



An accelerated track to rural practice (RMAT): Completing medical school in three years

William J. Crump, MD and R. Steve Fricker [Program Team](#)



Rationale

- UL Trover Campus (ULTC) began in 1998 in Madisonville (population 20,000), 150 miles southwest of Louisville
- High school and college Pathways programs began in 2001 and 2002
- Admissions of rural applicants maximized in 2006
- 120 graduates to date, 54% chose rural and 79% chose primary care
- Obstacle to enlarging class size is finding qualified, interested applicants from small Kentucky towns
- Many rural students choose other careers because of cost and length of medical training¹
- Can increase the number of small town applicants by reducing length and cost of medical school training

Process²

- 2005: AAFP Commission on Education asks ACGME to reconsider "3+3" programs, but was not approved
- 2006: KAFP Strategic Plan includes proposal for 3-year medical school track to rural practice
- 2007-2009: With ULSOM Dean as the champion, series of meetings to plan RMAT
- 2009: Texas Tech announces LCME approval for Family Medicine Accelerated Track
- 2011: ULTC RMAT approved by LCME
- 2012: First RMAT student completes RMAT 1 and 2
- 2017 First RMAT grad enters rural practice

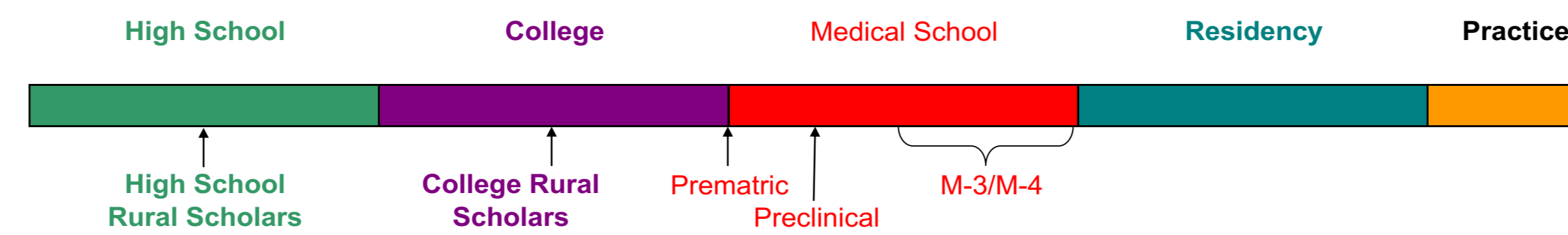
Schedule

- No change to premedical or M1-M2 years except for Pathways programs in summers
- Substitution of Pathways programs for vacation and allocation of M3 electives to RMAT curriculum meet 130 week medical education requirement
- Students formally enter track in the spring of M2 year after "audition" in RMAT-1 and RMAT-2, allowing both student and ULSOM to ensure they are a fit for RMAT

Program Contact

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Purpose of the U of L Trover Campus
By providing first-class medical education in a small Kentucky town, place more graduating medical students in practice in small Kentucky towns.



Rural Medicine Accelerated Track (RMAT)

Rural Medicine Accelerated Track (RMAT)												
	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Year 1:		Anat, Dev, PE (CADE)			Genes to Organs				Normal Body Systems			RMAT1* (4 w ks)
				Intro to Clinical Medicine					Intro to Clinical Medicine			
Year 2:	RMAT2* (4 w ks)			Intro to Clinical Medicine					Intro to Clinical Medicine			
		Disease and Therapeutics 1			Disease and Therapeutics 2		Disease and Therapeutics 3		Disease and Therapeutics 4		Step 1 Study Time	RMAT 3*
Year 3:	Internal Medicine	Surgery	(1) Neuro		RMAT 4*		Peds	(2) OB/GYN	(3) Psychiatry		RMAT 5*	
	Continuity Clinic (Hopkins County Community Clinic)											
	Integration Seminars											

Key: New or changed Experiences Unchanged Courses

- 1) Time is allowed for residency interviews and Step 2 CS during this time.
- 2) Students will enter the NRMP match process along with fourth year students in the regular Track.
- 3) USMLE Step 2 CK taken during this time.

