



Department of Emergency Medicine
Annual Report

2015

James E Brown MD MMM FACEP
Professor and Chair

For the period including
January 1, 2015 — December 31, 2015

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Statement from the Chair

2015 continued to be a successful year for the Department of Emergency Medicine. From a scholarship standpoint, the faculty and residents were quite productive. Led by the efforts of Drs. Marco and Olson, we produced multiple book chapters and articles. In addition, Dr. Marco's book on Ethics in Emergency Medicine was published. Several poster and oral presentations were also made.

The Department remained active in service, both to medicine and the community. We remain active in 5 EDs throughout town: MVH, GSH, CMC, WPAFB, and Sycamore. We anticipate adding MVH South and Good Samaritan North experiences in the near future. A significant portion (probably 1/3) of the patients in those departments is seen by our faculty and/or residents. In addition, all the medical support for Tactical Teams in the region is provided by Department of EM faculty and residents. We remain the medical providers for several federal teams and provide medical direction and support for the State Highway Patrol. Our CAP lab experience, led by Dr. Pickett and run by the residents, remains the premier EMS educational experience in the region.

Our tradition of educational excellence in emergency medicine continues. The residency training program is one of the oldest and largest in the country. Our graduates provide quality emergency care throughout the country and as far away as New Zealand. We educate every 4th year medical student in EM during their required clerkship. We interact with 1st and second year students in both didactic experiences and with simulations experiences throughout the second year. We are now training both WSU and KCMA senior nursing students in the simulation lab. Other students from across the region have some to spend time in our simulation center.

We continue to educate and serve the Miami Valley community, providing leadership in Emergency Medicine.

2 Programs/Divisions

Name of Division or Program	Director	Dates
CIMER - Simulation	Raymond Ten Eyck MD	
Tactical/EMS	Brian Springer MD Jason Pickett MD	
Research	James Olson PhD Catherine Marco MD	
Residency	James Brown MD	

3 Fully Affiliated Faculty

Name and Academic Position	Clinical Interests	Research Interests
James E Brown MD, Chair	EMS	Airway Mgmt, Chest Pain evaluation, EMS
Raymond Ten Eyck MD, Vice Chair		Simulation
Catherine Marco MD		Medical Ethics
Brian Springer MD	Tactical EM, Sports Medicine	Tactical EM, Sports Medicine
Stacey Poznanski DO, Clerkship Director		Education
Jason Pickett MD	EMS	EMS, Mass gathering medicine
Edward Feig DO, Residency Director		Education
Timothy Janz MD	Critical Care	Critical Care, Hematology
April Anderson MD, Faculty Development Fellow		Education, Quality
James Olson PhD		Brain Edema
Dennis Mann PhD MD	Toxicology	Toxicology, Opiate Abuse
Roy Johnson MD, Associate Residency Director		GI Bleeding
Leslie Vojta MD		Medical Ethics
Alan Dupre MD		Education
Brian Pennington MD	Ultrasound	Ultrasound

Name and Academic Position	Clinical Interests	Research Interests
Trent Morgan MD		Ultrasound

4 Teaching

Baccalaureate [any course for a bachelor's degree]

Dr. Springer – Medical Aspects of Athletic Training

Graduate students, including thesis supervision [master's, doctor's post-doctoral]

Dr. Olson –

Jeannine Crum, Biomedical Sciences Program, Wright State University. Doctor of Philosophy committee member and BMS representative,

Courtney Moore, Department of Neuroscience, Cell Biology, and Physiology. Master of Science committee chair,

Augusta Eduafo, Department of Neuroscience, Cell Biology, and Physiology. Master of Science committee chair, Thesis title: Mechanisms of hyperglycemia-induced ROS production in osmotically swollen glial cells.

Leamon Viveros, Environmental Sciences Program, Wright State University. Doctor of Philosophy committee member,

Joseph Santin, Biomedical Sciences Program, Wright State University. Doctor of Philosophy committee member and BMS representative,

Prakash Arumugan, Biomedical Sciences Program, Wright State University. Doctor of Philosophy committee member and BMS representative, Thesis title: The role of interleukin-2 in vascular smooth muscle cell function and its implications for understanding the progression of atherosclerosis.

