

# Kathryn M. Fisher, M.D., M.S.

## CURRENT APPOINTMENT

**Medical Education Fellow** 2019-2021  
Department of Emergency Medicine Houston, TX  
*Baylor College of Medicine*

## POST-GRADUATE TRAINING

**Emergency Medicine Residency** 2016-2019  
*McGovern Medical School, University of Texas Health Science Center Houston* Houston, TX

## EDUCATION

**Masters of Health Professions Education (M.H.P.E) student** 2019-present  
*University of Illinois-Chicago* Chicago, IL

**Doctor of Medicine (M.D.)** 2016  
*University of Wisconsin School of Medicine and Public Health* Madison, WI

**M.D./Ph.D. Training, Medical Scientist Training Program (MSTP)** 2011-2014  
*University of Wisconsin School of Medicine and Public Health* Madison, WI  
Completed Ph.D. coursework in Cell and Molecular Biology

**Masters of Science (M.S.): Microbiology** 2011  
*University of Wisconsin-Madison* Madison, WI

**Bachelor of Science with Research Honors (B.S.): Medical Microbiology and Immunology, Genetics** 2010  
*University of Wisconsin-Madison* Madison, WI

**Undergraduate Studies: Music Performance (Clarinet) and Microbiology** 2006-2008  
*University of Michigan* Ann Arbor, MI

## POST-GRADUATE CERTIFICATIONS

**ACEP/CORD Resident Teaching Fellowship** 2018  
*American College of Emergency Physicians (ACEP)/Council of Emergency Medicine Residency Directors (CORD)* Dallas, TX

**Physician Educator Certificate**  
*McGovern Medical School, University of Texas Health Science Center*

2018  
Houston, TX

## LEADERSHIP POSITIONS

### **Vice Chair of Resident Education**

2019-2020

*Emergency Medicine Residents' Association (EMRA) Education Committee*

- Developed and reviewed educational content for resident and medical student activities at national conferences
- Presented at the Medical Education Fellowship Panel during the Education Committee Meeting at CORD 2019
- Provided mentorship to EMRA medical student mentees on education projects
- Assisted with content development, editing and production of 2019 Quiz Show
- Served on the selection committee for EMRA "20 in 6" Lecture Competition for ACEP 2019

### **Vice Chief of Simulation**

2018-2019

*McGovern Medical School Emergency Medicine (EM) Residency*

Houston, TX

- Assisted with development of novel simulation curriculum for resident conferences, intern orientation, and medical student didactics
- Wrote and facilitated simulation cases for rotating medical students, EM intern orientation, and EM resident conferences
- Participated and placed in Semi-Finals for EMRA Sim Wars 2018

### **Vice Chief of Education**

2017-2019

*McGovern Medical School Emergency Medicine Residency*

Houston, TX

- Contributed to development of conference curriculum and multimodal "flipped classroom" boards review series
- Developed program educational website and wrote weekly "Conference Recap" posts

### **Resident Member and Education Committee Member**

2018-2019

*Council of Emergency Medicine Residency Directors (CORD)*

- Elected as program resident representative
- Attended CORD education committee meetings

### **Education Committee Member**

2017-2019

*Emergency Medicine Residents' Association (EMRA)*

- Participated in conference committee meetings and remote events
- Wrote questions for 2019 EMRA Quiz Show

### **Education Committee Member**

2016-2019

*McGovern Medical School Emergency Medicine Residency*

Houston, TX

- Contributed during monthly faculty education committee meetings and assisted with resident curriculum design

## PUBLICATIONS

**Kathryn M. Fisher**, Catherine Reynolds and Hilary Fairbrother. Teaching and Evaluating Medical Students Oral Presentations Skills. *Abstract WestJEM* [In-Press]

Catherine Reynolds, **Kathryn Fisher**, Hilary Fairbrother. A Novel Standardized Rubric for Medical Student Emergency Medicine Oral Presentations. *Abstract WestJEM* [In-Press]

**Kathryn M Fisher**, Akshay Elagandhala and Jonathan A. Giordano. 2018. Ophthalmology Emergencies. E-oral Boards Review. [In press]

**Kathryn M. Fisher**, Timothy Montrief, “Cryptococcal Meningitis” Peer-reviewed web publication. Emdocs.net. May 27, 2019.