Curriculum Change

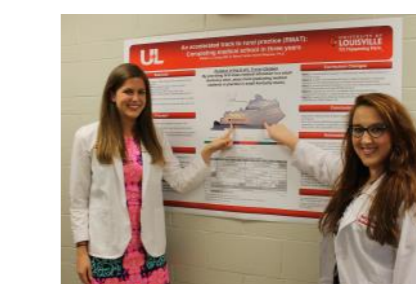
- **RMAT 1:** 4-week summer after M-1 year in rural practice near hometown. Continuity of care and detailed practice assessment.
- **RMAT 2:** 4-week summer after RMAT-1 in Madisonville. Adolescent health and county-wide health assessment.
- **RMAT 3:** 4-week rural free clinic rotation. Performance improvement in continuity care for underinsured, working low-income. Includes USMLE Step 2 CS prep.
- **RMAT 4:** 6 week Acting Internship in Madisonville, including ICU. Includes USMLE Step 2 CK prep.
- **RMAT 5:** 4-week rural Family Medicine clerkship.

Advice for other Institutions

- Requires a mature student with excellent time management skills
- Step 2 CK scores not available at time of the residency match
- Academic, medical, or specialty-change issues require the student to revert back to 4-year curriculum
- Significant medical school changes require a long process and strong leadership at all levels
- Even with strong institutional support in Admissions and a rural immersion experience, innovation is required to find and develop those small town students who are the best candidates to be future small town doctors

Student Outcomes

- 1 RMAT graduate began practice summer 2017
- 2 RMAT graduates began residency July 2017
- 2 RMAT medical students on track to begin their third and final year in Madisonville
- 3 RMAT medical students moved back to the M4 curriculum



References

1. Crump WJ, Fricker RS, Crump AM. Just what are rural premedical students thinking? A report of the first 6 years of a pathways program. J Rural Health. 2010 Winter;26(1):97-99.
2. Crump WJ, Wiegman David L, Fricker RS. An Accelerated Track to Rural Practice: An Option to Complete Medical School in Three Years. Journal of the Kentucky Academy of Family Physicians. Winter 2013, (78):20-22.

Program Curriculum

Rural Medicine Accelerated Track (RMAT)

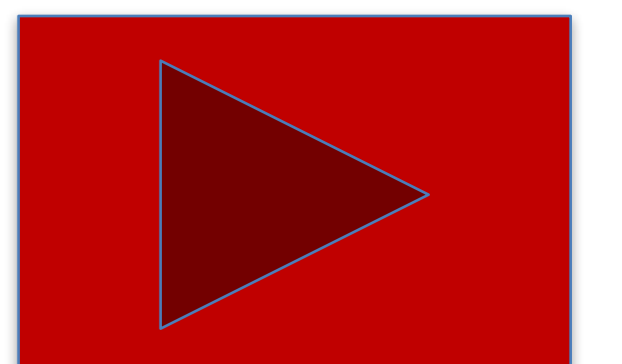
	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Year 1:		Anat, Dev, PE (CADE)			Genes to Organs		Normal Body Systems					RMAT1* (4 w ks)
		Intro to Clinical Medicine					Intro to Clinical Medicine					
Year 2:	RMAT2* (4 w ks)	Intro to Clinical Medicine					Intro to Clinical Medicine					RMAT 3*
		Disease and Therapeutics 1			Disease and Therapeutics 2		Disease and Therapeutics 3		Disease and Therapeutics 4	Step 1 Study Time		
Year 3:	Internal Medicine		Surgery		(1) Neuro	RMAT 4*		Peds	(2) OB/GYN	(3) Psychiatry	RMAT 5*	
	Continuity Clinic (Hopkins County Community Clinic)											
	Integration Seminars											

