

## **Rural Medicine Program-Huntsville Program Review**

<b>Program Director/Coordinator (Phases II and III):</b>	<b>William H. "Bill" Coleman</b>
<b>Academic Program Director:</b>	<b>Lawrence "Larry" Wit</b>
<b>Medical Director (Phase I Auburn):</b>	<b>Keith Bufford</b>
<b>Assistant Program Coordinator:</b>	<b>Victor Norman</b>
<b>Budget Coordinator:</b>	<b>Paula Cothren</b>

**Review Date: May 7th, 2012**

<b>Present:</b>	<b>Cathy Fuller</b>	<b>Chair, Special Programs Sub-committee</b>
	<b>Peter Smith</b>	<b>Special Programs Sub-committee</b>
	<b>Bill Coleman</b>	<b>Director, RMP</b>
	<b>Victor Norman</b>	<b>Director of Education, RMP</b>
	<b>Craig Hoesley</b>	<b>Associate Dean, UME</b>
	<b>James Jackson</b>	<b>UME</b>

<b>Apologies:</b>	<b>Marjorie Lee White</b>	<b>Special Programs Sub-committee</b>
-------------------	---------------------------	---------------------------------------

### **Review Process:**

Special programs within UASOM are reviewed on the basis of a self-study conducted by the program directors with the aid of UME, a face-to-face meeting between representatives of the Special Programs sub-committee of the MEC, the program directors, and a representative from UME, (the review committee). The final part of the review process is the drafting of the review report by the Special Programs committee representatives, which is then circulated to the Review Committee. Following any amendments and corrections the final report is presented to the MEC at the first available opportunity. Below is a summary of the face-to-face meeting, highlighting strengths and weaknesses of the program and identifying opportunities to ensure current and future success. This is followed by the detailed report, which provides the rationale for the recommendations and overall evaluation.

### **Program Goals:**

- 1. Recruit and prepare rural students for successful careers as primary care/family physicians in rural Alabama**
- 2. Support RMP pre-medical and medical students in becoming rural physicians**
- 3. Increase the number of primary care/family physicians in rural Alabama**

### **Summary:**

The Rural Medical Program at the University of Alabama at Huntsville is a recently initiated (first class accepted 2006) program, aimed at increasing the number of students from rural backgrounds who matriculate to UASOM with the aim that these students will return to rural Alabama to practice as family/primary care physicians. This program

operates in collaboration with the College of Sciences and Mathematics (COSAM) at Auburn. Thirty-eight students have been admitted to the RMP program and have successfully matriculated to UASOM. To date, 10 out of 12 students have entered residency in a primary care specialty; Family Medicine (8); Internal Medicine or Med-Peds (1); Pediatrics (1). Eight out of the ten primary care focused students are currently pursuing residency programs in Alabama (UAB, Huntsville, Montgomery). The number of students entering a primary care specialty from this program is far in excess of those non-rural program students. The purpose of this review therefore is to highlight points of strength that can be built upon, as well identifying areas that can be enhanced in order to further increase the success of the program.

### **Strengths:**

Although it has only been running for a comparatively short space of time, the RMP at Huntsville has recruited a significant number of students, and as far as can be assessed at this point, has succeeded in its mission to attract rural students to residencies in primary care. Time will tell as to whether this translates to an increasing number of physicians practicing in rural Alabama, but the current signs are encouraging.

Although the total number of students is currently quite small at 38, the RMP program has been very successful in that 100% of the students so far recruited into the program have completed their year at Auburn and have successfully matriculated into UASOM.

One clear strength is the energy and commitment to the project provided by Dr. Coleman, Dr. Wit and their colleagues both at Huntsville and at Auburn. They have succeeded in developing a comprehensive program with a focus on the needs of rural communities.

Additional strengths are the pre-matriculation year classes in Mammalian Physiology and Vertebrate Development. Both students and faculty have commented as to how this latter class in particular encourages the type of critical thinking that is required at medical school.