Benjamin L. Cooper, **Kathryn M. Fisher**, Yashwant Chathampally. Man With Left-Sided Chest Pain. ECG of the month. *Ann Emerg Med*. Vol. 72. No. 5. Nov. 2018. p. 558-561. PMID: 30342730

**Kathryn M. Fisher**, Catherine Reynolds, Mandy Hill, Misha Granado and Michael Van Meter. Teaching Medical Students Oral Presentations Skills. *Abstract WestJEM* Volume 19: Supplement, S22. August 2018.

Catherine Reynolds, **Kathryn Fisher**, Hilary Fairbrother. “Diabetic Ketoacidosis: Sneaky triggers and clinical pearls” Peer-reviewed web publication. Emdocs.net Nov 2017

Jonathan D. Lenz, Elizabeth A. Stohl, Rosanna Robertson, Kathleen T. Hackett, **Kathryn M. Fisher**, Kalia Xiong, Mijoon Lee, Dusan Heseck, Shahriar Mobashery, H. Steven Seifert, Christopher Davies, and Joseph P. Dillard. 2016. Amidase Activity of AmiC Controls Cell Separation, Stem-peptide Release, and is Enhanced by NlpD in *Neisseria gonorrhoeae*. *J. Biol. Chem.* jbc.M116.715573. doi:10.1074/jbc.M116.715573 PMID: 26984407

## AWARDS AND HONORS

<b>Clerkship Director Resident Teaching Award (SAEM/CORD)</b> <i>McGovern Medical School, Society for Academic Emergency Medicine, CORD</i>	2019
<b>McGovern Resident Nominee for CORD Academic Achievement Award</b> <i>McGovern Emergency Medicine Residency and CORD</i>	2018

<b>Access Emergency Medicine: Tintinalli’s Best of the Blogs 2018</b> <i>“Diabetic Ketoacidosis: ‘Sneaky’ triggers and clinical pearls” Emdocs.net</i>	2018
<b>Medical Student Community Service Award</b> <i>University of Wisconsin School of Medicine and Public Health</i>	2013
<b>Chemistry Study Group Leader of the Year</b> <i>University of Michigan Science Learning Center</i>	2007
<b>Full tuition merit-based scholarship (music)</b> <i>University of Michigan</i>	2006
<b>Shipman Scholarship for academic and music merit</b> <i>University of Michigan</i>	2006

## PROFESSIONAL EXPERIENCE

### LECTURES AND PRESENTATIONS

#### NATIONAL

**Kathryn Fisher**, Catherine Reynolds, Hilary Fairbrother. Teaching and Evaluating Medical Students Oral Presentations Skills. Council Of Emergency Medicine Residency Directors (CORD) Academic Assembly Poster Session. 04/2019

Catherine Reynolds, **Kathryn Fisher**, Hilary Fairbrother. A Novel Standardized Rubric for Medical Student Emergency Medicine Oral Presentations. Council Of Emergency Medicine Residency Directors (CORD) Academic Assembly Poster Session. 04/2019

Nicholas Governatori, Guy Carmelli, Sara Paradise, **Kathryn Fisher** and Deena Khamees. Medical Education Fellowship Panel. EMRA Education Committee Meeting. CORD Academic Assembly. 03/2019.

**Kathryn Fisher**. “Designer Drugs: Coming Soon To an Emergency Department Near You” Emergency Medicine Residents’ Association (EMRA) 20 in 6 Resident Lecture Competition. American College of Emergency Physicians (ACEP) Annual Meeting. 10/03/2018

**Kathryn Fisher**, Catherine Reynolds, Mandy Hill, Misha Granado and Michael Van Meter. Teaching Medical Students Oral Presentations Skills. Council Of Emergency Medicine Residency Directors (CORD) Academic Assembly Poster Session 04/2018

#### REGIONAL

**Fisher, Kathryn M.,** Garcia, Daniel L. and Joseph P. Dillard. A peptidoglycan degrading amidase, AmiC, as an antibiotic target in *Neisseria gonorrhoeae*. Midwest Microbial Pathogenesis Conference, Washington University in St. Louis, 09/2010

**Fisher, Kathryn M.,** Garcia, Daniel L. and Joseph P. Dillard. A peptidoglycan degrading amidase, AmiC, as an antibiotic target in *Neisseria gonorrhoeae*. Perlman Symposium On Antibiotic Discovery and Development, University of Wisconsin-Madison, 04/2010