rev. April '17

Key:	New or changed Experiences	Unchanged Courses
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* RMAT 1 is a 4 week rural preceptorship at the end of the M-1 year. RMAT 2 is the 4-week Preclinical program in Madisonville. RMAT 3 utilizes 4 weeks of elective time from the traditional curriculum to implement a performance improvement project in the Community Clinic and Step 2 CS Prep. RMAT 4 is the former 4 week M-4 Family Medicine Acting Internship plus 2 weeks ICU. RMAT 5 is the former M-3 Family Medicine rotation.

- 1) Time is allowed for residency interviews and Step 2 CS during this time.
- 2) Students will enter the NRMP match process along with fourth year students in the regular Track.
- 3) USMLE Step 2 CK taken during this time.



Goals of RMAAT-1

- To teach the student clinical skills through observation and practice.
- To have the student become familiar with the types of clinical problems managed in rural primary care.
- To have the student become familiar with the process of individual practice site assessment by interviewing key personnel in the practice.
- To have the student understand important aspects of continuity of care by studying a series of visits by patients with a common illness.
- To have the student understand how clinical guidelines can drive the development of patient education materials.

Goals of RMAAT - 3

- To provide the students with experience managing follow-up visits with patients having one or more common chronic diseases.*
- To allow the students practice in writing SOAP notes and giving oral presentations in the appropriate format for the outpatient setting.*
- To have the students participate in a community project to demonstrate greater knowledge of the needs of the underserved.*
- To provide the students with experience in the use of an electronic medical record as a method for performance improvement.

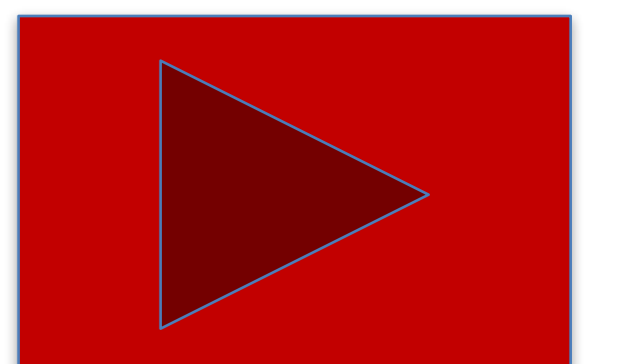
* Goals from existing M-3 Family Medicine clerkship

Goals of RMAAT – 2

- To reinforce the students' development of clinical skills through observation and practice.
- To have the students understand the details of the clinical decision-making process used in rural primary care.
- To have the students become familiar with the process of community health needs assessment by participating in a county-wide assessment.
- To have the students obtain hands-on experience, under appropriate medical supervision, in administering screening physical examinations and anticipatory guidance in rural community clinics.

Goals of RMAAT – 4

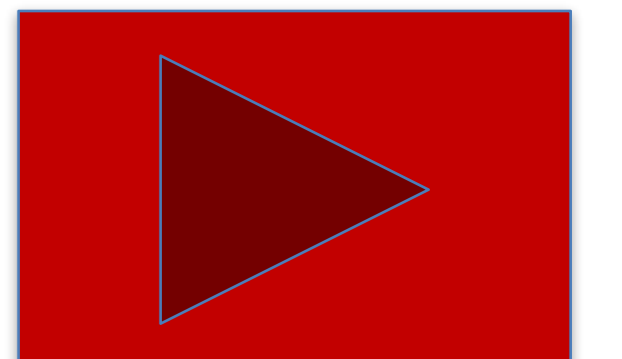
- Discuss the principles of family medicine.
- Gather information, formulate differential diagnoses, and propose plans for the initial evaluation and management of patients with common presentations.
- Develop evidence-based health promotion/disease prevention plans for patients of any age or gender.
- Demonstrate competency in advanced elicitation of history, communication, physical examination and critical thinking skills.
- Utilize appropriate techniques to communicate with patients of all levels of health literacy.