The recent MEC decision that scholarly activity for rural students at Huntsville should be directed by Dr. Coleman and his colleagues, and that rural students will be required to either complete a 2 week elective in rural/Primary Care Medicine or a 4 week acting internship with a rural/primary care focus are additional strengths. The decision that the 4 week AI can also fulfill requirements for the ambulatory care AI and that this can take place in facilities other than at UAB should also strengthen the ties of the RMS students with the rural communities.

The Family Practice Pathway program is also a positive component to the RMP as it allows students to spend one-on-one time with a rural family physician in an office as opposed to a hospital or academic setting.

The rural programs also enjoy broad support in the legislature, which has translated to stable funding, at least in part.

There seems to be a strong interaction between the RMP students and the Huntsville base while the students are at the Birmingham campus. This needs to be maintained and if possible further developed.

## **Threats:**

It is clear that the greatest hurdle rural students as a whole face in matriculating into UASOM is the MCAT. Lowering the MCAT score required for matriculation would increase the number of rural students; however, the value of the MCAT lies in its ability to predict future performance. Students with lower MCAT scores, if admitted, would require a significant level of academic support, which cannot be currently provided at UASOM. Currently, 100% of RMP students successfully matriculate to UASOM with MCAT scores > 24, but many experience academic difficulty as evidenced by pre-clinical module scores that are significantly lower than those of their non-rural counterparts. In addition, a greater number of rural students fail one pre-clinical module as compared to non-rural students, although no RMP student has failed more than one module. Poor performance on the modules translates to lower than average performance on the USLME Step 1 exam; UME identifies students at risk of failing Step 1 using an algorithm based on the student's MCAT, course performance and performance on an NBME shelf exam. Medical Student Services works extensively with these individuals to prepare them for Step 1. If necessary students can also attend specialized intensive Step 1 review courses held outside of UASOM. The fact that all of the RMP students have passed Step 1 after no more than 2 attempts, suggests that these programs are effective.

The lack of minority student participation in the RMP program at Auburn is surprising, and it is unclear why no minority students have so far come through this program to matriculate at UASOM. This may be due to competition from RMSP-UAT and USACOM and from historically black medical schools. However, minority students do participate in the summer program and the lack of transition is likely also due to the academic hurdle of the MCAT.

As currently established, the pre-matriculation year does not lead to any formal qualification, e.g. a M.S. degree. This might deter some otherwise qualified students from applying to the program, especially if they have not previously considered medicine as a career choice.

The RMP administration should consider targeting local rural high schools, particularly the juniors and seniors who are considering applications to Auburn, to raise awareness of the program in those communities.

Although all clerkships are under review by the Clinical Sciences Committee of the MEC, the RMP administration should clearly define the clinical competencies that are associated with the rural clerkship and outline how a student should be able to demonstrate proficiency.

The RMP administration also needs to outline a clear order of succession to Dr. Coleman, so that this new and promising program can continue to grow. There are two professional staff/faculty at UAB, Huntsville (Dr. Norman and Dr. Coleman) and 1/3 person support staff, as well as office space/computer and technical support. Dr. Wit will be fulltime in August. However his fulltime does not equal 40 hours per week. Dr. Bufford is full time at Auburn but he also has a private family medicine practice.

Continuation of funding in the current financial climate is a concern. Dr. Wit and Dr. Bufford are paid for their services with line item monies through the AFPRHB, which also provides limited overhead. UASOM Huntsville Regional Medical Center provides office space, computers, supplies, etc. All additional funding is obtained by the program itself. The program is not included in the HRMC state budget.

The continued expansion of osteopathy schools may reduce the number of applicants to the RMP and subsequently to UASOM.

### **Recommendations:**

Consider mechanisms to increase the success rate of students on the MCAT exam. This could be achieved by providing for an intensive MCAT course (e.g. Kaplan), that could be taken via on-line or video presentations or via residential courses. This should be made available to the 5<sup>th</sup> year undergraduate students. The availability of funds to support this potentially via scholarships should be investigated.

