):335-348. Journal Impact Factor: 1.64, Times Cited: 10 *Role: Writing*
- 30. Wagner DS, Gauger V, Chiravuri D, Faust K. Ondansetron Oral Disintegrating Tablets for the Prevention of Postoperative vomiting in Children Undergoing Strabismus Surgery. *Therapeutics and Clinical Risk Management*. 2007; 4:691-694. Journal Impact Factor: 1.34, Times Cited: 6 Role: Concept, Design, *Analysis, Writing, Corresponding Author*
- 31. Tait AR, Burke C, Voepel-Lewis T, Chiravuri D, Wagner D, Malviya S. Glycopyrollate does not Reduce the Incidence of Perioperative Adverse Events in Children with Upper Respiratory Tract Infections. *Anesthesia Analgesia*. 2006; 103(5):1-6. Journal Impact Factor: 3.42, Times Cited: 140 *Role: Writing*
- Wagner DS, Yap JM, Bradley K. Assessing Parents Preferences for the Avoidance of Undesirable Anesthesia Outcomes in Their Children Undergoing Surgical Procedures. *Pediatric Anesthesia*. 2007; 17:1035-1042. Journal Impact Factor: 1.74, Times Cited: 15 *Role: Concept, Design, Analysis, Writing, Corresponding Author*
- 33. Khanderia U, Wagner DS, Cullen R, Woodcock B, Walker P, Prager R. Use of Intravenous Amiodarone for Atrial Fibrillation Following Cardiac Surgery: Guidelines to Practice. *Clinical Cardiology*. 2007; 31: 6-10. Journal Impact Factor: 2.22, Times Cited: 19 *Role: Concept, Design, Analysis, Writing*
- 34. Wagner DS, Brummett C. Dexmedetomidine: As Safe as Safe Can Be. January 2006. Seminars in Anesthesia, Perioperative Medicine and Pain. 2006; 25:84-92. Times Cited: 19 Role: Writing, Corresponding Author

- 35. Brummett CM, Wagner DS. The Use of Alpha-2 Agonists in Peripheral Nerve Blocks: A Review of the History of Clonidine and a Look at a Possible Future for Dexmedetomidine. *Seminars in Anesthesia, Perioperative Medicine and Pain*. 2006; 25:77-83. Times Cited: 4 *Role: Writing*
- 36. Wagner DS, Golembiewski J. Meds on the Move: From Cupboard to Machine. Journal of PeriAnesthesia Nursing. 2005; 20(6):444-6. Journal Impact Factor: 0.89, Times Cited: 0.89 Role: Writing
- 37. Johnson C, Wagner DS, Deloach S, Cichon-Hensley B. Stability of Tramadol Hydrochloride-Acetaminophen (Ultracet) in Strawberry Syrup and in A Sugar-Free Vehicle. American Journal Health Systems Pharmacy 2004; 61:54-57. Journal Impact Factor: 2.21, Times Cited: 3 Role: Concept, Analysis, Design, Writing
- Walker P, Wagner DS. Treatment of Pain in Pediatric Patients. *Journal of Pharmacy Practice* 2003; 16:261-275. Times Cited: 8 *Role: Writing*
- Johnson C, Wagner DS, Bassard W. Stability of Dolasetron in Two Oral Liquid Vehicles. American Journal of Health Systems Pharmacy 2003; 60:2242-4. Journal Impact Factor: 2.21, Times Cited: 5 Role: Concept, Analysis, Design, Writing
- D'Errico CC, Munro H, Buchman S, Wagner DS, Muraszko K. Efficacy of Aprotinin in Children Undergoing Craniofacial Surgery. *Journal of Neurosurgery* 2003; 90:287-290. Journal Impact Factor: 3.23, Times Cited: 34 *Role: Analysis, Writing*
- Wagner DS, Johnson C, *Cichon-Hensley B, Deloach S.* Stability of Oral Liquid Preparations of Tramadol in Strawberry Syrup and Sugar-Free Vehicle. *American Journal of Health Systems Pharmacy* 2003; 60:1268-70. Journal Impact Factor: 2.21, Times Cited: 12 *Role: Concept, Design, Analysis, Writing, Corresponding Author*
- 42. Wagner DS, Pandit U, Voepel-Lewis T, Seiwart M. Dolasetron for the Prevention of Postoperative Vomiting in Children Undergoing Strabismus Surgery. *Paediatric Anesthesia* 2003; 13:522-26. Journal Impact Factor: 1.74, Times Cited: 16 *Role: Concept, Design, Writing, Corr. Author*
- Polley LS, Columb MO, Naughton NN, Wagner DS. Relative Potencies of Levobupivacaine and Ropivacaine for Epidural Analgesia in Labor. *Anesthesiology* 2002; 96:1123-8. Journal Impact Factor: 6.17, Times Cited: 110 *Role: Writing, Design*
- Wagner DS, Naughton NN, Michel T<sup>^</sup>, Pierson C. Potency and Sterility of Anesthetic Drugs in an Obstetric Anesthesia. *International Journal of Obstetric Anesthesia* 2002; 11: 252-54. Journal Impact Factor: 1.83, Times Cited: 5 *Role: Concept, Design, Analysis, Writing, Corresponding Author*
- 45. Polley LS, Columb MO, Naughton NN, Wagner DS, van de Ven CJM: Effect of Epidural Epinephrine on the Minimum Local Analgesic Concentration (MLAC) of Epidural Bupivacaine in Labor. *Anesthesiology* 2002; 96(5): 1123-28. Journal Impact Factor: 6.17, Times Cited: 33 *Role: Writing, Design*
- 46. Pandit UA, Collier PJ, Malviya S, Voepel-Lewis T, Wagner DS, Siewert M. Oral Transmucosal Midazolam for Preschool Children. *Can J Anesth* 2001; 48(2): 191-95. Journal Impact Factor: 2.49, Times Cited: 24 *Role: Design, Concept, Writing*
- 47. Polley LS, Columb MO, Naughton NN, Wagner DS, Dorantes DM<sup>^</sup>, van de Ven CJM: Effect of Intravenous versus Epidural Fentanyl on the Minimum Local Analgesic Concentration (MLAC) of Epidural

Bupivacaine in Labor. *Anesthesiology* 2000; 93:122-8 (editorial commentary in Obstetric Anesthesia Digest 2000; 20(4): 192-4. Journal Impact Factor: 6.17, Times Cited: 54 *Role: Writing, Design* 

- Polley LS, Columb MO, Naughton NN, Wagner DS, van de Ven CJM: Relative Analgesic Potencies of Ropivacaine and Bupivacaine for Epidural Analgesia in Labor: Implications for Therapeutic Indexes. *Anesthesiology* 1999; 90:944-50. (lead article with editorial comment) Journal Impact Factor: 6.17, Times Cited: 438 *Role: Writing, Design*
- Munro H, D'Errico CC, Wagner DS: Oral Granisetron for Strabismus Surgery in Children. Canadian J. Anesth 1999; 46(1): 45-48. Journal Impact Factor: 2.50, Times Cited: 19 Role: Concept, Analysis, Design, Writing
- 50. Polley LS, Columb MO, Wagner DS, Naughton NN: Dose Dependent Reduction of the Minimum Local Analgesic Concentration (MLAC) of Bupivacaine by Suferitanil for Epidural Analgesia in Labor. Anesthesiology 1998; 89: 626-32. Journal Impact Factor: 6.17, Times Cited: 125 Role: Writing, Design
- 51. Johnson CE, Weiner JS, Wagner DS, McLean JS: Effect of H1 and H2 receptor blocking on the inhibition of immediate cutaneous reactions. *Clin Pharm* 1984; 3(1): 60-4. Journal Impact Factor: 1.53, Times Cited: 83 *Role: Writing*

## In Press:

## <u>Submitted:</u>

- 52. Johnson K, Wagner D, Ciarkowski S. Pre-and Post-Intervention Analysis of Smart Pump Alerts for Intermittent Antimicrobial Infusions at an Academic Medical Center. Joint Commission Journal on Quality and Safety. 2016 under revision *Role: Conceptualization, Design, Writing*
- 53. Thompson J, Salter J, Bui P, Herbert L, Mills D, Wagner DS, Brent C. Safety and efficacy, and Cost Effectiveness of Low vs Standard dose Intranasal Naloxone for the treatment of prehospital opioid overdose in 2 Michigan Emergency Medical Services (EMS) Regions. May 2020 *Role Conceptualization, Design*
- 54. Li, D, Doellner C, Leis A, Marinkovic A, Gibbons K, Wagner D. Ketamine Low dose infusion as adjuvant therapy for refractory pain management during an acute pain crisis at a tertiary care pediatric hospital. Pediatric Hospital Pharmacy.May 2020 *Role Conceptualization, Design, Analysis*
- 55. Leja N, Wagner DS, Smith K, Hurren J. Transportation of Intravenous Insulin Through a Pneumatic Tube System. AJHP 0302 April 2020. *Role Conceptualization, Design, Writing*
- 56. Moorthy G, Wilder N, Andropoulos D, Paugh T, Kibler K, Wagner D, Nicolson S, Zuppa A. Sequestration of Dexmedetomidine in ex vivo cardiopulmonary bypass circuits after a bolus dose and continuous infusion. J Thoracic and Cardiovascular Surg. May 2020. *Role: Conceptualization*

57. Yalamanchi P, Thorne M, Gutting A, Tribble A, Bates KE, Gisondo G, Wagner, D, Parent A. Optimization of Antibiotic Prophylaxis Delivery for Pediatric Surgical Procedures. Pediatrics 2020/001669. May 2020. *Role: Conceptualization, Design, Writing* 

## In Preparation:

- 58. Wagner DS, Gill J, Annich G, Cornell T. Antithrombin III In-vitro Clearance in ECMO Circuits. Perfusion. *Role: Conceptualization, Design, Analysis, Writing*
- 59. Wagner DS, Nawer H, Bradley S, Cranford J, Kronick S, Neumar R. Comparison of Amiodarone versus Lidocaine for Treatment of In-Hospital Cardiac Arrest (IHCA). Chest. *Role: Conceptualization, Design, Writing.*
- 60. Thompson J, Salter J, Brent T, Wagner D. Safety, efficacy, and cost of 0.4mg versus 2mg intranasal naloxone for treatment of prehospital opioid overdose. Annals of Pharmacotherapy. AOP-21-0200. *Role: Conceptualization, Design, Analysis, Writing.*
- 61. Capparelli A, Spanu C, Brown J, Dillman N, Lloyd E, Wagner D. Reducing Time to Deliver First Dose Antibiotics for Treatment of Sepsis. *Role: Conceptualization, Writing.*
- 62. Pratyusha Yalamanchi, MD MBA<sup>1</sup>; Ashley L. Parent, MSN, RN<sup>1</sup>; Anne E. Baetzel, MD<sup>1</sup>; Susan M Crowe, PharmD<sup>1</sup>; Andrew A. Gutting, BSE<sup>1</sup>; Gino Gisondo, BS<sup>1</sup>; Lynda C Portice, MSN, RN<sup>1</sup>; Marc C Thorne, MD MPH<sup>1</sup>; Deborah S Wagner, PharmD<sup>1</sup>; Katherine E. Bates, MD<sup>1a</sup>; Alison C. Tribble, MD<sup>1a</sup> Optimization of Antibiotic Prophylaxis Delivery for Pediatric Surgical Procedures. PEDIATRICS/2020/001669. *Role: Conceptualization, Writing*
- 63. Cecilia Li, PharmD<sup>1</sup>, Courtney Doellner, PharmD, BCPPS<sup>2</sup>, Aleda Leis, MS<sup>2</sup>, Annette Marinkovic, RN<sup>2</sup>, Kathleen Gibbons, MD<sup>2</sup>, Deborah Wagner, PharmD, FASHP<sup>1,2</sup>. Low-dose ketamine infusion as adjuvant therapy during an acute pain crisis in pediatric patients. Journal of Pain and Palliative Care Pharmacotherapy Decision on Manuscript ID WPPC-2020-0062. *Role: Conceptualization, Design, Analysis, Writing*
- 64. Leja N, Smith K, Hurren J, Wagner D. Transportation of Insulin Through a Pneumatic Tube System. AJHP. 10.1093. *Role: Conceptualization, Design, Analysis, Writing*

## Non Peer Reviewed Publications

## <u>Published</u>

- 1. https://ashpadvantage.com/expert--insight/revising-thoughts-on-neuromuscular-blocking -reversal-agents April 2021
- 2. www.ashpadvantage.com/nmbreversal podcast, March 2021

- Durant K, Wagner D. Field Hospitals and the Novel Coronavirus Disease Pandemic: Insights on Developing a Field Hospital Formulary and Medication Distribution Process in Preparation for a Second Surge. AJHP Voices July 2020
- 4. <u>https://pharmacy.umich.edu/about-college/news/category/faculty-news/pharmacy-faculty-publish-paper-covid-19-field-hospital-formulary-and-medication-distribution-process</u>. August 2020
- 5. Wagner, DS, Garcia R, Soleberg C. The Role of the Anesthesiologist and Pharmacist in Opioid Diversion and Deterrence Practice. Anesthesiology News. Nov. 2019
- 6. Wagner DS, Viscusi G. The Roles of Anesthesiologist and Pharmacist in Ensuring Safe Handling and Administration of Opioids. Anesthesiology News. Aug. 2018
- 7. Wagner DS, Viscussi G. The opioid epidemic and its impact on anesthesia practice. Anesthesiology News. June 2018
- **8.** Wagner DS. HFMA Leadership Magazine Summer 2016 edition. Hfma.org/leadership/summer2016 taking action against drug shortages. Pg 16-24
- 9. Chernin E, Wagner DS. A Prescription for Improving Drug Safety in the OR. *Pharmacy Practice News*, October 2008. *Role: Conceptualization, Writing*
- Lubarsky DA, Vigoda MM, Wagner DS. Economic and Safety, Considerations of Inhaled Anesthetics. CME/CE Web Program, Academy for Continued Healthcare Learning, October 2007. *Role: Conceptualization, Design, Writing*
- 11. Wagner D. Management of Nausea and Vomiting in Pregnancy: Pharmacologic Perspective. CME Monograph, Academy for Healthcare Education, November 2002. *Role: Conceptualization, Design, Analysis, Writing, Corresponding Author*
- D'Angelo R, James RL: Is Ropivacaine Less Potent than Bupivacaine? *Anesthesiology* 1999; 90: 941-3. (Editorial comment on Polley LS, Columb MO, Naughton NN, Wagner DS, van de Ven CJM: Relative Analgesic Potencies of Ropivacaine and Bupivacaine for Epidural Analgesia in Labor. *Anesthesiology* 1999; 90: 944-50. *Role: Design, Writing*
- Polley LS, Columb MO, Wagner DS, Naughton NN: Dose-Dependent Reduction of the Minimum Local Analgesic Concentration of Bupivacaine by Sufertanil for Epidural Analgesia in Labor. (selected for commentary) Obstetric Anesthesia Digest 1999; 19(1): 44-5. Role: Design, Writing

## Peer Reviewed Abstracts

 Polley LS, Columb MO, Wagner DS, Benedict PE<sup>^</sup>, Balachandran KA<sup>^</sup>, Kaczynski DA<sup>^</sup>: Effect of Epidural Sufentanil on the Minimum Local Analgesic Concentration (MLAC) of Epidural Bupivacaine in Labor. *Anesth Analg* 1997; 84: S402. *Role: Design, Writing*