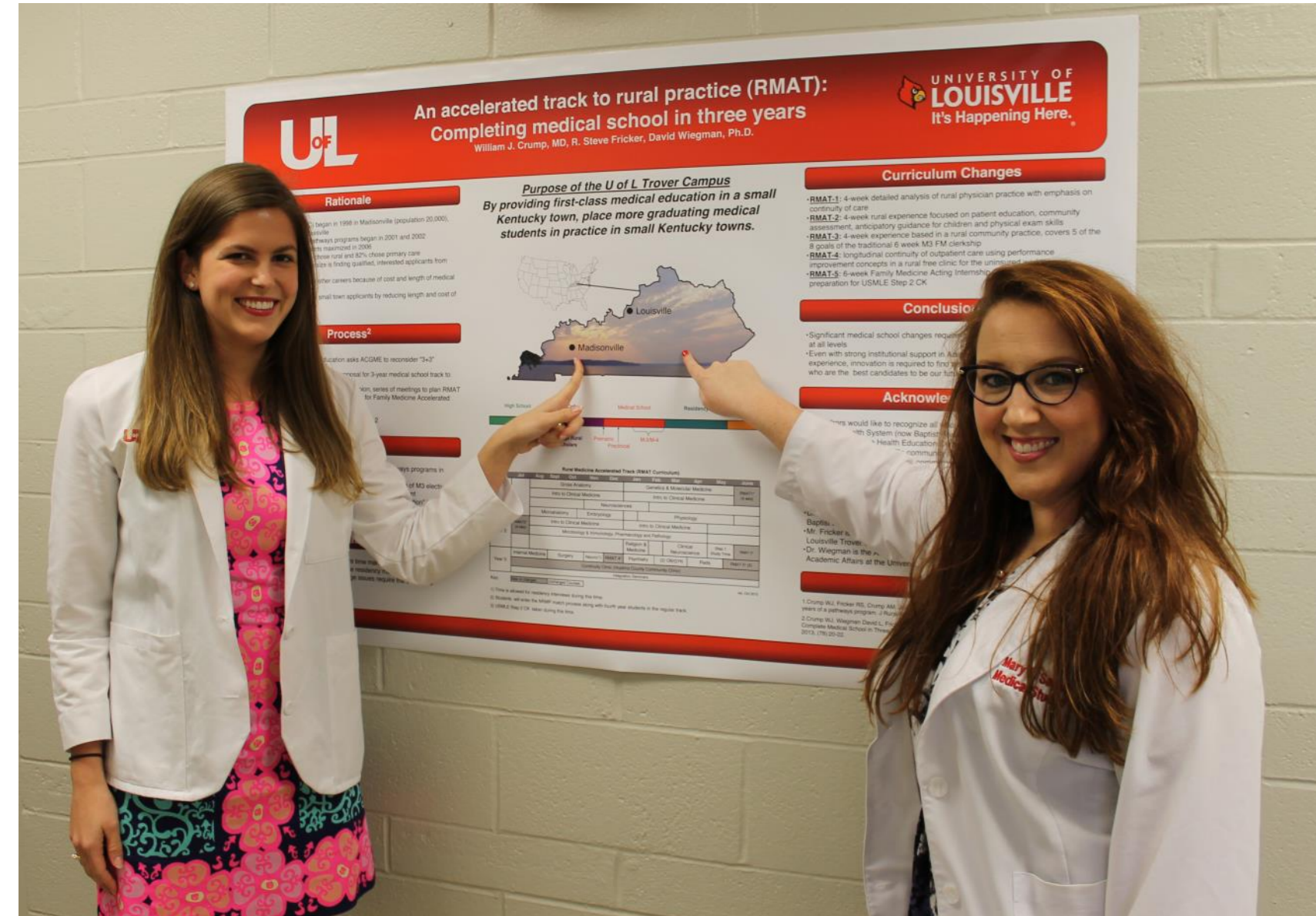
Individual RMAT Student Outcome Summary

Year Matriculation	Status	Preclinical Weeks RMAT completed	Academic Measures		
			Step 1	Step 2	Step 3
2011	Finished FM residency at Trover, now practicing in hometown	12	210	227	222
2011	Moved to 4-year curriculum at Louisville Matched to ULSOM Family Medicine Louisville	8*			
2013	Moved to 4-year curriculum at Trover Campus for family reasons. Matched to FM in North Carolina	8*	201	212	
2013	Moved to 4-year curriculum at Trover Campus for academic reasons. Matched to FM	8*	198	231	