Include more courses, (e.g. Biochemistry, Pharmacology), relevant to the pre-clinical modules in the pre-matriculation course. Other areas that could be considered for future inclusion are courses addressing the development of critical thinking skills and problem solving. This strategy would improve the performance of students in the pre-clinical years and hopefully translate to improved performance on Step 1. Increasing the basic science content may make this pre-matriculation program more difficult for senior students to accomplish alongside their regular undergraduate courses. The syllabus for the pre-clinical modules at UAB should be made available to the RMP Director to enable him to better tailor the pre-matriculation course to be of maximum benefit to the students. Possibilities to involve other basic science departments at Auburn, such as those in the Harrison School of Pharmacy should be explored.

Consider associating the pre-matriculation course with a formal qualification such as an M.S., to increase the attractiveness of undertaking the extra year of study.

Maintain and strengthen interactions between the rural programs and students while they are engaged in pre-clinical studies at the Birmingham campus. This could be achieved by holding rural focused seminars at UASOM and perhaps increase the participation of rural preceptors in these activities via teleconferencing.

Begin to identify competencies that could help define/refine the rural medicine clerkship.

Investigate ways to increase the enrollment of minorities in the RMP. Consider how to increase the number of minority summer program students who then transition to the RMP while at Auburn.

The RMP administration should consider targeting local rural high schools, particularly the juniors and seniors who are considering applications to Auburn, to raise awareness of the program in those communities.

Consider developing a mechanism with UAB, Huntsville and UAT whereby students enrolled at UASOM can transition to the more focused rural curriculum if they wish.

The Director expresses an urgent need for a data analyst to help with evaluating the program.

## **Report of RMP Review Committee Meeting, May 7<sup>th</sup>, 2012**

### **Program Goals:**

- 1. Recruit and prepare rural students for successful careers as primary care/family physicians in rural Alabama**
- 2. Support RMP pre-medical and medical students in becoming rural physicians**
- 3. Increase the number of primary care/family physicians in rural Alabama**

### **History of the RMP Program at University of Alabama Huntsville [see below]:**

The Rural Medicine Program at the UAB, Huntsville Regional Medical Campus was initiated in 2006 in response to an increasing need for US-trained rural physicians, as well as to take advantage of an opportunity for collaboration between UAB-Huntsville and Auburn University. The first group of 6 students graduated in 2011 and so the UAB-Huntsville program has only acquired limited data.

The Huntsville RMP program is like that at Tuscaloosa, i.e., a 5 year program with the first year being a pre-matriculation year, followed by the 4 year M.D. program at UASOM. Unlike the Tuscaloosa program however, there are no ancillary pipeline-type programs to recruit students at high school; all students in the Huntsville program enroll in the pre-matriculation year at Auburn and then progress to UASOM.

### **Program Review:**

#### **Recruitment to the RMP:**

As there are no high-school programs, the first exposure of students to the RMP program at Huntsville is at the college level. The RMP staff, along with admissions committee members from UASOM and USACOM visit the smaller colleges, community colleges, (e.g. Wallace State) and traditionally African-American schools to present information about the programs available. Presentations are also made at the annual Health Professions Conference and the RMP staff maintains contact with pre-health advisors at a number of schools. RMP staff has also participated in the pre-medical mock interview sessions held at Alabama and Auburn; in each case, rural students are specifically targeted. An additional program, the Huntsville Rural Pre-medical Internship is run each summer for 8 weeks. This program allows rural pre-medical students to observe the workings of rural/small town medical facilities. Of the students to date who have been enrolled in the RMP at Auburn, 16 (33.3%) were interns in the summer program; an additional 7 students who subsequently entered the RMSP program at Tuscaloosa were also involved in the summer program at Huntsville. It should be noted that 3 Hispanic and 2 African-American students are participating in the current 8-week summer program.