- Columb MO, Polley LS, Wagner DS, Naughton NN: Reduction In The Minimum Local Analgesic Concentration (MLAC) Of Bupivacaine By Epidural Suferitanil Is Dose Dependent. *European Journal of Anaesthesiology* 1997; 14: 549-50. *Role: Design, Writing*
- Polley LS, Columb MO, Naughton NN, Wagner DS, van de Ven CJM, Dorantes DM<sup>^</sup>: Relative Analgesic Potencies of Ropivacaine and Bupivacaine for Epidural Analgesia in Labor. *Anesth Analg* 1998; 86: S384. *Role: Design, Writing*
- Munro H, D'Errico CC, Tait AR, Voepel-Lewis T, Siewert MJ\*, Wagner DS: Dose Response of Oral Granisetron in Pediatric Strabismus Surgery. *Anesth Analg* 1998; 86:S1-S551. *Role: Conceptualization, Design, Analysis, Writing*
- Polley LS, Columb MO, Naughton NN, Dorantes DM<sup>^</sup>, Wagner DS, van de Ven CJM: Effect of Intravenous vs. Epidural Fentanyl on the Minimum Local Analgesic Concentration (MLAC) of Epidural Bupivacaine In Labor. Anesthesiology 1999; Society for Obstetric Anesthesia and Perinatology Supplement: A25. Best Paper of Meeting Award Role: Design, Writing
- 6. Polley LS, Columb MO, Naughton NN, **Wagner DS**: Effect of Epidural Epinephrine on the Minimum Local Analgesic Concentration (MLAC) of Epidural Bupivacaine in Labor. *Proceedings of the Anaesthetic Research Society*, BJA 2000; 84: 276P. *Role: Design, Writing*
- Naughton NN, Polley LS, Columb MO, Dorantes DM<sup>^</sup>, Wagner DS: Efficacy of Nalmefene for the Treatment of Intrathecal Opioid Induced Pruritus. *Anesthesiology 2000; Society for Obstetric Anesthesia* and Perinatology Supplement: A25. Role: Conceptualization, Design, Writing
- 8. Wagner DS, Naughton NN, Pierson CL, Michel T^, Sikorsky M^: The Potency and Sterility of Anesthetic Drugs in an Obstetrical Setting. *Anesthesiology 2000; Society for Obstetric Anesthesia and Perinatology Supplement*: A27. *Role: Conceptualization, Design, Analysis, Writing, Corresponding Author*
- 9. Polley LS, Columb MO, Naughton NN, **Wagner DS**, van de Ven CJM: Relative Analgesic Potencies of Ropivacaine and Levobupivacaine for Epidural Analgesia in Labor. (in preparation) *Role: Design, Writing*
- Ross BM<sup>^</sup>, Wagner DS, Naughton NN, Erber MG. Obstetric Anesthesia Data Analysis of Procedures With Respect to Occurrence and Adverse Events. *Anesthesiology Supplement* (October issue 2001) *Role: Analysis, Writing*
- Ames WA, Pandit U, Voepel- Lewis TD, Al-Khatib N<sup>^</sup>, Wagner D. Evaluation of Rapacuronium Under Sevoflurane or Halothane Anesthesia in Children. *Anesthesiology Supplement* (October issue 2001) *Role: Writing*
- 12. Polley LS, Columb MO, Naughton NN, **Wagner DS**. Comparison of the Minimum Local Analgesic Concentrations of Bupivacaine for Nulliparous and Multiparous Women in Labor. *Anesthesiology 2002;* Society for Obstetric Anesthesia and Perinatology Supplement P54. **Role: Design, Writing**
- 13. Polley LS, Columb MO, Naughton NN, **Wagner DS**. Relative Analgesic Potencies of Levobupivacaine and Ropivacaine for Epidural Analgesia in Labor. *Anesthesiology* 2002;96:A1052. *Role: Design, Writing*
- 14. *Cichon-Hensley B*, DeLoach S, Johnson CE, **Wagner DS**. Stability of Oral Liquid Preparations of Tramadol in Strawberry Syrup and a Sugar-free Vehicle. *American Journal of Health-System Pharmacy Supplement, December 2002. Role: Conceptualization, Design, Analysis, Writing*

- 15. D'Errico C, D'Errico J, Wagner D, O'Reily M. Aprotinin Levels During Pediatric Open Heart Surgery. Society of Pediatric Anaesthesiology. October 2003. Role: Design, Analysis, Writing
- 16. Wagner DS, *Siebigteroth, P.* Comparison of Local Anesthetic and Opioid Consumption between Two Concentrations of Labor Epidural Solutions. *Anesthesiology Supplement, October, 2003.* Role: Conceptualization, Design, Analysis, Writing, Corresponding Author
- Cichon-Hensley BK, DeLoach SL, Johnson CE, Wagner D: Stability of oral liquid preparations of Ultracet (tramadol/acetaminophen) in strawberry syrup and a sugar-free vehicle. Thirty-eighth Annual Midyear Clinical Meeting, American Society of Health-System Pharmacists. New Orleans, LA. December 2003. Role: Conceptualization, Design, Analysis, Writing
- Bussard WE, Johnson CE, Wagner D: Stability of oral liquid preparations of Anzemet (dolasetron) in strawberry syrup and a sugar-free vehicle. Thirty-eighth Annual Midyear Clinical Meeting, American Society of Health-Systems Pharmacists. New Orleans, LA. December 2003. Role: Conceptualization, Design, Analysis, Writing
- Khanderia U, Wagner DS, Walker P, Gerguson MA, Patel A, Anderson J. Evaluation of Intravenous Amiodarone Use Guidelines for Atrial Fibrillation Following Cardiac Surgery. Thirty-eighth Annual Midyear Clinical Meeting, American Society of Health-System Pharmacists. New Orleans, LA. *December*, 2003. Role: Conceptualization, Design, Analysis, Writing
- 20. Wagner DS, Collins C. Pharmacist Participation in Emergency Bio-terrorism Preparedness within Southeastern Michigan. Thirty-eighth Annual Midyear Clinical Meeting, American Society of Health-Systems Pharmacists. New Orleans, LA. *December 2003. Role: Design, Writing*
- Wagner DS, Gauger V, Malviya S, Faust K. Disintegrating Ondansetron Tablets for Prophylactic Treatment of PONV in Children Undergoing Strabismus Surgery. ASA A-1429, Las Vegas, NV. October 2004. Role: Conceptualization, Design, Analysis, Writing, Corresponding Author
- 22. Wagner DS, Malviya S, Chiravuri D, Faust K. Disintegrating Ondansetron Tablets for Prophylactic Treatment of Postoperative Nausea and Vomiting in Children Undergoing Strabismus Surgery. Society of Pediatric Anesthesiology, February 2005. *Role: Conceptualization, Design, Analysis, Writing, Corresponding Author*
- 23. Wagner DS, Yap JM, D'Errico C, Bradley K. Assessing Parents Preferences for the Avoidance of Undesirable Anesthesia Side Effects in their Children Undergoing Surgical Procedures. Society of Pediatric Anesthesiology, February 2005. *Role: Conceptualization, Design, Analysis, Writing, Corresponding Author*
- Nigg A<sup>^</sup>, Wagner DS, DePestel D. Evaluation of Compliance with Weight-Based Dosing Recommendations for Surgical Site Infection Prophylaxis", 2008 ASHP Midyear Clinical Meeting, Orlando, Florida. December 2008 Role: Conceptualization, Design, Analysis, Writing
- Poon J<sup>^</sup>, Cober M, Walker P, Wagner DS. Retrospective Review of Recombinant Factor Seven in Pediatric Patients", 2008 ASHP Midyear Clinical Meeting, Orlando, Florida. December 2008. *Role: Conceptualization, Design, Analysis, Writing*
- 26. Stevenson J, Ciarkowski S, Tran M, Wagner DS. The Effect of the Implementation of Smart Patient Controlled Analgesia (PCA) Pumps on PCA Administration Safety, 69<sup>th</sup> International Congress of

International Pharmaceutical Federation (FIP), Istanbul, Turkey, September 2009. *Role: Conceptualization, Design, Analysis, Writing* 

- 27. Khandera U, **Wagner DS**, Walker P. Amiodarone for Atrial Fibrillation Following Cardiac Surgery: Development of Clinical Practice Guidelines at a University Hospital", 8<sup>th</sup> International Congress on Coronary Artery Disease, Prague, Czech Republic. October 2009. *Role: Conceptualization, Design, Analysis, Writing*
- 28. Hannawa I, Wagner DS. Evaluation of the Incidence and Contributing Factors to the Development of Postoperative Shivering, 2009 ASHP Midyear Clinical Meeting, LasVegas, NV. December 2009. *Role: Conceptualization, Design, Analysis, Writing*
- 29. Wagner DS, *Burman L*. Use of Naloxone during Rapid Response Team Call at the University of Michigan Hospitals and Health Systems, 12<sup>th</sup> Annual NPSF Patient Safety Congress, Orlando, FL. June 2010. *Role: Conceptualization, Design, Analysis, Writing*
- 30. Wagner DS, Ciarkowski S. Naloxone Utilization and its Use as A Quality Indicator, 12<sup>th</sup> Annual NPSF Patient Safety Congress, Orlando, FL. June 2010. *Role: Conceptualization, Design, Analysis, Writing*
- 31. Khanderia U, Walker P, Wagner DS. Clinical Practice Guidelines: Amiodarone for Atrial Fibrillation Following Cardiac Surgery, 15<sup>th</sup> World Congress on Heart Disease, Vancouver, BC, Canada. July 2010 Role: Conceptualization, Design, Analysis, Writing
- 32. Kraft MD, **Wagner DS**, *Funk K, Marini B, Fong J, Naanos R*. "VTE and You": Assessment of a VTE patient education video ("InPHARMmercial") and an electronic risk scoring tool in hospitalized medicine patients. American College of Chest of Chest Physicians Chest. 2011 Annual Meeting, Honolulu, HI. October 2011. Role: Conceptualization, Design, Writing
- 33. Fong J, Naanos R, Funk K, Marini B, Kraft M, Wagner D, Stout S. Evaluation of Venous Thromboembolism Risk Assessment in Hospitalized Adult Medicine Patients, ASHP Midyear Clinical Meeting, New Orleans, LA. December 2011 Role: Conceptualization, Design, Writing
- 34. Voepel-Lewis T, Wagner D, Tait AR, Hemberg J\*, Pechlivanidis E, Malviya S, Talsma AN. Early adjuvant use of non-opioids reduces serious postoperative opioid adverse events and need for rescue in children. Society of Pediatric Anesthesia SO2-124, Tampa FL, Winter, 2012 *Role:* Conceptualization, Writing
- 35. Burke C, **Wagner D**, Nafui O, Baldock A, Malviya S, Voepel-Lewis T, *Lau I*. A Retrospective Description of Anesthetic Medication Dosing for Underweight, Normal Weight and Overweight/Obese Children. Society of Pediatric Anesthesia SP-228, Tampa FL, Winter, 2012 *Role: Conceptualization, Design, Writing*
- 36. Wagner D, *Costos B*, Gauger V, Lewis I, *Qian A*. Evaluation of a Pediatric Venous Thromboembolic Scoring Tool in Surgical Patients. Society of Pediatric Anesthesia SO2-121, Tampa FL, Winter, 2012 *Role: Conceptualization, Design, Analysis, Writing*
- 37. Wagner D, Pasko D, Phillips K, Waldvogel J, Annich G. In vitro clearance of Dexmedetomidine in extracorporeal membrane oxygenation. ELSO meeting, Keystone Colorado, February, 2012 *Role: Conceptualization, Design, Analysis, Writing*
- 38. Merkel S, Piazza J, Desmet C, Quinn S, Neusius H, Watson M, **Wagner D**, Gibbons K, Hardenbrook D, Setlock D, Garrett P, Lapointe M, Parent K, Straub C. The Poke Program: A Voice and Choice for

Children Undergoing Pokes and Procedures. 5<sup>th</sup> International Conference on Patient and Family Centered Care, Washington DC, June 2012 *Role: Writing* 

- 39. Wagner D, Waldvogel J, Martin J, *Gilogly A, Kilbourn C,* Annich GM. In vitro clearance of acetaminophen in extracorporeal membrane oxygenation, 29<sup>th</sup> Annual CNMC Symposium ECMO & the Advanced Therapies for Respiratory Failure, Keystone, CO February 24-28, 2013. *Role: Conceptualization, Design, Analysis, Writing*
- 40. Scoville BA<sup>^</sup>, Albany College of Pharmacy and Health Sciences, Vulaj V, University of Michigan College of Pharmacy, Mueller BA, University of Michigan College of Pharmacy, Annich GM, University of Michigan Health System, Wagner DS, University of Michigan Health System. Intravenous Acetaminophen Clearance During In Vitro Continuous Renal Replacement Therapy, SCCM 2014 Critical Care Congress, San Francisco, CA, January 2014. Role: Conceptualization, Writing
- 41. Scoville BA<sup>^</sup>, Albany College of Pharmacy and Health Sciences, Vulaj V, University of Michigan College of Pharmacy, Mueller BA, University of Michigan College of Pharmacy, Annich GM, University of Michigan Health System, Wagner DS, University of Michigan Health System. Intravenous Acetaminophen Clearance During In Vitro Continuous Renal Replacement Therapy, ELSO 2014, Keystone, CO, February 2014. *Role: Conceptualization, Writing*
- 42. Freundlich RE<sup>^</sup>, Newman J, *Brown S*, **Wagner D**, Ramachandran S: Department of Anesthesiology, University of Michigan, Incidence of Hypotension Related to the Use of Intraoperative Intravenous Clonidine, American Society of Anesthesiologists Annual Meeting, New Orleans, LA, 2014. *Role: Conceptualization, Design, Analysis, Writing*
- Caraballo M<sup>^</sup>, Peterson Yuki, Walvogel J, Wagner DS. In Vitro Effects of Sequestration of Aminocaproic Acid in Extracorporeal Membrane Oxygenation (ECMO), 31st Annual Keystone ECMO Symposium, Keystone, CO, 2015. *Role: Conceptualization, Design, Analysis, Writing*
- 44. **Wagner D**, Neff N, *Youness T*<sup>^</sup>, Kheterpal S, Shanks A, Phillips B, Wilkins K, Naughton N. The Impact of a Propofol Drug Shortage on Postoperative Nausea and Vomiting and Associated Complications in an Ambulatory Surgery Center, American Society of Anesthesiologists Annual Meeting, 15-A-3237-ASAHQ, San Diego, CA, 2016. *Role: Conceptualization, Design, Analysis, Writing.*
- 45. Nafiu OO, **Wagner DS**. A Rather Expensive Band-aid: Intravenous Acetaminophen Use is Associated with Increased Need for Recovery Room Pain Treatment Following Pediatric Ambulatory Surgery. American Society of Anesthesiologists Annual Meeting, A3021, San Diego, CA. 2016. *Role: Conceptualization, Writing*
- Galura G<sup>^</sup>, Wagner D, Schaeffler K. Intravenous Acetaminophen Waste Analysis in a Pediatric Operating Room Pharmacy. ASHP MCM, Orlando FL. 2017. *Role: Conceptualization,Design, Analysis, Writing.*
- 47. *Rida N*<sup>^</sup>, Schaeffler K, **Wagner D**, Tharp J. Ketogenic Diet Pharmacy Consult. ASHP MCM, Orlando FL. Dec. 2017. *Role: Conceptualization, Design, Writing.*

48. Parent A, Thorn M, Baetzel A, Crose S, Gisondo G, **Wagner, D**, Tribble A, Dillman N, Bates K, Gutting A, Sullivan L. Surgical Antimicrobial Prophylazis (SAP) in Children's Surgery to Optimize Appropriateness of Use and Timing. ACS Quality and Safety Conference July 2019, Washington DC, abstract 602362. *Role: Conceptualization, Design* 

- 49. Wagner DS, *Nawer H*^, Kronick S, Cranford J, Bradley S, Neumar R. Comparison of Amiodarone versus Lidocaine for Treatment of In-hospital Cardiac Arrest. Re SS Program Sesuscitation Science Symposium Nov. 2019 Philadelphia, PA #29. *Role: Conceptualization, Design, Writing*
- Workman P, Wagner D. Anesthesia Medication Trays: Bigger is not always better. ASHP MCM, Dec. 2019 LasVegas NV. 2019 0204-000-19-356-LO4-P. *Role: Conceptualization*, *Design,Writing*

51. *Li C*, Doellner C, Leis A, Marinkovic A, Gibbons K, **Wagner DS**. Low-sode Ketamine infusion as an adjuvant therapy for refractory pain management during an acute pain crisis at a teriiarty care pediatric hospital. ASHP MCM Dec. 2019 Las Vegas NV abstract ID 762382. *Role: Conceptualization, Design* 

## Non-Peer Reviewed Abstracts

- Kaczynski D<sup>^</sup>, Polley LS, Columb MO, Wagner DS, Naughton NN: Dose Dependent Reduction of the Minimum Local Analgesic Concentration (MLAC) of Bupivacaine by Sufentanil for Epidural Analgesia in Labor. Midwest Anesthesiology Residents Conference, Oak Brook, Illinois 1997. Oral Presentation 123.
- 2. Polley LS, Columb MO, **Wagner DS**, Naughton NN, Youn PY<sup>^</sup>, Thessen CC: Dose Dependent Reduction of the Minimum Local Analgesic Concentration (MLAC) of Bupivacaine by Sufertanil for Epidural Analgesia in Labor. Society for Obstetric Anesthesia and Perinatology Annual Meeting, April 1997, p. 66.
- Dorantes DM<sup>^</sup>, Polley LS, Columb MO, Naughton NN, Wagner DS, van de Ven CJM: Relative Analgesic Potencies of Ropivacaine and Bupivacaine for Epidural Analgesia in Labor. Midwest Anesthesiology Residents Conference, Minneapolis, Minnesota 1998. Oral Presentation 50. Second Place Obstetrics Poster Discussion. Third Place Best Paper of Meeting.
- 4. DeRemer SM<sup>^</sup>, Polley LS, Columb MO, Naughton NN, Dorantes DM, Wagner DS, van de Ven CJM: Effect of Intravenous vs Epidural Fentanyl on the Minimum Local Analgesic Concentration (MLAC) of Epidural Bupivacaine in Labor. Midwest Anesthesiology Residents Conference, Columbus, Ohio 1999. Oral presentation 1. *First Place Obstetrics Oral*.
- 5. Michel T<sup>^</sup>, **Wagner DS**, Naughton NN, Peirson CL, Sikorsky M: The Potency and Sterility of Anesthetic Drugs in an Obstetrical Setting. Midwest Anesthesiology Residents Conference, Chicago, Illinois 2000. Oral Presentation.
- 6. Naughton NN, Polley LS, Columb MO, Dorantes DM<sup>^</sup>, **Wagner DS**: Efficacy of Nalmefene for the Treatment of Intrathecal Opioid Induced Pruritus. Anesthesiology 2000: Society for Obstetric Anesthesia and Perinatology Supplement: A25.
- 7. **Wagner DS**, Naughton NN, Pierson CL, Michel T<sup>^</sup>: The Potency and Sterility of Anesthetic Drugs in an Obstetrical Setting. Anesthesiology 2000: Society for Obstetric Anesthesia and Perinatology Supplement A27.
- 8. **Wagner DS**, Landini K, Newland S, Walker P: Sedation Guidelines for the Use of Propofol in Pediatric Patients. American Society of Health Systems Pharmacist Midyear Clinical Meeting, Las Vegas, Nevada, 2000. Poster Presentation.