LOCAL

**Emergency Medicine Resident Conference Lectures**

*McGovern Medical School, University of Texas-Houston*

- Senior Grand Rounds: Designer Drugs 03/2019
- Resident Emergency Medicine Boards Review Lecture Series:
  - Environmental 03/2019
  - Traumatic Injuries and Human Trafficking 10/2018
  - Cardiovascular 08/2018
  - Immunology and Rheumatology 07/2018
  - Obstetrics and Gynecology 05/2018
  - Abdominal 04/2018
  - Musculoskeletal and Hematology 03/2018
  - Toxicology 02/2018
  - Neurology Part II 01/2018
  - Neurology Part I 11/2017
  - Trauma 11/2017
  - Male Genitourinary 10/2017
  - Respiratory Part II 09/2017
  - Respiratory Part I 08/2017
- Intern Orientation Lecture: “The Resident As a Learner” 07/2018
- Journal Club Lecture: “Review of Medical Education Literature” 05/2017
- Intern lecture series: “The Altered HIV Patient” 04/2017

**Medical Student Lectures**

*McGovern Medical School, University of Texas-Houston*

- Fourth-year medical student didactics: “Syncope and EKG’s” 08/2018
- Student Society for Emergency Medicine Interest Group: “EKG’s” 10/2017
- Fourth-year medical student didactics: “Rapid Ultrasound for Shock and Hypotension: RUSH exams” 08/2017

**Lecturer, 5.09 curriculum G.E.D. course equivalent** 10/2014  
*Milwaukee Literacy Services* Milwaukee, WI

- “Communicable Diseases”

**Guest Lecturer and Laboratory Instructor** 09/2012

Biology 312: Microbiology, *Edgewood College* Madison, WI

- Lectured on DNA Replication
- Directed laboratory sessions on clinical microbiology laboratory testing

**Lecturer** 2009  
 Microbiology 304: General Microbiology Laboratory Madison, WI  
*University of Wisconsin-Madison Department of Microbiology*

- Lectured on Plasmids, Plasmid Replication and Gel Electrophoresis

**SIMULATION**

**Medical Simulation Case Author and Facilitator**

*McGovern Medical School, University of Texas-Houston* Houston, TX

- Emergency Medicine Resident Conference Simulation Cases Authored
  - “Neonatal Resuscitation” 05/2019
  - “Shoulder Dystocia” 04/2019
  - “Digoxin Toxicity” 03/2019
  - “Priapism Management” 01/2019
  - “Methamphetamine Laboratory Explosion” 10/2018
  - “Status Asthmaticus” 08/2018
  - “Neonatal Congenital Heart Disease” 07/2018
  - “Neonatal Sepsis” 07/2018
  - “Upper Gastrointestinal Bleed” 06/2018
- Assisted with medical student didactic curriculum in simulation, airway management, ultrasound and procedure labs 08/2017-present
- Judged regional medical student simulation competition at McGovern Medical School 01/2018
- Edited case-scenarios for publication used in medical student simulation competition 12/2017-01/2018

**CURRICULUM DESIGN**

**Emergency Medicine Resident Curriculum**

*McGovern Medical School, University of Texas-Houston* 2017-2019  
 Houston, TX

- Developed in-conference boards review series based on HippoEM content using a flipped classroom model and multimodal approach
- Co-organized first-annual Resident Teaching Symposium during resident conference
- Developed first-annual intern orientation month workshop: Orientation to “Life Flight” and helicopter emergency medical services
- Assisted with development of novel simulation curriculum and authored and facilitated cases

**Emergency Medicine Medical Student Clerkship** 2017-2019

- Principal Investigator on IRB-approved “Teaching Medical Students Oral Presentations Skills” mentors: Dr. Michael Van Meter and Dr. Hilary Fairbrother
- Co-organized and facilitated workshop: Mock Interviews and Residency Application and Interview Advice

Houston, TX

**Instructor, Physiology 335: Human Physiology**

*University of Wisconsin Department of Physiology*

2014

- Designed lecture series, wrote course modules, discussion materials and exams for Introductory Physiology and Neurophysiology sections