Continuing communication between the college pre-medical/pre-health advisers and the RMP staff also helps to recruit students. Entrance to the RMP requires no specific courses other than the general requirements for entry to UASOM. There is no coordinate recruitment between UAT and UAB-Huntsville. Students who wish to be considered for a rural program apply via the UASOM website and can apply to one or

other or both rural programs. The most recent data shows that 7 students applied to the UAT program, 3 to Auburn, and 19 individuals applied to both programs. The requirements for acceptance into the RMP are essentially identical to those for acceptance into the RMSP at Tuscaloosa; an MCAT of 24 or above; a minimum GPA of 3.3, and residence in rural Alabama for at least 8 years. Some students can be accepted provisionally based on an ACT of  $\geq 24$  and an SAT of  $\geq 1100$ . However achieving the required MCAT score is pre-requisite for matriculation into UASOM. Final acceptance into the program is dependent on interview and evidence of a commitment to rural medicine and primary care/family practice.

## **RMP Program**

On being accepted into the RMP program, a student can follow one of two tracks; a student who is accepted at the start of their senior year can complete their senior year coursework at the same time as fulfilling the pre-matriculation year course work; alternately, a student who has completed his/her undergraduate degree completes the requirements of the pre-matriculation year. During the pre-matriculation year, the students are required to complete their undergraduate degree if they have not already done so, maintain a GPA of 3.2, complete the pre-matriculation courses (see below) and to attend two extra-curricular events, the Medical Association of Alabama's Annual Washington Conference and the annual physician recruitment fair (PAOF) held at Orange Beach.

The Pre-matriculation course itself is made up of a mixture of required and elective courses. Required courses are Biostatistics, Rural Sociology, Medical Sociology, Vertebrate Development, Mammalian Physiology and Clinical Applications I and II. Of these courses, Vertebrate Development and Mammalian Physiology receive positive feedback from the students both for their content and academic rigor. Mammalian Physiology is taught by Dr. Wit, who is the Associate Director of the RMP Program. The Clinical Applications courses study the clinical/personal issues facing primary care physicians in the rural community and are restricted to those students enrolled in the RMP program. They are taught by Dr. Bufford, Medical Director of the RMP program. Topics covered in these courses include Medical Ethics, Farming Risks and a field trip to a working farm, the Ins/Outs of Health Care Industry Insurance and two case presentation sessions. The second course includes topics covering Domestic Violence, Epidemiology in Rural Medicine, Rural Health Care and Religion, as well as case presentations and an industry field trip. Examples of elective courses taken include Agriculture and Society, Community Organization and Health Law. Students without a strong science background are encouraged to take additional science courses as electives. The majority of students admitted to the program complete the pre-matriculation year following the completion of their undergraduate degree; this is approximately 5-7 students per year. The remainder completes the pre-matriculation courses while completing their undergraduate degree in their senior year. There is no specific qualification associated with the pre-matriculation course, e.g. a certificate or M.S. degree. Auburn will not however allow a "Certificate" option as exists at UAT. Students can also join the program following their undergraduate degree or after a higher degree, e.g. an M.S. as long as they qualify as rural students.

## **Matriculation Data**

To date, all students admitted to the RMP who obtained an MCAT of  $\geq 24$ , have subsequently matriculated to UASOM (38 total). RMP students matriculating to UASOM have significantly lower MCAT scores than non-rural students (25.9 vs. 30.7), and lower GPA (3.47 vs. 3.72, respectively). While the individual MCAT components are all lower for rural as opposed to non-rural students, the greatest difference lies in the Physical Science category, where the mean is 7.7 for the RMP students, versus 10.2 for the non-rural students. At present no minority students have participated in the RMP program and there is no specific recruiting targeted to minority students. Historically black colleges that could send students to UASOM have strong affiliations with historically black medical schools, e.g. Tuskegee and Morehouse. There is no significant gender difference between rural and non-rural students matriculating to UASOM.