- Ross B<sup>^</sup>, Wagner DS, Naughton NN: Obstetric Anesthesia Data Analysis of Procedures with Respect to Occurrence and Adverse Events. Midwest Anesthesiology Residents Conference, Milwaukee, Wisconsin, 2001. First Place Obstetrics Poster Discussion.
- Ebeid A<sup>^</sup>, Wagner DS, Voepel-Lewis T, Pandit U, Malviya S: Dolasetron for the prevention of PONV in children undergoing strabismus surgery. Midwest Anesthesiology Residents Conference, Omaha, Nebraska, 2002.
- 11. Hsu L<sup>^</sup>, **Wagner DS**, Gauger V, Malviya S, Voepel-Lewis T: Disintegrating Ondansetron Tablets for Prophylactic Treatment of PONV in Children Undergoing Strabismus Surgery. Midwest Anesthesiology Residency Conference, Mayo Clinic, Rochester, New York, 2004.
- 12. Liao A<sup>^</sup>, **Wagner DS**, Yap JM: Assessing Parents Preference for the Avoidance of Undesirable Side Effects in their Children Undergoing Surgical Procedures. Midwest Anesthesiology Residency Conference, University of Wisconsin, Madison, Wisconsin, April 1-3, 2005.
- 13. Luckritz K, Dillman N, Bissacia E, **Wagner DS**. Is here a NINJA in the House? Leveraging the EHR for real-time Identification of Patients at Risk for Nephrotoxic Medication Induced Kidney Injury. Epic National meeting, Seattle WA, Aug 2019

(*italicized names represent students*, *^represent fellows and residents*)

## **Book Chapters**

- 1. Pediatric Sedation and Analgesia, American College of Clinical Pharmacy (PedSAP). 2018
- Handbook of Non-Prescription Drugs, 15<sup>th</sup> Edition, Pregnancy Risk Categories for Non-Prescription. Drugs & Nutritional Supplements. Wagner DS. 2005
- 3. Handbook of Nonprescription Drugs, 14<sup>th</sup> Edition. Appendix I, Pregnancy Risk Categories for Nonprescription Drugs and Nutritional Supplements. Wagner DS. 2004

## **Other** Media

- 1. Webcast, Postoperative Pain and Patient-Controlled Analgesia: Evaluating Current and Evolving Modalities. myCME.com (<u>http://www.mycme.com/postoperative-pain-and-patient-controlled-analgesia-evaluating-current-and-evolving-modalities/activity/1307/</u>). 2008
- 2. Article review, Children's Nausea and Vomiting Following Posterior Fossa Surgery: A Retrospective Study. BMC Nursing, December 2008.
- 3. Article review, NK-1 monograph. UHC Consortium, January 2009.
- 4. What Can the CRNA Do To Improve Medication Safety in the OR, AANA Learn CME program, Chicago, Ill, January 2011.
- 5. Improved Strategies for Perioperative Pain Management: Live Satellite Broadcast and Webcast, VHA TV, Dallas, TX. March 2011.

- 6. Important Safety News on Oral Acetaminophen Products, "Get Well" network, C.S. Mott Children's Hospital, University of Michigan Hospitals and Health Systems. November 2011.
- 7. ASHP Practitioner Spotlight, July 2012.
- 8. VTE Education Video <u>www.youtube.com/watch?v=mhDJ7MyVwGw</u> September 23, 2013.
- 9. Wagner D: Standardizing Medication to Ensure Patient Safety, <u>http://uofmhealthblogs.org/childrens/voices-from-mott/standardizing-medications-to-patient-safety/21093/</u>, University of Michigan, 2015.
- AHRQ 2015 Chartbook on Patient Safety. Network of Patient Safety Databases Program Brief. <u>http://www.ahrq.gov/research/findings/nhqrdr/chartbooks/patientsafety/index.html</u>, MHA Pediatric Safe Table Organization. Wagner D. March 2016
- 11. <u>http://opioid.boxcarsandbox.net/person/deborah-wagner-pharmd/</u> U-M Opioid Resource Center. March 2018
- 12. <u>https://mmheadlines.org/</u> Rewriting the script: Experts aim to improve pain management and reduce opioid-related harm. December 2018
- 13. Key Considerations for Preventing Residual Paralysis in the Perioperative Setting: What Managed Care Needs to Know About Neuromuscular Blockade Reversal Webinair, National Association of Managed Care Physicians (NAMCP) and the American Association of Managed Care Nurses (AAMCN), May 2019
- 14. Merck Pharmacy PDG Development US-XBR-00107 Pharmacy PDG Facilitator Guide. July 2020. Wagner DS
- 15. <u>https://mailchi.mp/e98aa802fb8d/einteractions-april-6856054?e=102e08c9de</u> Featured Story: Volunteers Compound Hand Sanitizer for UM Health System
- 16. <u>https://www.medscape.org/viewarticle/929652</u>. Improving Safe Outcomes after Neuromuscular blocker in Surgery: A Focus on Special Populations, May. 2020. Faculty: Glenn Murphy, Deb Wagner, Lynd Grant
- 17. MM-Headlines <u>mm-headlines@med.umich.edu</u> <u>A handy solution: College of Pharmacy students, Michigan</u> <u>Medicine pharmacy partner to meet critical need</u> March 2020

## **Invited Lectures or Presentations**

- 5/2021Invited to present CME Wagner D. No Small Challenge: Pediatric Acute Pain Management.5th Annual Facets of Pediatric Nursing Care Conference, Virtual, May 2021
- 4/2021 Poster Presentation. Capparelli A, Spanu C, Brown J, Dillman N, Lloyd E, Wagner D.
   Reducing Time to Deliver First Dose Antibiotics for Treatment of Sepsis PPAG 2021 Annual, Infectious Disease and PICU Mtg, April 2021
- 1/2021Invited to present CME Wagner D. Localizing Pain: The how's and the why's. Michigan<br/>Medicine OR and PACU nursing. January 2021

1/2021	Invited to present Thompson J, Salter J, Brent T, Wagner D. Safety, efficacy, and cost of 0.4mg versus 2mg intranasal naloxone for treatment of prehospital opioid overdose. NAEMSP. January 2021
12/2020	Invited to present CME Workman P, Wagner D. 364-H04 Management Case Study-Barcode Scanning Implementation in a Pediatric Hospital: Changing Workflow and Safety Culture to Eliminate Dispensing Errors. ASHP MCM, virtual. December 2020
10/2020	Quality Month Poster: Bolus Administration of Comfort Medications in the Pediatric Intensive Care Unit: A Pilot Program to Improve Efficiency and Satisfaction and Decrease Waste. Flori H, Reske J, Leja B, Baker L. October 2020 (Exemplar Finalist)
10/2020	Quality Month Poster: Dispense Prep: Barcode Technology to Decrease Errors in Medication Preparation, October 2020, Workman P, Wagner DS
3/2020	Invited to Present, Improving Safe Outcomes after Neuromuscular Blocking in Surgery: A Focus on Special Populations, Medscape Education CME
2/2020	Invited to Present, Exploring the Correlation between NMB reversal and pulmonary Outcomes after Surgery-Strategies to Improve Patient Safety, Miller Medical CME
2/2020	Invited to Present, Chair, ASHP Webinair Ask the Experts. Addressing Challenges Related to Reversal of Neuromuscular Blockade, Deb Wagner, Mike Aziz. CME
2/2020	Invited to Present Oral Poster, Low Dose Ketamine Infusion as an Adjuvant Therapy for Refracory Pain during an Acute Pain Crisis at a Tertiary Care Pediatric Hospital, Wagner DS, Li C, Doellner C, Marinkovic A, Leis A, Gibbons K, Society of Pediatric Anesthesiology Annual Meeting, Nassau, Bahamas
1/2020	Invited to Present, Update on Surgical Prophylaxis, OR Nursing CME Program, OBN-001-91 CME
12/2019	Poster Presentation, Low Dose Ketamine Infusion as an Adjuvant Therapy for Refracory Pain during an Acute Pain Crisis at a Tertiary Care Pediatric Hospital, Li, C, Doellner C, Leis A, Marinkovic A, Gibbons K. ASHP MCM, Las Vegas NV
12/2019	Invited to Present, Anesthesia Medication Trays: Bigger is not always Better. Wprl,am {. Wagner D. ASHP MCM , CME, Las Vegas, NV
11/2019	Invited to Present, Comparison of Amiodarone versus Lidocaine for Treatment of In-hospital Cardiac arrest, Wagner DS, Nawer H, Kronick S, Cranford J, Bradley S, Neumar R. ReSS Program-Resuscitation Science Symposium 2019, Philadelphia, PA
11/2019	Invited to Present, New Frontiers for Neuromuscular Blockade Use and Reversal, Activity chair Wagner, D, Aziz M, Wolfe RC, ASHP Ask the Experts Webinair, CME
10/2019	Poster Presentation, Improving Timing and Appropriateness of Pediatric Surgery Antimicrobial Prophylaxis, Parent A, Crowe S, Gisondo G, Wagner DS, Tribble AC, Bates KE, Thorne MC, Michigan Medicine Quality Month, Ann Arbor, MI

10/2019	Poster Presentation, Use of a Modified Caprini Venous Thromboembolism Risk Scoring Tool in Pediatric Patients. Wagner D, Moote M, Zimmerman C, Neeluru J, Thompson K, Khan H. Michigan Medicine Quality Month, Ann Arbor, MI
10/2019	Invented to Present, The Drug Overdose Epidemic and the Role of Naloxone as a Rescue Agent, University of Michigan Health Service, CME, Ann Arbor, MI
9/2019	Invited to Present, An Update on Pediatric Surgical Prophylaxis, Michigan Medicine Anesthesiology Lunch and Learn, CME, Ann Arbor, MI
8/2019	Invited to Present, "Is there a NINJA in the house?"Leveraging the HER for real-time Identification of Patients at Risk for Nephrotoxic Medication Induced Kidney Injury. Luckritz K, Dillman N, Bissacia E, Wagner DS. EPIC National Meeting, Seattle, WA
7/2019	Invited to Present Surgical Antimicrobial prophylaxis in Children's Surgery to Optimize Appropriateness of Use and Timing, Paren A, Thorne M, Baetzel A, Crowe S, Gisondo G, Wagner D, Tribble A, Dillman N, Bates K, Guttin A, Sullivan L. ACE Quality and Sfety Conference, Washington DC
6/2019	Invited to Present. Medication Safety in the Perioperative Space: Role of the Anesthesia Technician. American Society of Anesthesia Technologists and Technicians Region 2 Annual Meeting, CME, Ann Arbor, MI
6/2019	Invited to Present, Benzodiazipine prescribing 2019 What you should know. <u>Http://www.med.umich.edu/i/pain/</u> Naloxone kits for High Risk Patients, Ann Arbor MI
5/2020	Poster Presentation, Preventing SSI's: Improving Timing of and Appropriateness of Surgical Antimicrobial Prophylaxis. Parent A, Throne M, Crose S, Gisondo G, Wagner D, Tribble A, Bates K. Solutions for Patient Safety Annual Meeting, Detroit, MI
5/2019	Poster Presentation, Use of a Modified Caprini Venous Thromboembolism Risk Scoring Tool in Pediatric Patients. Wagner D, Moote M, Zimmerman C, Neeluru J, Thompson K, Solutions for Patient Safety Annual Meeting, Detroit, MI
5/2019	Invited to Present Key Considerations for Preventing Residual Paralysis in the Perioperative Setting: What Managed Care Needs to Know About Neuromuscular Blockade Reversal Webinair, National Association of Managed Care Physicians (NAMCP) and the American Association of Managed Care Nurses (AAMCN)
4/2019	Invited to Present, Grand Rounds Barnes Jewish Memorial Health System, A Practical Guide to Neuromuscular Blockade Management, St. Louis, MO
4/2019	Invited to Present, "the latest in opioid legislation" Michigan Association of Perianesthesia Nurses CME, Ypsilanti, MI
2/2019	Invited to Present Plenary Panel Discussion Interprofessional Perspectives on Pain Management CME, The 2019 Conference on Pain, Livonia, MI
11/2019	Invited to Present "the times they are a changingthe new opioid landscape", 2018 Survival Slight "on the road" Annual Emergency and Critical Care Conference, Frankenmuth, MI

10/2018	Invited to Present Opiate and Pain Management Strategies in Pediatrics, Michigan Medicine PACU Nursing CME, Ann Arbor, MI
10/2018	Invited to Present Satellite Symposium, Advancing Bestt Practices: Insights from the 2018 APSF Stoelting Conference on Perioperative Medication Safety, ASA, San Fransisco, CA
9/2018	Invited to Present The Drug Overdose Epidemic and the Role of Naloxone as a Rescue Agent, Michigan Medicine, Advanced Practice Nursing CME, Ann Arbor, MI
9/2018	Invited to Present, Medication Safety in the Operating Room, Michigan Medicine OR Nursing CME, Ann Arbor, MI
9/2018	Invited to Present, Short on Drugs, What it means to you., AANA meeting, Boston, MA
6/2018	Invited to Present, Reversal of Neuromuscular Blocking Agents, Pro/Con Debate, Fresenius Kabi Advisory Board, Dallas, TX
5/2018	Invited to Present, Does Roc Rock and Sux Suck?. 2018 Michigan EMS Expo, Mackinac Island, MI
1/2018	Invited to Present, Current limitations and complications of neuromuscular blockers and reversal agents.2018 University of Michigan CRNA Updates, Ann Arbor, MI
12/2017	Poster Presentation, Galura G, Wagner D, Schaeffler K. Intravenous Acetaminophen Waste Analysis in a Pediatric Operating Room Pharmacy. ASHP MCM, Orlando FL
12/2017	Poster Presentation, Rida N, Schaeffler K, Wagner D, Tharp J. Ketogenic Diet Pharmacy Consult. ASHP MCM, Orlando FL
12/2017	Invited to Present, Therapeutic Debates : Sevoflurane/Desflurane, ASHP MCM, Orlando FL
12/2017	Invited to Present, A Case Based Approach to Multimodal Analgesia: Enhanced Recovery after Surgery in the Critically III. ASHP MCM, Orlando FL
11/2017	Invited to Present, Pharmacy Ethics Class (P704) and Social Justice Grand Rounds (SJGR), Ann Arbor, MI
5/2017	Invited to Present, Current Trends in Acute Pain Management (CME), 2017 Michigan EMS Expo, Mackinac Island, MI
1/2017	Invited to Present, Meeting the Challenge of the Opioid Crisis, Taking the Lead 2017: Leading Systems, Others and Self UMHS Professional Development and Education, Ann Arbor, MI
12/2016	Invited to Present. Promoting Safety in the Perioperative Setting: Best Practices in Neuromuscular Blockade and Reversal (CME), ASHP MCM, Las Vegas NV
12/2016	Poster Presentation, Piloting Medication Histories in the CS Mott Children's Hospital Post- Anesthesia Care Unit (PACU), Lake N, Nawer H, Wagner D, Lopes E, Schaeffler K. ASHP MCM, Las Vegas NV