2014	RMAT-1 completed in June 2015 RMAT -2 completed in July 2015 RMAT 3 completed June 2016 and matched to FM	12	202	217	
2014	RMAT-1 completed in June 2015 RMAT -2 completed in July 2015 RMAT 3 completed June 2016 and matched to FM	12	214	229	
2015	RMAT 1 completed in June 2016 RMAT 2 completed in July 2016 RMAT 3 completed in June, 2017 Began M-3 (last) year July, 2017	12	203		
2016	RMAT 1 completed in June 2017 RMAT 2 completed in July 2017	8			

*Applies as elective credit in the M-4 year



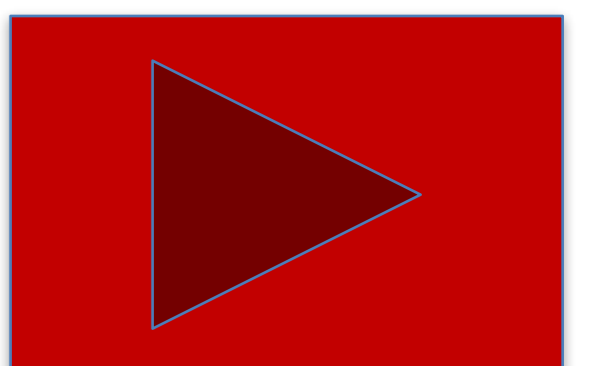
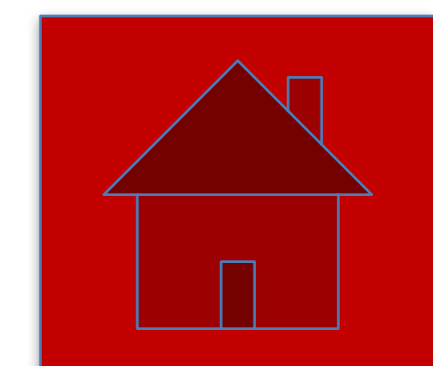
RMAT Students in Action



