An accelerated track to rural practice (RMAT):
Completing medical school in three years
William J. Crump, MD and R. Steve Fricker
Program Team

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.

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
- Many rural students choose other careers because of cost and length of medical training
- Can increase the number of small town applicants by reducing length and cost of medical school training

Process
- 2005: AAFP Commission on Education asks ACGME to reconsider “3+3” programs, but was not approved
- 2006: KAPF Strategic Plan includes proposal for 3-year medical school track to rural practice
- 2007-2009: With ULSCOM 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 ULSCOM to ensure they are a fit for RMAT

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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 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
3. RMAT medical students on track to begin their third and final year in Madisonville
4. RMAT medical students moved back to the M4 curriculum

Rural Medical Accelerated Track (RMAT)

<table>
<thead>
<tr>
<th>Year</th>
<th>Year</th>
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<tbody>
<tr>
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<td>Jan</td>
<td>Mar</td>
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<td>Sep</td>
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<td>5th</td>
<td>6th</td>
<td>7th</td>
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<td>V1</td>
<td>Intro to Clinical Medicine</td>
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<td>Intro to Clinical Medicine</td>
<td>Intro to Clinical Medicine</td>
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<tr>
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<td>Internal Medicine</td>
<td>Surgery</td>
<td>1st Year</td>
<td>RMAT-1*</td>
<td>Prelims</td>
<td>LM1/WM1</td>
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<td>Disease and Therapeutics</td>
<td>Disease and Therapeutics</td>
<td>Disease and Therapeutics</td>
<td>Disease and Therapeutics</td>
<td>Step 1 Work Free</td>
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<td>V5</td>
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</table>

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.

References
# Program Curriculum

## Rural Medicine Accelerated Track (RMAT)

<table>
<thead>
<tr>
<th>Year</th>
<th>Month</th>
<th>Course</th>
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<td>Anat, Dev, PE (CADE)</td>
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<td>Intro to Clinical Medicine</td>
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<tr>
<td>2</td>
<td>Jan</td>
<td>Normal Body Systems</td>
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<tr>
<td></td>
<td>Feb</td>
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</tr>
<tr>
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<td>Mar</td>
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<tr>
<td>3</td>
<td>Apr</td>
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</tr>
<tr>
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<td>May</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jun</td>
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### Key:
- **New or changed experiences**
- **Unchanged courses**

* 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 RMAT-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 RMAT - 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 RMAT – 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 RMAT – 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.
<table>
<thead>
<tr>
<th>Year Matriculation</th>
<th>Status</th>
<th>Preclinical Weeks RMAT completed</th>
<th>Academic Measures</th>
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<tr>
<td></td>
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<td>Step 1</td>
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<tr>
<td>2011</td>
<td>Finished FM residency at Trover, now practicing in hometown</td>
<td>12</td>
<td>210</td>
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<tr>
<td>2011</td>
<td>Moved to 4-year curriculum at Louisville Matched to ULSOM Family Medicine Louisville</td>
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<tr>
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<td>198</td>
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<td>12</td>
<td>202</td>
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<tr>
<td>2014</td>
<td>RMAT-1 completed in June 2015 RMAT -2 completed in July 2015 RMAT 3 completed June 2016 and matched to FM</td>
<td>12</td>
<td>214</td>
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<tr>
<td>2015</td>
<td>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</td>
<td>12</td>
<td>203</td>
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<td>2016</td>
<td>RMAT 1 completed in June 2017 RMAT 2 completed in July 2017</td>
<td>8</td>
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*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

- William Crump, MD, ULTC Associate Dean
- R. Steve Fricker, ULTC Director of Rural Health/Student Affairs
- Monica Ann Shaw, MD, Vice Dean for Undergraduate Medical Education
- Pam Carter, ULTC Clerkships Coordinator