12/2016	Poster Presentation, Retrospective Analysis of Perioperative Administration of Intravenous Acetaminophen and Postoperative Opioid Use in Pediatric Tonsillectomies and Adenotonsillectomies. Wagner D, Sauro A, Revard S, Malviya S, Voepel-Lewis T, Nafiu O, Weber O. ASHP MCM, Las Vegas NV
12/2016	Poster Presentation, Evaluation of an electronic venous thromboembolism risk assessment tool in pediatric patients. Butterfield V, Wagner D, Zimmerman D. ASHP MCM, Las Vegas NV
12/2016	Invited to Present, It's All About Time- Surgical Antimicrobial Prophylaxis, MSQC Collaborative Meeting, Livonia, MI
11/2016	Update on Pediatric Pain Management (CME), UMHS Nursing Perianesthesia Nursing Update, Ann Arbor, MI
11/2016	Poster Presentation, Continuous Lidocaine Infusions to Manage Opioid-refractory Pain in Four Pediatric Cancer Patients, Gibbons K, DeMonbrun A, Beckman EJ, Keefer P, Wagner D, Stewart M, Saul D, Hakel S, Liu M, Niedner MF, Pediatrics and Communicable Diseases 26 <sup>th</sup> Annual Pediatric Research Symposium, Ann Arbor, MI
11/2016	Invited to Present, The Impact of a Propofol Drug Shortage on Postoperative Nausea and Vomiting and Associated Complications in an Ambulatory Surgery Center, Wagner D, Neff M, Youness T, Kheterpal S, Shanks A, Phillips B, Wilkins K, Naughton M. American Society of Anesthesiologist Annual Meeting, San Diego, CA
11/2016	Invited to Present, "WHO" calls for Intranasal Naloxone Administration, Survival Flight "On The Road" Emergency and Critical Care Conference, Frankenmuth, MI
10/2016	Poster Presentation, The Impact of a Propofol Drug Shortage on Postoperative Nausea and Vomiting and Associated Complications in an Ambulatory Surgery Center, Wagner DS, Neff M, Youness T, Kheterpal S, Shanks A, Phillips B, Wilkins K, Naughton N, American Society of Anesthesiology Annual Meeting, San Diego, CA.
10/2016	Invited to Present, "WHO Says Narcan? Intranasal That Is!", The 2015 Conference on Pain: The Puzzle of Pain Fitting the Pieces Together, Novi, Michigan
10/2016	Invited to Present. Ionsys CII: A Novel System for Patient-controlled Analgesia. Health Connect Partners, Chicago, IL
05/2016	Invited to Present, Monitoring and Reversal of Anesthesia: Key Considerations in the Postsurgical Setting, ASHP Kentucky Society Spring Meeting, Lexington, KY.
12/2015	Poster Presentation, Pre-and Post-Intervention Analysis of Smart Pump Alerts for Intermittent Antimicrobial Infusions at an Academic Medical Center, Johnson K, Wagner D, Ciarkowski S. ASHP Midyear Clinical Meeting, New Orleans, LA
12/2015	Poster Presentation, Improving Alert Compliance of Patient-controlled Analgesia Smart Pumps in a Tertiary Care Academic Children's Hospital, Tran H, Wagner D, Ciarkowski S. ASHP Midyear Clinical Meeting, New Orleans, LA

6/2015	Invited to Present, Helping pharmacists support the needs of surgical patients, HCP Panelist Interactive Workshop, Mylan Pharmaceuticals, Phoenix, AZ
3/2015	Poster Presentation, An In-Vitro Study of Dexmedetomidine Disposition in Neonatal/Infant Cardiopulmonary By-pass Circuits, N. S. Wilder, D. B. Andropoulos, G. S. Moorthy, T. A. Paugh, K. K. Kibler, <u>D. Wagner</u> , A. F. Zuppa, International Anesthesia Research Society Annual Meeting, Honolulu, HI
2/2015	Poster Presentation, In-vitro Effects of Sequestration of Aminocaproic Acid in Extracorporeal Membrane Oxygenation (ECMO), Miguel Caraballo, PharmD Candidate, Yuki Peterson RN, John Waldvogel RN, <u>Deborah Wagner PharmD, FASHP</u> , 31 <sup>st</sup> Annual Keystone ECMO symposium, Keystone, CO
2/2015	Moderator, Coagulation Session, The 31 <sup>st</sup> Annual Children's National Symposium: ECMO & the Advanced Therapies for Respiratory Therapy, Keystone, CO
1/2015	Invited to Present, CRNA Update: Current Trends in Pediatric Pain Management, University of Michigan, Ann Arbor, MI
11/2014	Invited to Present, Optimizing Non-traditional Pain Management Strategies in the Pediatric Population, Michigan Society of Health System Pharmacists Annual Meeting, Grand Rapids, MI
10/2014	Poster Presentation, Incidence of Hypotension Related to the Use of Intraoperative Intravenous Clonidine, Freundlich RE, Newman J, Brown S, <u>Wagner D</u> , Ramachandran S, American Society of Anesthesiologists Annual Meeting, New Orleans, LA
9/2014	Poster Presentation, Use of Intravenous Acetaminophen in Patients Requiring Extracorporeal Life Support, Yu J, Annich G, <u>Wagner D</u> , ELSO 50 <sup>th</sup> Anniversary Meeting, Ann Arbor, MI
6/2014	Invited to Present, Antithrombin Use in the Hospital Setting: A Scenario-Based Discussion, Thrombate III Advisory Board: Hospital Pharmacist Perspectives, Dallas, TX
2/2014	Poster Presentation, Intravenous Acetaminophen Clearance during in Vitro Continuous Renal Replacement therapy, Scoville BA, Vulaj V, Mueller BA, Annich GM, <u>Wagner DS</u> , 30 <sup>th</sup> Annual ECMO & the Advanced Therapies for Respiratory Failure, Keystone, CO.
2/2014	Invited to present, What About All the Factors: Cost vs. Efficacy? Should We Bother? 30 <sup>th</sup> Annual ECMO & the Advanced Therapies for Respiratory Failure, Keystone, CO.
2/2014	Invited to present, What medications does the circuit bind? 30 <sup>th</sup> Annual ECMO 2014, Keystone, CO.
1/2014	Invited to present, Drug Metabolism in ECMO, 2 <sup>nd</sup> SMC Mechanical Life Support Symposium, Soule, Korea.
1/2014	Poster Presentation, Intravenous Acetaminophen Clearance During In Vitro Continuous Renal Replacement therapy. Scoville BA, Vulaj V, Mueller BA, Annich GM, <u>Wagner DS</u> , SCCM 2014 Critical Care Congress, San Francisco.

12/2013	Poster Presentation, Real-World Use of an Electronic Venous Thromboembolism (VTE) Risk Assessment Tool and Corresponding 30-Day VTE Event Rates in Hospitalized Medicine Patients. Funk, Kylee; Liu, Jessica; Naanos, Roxanne; <u>Wagner, Deborah;</u> Marini, Bernard; Stout, Stephen; Kraft, Mike, ASHP Midyear Clinical Meeting, Orlando, FL
10/2013	Poster presentation, Ensuring safe medication administration through direct observation. Katelyn Young, Katie Brehmer, Mei Mei, Karen Adkins-Bley JD. RN., <u>Deborah Wagner</u> <u>PharmD FASHP.</u> , Scott Ciarkowski PharmD, ASHRM Annual Conference, Austin, TX.
10/2013	Poster presentation, Standardizing the Use of High Risk Heparin in Interventional Radiology. Scott Ciarkowski, <u>Deborah Wagner</u> , UMHS Quality Month, Ann Arbor, MI
10/2013	Poster presentation, "Novo Seven® Use for Refractory Hemorrhage in Pediatric Patients on Extracorporeal Membrane Oxygenation Support: A Single Center Review. Long M, <u>Wagner D</u> , Hubbard A, Pasko D, Baldridge P, Annich G, University of Michigan, Department of Pediatrics & Communicable Diseases Pediatric Research Symposium; Ann Arbor, MI.
9/2013	Invited to present, "Pediatric Venous Thromboembolism: What's New Webinair for MHA Monthly Patient Safety Organization
9/2013	Invited to present, Naloxone Utilization and Review, Children's National Medical Center Monthly Automated Adverse Event Detection Collaborative.
9/2013	Invited to present, Postoperative Pain Management, UMHS CME Presentation, Ann Arbor, MI.
9/2013	Poster presentation, "Safety and efficacy of recombinant activated factor VII for refractory hemorrhage in pediatric patients on extracorporeal membrane oxygenation: a single center review. Micah T Long, MD; <u>Deborah Wagner, PharmD</u> ; Anna Maslach-Hubbard, MD; Deborah A Pasko, PharmD, MHA; Paula Baldridge, MSN, MHA, RN; and Gail Annich, MD, MS, FRCP(C). Extracorporeal Life Support Organization Conference, Philadelphia, PN and the Medical College of Wisconsin Research Day, Milwaukee.
2/2013	Invited to present, "In Vitro Clearance of Acetaminophen in Extracorporeal Membrane Oxygenation, Poster Symposium, <u>Wagner D.</u> Waldvogel J, Martin J, Gilogly A, Kilbourn C, Annich GM, The 29 <sup>th</sup> Annual CNMC Symposium: ECMO & the Advanced Therapies for Respiratory Failure, Keystone, CO
12/2012	Invited to present, "Postoperative Pain and Patient-Controlled Analgesia: Evaluating Current and Evolving Modalities, Wisconsin School of Pharmacy, Las Vegas, NV
11/2012	Invited to present, "Nonopioid Therapies: What's Old What's New", Wisconsin Nurses Association, 2012 Conference on Pain-Working Across Disciplines to Solve Pain Problems, Ypsilanti, Michigan
9/2012	Invited to present, "Non-Opioid Adjuvants in the Treatment of Acute Pain: Tried and True, or New and Improved", UMHS Nursing CE Series, Ann Arbor, Michigan

06/2012	Invited to present, "Leading an Event Detection" Medication Safety, ASHP Annual Mtg, Baltimore, Maryland
5/2012	Poster presentation, The Poke Program: A Voice and Choice for Children Undergoing Pokes and Procedures Sandra Merkel MS, RN; Julie Piazza MS, CCLS; Cathy Desmet RN; S Quinn RN; Harry Neusius SM, MBA; M Watson MSBA, RN; K Gibbons MD; D Hardenbrook RN; D Setlock RN; Paula Garrett RN; M Lapointe RN; <u>D. Wagner</u> ; K Parent, PFCC rep; Cindy Straub, Medical Tech, 5 <sup>th</sup> International Conference for Patient- Family Centered Care, Washington DC
02/2012	Poster presentation, "A Retrospective Description of Anesthetic Medication Dosing for Underweight, Normal Weight, and Overweight/Obese Children", Burke CN, Nafiu O, Baldock A, Malviya S, Lau I, Voepel-Lewis T, <u>Wagner D</u> , Society of Pediatric Anesthesia, Tampa, Florida
02/2012	Poster presentation, "Evaluation of a Pediatric Venous Thromboembolic Scoring Tool in Surgical Patients", <u>Deborah Wagner PharmD</u> , FASHP, Bess Costos NP, Virginia Gauger MD, Ian Lewis MD, April Qian PharmD Candidate, Society of Pediatric Anesthesia, Tampa, Florida
02/2012	Poster presentation, "Multimodal Analgesia Reduces Serious Opioid Adverse Events and Need for Rescue in Children", Terri Voepel-Lewis, Alan Tait, <u>Deborah Wagner</u> , Society of Pediatric Anesthesia, Tampa, Florida
02/2012	Poster presentation, "In Vitro Clearance of Dexmedetomidine in Extracorporeal Membrane Oxygenation", <u>D. Wagner, PharmD</u> , D. Pasko, PharmD, MSPH, K. Phillips, PharmD, J. Waldvogel, RRT, G. Annich, MD, MS, 28 <sup>th</sup> Annual CNMC Symposium: ECMO and the Advanced Therapies for Respiratory Failure, Keystone, Colorado
12/2011	Poster presentation, "Extended Stability of IV Acetaminophen in Syringes and Glass Bottles", Jennifer L. Kwiatkowski, Pharm.D., Cary E. Johnson, Pharm.D., FASHP, <u>Deborah S. Wagner, Pharm.D</u> , ASHP Midyear Clinical Meeting, New Orleans, Louisiana
12/2011	Poster presentation, "Effects of Venous Thromboembolism Risk Assessment in Hospitalized Adult Medicine Patients", Marini BL, Funk K, Kraft MD, Fong J, Naanos R, Stout S, <u>Wagner D</u> , ASHP Midyear Clinical Meeting, New Orleans, Louisiana
10/2011	Poster presentation, ""VTE and You": Assessment of a VTE Patient Education Video ("inPHARMmercial") and an Electronic Risk Scoring Tool in Hospitalized Medical Patients, Marini BL, Funk K, Kraft MD, Fong J, Naanos R, Stout S, <u>Wagner D</u> , American College of Chest Physicians Chest 2011 Annual Meeting, Honolulu, Hawaii
10/2011	Poster presentation, "Pre-filled, Pre-labeled Syringes in the Operating Room: Provider Acceptance", James H. Abernathy, MD, MPH, <u>Deborah S. Wagner, PharmD*</u> , Christopher R. Fortier, PharmD, Marv Shepherd, PhD, Orin F. Guidry, MD, A.S.A. Annual Meeting, Chicago, Illinois
09/2011	Invited to present, "New Concepts in Analgesia", Greater Toledo Area Council of Critical Care Nursing, Toledo, Ohio