Isaie Sibomana, Biomedical Sciences Program, Wright State University. Doctor of Philosophy committee member,

April Daubenspeck, Biomedical Sciences Program, Wright State University. Doctor of Philosophy committee chair,

Undergraduate medical education [medical school]

Introduction to Clinical Medicine I & II

Staying Alive

Mind (Simulation)

EMD801 – Critical Care Sub-Internship

EMD880 – Academic Medicine – Emergency Medicine

EMD891 – EM Clerkship

Introduction to Ultrasound Elective

Simulation-based Internship Prep Elective

Graduate medical education [residents, fellows]

April Anderson – Faculty Development Fellow

46 Emergency Medicine residents

Continuing medical education [grand rounds, seminars]

“Clinical Pharmacology I & II”, 2015 Emergency Medicine Review Course, Ohio Chapter, American College of Emergency Physicians, Columbus, OH

Other

KHN 2015 EMS Symposium – Introduction to Tactical EMS

Critical First Aid Advanced training – Ohio Police officer Training Academy

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Scholarly Activity

Funded Grants

National Institutes of Health, R01 HL098637-01, 7/1/2010 – 12/30/2015 (Co-Investigator) Title: Balance of Angiotensin II/Angiotensin (1-7): A Target in Ischemic Stroke

Emergency Medicine Foundation, Resident Research Grant 7/1/2014 – 6/30/2015 (Mentor for John Trentini**) Title: The Neuroprotective Effects of Cerium Oxide Nanoparticles in Acute Stroke

Publications

Papers in refereed journals

Catherine A Marco · Christopher Fagan · Catherine Eggers · William Trautman, Dennis Mann James E Olson
Self-assessment of hunger among ED patients with abdominal pain: lack of association with disease severity
October 2015 · The American journal of emergency medicine 11/2015; 34(1). Ol:10.1016/j.ajem.2015.10.

Catherine A Marco · Andy Davis · Sylvia Chang · Dennis Mann · James E Olson ED patient satisfaction:
Factors associated with satisfaction with care September 2015 · The American journal of emergency medicine
09/2015; 33(11). DOI:10.1016/j.ajem.2015.08.023

Marco CA, Kowalenko T: Emergency Medicine Residents' Perspectives on Patient Safety and Duty Hours Am J
Emerg Med 2015; 33:459-60. PMID: 25662206

Geiderman JM, Marco CA, Moskop JC, Adams J, Derse AR: Ethics of Ambulance Diversion. Am J Emerg Med
2015; Volume 33, issue 3, 822-27. PMID: 25616586

Venkat A, Wolf L, Geiderman JM, Asher SL, Marco CA, McGreevy J, Derse AR, Otten EJ, Jesus JE, Kreitzer NP,
Escalante M, Levine AC: Ethical Issues in the Response to Ebola Virus Disease in US Emergency Department: A
Position Paper of the American College of Emergency Physicians, the Emergency Nurses Association and the
Society for Academic Emergency Medicine. Acad Emerg Med 2015 May;22(5):605-15. PMID: 25903144

Venkat A, Wolf L, Geiderman JM, Asher SL, Marco CA, McGreevy J, Derse AR, Otten EJ, Jesus JE, Kreitzer NP,
Escalante M, Levine AC: Ethical Issues in the Response to Ebola Virus Disease in US Emergency Department: A
Position Paper of the American College of Emergency Physicians, the Emergency Nurses Association and the
Society for Academic Emergency Medicine. J Emerg Nursing 2015; 41: e5-16. PMID: 25770003

Smith-Coggins R, Marco CA, Baren JM, Beeson MS, Carius ML, Counselman FL, Heller BN, Kowalenko T,
Muelleman RL, Nelson LS, Wahl RP, Korte RC, Joldersma KB: American Board of Emergency Medicine Report
on Residency Training Information (2014-2015), American Board of Emergency Medicine. Ann Emerg Med
2015;65:584-594, PMID: 25910762

Rando J, Broering D, Olson JE, Marco CA, Evans SB: Intranasal Naloxone Administration by Police First-
Responders is Associated with Decreased Opioid Overdose Deaths. Am J Emerg Med 2015; 33(9):1201-4,
PMID: 26095132

Marco CA, Michael S, Bleyer J, Post A: Do Not Resuscitate Orders Among Trauma Patients. Am J Emerg Med.
2015 Dec;33(12):1770-2. PMID: 26371832

Marco, Catherine A.; Edgell, Ashlee; Eggers, Catherine; Fagan, Christopher; and Olson, James E. Altered mental
status among geriatric trauma patients. Emergency Medicine 48(1):8-15, 2015

Pickett JR, Kallsen TW, Schott EE. Damage control resuscitation. Trauma Reports. 2015 July

Hiller K., Franzen D., Heitz C., Emery M., Poznanski S. (2015). Correlation of the National Board of Medical
Examiners Emergency Medicine Advanced Clinical Examination given in July to intern American Board of
Emergency Medicine in-training examination scores; a predictor of performance? *Western Journal of Emergency
Medicine*, 16:6, 957-60. PMID: 26594299

Hiller K., House J., Lawson L., Poznanski S., Morrissey T.K. (2015). Medical student performance on the National
Board of Medical Examiners Emergency Medicine Advanced Clinical Examination and National Emergency
Medicine M4 exams. *Western Journal of Emergency Medicine*, 16:6, 919-22. PMID: 26594290

Poznanski, S., Selvam P, Namboodiri A (2015). Dental Emergencies in the ED. *Emergency Medicine Reports*,
36(21) 245-260.

