expertise,” although we disagree whether this should be mandated as part of the 4-year program or offered as an optional addition to a 2-year core.

Drs. David and Saultz rightly point out that to attract the best students, we must challenge them. However, when it comes to training, longer does not equate to better. Is a student who selects a 4-year combined medicine-pediatrics program because he/she desires more comprehensive training “brighter” than the student who selects our 3-year family medicine curriculum?

As family medicine educators, we can all agree that we want to produce high-quality family physicians who will best serve our communities. It is my belief that the most important contribution we make is our expertise in providing primary care services in ambulatory settings. Focusing on this incredibly important and challenging aspect of health care system is not “dumbing down” our discipline. Instead, preparing our graduates for what society needs while offering an element of flexibility and personal choice should appeal to students for generations to come.

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Increasing Research in Family Medicine

To the Editor:

It was a pleasure to read the upbeat commentary by Drs. Johnson and Duncan on the many potential facets of family medicine research. Indeed, we would support their notion that the breadth of the specialty lends itself to research on a variety of topics, including those in the basic sciences for those family physicians who are interested in the area. However, we would not agree that increasing the amount of research in the specialty of family medicine is of no “concern.”

It is not clear how Drs. Johnson and Duncan got the idea that the student data we reported are from “premedical” students. As stated in the article, our dataset included Association of American Medical College’s longitudinal data for more than 6,000 medical students representing three cohorts of graduates. These data are from questionnaires completed by students at matriculation and at graduation, matched, with the student as the unit of analysis. We don’t have data on what type of research these students may have experienced over their 4 years in medical school; however, it was almost certainly not limited to bench research as Drs. Johnson and Duncan imply and likely includes the same students they describe as interested in family medicine research.

Our data do not allow us to address Drs. Johnson’s and Duncan’s assertion that those interested in family medicine research “frequently” become family physicians. It is clear, however, that a joint interest in family medicine and research does not persist over the course of medical school. As stated in our article, of the 596 students who were interested in both research and family medicine at the beginning of medical school, just six (1% of the total) were still interested in both on graduation, and just 39 students out of all graduates (1%) were interested in both family medicine and research on graduation.

Finally, in our discussion, we explored four possible results of an increase in research by family physicians; two of these scenarios involved increases and two involved decreases in the number of students selecting family medicine. As we stated, we don’t know why there is a negative relationship between interest in research and family medicine and, therefore, don’t know what the effect of increasing family medicine research would be. But it does seem shortsighted and a disservice to the specialty to dismiss this strong inverse relationship as “fallacious.” We should not ignore the possibility that increased research will have some influence on numbers of students entering family medicine.

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REFERENCE


Authors’ Response:

We appreciate Drs. Senf’s, Kutob’s, and Campos-Outcalt’s data and the comments in response to our essay “Basic Science and Family Medicine.” We understand that the data presented is from the Association of American Medical Colleges. The incoming first-year students were first surveyed upon matriculation, and thus the research exposure of the vast majority of them was obtained while they were undergraduates. In our experience at three different medical schools, students often seek out family medicine research as a way of avoiding the bench research they did as undergraduates. These students prefer to be involved in research that has immediate clinical relevance and human contact. So to argue that the statistically significant inverse correlation between interest in any research as a first-year student and their subsequent interest in family medicine should caution us from promoting family medicine research to students is fallacious, because they have almost certainly not had any exposure to family medicine-type research. It is an ecological fallacy1 to assume that what applies to all research should also apply to family medicine research.
We agree that we cannot “ignore the possibility that increased research will have some influence on numbers of students entering family medicine.” To evolve as a medical specialty, family medicine must increase its research output. Therefore, we must make sure that the influence of our research on students is positive. More research is needed to elucidate the relationship between family medicine research and student interest. In the meantime, we think it is not an accident that more than half of our graduating seniors who chose family medicine residencies did research with our department.

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REFERENCES

More on Family Medicine Research

To the Editor:

As directors of a student research program in family medicine, we read the April issue of Family Medicine with great interest. After considering South-Paul’s plea for more involvement of family medicine faculty to select and mentor medical students,1 Senf et al’s documentation that interest in family medicine among graduating students is strongly inversely proportional to interest in research,2 and Johnson’s and Duncan’s experience in working with premedical student research,3 we sensed an important theme. If research is essential to the future of our discipline, and we believe that it is, then changing the perception of research within family medicine needs to start at the beginning of the pipeline—at the level of medical and premedical students. We believe that reaching students with research opportunities, mentoring, and examples should be a core activity for building the future of our discipline.

In our experience, the suggestions that research in family medicine should be eclectic, interdisciplinary, and collaborative are on target.1 We believe some researchers spend unnecessary energy debating what kind of research we “should” or “should not” be doing in family medicine. This debate does not serve our mission. Family medicine research can include anything that adds meaningful knowledge regarding human health, in any area where family medicine contributes insight and perspective. We should commit as a profession to the large breadth of research possibilities that is our strength and direct our energy toward exposing students to this breadth of research possibilities available in family medicine.

At the University of Utah, we have had an ongoing paid summer research experience for medical students between their first and second year of medical school for more than a decade. Students greatly appreciate the exposure to research that is not restricted to bench science. Of the 66 students who participated in the program from 1994 to 2001, 33% subsequently matched into family medicine. In comparison, 22% of all University of Utah medical school graduates in the same cohort chose family medicine. Because students self-select to the summer research program, we cannot establish whether participation in the program increased the probability that these students went into family medicine, but we know from their exit evaluations that their experience positively impacted their perception of both family medicine and family medicine research.

As far as research topics and methods, our only requirement has been that the primary research mentor for the student be on faculty in our department. Interdisciplinary collaborations including faculty from other departments have usually yielded the most effective projects for student participation. Funding for this program has come from various sources, and the program has continued as a priority activity for our department.

With an open definition of the research domain for family medicine, the opportunities to improve human health are immense. We must bring that message to students in the earliest stages of training, for the future of the discipline and, more importantly, to improve the future of health and health care.

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Authors’ Response:

We welcome the opportunity to respond to Drs Stanford’s and Cochella’s letter. As Drs Stanford and Cochella state: (1) involving medical students in research in departments of family medicine will increase the attractiveness of our discipline for the next generation and (2) changing the perception of research within family medicine needs to start with medical and premedical students. These are two premises that we support and that have guided our programs here at the University of Pittsburgh.

Parchman et al and Bowman et al2 have suggested that there is evidence to show that the specialty choice by medical students may be influenced by their understanding and perception of the opportunity for research activity within the discipline, and this opportunity...