08/2011	Invited to present, "Pharmacoecono Association of Nurse Anesthetists Ann	mics of Inhaled Anesthetic Agents", American nual Meeting, Boston, Massachusetts
06/2011	Invited to present, "Pain Update", CM Arbor, Michigan	E Program, University of Michigan Hospitals, Ann
5/2011	Invited to present, "What's New with Nurse Specialists, Indianapolis, Indian	Acetaminophen", National Association of Clinical a
3/2011	Invited to present, "A different Mechan Advocate Christ Hospital, Chicago, Ill	nism for Sedation in the ICU and Operating Room", inois
3/2011	Invited to present, "Improved Strate Satellite Broadcast and Webcast, VHA	egies for Perioperative Pain Management", Live TV, Dallas, Texas
2/2011	Invited to present, "A Non-Opioid, Management", Web-based On-Demand	Non-NSAID Analgesic for Perioperative Pain d Program, Cadence Pharmaceuticals
1/2011	Invited to present, "What Can the CR AANALearn CME program, Chicago,	NA Do to Improve Medication Safety in the OR", Illinois
12/2010	Invited to present, "Pain Management Meeting, San Diego, California	Basics", Cadence Pharmaceuticals, National Sales
9/2010	<b>1</b>	ation and its Use as a Quality Indicator – A Pain Vagner, PharmD, Scott Ciarkowski, RpH, MBA,
8/2010	Invited to present, "What Can the CRN Costs in the OR", AANA 77 <sup>th</sup> Annual	NA Do to Improve Medication Safety and Decrease Meeting, Seattle, Washington
8/2010	Invited to present, "Physiologic and Anesthetics", AANA 77 <sup>th</sup> Annual Mee	Economic Advantages of Short Acting Inhaled ting, Seattle, Washington
07/2010	1 /	e Guidelines: Amiodarone for Atrial Fibrillation ia U, <u>Wagner DS,</u> Cullen R, Woodcock B, Walker eart Disease, Vancouver, BC, Canada
05/2010	1	during Rapid Response Team Call at the University ems", <u>Deborah Wagner</u> , Luba Burman, 12 <sup>th</sup> Annual o, Florida
05/2010	<b>1</b>	ation and Its Use as a Quality Indicator", <u>Deborah</u> RpH, MBA, 12 <sup>th</sup> Annual NPSF Patient Safety
02/2010	Invited to present, "Why Pain Manager of Health System Pharmacist, Royal O	nent is such a Pain", Southeastern Michigan Society ak, Michigan
12/2009	Invited to present, "Delirum in the IC Chicago, Ill	U-Current Advancements", University of Chicago,
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10/2009	Invited to present, "Amiodarone for Atrial Fibrillation Following Cardiac Surgery: Development of Clinical Practice Guidelines at a University Hospital", Khanderia U, <u>Wagner DS</u> , Cullen R, Woodcock B, Walker P, Prager R, 8 <sup>th</sup> International Congress on Coronary Artery Disease, Prague, Czech Republic
09/2009	Invited to present, "The Effect of the Implementation of Smart Patient Controlled Analgesia (PCA) Pumps on PCA Administration Safety", Mai Tran, James Stevenson, Scott Ciarkowski, <u>Deborah Wagner</u> , 69 <sup>th</sup> International Congress of International Pharmaceutical Federation (FIP), Istanbul, Turkey
08/2009	Invited to present, "Advances in Sedation for the Perioperative and Intensive Care Setting", ACHL CME Program, Springfield, Illinois
07/2009	Invited to present, "Unexplained Peri-operative Bleeding", North Iowa Pharmacist Organization, Mason City, Iowa
07/2009	Invited to present, "Balancing Sedation, Patient Comfort, and Mechanical Ventilation in the ICU", Grand Rounds, Ingham Medical Center, Lansing Michigan
06/2009	Invited to present, "Role of Computerization/Clinical Decision Support in the Perioperative Setting", ASHP Annual Meeting, Chicago, Illinois
05/2009	Invited to present, "Factor 5 Deficiencies and the Impact on Post-operative Bleeding", Spectrum Health, Grand Rapids, Michigan
04/2009	Invited to present, "Immune Mediated Coagulapthies", Memorial Hospital's, Southbend, Indiana
01/2009	Invited to present, "Targeting Sedation and Analgesia", Visiting Professorship Program in Sedation Management, CME/CE program Kerrville, Texas
12/2008	Invited to present, "Retrospective Review of Recombinant Factor Seven in Pediatric Patients", Jennifer Poon, Mary Petrea Cober, Paul C Walker, <u>Deborah S Wagner</u> , 2008 ASHP Midyear Clinical Meeting, Orlando, Florida
12/2008	Poster presentation, "Evaluation of the Incidence and Contributing Factors to the Development of Post-operative Shivering, Idan Hannawa, <u>Deborah Wagner</u> , PharmD, 2008 ASHP Midyear Clinical Meeting, Orlando, FL
12/2008	Invited to present, "Evaluation of Compliance with Weight-Based Dosing Recommendations for Surgical Site Infection Prophylaxis", Andrea J Nigg, <u>Deborah</u> <u>Wagner</u> , Daryl DePestel, 2008 ASHP Midyear Clinical Meeting, Orlando, Florida
11/2008	Pharmacy Grand Rounds, "Pain Management", University of Michigan Health Systems, Ann Arbor, Michigan
09/2008	Invited to present, "Pickled or Preserved", Sweet Conference, Department of Anesthesiology, University of Michigan Health Systems, Ann Arbor, Michigan

09/2008	Invited to present, "Process Improvement in the Peri-operative Arena", VHA Central, Michigan Surgical Care Services and Pharmacy Directors Council, Lansing, Michigan
09/2008	Invited to present, "Exploring the Realm of Pediatric Pain", 7 <sup>th</sup> Annual Interprofessional Conference for Physicians and Pharmacists, Sterling, Alaska
08/2008	Invited to present, "Economics and Safety Considerations of Inhaled Anesthetics", AANA Annual Meeting, Minneapolis, Minnesota
06/2008	Invited to present, "Anesthesia, OR and PACU: Medication Use behind the Double Doors", ASHP Summer Meeting, Seattle, Washington
02/2008	Invited to present, "Targeting Sedation and Analgesia", Academy for Continued Healthcare Learning, CME/CE program, Ft. Wayne, Indiana
12/2007	Poster Presentation, "A Retrospective Analysis of Dolasetron and Ondansetron in the Prevention of PONV in Pediatrics", <u>Deborah Wagner, PharmD</u> , Stephanie Foreman, PharmD, Heather Sarkozi, PharmD 42 <sup>nd</sup> ASHP Midyear Clinical Meeting, Las Vegas, Nevada
09/2007	Invited to present, "Pharmacoecomonics of Inhalational Agents", Consorta Source Conference and Exhibition 2007, Chicago, Illinois
08/2007	Invited to present, "Emerging Issues in Anesthesia: Anesthetic Degradation and Considerations for a Universal Inhalational Anesthetic Agent," American Association of Nurse Anesthetists, Denver, Colorado
04/2007	Invited to present, "The Dangers of Acetaminophen & Other OTC Drugs," Children in Pain Conference, Children's Hospital of Michigan/University of Michigan Health System, Novi, Michigan
04/2007	Invited to present, "Cutting Edge Therapy - Dexmedetomidine," Children in Pain Conference, Children's Hospital of Michigan/University of Michigan Health System, Novi, Michigan
03/2007	Invited to present, "Approaches in Therapy for Emesis in Pregnancy", Grand Rounds, Covenant Health Systems, Saginaw, Michigan
02/2007	Invited to present, "Update on Current Concepts in the Management of PONV", South Asian Confederation of Anaesthesiologists, 7 <sup>th</sup> SACA Congress, Kathmandu, Nepal
01/2007	Invited to present, "Updates in PONV", Spectrum Health, Grand Rapids, Michigan
11/2006	Invited to present, "The Role of NK-1 Antagonists in the Prevention of PONV", Memphis, Tennessee
11/2006	Invited to present, "Aprotinin in CABG: Current Renal and Cardiac Concerns", Grand Rounds, Providence Hospital, Southfield, Michigan
11/2006	Invited to present, "Contemporary Issues with Post-Operative Nausea Vomiting", Birmingham, Michigan
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08/2006	Invited to present, "Post-Operative Nausea and Vomiting: Current Trends and New Opportunities", Ann Arbor, Michigan
07/2006	Journal Club Presentation, Abbott Laboratories, "Difficulties in Standardization", Ann Arbor, Michigan
06/2006	Invited to present, "Precedex: The Future of Alpha-2 Agonists in Therapy", Round Table Discussion, Ann Arbor, Michigan
06/2006	Anesthesia Advisory Board Meeting, "Rational Use of Inhalational Agents in Anesthesia", Atlanta, Georgia
06/2006	Anesthesia Advisory Board Meeting, "Cost Effective Selection of Inhalational Agents – Focus on Sevoflurane", Ft. Lauderdale, Florida
06/2006	Anesthesia Advisory Board Meeting, "Inhaled Anesthetics, Product Overview", ASHP Annual Meeting, Orlando, Florida
05/2006	Anesthesia Advisory Board Meeting, "Barriers to Standardization of Inhalational Agents", Cleveland, Ohio
05/2006	Anesthesia Advisory Board Meeting, "Current Practice with Sevoflurane", Louisville, Kentucky
11/2005	Poster Presentation, "Assessing Parents Preferences for the Avoidance of Undesirable Anesthesia Side Effect in Their Children Undergoing Strabismus Surgery." <u>Deborah S</u> <u>Wagner</u> , Pharm D, Jose Martin Yap, MD Kathryn M. Bradley, CRNA Terri Voepel- Lewis, MSN, RN, ACCP Annual Meeting, San Francisco, California
05/2005	Invited to present, "Pain Team Consult – Difficult Cases," Children in Pain Conference, Children's Hospital of Michigan/University of Michigan Health System, Ypsilanti, Michigan
03/2005	Invited to present, "The Good, The Bad, and The Unexpected: The Drugs We Use", University of Michigan/Flint Hurley Medical Center Master of Science Anesthesia Program, Frankenmuth, Michigan
03/2005	Invited to present, "Neuromuscular Blockers: Delivering Your Best Punch", University of Michigan/Flint Hurley Medical Center Master of Science Anesthesia Program, Frankenmuth, Michigan
02/2005	Poster Presentation, Assessing Parents Preferences for the Avoidance of Undesirable Anesthesia Side Effects in their Children Undergoing Surgical Procedures", <u>Deborah S</u> <u>Wagner</u> , Pharm D, Jose Martin Yap, MD Kathryn M. Bradley, CRNA Terri Voepel-Lewis, MSN, RN, Society of Pediatric Anesthesia, Miami, Florida
02/2005	Poster Presentation, "Disintegrating Ondansetron Tablets for Prophylactic Treatment of PONV in Children Undergoing Strabismus Surgery", Lilly Hsu, M.D., <u>Deborah Wagner</u> ,

	<u>Pharm.D</u> ., Virginia Gauger, M.D., Shobha Malviya, M.D., Terri D. Voepel-Lewis, R.N., Society of Pediatric Anesthesia, Miami, Florida		
10/2004	Poster Presentation, "Disintegrating Ondansetron Tablets for Prophylactic Treatment of PONV in Children Undergoing Strabismus Surgery. <u>Wagner DS</u> , Gauger V, Malviya S, Faust KASA, Las Vegas, Nevada		
10/2004	National CME Teleconference, "Contemporary Strategies for Preventing Postoperative Nausea Vomiting and Chemo-induced Nausea and Vomiting", Presented in Ann Arbor, Michigan		
03/2004	Poster Presentation, "Disintegrating Ondansetron Tablets for Prophylactic Treatmer PONV in Children Undergoing Strabismus Surgery. Lilly Hsu, M.D., <u>Deborah Wa</u> <u>Pharm.D.</u> , Virginia Gauger, M.D., Shobha Malviya, M.D., Terri D. Voepel-Lewis, Midwest Anesthesiology Residency Conference. Mayo Clinic, Rochester, New York	a <u>gner,</u> R.N.,	
02/2004	Invited to present, "PONV: Where the Consensus Guidelines Take Us," The Se Practical Updates in Anesthesiology 2004, Puerto Vallarta, Mexico	venth	
02/2004	Invited to present, "Beyond the Black Box Uncommon Effects of Common Anes Agents," The Seventh Practical Updates in Anesthesiology 2004, Puerto Vallarta, M		
12/2003	Poster Presentation, "Stability of Oral Liquid Preparations of Dolasetron in Strawberry Syrup and A Sugar-Free Vehicle," <u>Wendy E. Bussard, Cary E. Johnson, Deborah S.</u> <u>Wagner</u> , Thirty-eighth Annual Midyear Clinical Meeting, American Society of Health System Pharmacists, New Orleans, Louisiana		
12/2003	Poster Presentation, "Stability of Oral Liquid Preparations of Tramadol HCL/Acetaminophen in Strawberry Syrup and A Sugar-Free Vehicle," Brenda Cicho Hensley, Sherry DeLoach, Cary E. Johnson, <u>Debra Wagner</u> , Thirty-eighth Annual Midyear Clinical Meeting, American Society of Health System Pharmacists, New Orleans, Louisiana	)n-	
12/2003	Poster Presentation, "Evaluation of Intravenous Amiodarone Use Guidelines for A Fibrillation Following Cardiac Surgery," U. Khanderia, <u>DS Wagner</u> , P Walker, Ferguson, A. Patel. J. Anderson, Thirty-eighth Annual Midyear Clinical Mer American Society of Health Systems Pharmacists, New Orleans, Louisiana	, MA	
12/2003	Poster Presentation, "Pharmacist Participation in Emergency Bioterrorism Preparedness Within Southeast Michigan," <u>Deborah Wagner Pharm</u> D, Curtis Collins,, PharmD, MS Midyear Clinical Meeting, American Society of Health System Pharmacists, New Orleans, Louisiana		
10/2003	Poster Presentation, "Aprotinin Levels During Pediatric Open Heart Surgery," C. D'Errico DO, M. O'Reilly MD, D. Wagner PharmD, Society of Pediatric Anesthesia, Annual Meeting, San Francisco, California		
10/2003	Poster Presentation, "Comparison of Actual Local Anesthetic and Opioid Consum Between Two Concentrations of Labor Epidural Solutions," American Societ Anesthesiologists, <u>Wagner DS</u> , Siebigteroth, P, Annual Meeting, San Franc California	ty of	
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05/2003	Invited to present, "Allergies and Anesthesia", Mott OR Nursing CE program, University of Michigan Health System, Ann Arbor, Michigan
04/2003	Invited to present, "What's up with Opioids?" ACPE Program #209-999-03-015-L01, Children in Pain Conference, Ann Arbor, Michigan
02/2003	Invited to present, "Current Concepts Focusing on Perioperative Care," Michigan Pharmacists Association Annual Meeting, Dearborn, Michigan
02/2003	Invited to present, "Challenges of Managing Nausea and Vomiting of Pregnancy," OB Grand Rounds, University of Michigan Health System, Ann Arbor, Michigan
02/2003	Poster Presentation, "Relative Analgesic Potencies of Ropivacaine and Bupivacaine for Caudal Analgesia in Pediatric Patients," SPA, Sanibel Island, Florida
12/2002	Poster Presentation, "Stability of Oral Liquid Preparations of Tramadol in Strawberry Syrup and A Sugar-free Vehicle", Brenda Cichon-Hensley, Sherry DeLoach, Cary E. Johnson, <u>Debra Wagner</u> , American Society of Health Systems Pharmacists Midyear Clinical Meeting, Atlanta, Georgia
12/2002	Management Case Study, Oral Presentation, "The Anatomy of an Improved Emergency Medication Distribution and Accountability Process", American Society of Health Systems Pharmacists Midyear Clinical Meeting, Atlanta, Georgia
11/2002	Poster Presentation, "Dolasetron for the Prevention of Postoperative Vomiting in Children Undergoing Strabismus Surgery", <u>D. Wagner</u> , T. Voepel-Lewis, U. Pandit, S. Malviya, American College of Clinical Pharmacy Annual Meeting, Albuquerque, New Mexico
11/2002	Poster Presentation, "Relative Analgesic Potencies of Levobupivacaine and Ropivacaine for Epidural Analgesia in Labor", L. Polley, M. Columb, N. Naughton, <u>D. Wagner</u> , American Society of Anesthesiologists, Orlando, Florida
09/2002	Pediatric Mock Codes, Pediatric Medical Residents and Fellows, University of Michigan Health System, Ann Arbor, Michigan
09/2002	Poster Presentation, "Management of Insulin Use in the Pediatric Diabetic Patient", <u>D.</u> <u>Wagner</u> , L. Reigger, Quality Month, University of Michigan Health System, Ann Arbor, Michigan
05/2002	Poster Presentation, "Comparison of the Minimum Local Analgesic Concentration of Bupivacaine for Nulliparous and Multiparous Women in Labor", Polley LS, Columb MO, Naughton NN, <u>Wagner DS</u> , Society of Obstetric Anesthesia and Perinatology, Hilton Head, South Carolina
05/2002	Invited to present, "Management of Nausea and Vomiting in Pregnancy: A Pharmacological Perspective", American College of Obstetrics and Gynecology Annual Meeting, Los Angeles, California