## **Medical School Performance: Pre-clinical**

In general RMP students do less well on the pre-clinical modules than non-rural students; exceptions were the Pulmonary and Musculo-Skeletal/Skin modules, where their performance was equivalent to that on non-rural students. The greatest difference in performance was seen in the Fundamentals I, Neuroscience and Endocrinology modules. A larger proportion of RMP students also fail one module than non-rural students (7.9% vs. 4.3%, respectively), but no RMP student failed more than one module. A greater proportion of RMP students also fail USLME Step 1 exams, with 36.8% of students failing once, which is significantly higher than non-rural students, where there was only a 6.7% failure rate. However failure rates for a second attempt at the Step 1 exam were equivalent for both rural and non-rural students (33.3% and 27.6%, respectively). In each group a single student failed a third attempt at Step 1. Overall the USLME Step 1 scores were also significantly lower for RMP versus non-rural students (200 and 219, respectively).

## **Special Topics/Scholarly Activity**

Several special topics and scholarly activities with a rural focus are also available for students at UASOM. These are available for all students but some are required for students in the RMP program. Examples of the required Special Topics include Life and Practice in Rural Alabama and one entitled Introduction to Organized Medicine. This special topic for second year students interested in Family Medicine allows the students to attend the annual American Academy of Family Physicians National Student Conference. To date, 5 RMP students have participated in the "rural" Special Topics courses. These Special Topics courses have been very well-received by the students. Scholarly Activity topics have included "Alabama Primary Care: A hospital based spatial analysis of current and potential coverage"; "Primary Care Shortage in Crenshaw County, AL: An evaluation of a rural communities' ability to support family medicine physicians"; "Colorectal Cancer Prevention: the status of colonoscopy colorectal cancer screening in Alabama's rural Medicare population". To date, 8 RMP students have completed their rural scholarly activities under the general oversight of Dr. Coleman. The recent decision by the MEC to allow the RMP (and RMSP) programs to oversee special topic and scholarly activity programs, will likely increase the number of Rural Medical Scholars taking part in these activities. It is important that a focus on rural medicine remains central to these students during their 4 year tenure at UASOM.

In addition, RMP students are required to participate in the Family Practice Pathway Program, which takes place in the summer between first and second year of medical school. In this program students are placed one on one with a rural family physician for 4-6 weeks. Further opportunities for rural students include the Family Medicine Interest Group which allows students to present on rural/family practice topics and involves presentations, seminars and offers multiple activities for students to become involved with the local community; this interest group operates at both the Birmingham and Huntsville campuses and is therefore available for RMP students throughout all 4 years of medical school.

### **Medical School Performance: Clerkships**

All students at the Huntsville campus (by default including all RMP students), are required to complete a rural medicine clerkship. This involves three weeks of working with a family medicine preceptor in private practice in a rural community and one week of out-patient care working in the UAB-Huntsville Family Medicine Center. This is coupled with the Family Medicine Clerkship to form an integrated Family and Community Medicine clerkship that lasts 8 weeks. The overall objective of this clerkship is to foster clinical competencies within the framework of a family physician's approach to medicine emphasizing the continuum of care required for a broad spectrum of patients in the ambulatory setting. Students are required to maintain a patient log during the clerkship, participate in all preceptor activities (at the preceptor's discretion), and complete and present a rural clerkship report, which is discussed at the end of the clerkship. The recent decision by the UASOM MEC to require rural students to either complete a 2 week elective in Rural/Primary Care Medicine or a 4 week acting internship with a rural/primary care focus (that will fulfill requirements for the ambulatory care AI), as well as the decision to permit this to take place at in facilities other than at UAB, is a positive move and should strengthen the ties of these students to the rural community. Since the inception of the program, 17 students have been placed with rural preceptors in 5 separate communities. Student evaluations clearly show that these experiences are highly valued by the students.

To date, only a single student from the RMP program has failed a clerkship and no student has failed more than 1 clerkship. However on a percentage basis, this is a far greater failure rate (5.6%) than observed in the non-rural student population (0.9%). Similarly, a single student failed the Step 2 CK exam,(9.1% fail rate as compared with 2.9% for the non-rural students), but was successful on the third attempt. No rural student failed the OSCE or the Step 2 CS exam. However these data are based on a very small sample size ( $\leq 18$ ).