Hiller K., Miller E, Lawson L, Wald D, Beeson M, Heitz C, Morrissey T, House J, **Poznanski S** (2015). Correlation
of the NBME Advanced Clinical Examination in Emergency Medicine and the National Emergency Medicine M4
Exams. *Western Journal of Emergency Medicine*, 16:1, 138-142. PMID 25671023.

Wolff M., Wagner MJ, **Poznanski S**, Schiller J, Santen S (2015). Not another Boring Lecture: Engaging Learners
with Active Learning Techniques. *The Journal of Emergency Medicine*, 48:1, 85-93. PMID 25440868.

Springer B, Witte D (2015). "Acute Shoulder Injury" Emergency Medicine Reports, April; 36(8):85-96.

Mayrand K, Fischer E, Ten Eyck R. Simulation-Based Randomized Controlled Study of Factors Influencing Chest
Compression Depth by Advanced Life Support Providers. *Western Journal of Emergency Medicine*. 2015
Dec;16(7):1135-40.

Smith S, Farra S, Ten Eyck R, Bashaw M. Development of an Instrument to Measure Nursing Student Teamwork Skills. *Clinical Simulation in Nursing*. 2015;11, 507-512.

Gardner AK, Scott DJ, Hebert JC, Mellinger JD, Frey-Vogel A, Ten Eyck RP, Davis BR, Sillin LF, Sachdeva AK. Gearing up for milestones in surgery: Will simulation play a role? *Surgery*. 2015 May 23. pii: S0039-6060(15)00251-2. doi: 10.1016/j.surg.2015.03.039. PMID: 26013987

Books, chapters, reviews

Marco CA and Schears RM, (eds): *Ethical Dilemmas in Emergency Medicine*. New York: Cambridge University Press 2015.

Rothman R, Marco CA, Yang S: HIV Infection and AIDS. Chapter in: Tintinalli et al, eds: *Emergency Medicine: A Comprehensive Study Guide*, 78th edition, New York: The Mc-Graw-Hill Companies, 2015.

Rothman R, Marco CA, Yang S: Endocarditis. Chapter in: Tintinalli et al, eds: *Emergency Medicine: A Comprehensive Study Guide*, 78th edition, New York: The Mc-Graw-Hill Companies, 2015.

Marco CA: Ethical issues of resuscitation. Chapter in: Tintinalli et al, eds: *Emergency Medicine: A Comprehensive Study Guide*, 7th edition, New York: The Mc-Graw-Hill Companies, 2015.

Brown, JE: Evaluation of Chest Pain. <http://bestpractice.bmj.com> November 2015.

Vojta, LR, Brown JE: Informed Consent in Marco CA and Schears RM, (eds): *Ethical Dilemmas in Emergency Medicine*. New York: Cambridge University Press 2015. Pp. 102-112

Significant presentations [e.g., to academic societies, medical schools and national professional societies.]

Marco, CA, Fagan, C, Mann, DM, Pickett, JR, Olson, J., Eggers, C, Trautman, W, Daubenspect, A, Birdsong, S. 2015. Prediction of Disease Severity Among Emergency Department Patients with Abdominal Pain. DAGMEC Meeting.

Marco, CA .Ethical Issues of Resuscitation, Rutgers Emergency Medicine Conference, September 2015, New Brunswick, New Jersey

Marco, CA Against Medical Advice. American College of Emergency Physicians Scientific Assembly, October 2015, Boston, Massachusetts

Marco, CA Is There a Doctor in the House? American College of Emergency Physicians Scientific Assembly, October 2015, Boston, Massachusetts

Marco, CA The Toughest Cases: Ethical, Moral and Legal Dilemmas. American College of Emergency Physicians Scientific Assembly, October 2015, Boston, Massachusetts

Bridging the Cultural Gap: Developing Cultural Competency. American College of Emergency Physicians Scientific Assembly, October 2015, Boston, Massachusetts

Marco, CA Ethical Issues of Resuscitation, Ohio State University Emergency Medicine Conference, November 2015, Columbus, Ohio

Marco, CA Dermatology Jeopardy, Oregon Health and Science University Emergency Medicine Conference, November 2015, Portland, Oregon

Marco, CA Ethical Issues of Resuscitation, Oregon Health and Science University Emergency Medicine Conference, November 2015, Portland, Oregon

Marco, CA Top Ten Rashes, Morristown Atlantic Health Medicine Conference, November 2015, Morristown, New Jersey