RMAT grads, pointing to hometown and future practice site



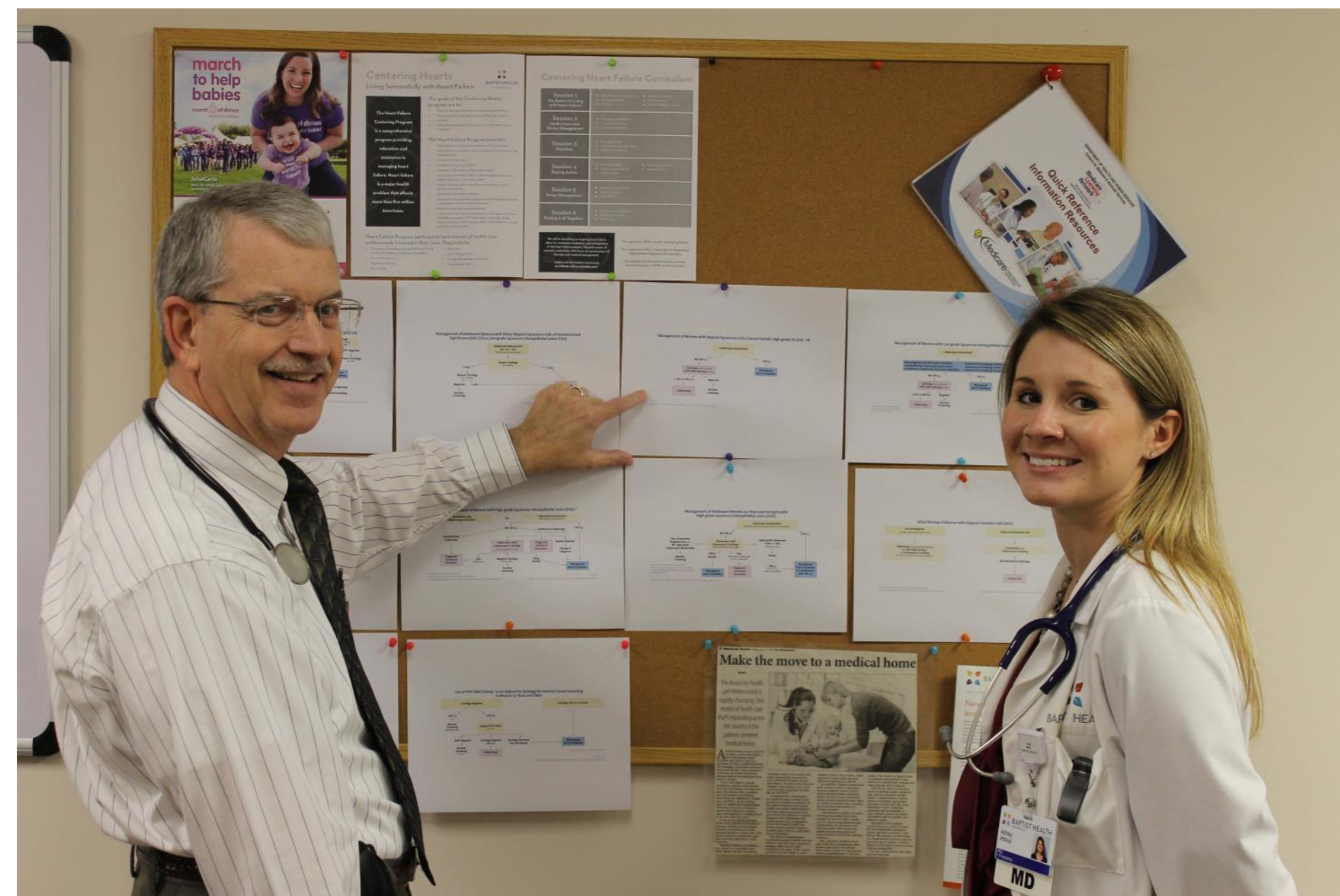
RMAT grads pointing to their favorite part of the Trover Campus



RMAT Students in Action



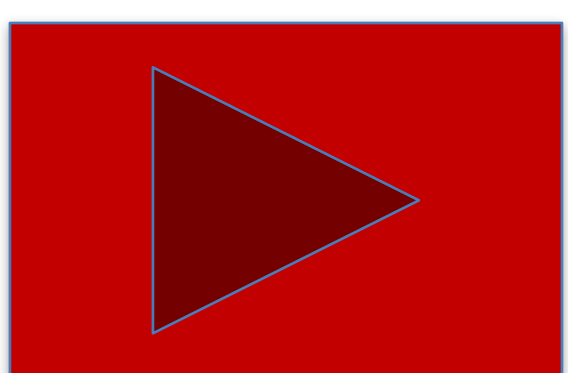
RMAT graduate teaching on pelvic simulator



Dr. Crump and RMAT graduate discussing patient centered medical home design in residency



Dr. Crump teaching RMAT students painless ear exam



Program Team

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- Pam Carter, ULTC Clerkships Coordinator