### **Medical School Outcomes:**

Of all the 38 RMP students to have entered the program to date, only one had to re-cycle a year and ultimately resigned. However, 5 students took an academic leave of absence, considerably greater percentage (13.2%) than the non-rural students requiring an academic leave (3.5%) over the same 2007-2011 period. In contrast, retention rates between the non-rural and RMP students are equivalent (97.7% vs. 97.4%, respectively).

Only the first two classes of 12 students admitted to the RMP program have graduated and entered residency so far. Ten out of twelve students entered a primary care specialty; Family Medicine (8); Internal Medicine or Med-Peds (1); Pediatrics (1). Of the remaining students, one entered residency in Emergency Medicine and one re-cycled a year and will graduate in 2013. Eight out of the ten primary care focused students are currently pursuing residency programs in Alabama (UAB, Huntsville, Montgomery). As the first class of RMP students only graduated in 2011, long term outcomes cannot be assessed.

### **Additional Information:**

#### **Financial Support**

The RMP program is funded from the state legislature via the Alabama Family Practice Rural Health Board. For the current year a total of \$261,000 was allocated to the RMP program. Of that, \$120,000 is provided to the Auburn pre-matriculation program to support faculty effort, infrastructure and student activities. The remaining funds are distributed to the Huntsville program to similarly support faculty, infrastructure and relevant activities of the Huntsville students while at UASOM. However, while state funded initiatives have been relatively stable, funding from other programs is more volatile and so fluctuation in future program funds is a concern that may impact on potential initiatives.

### **Overall Evaluation:**

The main focus of this review is to examine the rural medicine program as it operates at UAB-Huntsville and to determine how this promising program can be made even better. Areas on which to focus include increasing the number of minority students who enroll into the RMP program, increasing the number who attain required MCAT scores for matriculation into UASOM or other medical schools, providing support to help these students through the challenging pre-clinical years while maintaining the requirement for academic rigor, and maintaining a student commitment to rural medicine while in medical school.

#### **Strengths:**

Although it has only been running for a comparatively short space of time, the RMP at Huntsville has recruited a significant number of students, and as far as can be assessed at this point, has succeeded in its mission to attract rural students to residencies in primary care. Time will tell as to whether this translates to an increasing number of physicians practicing in rural Alabama, but the current signs are encouraging.

Although the total number of students is currently quite small at 38, the RMP program has been very successful in that 100% [at the time of review] of the students so far recruited into the program at Auburn have successfully matriculated into UASOM.

One clear strength is the energy and commitment to the project provided by Dr. Coleman, Dr. Wit and their colleagues both at Huntsville and at Auburn. They have

succeeded in developing a comprehensive program with a focus on the needs of rural communities.

Additional strengths are the pre-matriculation year classes in Mammalian Physiology and Vertebrate Development. Both students and faculty have commented as to how this latter class in particular encourages the type of critical thinking that is required at medical school.

The recent MEC decision that scholarly activity for rural students at Huntsville should be directed by Dr. Coleman and his colleagues, and that rural students will be required to either complete a 2 week elective in rural/Primary Care Medicine or a 4 week acting internship with a rural/primary care focus are additional strengths. The decision that the 4 week AI can also fulfill requirements for the ambulatory care AI and that this can take place in facilities other than at UAB should also strengthen the ties of the RMP students with the rural communities.

The Family Practice Pathway program is also a positive component to the RMP as it allows students to spend one-on-one time with a rural family physician in an office as opposed to a hospital or academic setting.

The rural programs also enjoy broad support in the legislature, which has translated to stable funding, at least in part.