Marco CA, Davis A, Chang S, Mann D, Olson JE: Emergency Department Patient Satisfaction: Factors Associated with Satisfaction with Care. SAEM Midwest Regional Meeting, September 2015, Toledo Ohio

Marco CA, Fagan CR, Mann D, Pickett JR, Olson JE, Eggers C, Trautman W, Daubenspeck A, Birdsong S: Prediction of Disease Severity Among Emergency Department Patients with Abdominal Pain. SAEM Midwest Regional Meeting, September 2015, Toledo Ohio

Griffith NE, Marco CA: Assessing the financial impact of nonurgent pediatric ED visits. SAEM Midwest Regional Meeting, September 2015, Toledo Ohio

Ten Eyck, R. High-Fidelity, Low Cost Transvenous Simulator; Spectrum of Innovations; International Meeting on Simulation in Healthcare, Jan 2015.

Ten Eyck, R. Low cost Modification to Create an Arterial Line Model; International Meeting on Simulation in Healthcare, Jan 2015.

Ten Eyck, R. Modification of a High-Fidelity Mannequin IV Arm To Permit Infusion with Consistent Blood Return; International Meeting on Simulation in Healthcare, Jan 2015.

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Summary of Service Activities

Student advising

Dr. Marco – 16 Students in research

Committee membership/officer

Wright State University Boonshoft School of Medicine]

Dr. Mann – Opiate Working Group member

Dr. Marco – Faculty Development, Medical Student Research, Faculty Promotion and Advancement, Scholarly project TF Chair, Medical Student Honor Code Council Chair

Dr. Olson – DAGMEC Research and Education, Pathology Chair review

Dr. Poznanski – EM Chair Review, Biennium 2 Clerkship Directors – Chair, FCC – Member, Wright Curriculum Advanced Doctoring Phase Co-Chair

Dr. Ten Eyck – Student Honor Code, nominations, Bylaws, Foundations Curriculum

Wright State University

Dr. Olson – COSM Undergraduate Neuroscience Development

Wright State Physicians

Dr. Brown – Treasurer, Board Member, Management Committee Member, Finance Committee Chair, Compensation Committee Member

Hospital or affiliated institution [name]

VAMC

Dr Janz – Patient Safety Improvement , Special Care Units, Nutritional Support

MVH

Dr. Olson – Multidisciplinary Research Committee

State

Dr. Marco – Sexual Assault Advisory Board of Ohio

Drs. Pickett, Springer, Brown – Region II Regional EMS Physician Advisory Board

National

Dr. Marco – ACEP Ethics Committee Member, American Board of Emergency Medicine Board of Directors Member, Research and Credentials Committees Chair, Institute of Medicine EM Fellowship Committee Member

Dr. Olson – NIH Small Grants for New Investigators to Promote Diversity Study Section, ACEP Scientific Review Committee, SAEM Abstract Review Committee

Dr. Poznanski – Academy for Women in Academic Emergency Medicine – President, Clerkship Directors in EM – National Executive Board Member

Other

Mental Health and Recovery Services of Warren and Clinton Counties, Ohio Department of Mental Health. Chair, Board of Directors. Mental Health and Alcohol and Drug Addiction Services subcommittee chair – Dr. Mann

Medical Direction

Dr. Janz – Med-Trans EMS

Dr. Pickett – Medical Director: Warren County tactical response, Regional Emergency Response Team, Xenia Fire, Fairborn Fire, Pike TWP Fire. Associate Medical Director: Dafton Fire, MMRS, Mont County Regional Haz Mat.

Dr. Brown – Medical Director: Montgomery County SWAT, Ohio State Highway Patrol Special Response Team, Associate MD: Dayton Fire

Dr. Springer – Medical Director: FBI, Cinti Div., US Marshals, Southern Ohio, Dayton PD SWAT Dep Medical Director US DOE, Office of Secure Transportation

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Patient Care Summary

Emergency Medicine Faculty and Residents treat patients in six EDs in the Miami Valley region. Of the approximately 300,000 visits per year, at least 1/3 are cared for by Department of EM personnel.

In addition, our Tactical EM division provides Medical Support to every local SWAT team, the FBI, The US Marshal's Service, and the Highway Patrol.

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Honors and awards [Faculty or staff]

Timothy Janz MD – Excellence in Medical Education Award – BSOM
Robert Davis Award for Teaching Excellence – Dept of Medicine
Dennis Mann MD – Miami Valley Hospital Wall of Excellence
Stacey Poznanski DO – BSOM Excellence in Medical Education Award
Dr. Ten Eyck – BSOM Innovations in Medical Education

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Hosted events [CME, etc.]

CAP Lab – a 2 day CEU event for EMS personnel directed and run by EM residents and faculty. The Department educated approximately 250 EMS personnel from all over the US and Canada.