Milwaukee, WI

**Public Health Curriculum Design**

*Milwaukee Literacy Services*

2014

- Developed a Health Curriculum for a G.E.D. course equivalent

Milwaukee, WI

**Maternal Fetal Health Curriculum for Medical Students**

*Medical Students Offering Maternal Support student organization, University of Wisconsin School of Medicine and Public Health*

2012-2013

- Developed educational curriculum including lectures at orientation, monthly seminars, and community outreach on maternal health

Madison, WI

**Biotechnology Outreach**

*University of Wisconsin-Madison Biotechnology Outreach Center*

2009-2010

- Created and demonstrated hands-on scientific exploration stations for kids at outreach events throughout Wisconsin and organized campus science events for kids
- Taught week-long Microbiology course at “Grandparents University” for elementary students and their grandparents

Madison, WI

**TEACHING EXPERIENCE**

**Resident Education Elective**

*McGovern Medical School, University of Texas-Houston*

2017, 2018

- Completed month-long Educational Research elective
- Completed month-long Education elective including individual teaching shifts with each medical student

Houston, TX

**Medical Student Tutor**

*University of Wisconsin School of Medicine and Public Health, Madison, WI*

2013-2015

- Tutored and lead discussion groups for a second-year medical student in integrated organ block courses

Madison, WI

**Instructor, Physiology 335: Human Physiology**

*University of Wisconsin Department of Physiology*

2014

- Lectured for eight 90 minute lectures over course block

Madison, WI

- Instructor and Tutor**, Medical College Admission Test (MCAT)  
*The Princeton Review* 2011-2014  
Madison, WI
- Lectured and tutored for general and organic chemistry sections
- Academic Tutor**, Athletic Academic Services 2013-2014;  
*University of Wisconsin-Madison Athletic Department* 2008-2011  
Madison, WI
- Tutored individual and group sessions primarily in Organic and General Chemistry, Microbiology, Immunology, Biochemistry, Music Theory
  - Prepared supplemental learning materials and exam preparatory guides
- Chemistry Tutor** 2007-2014  
*Self-employed* Ann Arbor, MI  
Madison, WI
- Tutored Organic Chemistry to undergraduate students and Chemistry to high school students
- Teaching Assistant**, Microbiology 304: General Microbiology Laboratory 2009  
*University of Wisconsin-Madison Department of Microbiology* Madison, WI
- Study Group Facilitator**, Organic Chemistry 2007-2008  
*University of Michigan Science Learning Center* Ann Arbor, MI
- Facilitated weekly study groups and designed study materials

## RESEARCH EXPERIENCE

- Educational Research** 2017-present  
*Department of Emergency Medicine, McGovern Medical School* Houston, TX
- Principal Investigator on IRB-approved “Teaching Medical Students Oral Presentations Skills” mentors: Dr. Michael Van Meter and Dr. Hilary Fairbrother
  - Development of novel grading rubric for medical student oral presentations mentor: Dr. Hilary Fairbrother
- Graduate Research Assistant** 2014  
Laboratory of Dr. Joseph Dillard, Ph.D. Madison, WI  
*Department of Medical Microbiology and Immunology, University of Wisconsin School of Medicine and Public Health (UWSMPH)*
- Developed assay using human blood as a model system for studying peptidoglycan fragment release as it relates to pathogenesis and immune evasion in *Neisseria meningitidis*
  - Investigated the role of NlpD, a putative peptidoglycanase, on cell separation and peptidoglycan fragment release in *Neisseria meningitidis*
- Graduate Research Assistant** 2013  
Laboratory of Dr. Christine Seroogy, M.D. Madison, WI  
*Department of Pediatrics, Division of Allergy and Immunology, UWSMPH*



- Assisted with analysis of complex flow cytometry data and optimized analysis techniques for clinical trial data studying the development of the innate immune system, specifically addressing the role of environmental exposures on the development of asthma and allergies in childhood

**Graduate Research Assistant**

Laboratory of Dr. Daniel Jackson, M.D.

*Department of Pediatrics, Division of Allergy and Immunology, UWSMPH*

- Analyzed data from patients in the Childhood Origins of Asthma (COAST) cohort investigating the role of vitamin D deficiency in the development of asthma, allergies and atopic dermatitis in children

2012  
Madison, WI

**Graduate Research Assistant**

Laboratory of Dr. Ryan Westergaard, M.D.