#### **Weaknesses:**

It is clear that the greatest hurdle rural students as a whole face in matriculating into UASOM is the MCAT. Lowering the MCAT score required for matriculation would increase the number of rural students; however, the value of the MCAT lies in its ability to predict future performance. Students with lower MCAT scores, if admitted, would require a significant level of academic support, which cannot be currently provided at UASOM. Currently, 100% of RMP students have successfully matriculated to UASOM but many experience academic difficulty as evidenced by pre-clinical module scores that are significantly lower than those of their non-rural counterparts. In addition, a greater number of rural students fail one pre-clinical module as compared to non-rural students, although no RMP student has failed more than one module. Poor performance on the modules translates to lower than average performance on the USLME Step 1 exam; UME identifies students at risk of failing Step 1 using an algorithm based on the student's MCAT, course performance and performance on an NBME shelf exam. Medical Student Services works extensively with these individuals to prepare them for Step 1. If necessary students can also attend specialized intensive Step 1 review courses held outside of UASOM. The fact that all of the RMP students have passed Step 1 after no more than 2 attempts, suggests that these programs are effective.

The lack of minority student participation in the RMP program at Auburn is surprising, and it is unclear why no minority students have so far come through this program to matriculate at UASOM. This may be due to competition from RMSP-UAT and USACOM.

As currently established, the pre-matriculation year does not lead to any formal qualification, e.g. a M.S. degree. This might deter some otherwise qualified students

from applying to the program, especially if they have not previously considered medicine as a career choice.

The RMP administration should consider targeting local rural high schools, particularly the juniors and seniors who are considering applications to Auburn, to raise awareness of the program in those communities.

Although all clerkships are under review by the Clinical Sciences Committee of the MEC, the RMP administration should clearly define the clinical competencies that are associated with the rural clerkship and outline how a student should be able to demonstrate proficiency.

The RMP administration also needs to outline a clear order of succession to Dr. Coleman, so that this new and promising program can continue to grow.

### **Opportunities:**

Opportunities exist to increase both matriculation and performance of the RMP student at UASOM. Increasing MCAT performance and thus the number of students who matriculate to the school could be improved by including an MCAT preparation/study course as part of the pre-matriculation year; this course could take the form of an on-line, video-instruction or residential course; potentially, this could be supported by scholarship funds for deserving candidates. An alternate strategy might be to recruit talented students who are likely to do well on the MCAT to the program, based on their GPA or ACT scores.

It might also be beneficial to focus more of the pre-matriculation courses on topics that the student will meet in the pre-clinical modules. For example, topics such as Biochemistry, Pharmacology, Genetics and Immunology could all be usefully incorporated into the pre-matriculation course. Development of such courses could include video and teleconferencing between Auburn and UAB and the use of video lectures on key topics captured by the Echo system. Other areas that could be considered for future inclusion are the development of critical thinking skills and problem solving. This strategy would improve the performance of students in the pre-clinical years and hopefully translate to improved performance on Step 1. Community/county financial support may be available or potentially could be solicited to support such an initiative.

As mentioned above, the RMP administration should consider developing the pre-matriculation course into a formal qualification earning program.

### **Threats:**

Continuing threats to the program include the potential loss of funding, although the rural programs are seen as valuable by the state legislature and state support is likely to continue. However, the level of this support may drop and in any case, needs to be supported by external grants. Any expansion in the program will need to identify additional new sources of revenue if they are to be successful. Increasing tuition costs will also deter some students from pursuing the pre-matriculation year.

The RMP has little direct institutional/infrastructure support in terms of office space/computer facilities and technical support. There are four full time faculty; the majority of faculty and support personnel are secondary and assist on a part-time basis. The Director expresses an urgent need for a data analyst to help with evaluating the program.

A second threat to the RMP program is the establishment of a new osteopathy school (ACOM) in Dothan is scheduled to admit its first class of 150 students in 2013. The primary stated goal of this institution is to provide primary care physicians for rural Alabama and is likely to attract rural students. No information is currently available as to entrance MCAT requirements, but they are likely to be <24, in line with the average MCAT for schools of osteopathy of 24 and an overall GPA of 3.3. In contrast, average MCAT score at UAB is 30.7 and GPA is 3.7.