03/2002	Poster Presentation, "Dolasetron for the Prevention of Post-Operative Vomiting in Children Undergoing Strabismus Surgery", Ebeid A, <u>Wagner DS</u> , Voepel-Lewis T, Pandi U, Malviya S, Midwest Anesthesia Resident Conference, Kansas City, Missouri		
12/2001	-	ous Amiodarone Utilization Guide son, A Patel, J Anderson, ASHP M	· · · · · · · · · · · · · · · · · · ·
12/2001	•	and Potency of Epinephrine an R, Klein, M, ASHP Midyear Clinic	-
10/2001	Occurrence and Adverse Even	Anesthesia Data Analysis of Pro ss", Blaine M Ross <u>, Deborah S Wa</u> n, American Society of Anesthe	ugner, Norah N Naughton,
10/2001	Anesthesia in Children", Ames	tion of Rapacuronium under Se WA, Pandit U, Voepel- Lewis T hesiologists, New Orleans, Louisia	D, Al-Khatib N, <u>Wagner</u>
01/2001	Invited to present, "Update or City, Michigan, Sponsored by	n ACLS Guidelines 2000", Bay C Wyeth-Ayerst	City Medical Center, Bay
12/2000	· 1	Sedation Guidelines for the Use K, Newland S, Walker P, ASHP N	1
10/2000	•	and Sterility of Anesthetic Drugs i Iichel T, Pierson C, ASA Annual	
05/2000		nd Sterility of Anesthetic Drugs in a and Perinatology, Montreal, Ont	-
04/2000	1 0	ent of Postoperative Arrhythmia n Hospital, Ann Arbor, Michigan	s", sponsored by Wyeth-
03/2000		and Sterility of Anesthetic Drugs i Michel T, Pierson C, Midwo	-
05/1999	in Pain Conference, Children'	ogy-Combination Therapy and W s Hospital of Michigan and C.S. I Systems, Ann Arbor, Michigan	
04/1999	Invited to present, "Perioper University of Michigan Hospit	ative use of Amiodarone", spon cal, Ann Arbor, Michigan	sored by Wyeth-Ayerst,
11/1997	-	Blockers-An Update", Glaxo W an Hospital, Ann Arbor, Michigan	1
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07/1997	Presented, "Remifentanil-A New Opioid", Glaxo Wellcome sponsored CE program, University of Michigan Hospital, Ann Arbor, Michigan
04/1996	Presented, "Surgical Antimicrobial Prophylaxis", CRNA monthly meeting, University of Michigan Hospital, Ann Arbor, Michigan
12/1996	Poster Presentation, "Cost Containment in the OR-Expanding the Role of the OR Pharmacist", <u>Wagner DS</u> , ASHP Midyear Meeting, New Orleans, Louisiana
09/1995	Invited to present, "Pharmacology and Pharmacodynamics of Vasoactive Drugs", Wisconsin Society of CRNA's, Green Bay, Wisconsin
09/1995	Invited to present, "Pharmacology and Pharmacodynamics of Oral Antihypertensive Agents", Wisconsin, Society of CRNA's, Green Bay, Wisconsin
06/1995	Poster Presentation, "Implementation and Evaluation of Ondansetron for PONV", ASHP Annual Meeting, Philadelphia, Pennsylvania
05/1995	Invited to present, "Overview of Pre-operative Medications-Focus on Fentanyl Oralet", Springfield Hospital, Springfield, Ohio
02/1995	Presented, Fentanyl Oralet Training inservice to Mott Childrens Hospital Pharmacy Staff, University of Michigan Hospital, Ann Arbor, Michigan
12/1983	Invited to present, "Effect of Cimetidine, Cyproheptadine, and Their Combination on Immediate Cutaneous Hypersensitivity Reactions", poster presentation, <u>D. Wagner</u> , C. Johnson, American Society of Hospital Pharmacist Midyear Clinical Meeting, Atlanta, Georgia
05/1982	Presented, "Dosing of Lithium Carbonate in Hemodialysis Patients" to hemodialysis unit, St. Joseph Mercy Hospital, Ann Arbor, Michigan
04/1982	Presented, "Total Parenteral Nutrition in Hypermetabolic Patients" to PharmD students and faculty, University of Michigan College of Pharmacy, Ann Arbor, Michigan
12/1981	Invited to present, "Effect of Cimetidine, Cyproheptadine, and Their Combination on Immediate Cutaneous Hypersensitivity Reactions", poster presentation, Research in Progress, <u>D. Wagner</u> , C. Johnson, American Society of Hospital Pharmacist Midyear Clinical Meeting, New Orleans, Louisiana
11/1981	Presented, "Hepatic Encephalopathy and Lactulose Therapy" to nursing staff, Veterans Administration Hospital, Ann Arbor, Michigan
10/1981	Presented, "Parkinsonism" to PharmD students and faculty, University of Michigan College of Pharmacy, Ann Arbor, Michigan
03/1981	Presented, "Pharmacokinetics of Propranolol" to PharmD. students and faculty, University of Michigan College of Pharmacy, Ann Arbor, Michigan

11/1980	Presented, "New Drugs in the Treatment of Congestive Heart Failure" to PharmD students and faculty, University of Michigan College of Pharmacy, Ann Arbor, Michigan	
10/1979	Invited to present, "Drugs Used in Cardiac Arrests" to the Residents Clinical Conference, University of Michigan Hospital, Ann Arbor, Michigan	
09/1979	Invited to present, "Proper Uses of Vitamins" to the Michigan Pharmaceutical Association's Pharmacy Technician Forum Seminar, Lansing, Michigan	
06/1979	Invited to present, "Medications Used in Cardiac Arrests" for Education Services for Nursing, University of Michigan Hospital, Ann Arbor, Michigan	
02/1979	Invited to present, "Decentralized Unit Dose Services Using a Mobile Drug Supply Cart", poster presentation, Michigan Pharmaceutical Association's Interim and Midyear Meeting, Detroit, Michigan	
02/1979	Presented, "Computer Orientation" to physicians and nursing staff on pilot unit, University of Michigan Hospital, Ann Arbor, Michigan	
12/1978	Invited to present, "Decentralized Unit Dose Services Using a Mobile Drug Supply Cart", poster presentation, D. Wagner, L. Depping, H. Lee. American Society of Hospital Pharmacists' Midyear Clinical Meeting, San Antonio, Texas	

## **Extramural Funding**

#### Research Funding and Projects

### **Principle Investigator or Co-Principle Investigator**

December 2014-December 2015 "Clinical Simulation of the In Vitro Clearance of Antithrombin III During Extracorporeal Membrane Oxygenation". Grifols Inc. \$42,300. (A material transfer agreement was executed in December 2014, and Grifols provided 36 vials of Antithrombin III worth approximately \$42,000), Effort: 0% Principal Investigator

1/2013–1/2014 "Venous Thromboembolism Video". University of Michigan, Patient Education Advisory Committee. \$5,000.00. Effort: 0% Principal Investigator

12/13/2013-12/31/14 "Intravenous acetaminophen removal during in vitro continuous renal replacement therapy". Cadence Pharmaceuticals. \$9,177.00 (total), \$5,901 (directs) Effort: 0% Principle Investigator

12/2/2011-1/31/2012 "Clearance of IV Acetaminophen in ECMO". Cadence Pharmaceuticals. \$5,010.00 (total),\$3,854 (directs), Effort: 0% Principal Investigator.

7/31/2009-7/30/2010 "Drug Waste in the OR". Pharmedium Inc. \$6,500.00 (total), \$5,000 (directs) Effort: 1% Principal Investigator.

04/2005-4/2006 "Roche Kytril Post-operative Nausea and Vomiting Protocol ML16633". Roche. \$46,625.00. Co-Principal Investigator.

8/30/2004-6/30/2005 "Assessing Parents Preferences for the Avoidance of Undesirable Anesthesia Outcomes in Their Children Undergoing Surgery. GlaxoSmithKline. \$22,000.00. (total), \$18,333 (directs) Effort: 16% Principal Investigator.

3/14/2003-4/30/2004 "Disintegrating Ondansetron Tablets for Prophylactic Treatment of Postoperative Nausea and Vomiting in Children Undergoing Strabismus Surgery". GlaxoSmithKline. \$39,000.00.(total), \$25,359 (directs) Effort: 0% Principal Investigator.

01/2003 "Stability of Oral Liquid Preparations of Tramadol in Strawberry Syrup and a Sugar-Free Vehicle G002867". University of Michigan. \$2,175.00. Effort: 0% Principal Investigator.

07/2002 "Unrestricted Educational Grant: Amiodarone". Wyeth-Ayerst. \$5,000.00. Principal Investigator.

09/1999–03/2001 "ORG 9487 (Rapacuronium Bromide) for Injection Investigator's Brochure" Azko Nobel, Clinical Trail 070-900(02) \$48,000.00. Effort: 0% Co-Principal Investigator.

12/01/1998–12/31/2000 "Comparison of a Single Per-Kilogram Dose of Intravenous Dolasetron Mesylate at 0.35 mg/kg vs. A Single Fixed Dose of Intravenous Dolasetron Mesylate at 12.50 mg vs. Placebo for Prevention of Emesis Following Pediatric Outpatient Strabismus Surgery". Hoechst Marion Roussel, Grant #M073147/411. \$50,000.00 (total), \$43,609(directs) Effort: 0% Co-Principal Investigator.

## **Co-Investigator Grants**

02/2015-present A Parent-Guided Approach to Prevent Analgesic-Related Adverse Drug Events in Children R2 Effort: Consultant Co-Investigator. (PI Terri Voepel-Lewis, RN, PhD)

8/13/13-8/12/15 "In Vitro Clearance of Dexmedetomidine in the Neonatal/Infant Cardiopulmonary Bypass Circuit". Hospira. \$25,571 (total), \$19,670 (directs) Effort: Consultant Co-Investigator. (PI Nicole Wilder, MD)

03/2014 (under secondary review) "Alcohol Based Skin Prep Agents and Prophylactic Antibiotics; Multi-year Study on Surgical Site Infections in a State-wide Hospital Network". Agency for Health Care Research and Quality \$987,573.00. Effort: 5% Co-Investigator (PI AkkeNeel Talsma)

07/2009-07/2010 "Poke Plan". University of Michigan Health Systems: FIG (Fostering Innovation Grant) \$3,500.00. Effort: 0% Co-Investigator.

### **Unfunded Grants**

2009 Novo-nordisk, In-vitro Clearance of Factor VII in Extracorporeal Membrane Oxygenation

2013	National Institute of Health, Propylene Glycol Levels in PediatricIntensiveCare Patients Receiving Lorazepam Continuous Infusions
8/1/2019-7/31/2020	National Institute of on Drug Abuse Grant Number 5RO1DA044245-03 PI: Terri Voepel-Lewis PhD Title: Scenario-tailored opioid messaging program: An Interactive Intervention to Prevent Analgesic-related ADE's in Children and Adolescents
11/2019-11/2021	ISMP and FDA Title: Creation of a self-assessment instrument designed to evaluate the safety of medication use in perioperative settings across US hospitals and ambulatory surgical centers (ASCs).

#### Service:

Since 2005 I have been in the unique position to expand pharmacy services in a practice area that is both challenging and rewarding as well as a perfect marriage of pharmacy and medicine. As the Pediatric Safety Coordinator for the University of Michigan Health Systems (UMHS) and the Pharmacy Clinical Specialist in the Operating Room (OR) areas my practice is unique in the fact that my scope encompasses many different areas of practice. Additionally I have taken on additional administrative roles for the pediatric pharmacy department. I also have direct service line reporting to the Department of Pediatric Anesthesiology and work as a member of a multidisciplinary team of providers. As a clinical pharmacist in the health system I am the pharmacy representative on most executive committees including pain, sedation, venous thromboembolic disease, cardiopulmonary resuscitation (adult, pediatric, and ambulatory), transfusion, patient safety, and disaster preparedness, as well as subcommittees of the Pharmacy and Therapeutics Committee, i.e. medication safety and pediatric medication safety. These service areas give me an incredible strong foundation upon which I have been able to share my knowledge with various practices and influence practice changes. They have led to multiple PharmD investigations projects as well as a multifaceted PGY2 rotation. My evaluations from students and residents only serve to reinforce my broad knowledge base and scope. In 2011 I was recognized for my work in VTE receiving the North American Thrombosis Forum DVTeam Care Hospital Award and currently still provide research studies for PharmD. students and residents in this field. My work with the CPR committee has led me to develop pharmacy based teaching models for medication administration during arrests utilizing our simulation This teaching effort may be the first in the country to use hands on simulation medicine solely for center. pharmacist based code training. I was instrumental as well for cardiopulmonary response and mock code training prior to opening of our new Children's and Women's Hospital in 2012. Currently I serve as the chair of the Pediatric Medication Committee that is highly regarded as a committee to make decisions relative to medication safety throughout the institution. Both this role and the of the Pediatric Safety Coordinator have allowed me to have access to all high level administrators and practitioners within the institution and I personally believe has elevated the respect and value of pharmacy practice in general. I have now expanded my roles in CW Administration and work closely with the hospitals quality and safety initiatives with their participation in the Solutions for Patient Safety. I am the point person for the Adverse Drug Collaborative and VTE as well as a participant on the SSI and NINJA HAC group. Now I am engaged in the training launch for the Healthcare Performance Initiative at Michigan medicine being a lead in the High Reliability Leadership Professional Development series. Many initiatives that I have helped foster such as the multidisciplinary "Poke Plan "program, Family Centered Care, MiPeds liquid compounding standardization, and pain management have gained national attention to which I am extremely proud to have been a part of.

Our OR pharmacy clinical practices are some of the best in the country as my joint appointment with the Department of Anesthesiology has allowed me the capacity to forge new practices in those environments developing guidelines for postoperative nausea and vomiting, sedation teaching modules, pain pathways, Deborah Sue Wagner 5/26/2021 44

neuraxial medication management just to mention a few. It is humbling that I am so well respected throughout pharmacy and anesthesiology as well as the institution as a whole. For some reason I have gained the nickname "the fixer". Most recently my efforts have focused on medication safety in the perianesthesia arena developing clinical practice guidelines, reviewing medication errors and strategizing ways to minimize medication errors. In Sept. 2018 I was awarded 2<sup>nd</sup> Place for Medication Safety from the Anesthesiology Patient Safety Foundation. An award rarely given to non physician members. I have had the opportunity to develop new roles for pharmacists to participate in medical missions that historically have never needed or sought out a pharmacist to attend. My work that began with Pediatric Neurosurgery 5 years ago with Project Shunt has now opened the chance for pharmacists to join medical missions in Haiti, Guatemala, and Kenya to date. I strongly believe that we all have an obligation to improve global health and this is one step forward with that regard. This past year I established an academic scholarship at the college of pharmacy for students interested in global health.

Lastly I have become drug expert within the health system and to some degree nationally and internationally in drug therapy during extracorporeal membrane oxygenation. This has directly correlated with my recent research endeavors. I have had the distinct honor and pleasure to work directly with Bob Bartlett, the godfather of ECMO, and Gail Annich, his protégé, to further describe drug clearance in ECMO circuitry.

Outside the health system one of my most rewarding experiences has been that of working with the Emergency Medical Services (EMS) communities. For over 30 years I have been the pharmacy representative for the Washtenaw/Livingston County Emergency Medical Services (EMS). In 2008 I received the coveted 25 years of Continuous Community Service from them. My role expanded to encompass the Western Wayne County region as well as the becoming the regional Southeastern Michigan Pharmacy Coordinator. I oversee the development of clinical guidelines for medication administration, protocols, management of drug shortages and legal requirements for ambulance medication storage. The Southeastern Michigan EMS program is a model for other areas of the country and is known as being one of the most progressive. I have helped establish bicycle paramedic programs, HAZMAT protocols, epi pen protocols for medical first responders, intensive care medication transport protocols, and now am developing a regional naloxone first responder exchange between pharmacies and medical control areas. Being able to get agreement between multiple hospital pharmacy programs is a major success story. I also have been nominated to sit on the State of Michigan Quality Assurance Task Force for emergency medical services throughout the state. This task force is responsible for developing statewide EMS protocols for medication management and most recently has developed as of 2017 the MiMedic dosing cards for pediatric medications.

In 2009 I was selected to be a member of the ASHP Medication Safety Committee, a subcommittee of the Section of Inpatient Care Providers. At the time medication safety was taking a front seat in patient safety and our committee was directly responsible for elevating medication safety as a core component of the ASHP annual meeting. I served as Vice-chair for 2 years on the committee gaining a national reputation as a thought leader in pediatric medication safety. I am currently working with ASHP to rewrite the Practice Guidelines for OR Pharmacy Services. In 2010 I was awarded a Fellow of ASHP, an award presented to less than 700 pharmacists nationally for continued contributions to the practice of pharmacy. This is one of my most memorable achievements to be one of a small group of highly regarded pharmacy practitioners particularly for my longitudinal practice in OR Pharmacy and my knowledge depth of anesthesiology. This has made me nationally known for work in the field of pain management. Most recently in 2017-18 I have been engaged in the opioid epidemic, working with national, state, and local organizations and being part of the University of Michigan campus network of faculty addressing the health care issue. I have also directed training and policy development within the Department of Pharmacy Services to provide outpatient naloxone based on the recent enactment of the State law to allow dispensing without a prescription.

My patient safety position has afforded me the opportunity to become engaged with the Michigan Hospital Association and now represent the Children's and Women's Hospital at the state Pediatric Safety Organization. This group brings together thought leaders throughout the state to standardize and improve pediatric care.

Statewide support of MiPeds standardization project began with my presentation to this group which won the ISMP "Cheers" award in 2014. I am now working with the MHA to develop a tool kit for AHRQ for pediatric liquid standardizations as well. Additionally I have developed patient safety training videos for the patient room televisions via the GetWell Network to enhance medication safety. My roll has expanded with new opportunities with Quality and Safety initiatives within the Children's and Women's Hospital administrative branch working with the Children's Hospital Association of America and the Solutions for Patient Safety. As of 2018 we are in the initial launch of the NINJA collaborative to screen pediatric patients for nephrotoxic medications to reduce acute kidney injury. Currently I am involve in a collaborative between ISMP and and FDA funded grant to assess medication safety in the perioperative space. I also was the pharmacy lead for Michigan Medicine's COVID -4 planning stage to open a field hospital and was critically involved in space identification, formulary development and operational planning.