*Department of Medicine, Division of Infectious Disease, UWSMPH*

- Assisted with design of retrospective study to analyze behavioral patterns of injection drug users assessing high-risk drug- and needle-sharing behaviors in Milwaukee and Madison, WI and its relationship to prevalence and incidence of Hepatitis C and HIV infection in this population

2012  
Madison, WI

**Graduate Research Assistant**

Laboratory of Dr. John-Demian (J.D.) Sauer, Ph.D.

*Department of Medical Microbiology and Immunology, UWSMPH*

- Investigated the role of *lmo2473* and other gene mutations in *Listeria monocytogenes* on bacteriolysis in host macrophages and its role on host cell death, inflammasome activation, and cytokine production

2012  
Madison, WI

**Research Assistant**

Laboratory of Dr. Joseph Dillard, Ph.D.

*Department of Medical Microbiology and Immunology, UWSMPH*

- Investigated the role of AmiC in cell separation and the possibility of AmiC as an antibiotic drug target
- Contributed preliminary data to funded R01 grant on cell separation in *Neisseria gonorrhoeae* and R21 grant on the action of AmiC in peptidoglycan metabolism in *Neisseria gonorrhoeae*
- Developed assay to study the function of AmiC, a peptidoglycanase, in peptidoglycan recycling and fragment release in the pathogenesis of *Neisseria gonorrhoeae*

2008-2011  
Madison, WI

**VOLUNTEER EXPERIENCE**

**Medical Student Mentor**

*McGovern Medical School, University of Texas-Houston*

- Individual mentorship of three current 3<sup>rd</sup> year medical students

2017-present  
Houston, TX

- Medical Student Free Clinics, *MEDIC Student-run Free Clinics*** 2011-2016  
*University of Wisconsin School of Medicine and Public Health* Madison, WI
- Over 100 hours volunteered providing direct patient care in several area clinics
- Event Medicine: Emergency Medical Technician** 2010-2014  
*University of Wisconsin Police Department First Responders* Madison, WI
- Responded to campus 9-1-1 calls on weekends, nights
  - Provided medical care for special events such as marathons, Ironman races, university sporting events
- Community Service Programs Committee Member** 2012-2013  
*University of Wisconsin School of Medicine and Public Health* Madison, WI
- Served on committee with the Dean of Students regarding improvement and maintenance of medical student service organizations
- Global Health Volunteer: San Lucas Tolimán, Guatemala** 2012  
*University of Wisconsin School of Medicine and Public Health-sponsored* Guatemala
- Participated in two-week long trip to provide medical care in rural Guatemala
- Director, *Medical Students Offering Maternal Support student organization,*** 2011-2013  
*University of Wisconsin School of Medicine and Public Health* Madison, WI
- Recruited and matched first- and second-year medical students to serve as doulas and provide support for pregnant women in area clinics
  - Organized a doula training course for interested medical and nursing students and completed birth doula training course

## CERTIFICATIONS

Board Eligible, Emergency Medicine, 2019  
 DEA license (Active, Expires 09/30/2021)  
 Texas Medical License (Active, Expires: 11/30/2021)

Advanced Cardiac Life Support (ACLS), expires 07/2021  
 Advanced Trauma Life Support (ATLS), expires 07/2020  
 Basic Life Support (BLS), expires 07/2021  
 Bedside Ultrasound  
 Pediatric Advanced Life Support (PALS), expires 07/2020

Emergency Medical Technician-Advanced, WI (2010-2016)

## PROFESSIONAL AFFILIATIONS

American College of Emergency Physicians (ACEP) 2016-present  
 American College of Emergency Physicians (ACEP): American Association of Women Emergency Physicians (AAWEP) 2016-present

Council of Emergency Medicine Residency Directors (CORD) Resident Member	2018-present
Emergency Medicine Resident Association (EMRA)	2016-present
EMRA Education Committee	2017-present
FeminEM	2018-present
Society for Academic Emergency Medicine (SAEM)	2016-present
Texas Medical Association	2016-present
Texas College of Emergency Physicians (TCEP)	2016-present

#### PROFESSIONAL INTERESTS

Medical Education, Curriculum Design, Simulation, Toxicology, Research

#### LANGUAGES

Proficient in Medical Spanish