I am a good citizen to the college of pharmacy and anyone that knows me would say that I bleed maize and blue. For many years I served proudly on the college of pharmacy alumni board of governors working to establish an alumni mentorship for students as well as an annual golf outing that is now one of the board's cherished events. I have served as an alumni marshal at graduation for many consecutive years and each year look forward to spending time with the alumni honorees. Career fairs, poster sessions, homecoming activities, fund raiser are all part of my stewardship and long term love of the University of Michigan.

I have been extremely blessed to have had the service career path that I have which has allowed me to work and succeed in a non-traditional pharmacy practice model and expand the horizons for other pharmacists to follow in my pathway.

Dates	Organization	Role
2014-present	Society of Head and Neck	Member
	Anesthesiology	
9/2011-8/2012	American Society of Health	Vice-chair
	SystemPharmacists	
	Medication Safety Section	
6/2009-6/2010	University of Michigan	Member
	College of Pharmacy Alumni	
	Board of Governors	
6/2007-6/2008	University of Michigan	Vice-President
	College of Pharmacy Alumni	
	Board of Governors	
2/2006-2/2010	University of Michigan	Member (elected)
	College of Pharmacy Alumni	
	Board of Governors	
1995-present	American College of Clinical	Member
	Pharmacy	
10/1994-10/2001	University of Michigan	Member (elected)
	College of Pharmacy Alumni	
	Board of Governors	

### **Memberships in Professional Societies**

10/1000 10/1004		$\mathbf{M} = 1$ (1 (1))
10/1990-10/1994	University of Michigan	Member (elected)
	College of Pharmacy Alumni	
	Board of Governors	
10/1989-10/1990	University of Michigan	President
	College of Pharmacy Alumni	
	Board of Governors	
10/1988-10/1989	University of Michigan	Vice-President
	College of Pharmacy Alumni	
	Board of Governors	
2/1982-10/1988	University of Michigan	Member
	College of Pharmacy Alumni	
	Board of Governors	
1976-present	American Society of Health	Member
	Systems Pharmacists	
1993-2004	Michigan Operating Room	Vice Chair
	Pharmacist Association	
1995-2000	Society of Obstetric	Member
	Anesthesia and Perinatology	

# <u>Editorships</u>

Dates	Organization	Role
1985-1988	Southeastern Michigan Society of Hospital Pharmacists Newsletter	
1985-1985	Southeastern Michigan Society of Hospital Pharmacists Newsletter	Assistant Editor

# **External Committees**

Dates	Organization	Role
2019-present	ISMP Perioperative Medication Safety	Member
2018-present	ASHP Standardize for Safety	Member
2018-present	SEM Medical Control Authority	Pharmacy Chair
2018-present	Pain Management Conference Committee	Planner
2017-present	ASHP Pediatric Work Group	Member
2016-17	Seeking Balance in Pain Management: 2017	Planner
	Conference on Pain, Novi,MI	
5/2016-present	Northstar Reach Camp	Pharmacy
		Ambassador
4/2015-present	EMS Trauma and Systems Committee,	Pharmacy Chair
	Department of Community Health, State of	
	Michigan	
2014-present	Children's National Hospital ADE	Member
7/2012-present	Michigan Hospital Association	Member
	Pediatric Safe Table, Lansing MI	

07/2012-2016	Pediatric Trigger Tool Collaborative with	Lead
0772012 2010	Children's National, University of Michigan	Lead
	Hospitals and Health System, Ann Arbor, MI	
06/2011-06/2012	ASHP Annual Meeting, Medication Safety	Program Chair
00/2011 00/2012	Program, Section of Inpatient Care Practitioners	r rogrum chun
08/2011-09/2012	Medication Safety Section Advisory Group,	Vice-chair
00/2011 09/2012	Section of Inpatient Care Practitioners, American	
	Society of Hospital Pharmacists	
08/2010-6/2011	ASHP Annual Meeting, Medication Safety	Program Chair
	Program	8
07/2009-present	ASHP Advisory Group, Medication Safety,	Member
1	American Society of Health-System	
	Pharmacists, Bethesda, MA	
2009-2011	Region 2 South EMS Pharmacy Committee	Chair
01/2003-6/2005	National Pharmaceutical Stockpile Advisory	Member
	Committee Region II South, State of Michigan	
10/2002-present	Regional II South Bioterrorism Advisory	Member
	Committee, State of Michigan, Wayne MI	
09/1997-present	Wayne County Medical Control Board,	Member
	Emergency Medical Services, Wayne County,	
	Michigan	
01/1996-present	Training and Education Committee, Emergency	Member
	Medical Services, Washtenaw and Livingston	
	Counties, Michigan	
07/1990-09/1994	Membership Committee, MPA, Lansing,	County Representative
	Michigan	
07/1990-1995	Washtenaw County Pharmacist Society	Board Member
11/1989-present	Advanced Life Support Program of Washtenaw	Pharmacy Coordinator
	and Livingston County, Medical Control Board	
04/1988-05/1992	Medicaid Board of Review, Department of	Member
	Social Services, Lansing, Michigan	
07/1987-07/1989	MSHP Publication Committee, Lansing,	Member
02/1004 07/1001	Michigan	
03/1984-07/1984	Patient Education Committee, Washtenaw	Member
	County Pharmaceutical Society/Washtenaw	
	County Health Department, Ann Arbor,	
00/1001 05/1002	Michigan	$\mathbf{D}_{1}$
08/1981-05/1982	Advanced Life Support program for Washtenaw	Pharmacy Coordinator
	and Livingston Counties Medical Control Board	

# <u>Reviewer</u>

Dates	Journal	Role
1999	Pharmacotherapy	Reviewer
7/2001-2004	ASHP Pain Guidelines: Pain	Reviewer
	Management for Primary Care	
	Providers	

2006-present	AJHP	Reviewer
6/2006-present	Novation/UHC Drug	Reviewer
	Monograph Series	
9/2007-present	Journal of Perianesthesia	Reviewer
	Nursing	
2008-present	Mary Hanna Memorial	Reviewer
	Journalism Award	
2009-present	Quality and Safety in Health	Reviewer
	Care	
2010-present	Hospital Pharmacy	Reviewer
10/2010-present	<b>BioMedical Central Journal</b>	Reviewer
11/2010-present	Journal of Patient Safety	Reviewer
3/2011-2019	University of Michigan	Reviewer
	MICHR grant proposals	
2011-present	Pediatric Anesthesia	Reviewer
2014-present	British Journal of	Reviewer
	Anaesthesiology	
2019-present	Bentham Sciend Publishers-	Reviewer
	The Open Anesthesia Journal	
2020-present	HopsitalPharmacist Newsletter	Reviewer
2020-present	Pediatrics	Reviewer

# **Department, College, and University**

## Department

Dates	<b>Committee/Position</b>	Role		
1/2021	Pediatric Pain Committee	Member		
3/2020-4/2020	Michigan Medicine Covid 4 Pharmacy	Pharmacy Lead		
4/2020-present	Pharmacy Sunshine Committee	Management Sponsor		
4/2020	Pediatric glycemic control committee	Covering co-chair		
8/2019-present	C&W Mental Health Quality and Safety Subcommittee	Member		
2018-present	Pain Committee Event Review	Member		
2018-present	Anesthesiology Pyxis Workstation	Member		
2017-present	Pediatric Surgical Quality	Member		
2017-present	Surgical Quality Event Review	Member		
2017-present	Anesthesiology/Pharmacy Task Force	Member		
2017-present	SPSS NINJA Collaborative	Lead		
01/2016-present	PT Committee	Member		
12/2016-present	CW Quality and Safety	Member		

12/2016-present	CW Serious Safety Event Review Committee	Member
07/2016-present	Anesthesiology Medication Safety Task Force	Member
4/2015-present	Emergency Management Executive Committee	Member
11/2014-present	Mott Perioperative/PICU Handoff Committee, CW Hospital, Ann Arbor, MI	Member
8/2014-present	HPI Risk Scoring Committee, CW Hospital, Ann Arbor, MI	Member
8/2014-present	Pediatric Medication Safety Committee, CW Hospital, Ann Arbor, MI	Chair
12/2013-present	Mott OR Steering Committee	Member
12/2012-present	UMHS Blood Transfusion Committee	Member
9/2012-present	Mott Clinical Practice Guidelines Subcommittee of the Mott Executive Committee	Member
06/2012-present	UMHS Critical Care Steering Committee	Member
07/2012-12/2012	UMHS Pediatric Medication Safety Committee	Interim Chair
07/2012-present	UMHS Medication Safety Committee	Member
10/2002-present	Regional II South Bioterrorism Advisory Committee, State of Michigan, Wayne, Michigan	Member
07/2012-present	ADE, SIP and VTE Pediatric subgroups, Ohio Collaborative quality program, CW Hospital, Ann Arbor, MI	Member
03/2011-present	Mott Executive Quality Assurance Committee, University of Michigan Health System	Member
11/2010-present	VTE Executive Steering Committee	Member
07/2009-2016	Mott Discharge Prescription Pilot, University of Michigan Health System, Ann Arbor, MI	Chair
10/2008-present	Pain Executive Steering Committee	Member
10/2008-present	Sedation Executive Steering Committee	Member
7/2008-present	Ambulatory Care CPR Committee	Member
05/2008-present	Pediatric Needlesticks Committee, University of Michigan Health System, Ann Arbor, Michigan	Member
01/2008-11/2010	Anticoagulation NPSG Committee, University of Michigan Health System, Ann Arbor, Michigan	Member
12/2007-2016	Women's Leadership Committee, University of Michigan Health System, Ann Arbor, Michigan	Member
12/2006-01/2010	Equipment Management Committee, University of Michigan Health System, Ann Arbor, Michigan	Member
12/2006-2017	Patient Safety Committee, University of Michigan Health System, Ann Arbor, Michigan	Member
7/2006-12/2015	Pediatric CPR Committee	Member
11/2005-2016	Pediatric Palliative Care Team, University of Michigan Health System, Ann Arbor, Michigan	Member
05/2005-12/2012	Mott Hospital Design Committee, University of Michigan Health System, Ann Arbor, Michigan	Member
11/2004-present	Pediatric Medication Safety Committee, University of Michigan Health System, Ann Arbor, Michigan	Member

10/2004-10/2008	Pain and Analgesia Sedation Committee,	Member
	University of Michigan Health System, Ann Arbor, Michigan	
07/2004-present	Mott Anesthesia Technical Support Committee,	Member
o // 2001 prosent	University of Michigan Health System, Ann	
	Arbor, Michigan	
09/2003-7/2005	Drug Diversion Committee, University of	Member
	Michigan Health System, Ann Arbor, Michigan	
02/2003-9/2006	Contrast Media Reaction Committee, University	Member
	of Michigan Health System, Ann Arbor, Michigan	
11/2002-present	Anesthesia Technical Support Committee,	Member
	University of Michigan Health System, Ann	
	Arbor, Michigan	
10/2002-7/2004	Pain Steering Committee, University of Michigan	Member
	Hospitals, Ann Arbor, Michigan	
01/2002-present	2003 Pediatric Pain Conference Planning	Member
	Committee, CHM, and UMHS	
12/2001-12/2005	Cardiovascular Drug Utilization Team, University	Member
	of Michigan Hospitals, Ann Arbor, Michigan	
07/2001-present	Anesthesia Quality Assurance Committee,	Member
	University of Michigan Hospital, Ann Arbor,	
0.6/2001	Michigan	
06/2001-present	Emergency Medicine Bio-terrorism/Disaster	Member
	Committee, University of Michigan Hospital, Ann	
01/2000-10/2005	Arbor, Michigan Continuing Education Committee, University of	Member
01/2000-10/2003	Michigan Hospital, Ann Arbor, Michigan	Wiember
01/1998-present	CPR Committee, University of Michigan Hospital,	Pharmacy
01/1770-present	Ann Arbor, Michigan	representative
09/1996-10/2005	Michigan Congenital Heart Institute Division of	
07/1770-10/2003	Clinical Services, Mott Children's Hospital, Ann	Wiember
	Arbor, Michigan	
01/1996-09/1996	Pitchers and Catchers, Peds Cardiology, Mott	Member
01/1990 09/1990	Children's Hospital, Ann Arbor, Michigan	Weineer
06/1994-present	Pediatric Anesthesiology Research Committee,	Member
r	University of Michigan Hospital, Ann Arbor,	
	Michigan	
07/1993-07/2000	Public Education Committee, Michigan Heart and	Member
	Vascular Institute, Ann Arbor, Michigan	

## **College of Pharmacy**

Dates	Committee/Position	Role
7/2020-present	Admissions Committee, University of Michigan	Member
	College of Pharmacy	
6/2014-2016	International Committee, University of Michigan	Member
	College of Pharmacy	
6/2014-present	Practitioner Relations/CE	Member

6/2013-6/2014	Admissions Committee, University of Michigan College of Pharmacy	Member
6/2012-6/2013	International Studies Committee, University of Michigan College of Pharmacy	Member
02/2003-06/2005	College of Pharmacy Teaching, Effectiveness Committee, Ann Arbor, Michigan	Member
03/2000-08/2012	PharmD Investigations Committee, University of Michigan College of Pharmacy, Ann Arbor, Michigan	
09/1999-2001	Clinical Research Committee, College of Pharmacy, University of Michigan, Ann Arbor, Michigan	Member
07/1993-09/1993	Pharmacy Practice Board, University of Michigan College of Pharmacy, Ann Arbor, Michigan	Member
04/1993-06/1993	Curriculum Review Committee, University of Michigan College of Pharmacy, Ann Arbor, Michigan	Member
10/1989-03/1990	University of Michigan College of Pharmacy Spring Seminar on Diabetes, Ann Arbor, Michigan	Chairperson
10/1988-03/1989	University of Michigan College of Pharmacy Spring Seminar on Nutrition, Ann Arbor, Michigan	Chairperson
10/1987-03/1988	University of Michigan College of Pharmacy Annual Spring Seminar on Home Health Care and Pharmacy Practice, Ann Arbor, Michigan	Chairperson
10/1985-04/1986	University of Michigan College of Pharmacy Annual Spring Seminar on Diabetes, Ann Arbor, Michigan	Chairperson
06/1985-10/1985	University of Michigan College of Pharmacy Alumni Board of Governors Nominating Committee, Ann Arbor, Michigan	Chairperson
10/1983-03/1984	University of Michigan College of Pharmacy Annual Spring Seminar "Update on Rheumatoid Disorders and Their Treatment", Ann Arbor, Michigan	Chairperson
04/1983-10/1983	University of Michigan College of Pharmacy Annual Fall Seminar on Pediatric Patients: Treatment Concepts and Selected Diseases", Ann Arbor, Michigan	Chairperson
09/1982-04/1983	University of Michigan College of Pharmacy Annual Spring Seminar on "Sexually Transmitted Diseases", Ann Arbor, Michigan	Co-Chairperson
09/1981-05/1992	Curriculum Committee, University of Michigan, Ann Arbor, Michigan	Member

Appendix B: College of Pharmacy, Summary of Teaching Experience Form

## **Evaluative Summary of Teaching Experience**

Link to narrative self evaluation: comment on description of teaching/mentoring/precepting experience; how teaching has changed overtime; teaching load; teaching philosophy; general approach to teaching; changes/faculty development in the area of teaching; innovation; quality including but not limited to self reflection, awards and scholarship of teaching. Where possible, the data in the tables below should come from CoP sources (e.g., annual FED reports, course guide, student ratings). Note: 1-A, 2-A and 3 should be copied from corresponding parts of the CV.

#### **1-A** Didactic Teaching

Description of what the individual teaches and teaching load for ALL courses taught at UM for the past 6 years.

Course # and Title	Year/Semester	Role: Coordinator, Lecturer, Both	Brief Course Description	Students: PharmD, Graduate or Undergraduate (#)	Student Contact Hrs.
N677	Winter 2021	Lecturer	Pharmacoloty	Graduate (15	4
P579	Winter 2021	Advisor	PharmD Investigations	Pharm D (2)	1
P569	Fall 2020	Advisor	PharmD Investigations	PharmD (2)	1
N677	Winter 2019	Lecturer	Pharmacology	Graduate (15)	4
N540	Fall 2018	Lecturer	Pharmacology	Graduate (12)	3
P569	Winter 2019	Advisor	PharmD Investigations	PharmD (2)	1
P569	Winter 2018	Advisor	PharmD Investigations	PharmD(3)	1
P569	Fall 2018	Advisor	PharmD Investigations	PharmD(3)	1
P680	Fall 2019	Advisor	Seminar PharmD (2)		1
P569	Fall 2017	Advisor	PharmD Investigations	PharmD(1)	1
N540/546	Fall 2017	Lecturer	Pharmacology	Graduate	4
P706	Winter 2016	Advisor	MUE	PharmD	2
P569	Winter 2016	Advisor	PharmD Investigations	PharmD(4)	1
N540/546	Fall 2016	Lecturer	Pharmacology	Graduate	4
N640	2016 Winter	Lecturer	Pharmacology	Graduate	4
N540/546	2015 Fall	Lecturer	Pharmacology	Graduate	4
N640	2015/Winter	Lecturer	Pharmacology	Graduate	4
P569	2015/winter	Advisor	PharmD investigations	PharmD (6)	1
N540/546	2014/fall	Lecturer	Pharmacology	Graduate	4
P569	2014/fall	Advisor	PharmD Investigations	PharmD (7)	1
P680	2014/fall	Advisor	Seminar	PharmD (1)	2
P569	2014/winter	Advisor	PharmD Investigations	PharmD (7)	1
N640	2014/winter	Lecturer	Pharmacology	Graduate	4

P690	2013 fall	Preceptor	Advanced Pharmacy Practice	PharmD (1)	2
N540/546	2013 fall	Lecturer	Pharmacology	Graduate	4
P569	2013 fall	Advisor	PharmD Investigations	PharmD (6)	1
N640	2013 winter	Lecturer	Pharmacology	Graduate	4
P569	2013 winter	Advisor	PharmD Investigations	PharmD (6)	1
P680	2012 fall	Advisor	Seminar	PharmD (2)	2
P569	2012 fall	Advisor	PharmD Investigations	PharmD (10)	1
N540/546	2012 fall	Lecturer	Pharmacology	Graduate	4
IOE 481	2012 fall	Advisor	Engineering Design	Undergraduate (3)	4
P569	2012 winter	Advisor	PharmD Investigations	PharmD (10)	1
N640	2012 winter	Lecturer	Pharmacology	Graduate	4
IOE 481	2012 winter	Advisor	Engineering Design	Undergraduate (3)	4
P680	2011 fall	Advisor	Seminar	PharmD (1)	2
P569	2011 fall	Advisor	PharmD Investigations	PharmD (8)	1
N540/546	2011 fall	Lecturer	Pharmacology	Graduate	4
P569	2011 winter	Advisor	PharmD Investigations	PharmD (8)	1
N640	2011 winter	Lecturer	Pharmacology	Graduate	4
P570	2010 fall	Advisor	Independent Study	PharmD (1)	2
P569	2010 fall	Advisor	PharmD Investigations	PharmD (3)	1
N540/546	2010 fall	Lecturer	Pharmacology	Graduate	4
IOE 481	2010 winter	Advisor	Engineering Design	Undergraduate (4)	4
N640	2010 winter	Lecturer	Pharmacology	Graduate	4
P569	2010 winter	Advisor	PharmD Investigations	PharmD (3)	1
P569	2009 fall	Advisor	PharmD Investigations	PharmD (2)	1
N540/546	2009 fall	Lecturer	Pharmacology	Graduate	4
IOE 481	2009 fall	Advisor	Engineering Design	Undergraduate (4)	4
P569	2009 winter	Advisor	PharmD Investigations	PharmD (1)	1
N640	2009 winter	Lecturer	Pharmacology	Graduate	4

# **1-B** Summary of Student Ratings for Didactic Teaching (Not applicable, evaluations of classes outside the COP do not provide quartile evaluations)

This list should be completed for ALL courses taught at UM for the past 6 years. All pertinent E and E reports will be provided by the Department Chair.

Course/Semester/Year	Q2	Q201	Q216	Q230
(# responding/#enrolled)	(CoP 50%ile)	(CoP 50%ile)	(CoP 50%ile)	(CoP 50%ile)
NA	NA	NA	NA	NA

Q2: Overall, the instructor was an excellent teacher explanations

Q201: The instructor gave clear

Q216: The instructor acknowledged all questions in so far as possible Q230: The prepared for each class

Q230: The instructor seemed well

## 1-C Summary of Student Ratings for Didactic Teaching (School of Nursing)

Questions	Student Ratings/ Year Scale 1-	2009	2010	2011	2012	2013	2014	2015	2016	2017	201 8	2020
Material is important for the student	4	4	4	4	4	4	4	4	4	4	4	4
Students have background to understand		4	4	4	4	4	4	4	4	4	4	4
Examples are relevant		4	4	4	4	4	4	4	4	4	4	4
Different viewpoints are presented		4	4	4	4	4	4	4	4	4	4	4
Amount of material is adequate		4	4	4	4	4	4	4	4	4	4	4
New terms, concepts and principles defined		4	4	4	4	4	4	4	4	4	4	4
Relationship of theory to practice		4	4	4	4	4	4	4	4	4	4	4
Summaries are provided		4	4	4	4	4	4	4	4	4	4	4

Did not digress from topic	4	4	4	4	4	4	4	4	4	4	4
Teaching method appropriate for contents	 4	4	4	4	4	4	4	4	4	4	4
Examples relevant to ethnic-cultural grps	4	4	4	4	4	4	4	4	4	4	4
Purpose of class stated	4	4	4	4	4	4	4	4	4	4	4
Relationship of present and previous material	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Content discussed in systematic manner, aligned with syllabus	4	4	4	4	4	4	4	4	4	4	4
Uses questions to determine student understanding	4	4	4	4	4	4	4	4	4	4	4
Uses examples to clarify concepts	4	4	4	4	4	4	4	4	4	4	4
Encourages student questions	4	4	4	4	4	4	4	4	4	4	4
Pauses after questions to allow students time for thought	4	4	4	4	4	4	4	4	4	4	4
Summarizes important ideas	4	4	4	4	4	4	4	4	4	4	4
Addresses problems raised during class	4	4	4	4	4	4	4	4	4	4	4
Board work legible	4	4	4	4	4	4	4	4	4	4	4

	-				-			-			-	
Handouts facilitated note taking		4	4	4	4	4	4	4	4	4	4	4
Contained supplemental material		4	4	4	4	4	4	4	4	4	4	4
AV materials added to presentation		4	4	4	4	4	4	4	4	4	4	4
Voice is easily heard		4	4	4	4	4	4	4	4	4	4	4
Tone raised/lowered for emphasis		4	4	4	4	4	4	4	4	4	4	4
Speech mannerisms are not distracting		4	4	4	4	4	4	4	4	4	4	4
Rate of speech allows time for note taking		4	4	4	4	4	4	4	4	4	4	4
Tone of voice conveys encouragement		4	4	4	4	4	4	4	4	4	4	4
Maintains eye contact with class		4	4	4	4	4	4	4	4	4	4	4
Listens attentively to students		4	4	4	4	4	4	4	4	4	4	4
Body language is congruent with oral message		4	4	4	4	4	4	4	4	4	4	4
Responds to students cues		4	4	4	4	4	4	4	4	4	4	4

Comments: Extremely knowledgeable, enthusiastic and passionate, VERY experienced and engaging, kept the students attention

#### 2-A Experiential Teaching

	IPPEs	P4 Student Rotations		Residen	t Rotations	Graduate Student Rotations		
Year	# of Students	# of Blocks	# of Students	# of Blocks	# of Residents	# of Semesters	# of Students	
2020				1	1			
2017	2			1	1			
2016				1	1			
2015	5			1	1			
2014		1	1	1	1			
2013				1	1	2	2	
2012						2	1	
2011				1	1	2	1	
2010						2	1	

#### 2-B Student Ratings of Preceptor

Faculty to record average student ratings of preceptor based on FED reports over time.

Questions P680 Seminar Advisor Evaluation	Strongly disagree 1- Strongly agree 5	2011 Kylee Funk	2012 April Qian	2012 Irwin Lau	2014 Josh Clark	2016 Mathew Paterini	2017 Lucas Rondin	2018
Advisor provided adequate guidance for literature review		5	5	5	5	5		
Advisor provided adequate guidance for slide format		5	5	5	5	4		
Advisor provided adequate guidance for slide content		5	5	5	5	5		
Advisor provided adequate guidance for case		5	5	5	5	3		
I had adequate opportunity to meet with advisor		5	5	5	5	4		
I presented my completed seminar at least once		5	5	5	5	5		
Advisor moderated a critique of my seminar		5	5	5	5	5		

#### **Comments:**

-I had a great experience working with my preceptor on my presentation

#### 2-C Resident Ratings of Preceptor

Faculty to provide the average ratings received on the following questions from the Resident Evaluation of Preceptor from used by the UMHS Residency Program.

Question	PGY2 2011	PGY2 2013	PGY 2 2014	PGY2 2015	PGY2 2016	PGY 2 2017	PGY 2 2020	PGY 1 2020
1. Preceptor was a pharmacy practice role model.	10	10	10	10	10	10		
2. Preceptor gave me feedback on a regular basis.	10	10	10	10	10	10		
3. Preceptor's feedback helped me improve my performance.	10	10	10	10	10	10		
4. Preceptor was available when I needed him/her.	10	10	10	10	10	10		
5. Preceptor arranged necessary learning opportunities to meet my objectives.	10	10	10	10	10	10		
6. Preceptor displayed enthusiasm for teaching.	10	10	10	10	10	10		
7. Preceptor gave clear explanations	10	10	10	10	10	10		
8. Preceptor asked questions that encouraged me to do my own thinking.	10	10	10	10	10	10		
9. Preceptor answered my questions clearly	10	10	10	10	10	10		
10. Preceptor modeled for me, coached my performance or facilitated my independent work as appropriate.	10	10	10	10	10	10		
11. Preceptor displayed interest in me as a resident	10	10	10	10	10	10		
12. Preceptor displayed dedication to teaching.	10	10	10	10	10	10		

Comment:

-The topic discussions were one on the preceptors greatest strengths

-Preceptor created many opportunities for me

-I learned a lot about pain management

-Dr. Wagner is well respected and loved by the department, one of the most hard working people I have met. I hope to emulate through my life

-Dr. Wagners powerpoints are AWESOME!

-She is a great role model and devotes a lot of time to resident training

-Deb is a great preceptor

## 3 Mentoring

Year(s)	Trainee/Mentee	Description*	Mentee's Current Position
2021	Amima Mamhood	PharmD Investigations	Student
2021	Jenna Salter	PharmD Investigations	Student
2020	Amanda Harris, Callum Krause, Jordan Derio, Pryia Desai, Tyler Spuree	IOE 481	Student
2020	Gabrielle Brathwaite, William Crowley, Jacob Lawson, Ronald Scott	IOE481	Student
2019	Jenna Salter	PharmD Investigations	Student
2019	Jenna Salter	Summer Intern	Student
2019	Cecilia Li	PharmD Investigations	Student
2019	Rachel Wolfe	Seminar Advisor	Student
2018	Madeline Lipp	PGY1	Resident
2018	Lauren Aschermann	Seminar Advisor	Student
2018	Joo Yoon	Seminar Advisor	Student
2017	Genevra Golom	Summer Intern	Student
2017	Nada Rida	Summer Intern	Student
2017	Abigail Schauble	PGY2	Resident
2017	Lucas Rondon	Seminar Advisor	Student
2016	Humaira Nawer	Summer Intern	
2016	Nathan Lake	Summer Intern	
2016	Mathew Paterini	Seminar Advisor	
2016	Jessica Richards PharmD	PGY2	PCTU Clinical Specialist C&W Hospital
2015	Lisa Scherkenbach, Pharm D	PGY2	PICU Clinical Specialist C&W Hospital
2014	Emily Israel, Pharm D	PGY2	Graduated
2014	Josh Clark	Seminar Advisor	
2013	Justina Damiani, Pharm D	PGY2	Chicago, Ill
2010- 2013	Terri Voepel-Lewis	PhD, University of Michigan School of Nursing	Pediatric Research Coordinator Pediatric Anesthesiology University of Michigan Hospitals
2013	Bess Connors	Summer Biomedical Research Student,	University of Michigan Medical School
2011	Jennifer Hemberg	UROP	Medical School
2009- 2010	Hannah Yu	Research Assistant	Department of Anesthesiology
2009- 2010	Lori Burnham	Mentor	MiChart Willow UMHS
2012	Breanna Luckett	IOE	
2012	Donald Rysdyk	IOE	

List all PharmD students, graduate students, postdoctoral fellows, resident who were mentored.

2012	Samantha Vincenti	IOE	
2009	Michael Bagliebter	IOE	
2009	Brandon Barnett	IOE	
2009	Matt Cooper	IOE	
2009	Julian Stauffer	IOE	
2014	Josh Clark	Seminar Advisor	Medical School
2012	April Qian	Seminar Advisor	Industry-east coast
2012	Irwin Lau	Seminar Advisor	California
2011	Kylee Funk	Seminar Advisor	Minnesota COP faculty
2015	Katie Johnson	Research	Student
2015	Henry Tran	Research	Student
2015	Victoria Butterfield	Research	Student
2015	Ashley Wolf	Research	Student
2015	Christina Sienkowski	Research	Student
2013-	Miguel Caraballo	Research	Denver, CO
2014 2013-			
2014	Joy Lee	Research	
2013- 2014	John Sindlee	Research	COP UMHS
2013- 2014	Vera Vulaj	Research	
2013-	Mohamad Yassine	Research	
2014 2013-			
2014	Thoraya Youness	Research	
2012- 2013	Anthony Ellis	Research	Retail California
2010- 2013	Courtney Kilborn	Research	Staff UMHS
2010- 2013	Alicia Giloglly	Research	Staff UMHS
2010-	Roxanne Nanos	Research	University of Oklahoma
2013 2010-			
2013 2010-	Jessica Fong	Research	Kaiser Permanente
2010- 2013	Irwin Lau	Research	
2010- 2012	Sara Brown	Research	
2009- 2012	April Qian	Research	
2009-	Kylee Funk	Research	University of Minnesota
2012 2009-	Berni Marini	Research	UMHS
2012 2009-	Sara Berman	Research/Independent Study	
2011 2007-			
2010	Idan Hananawa	Research	Beaumont Hospital
2008- 2010	Mai Tran	Reserach	
Deborah Sue Wa	ugner 5	5/26/2021	61

2008- 2010	Luba Burman	Research	Chicago, Ill
2008- 2009	Devon Grey	Research	
2008- 2009	Robert McCollum	Research	

\* Descriptions: Pharm.D. Investigations, Pharm.D. Seminar, Master's Student, Ph.D. Student, Resident, Postdoctoral Fellow.

#### 4 Additional Teaching (if any)

Pain CME annual lectures for pharmacy Staff

Continuous CPR training for all new pharmacists and residents

Summer Biomedical Research Rotations

Anesthesiology Tutorials for Pediatric residents and fellows

Nursing Inservices PACU and OR nursing

Risk Management Summer Internship

IPPY orientation to patient safety 2010-2011

Summer Internship Project oversite CW Hospital 2016 and 2017

Opioid Misuse Work at University of Michigan, Michigan injury Center, Ann Arbor, MI. January 2017

Roundtable discussion: University of Michigan College of Pharmacy, APhA-ASP Interprofessional Prescription Drug Abuse Awareness, January 2017

Perioperative Continuum Surgical/Anesthesia Panel, Pfizer Essential Health, Orlando, FL. January 2017 Fall 2017 Mentoring CW generalist presentation "medication safety in the operating room" Mott OR nurs

Fall 2017 Mentoring CW generalist presentation "medication safety in the operating room" Mott OR nursing staff

November 2017

Pharmacist Naloxone dispensing training. Michigan Medicine. November 2017

Pacira Nerve Block Launch Meeting, Core participant, Long Beach CA. February 2018

Rewrite the Script, Michigan Medicine Opioid Initiative, November 2018, participant

Merck, National Sales Meeting, The Role of the Hospital Pharmacist, August 2018

11E CW Nursing Retreat Educational Program on Opioid Abuse, December 2018

Mi-Tesa Pharmacy workgroup 2019-present

Low-dose Lidocaine Infusion for Acute Pain guidelines and education training 2019-2020 Bolus off the Pump- medication safety 2020