VitalSigns | Revisiting Professionalism

Perspectives of a New Dean

I arrived on May 15, 2001, to become the fourth dean of the College of Human Medicine. What an honor and privilege! The College survived, even thrived, through its adolescence (in medical school years) and is emerging into young adulthood. What can a new dean contribute to the College? The College is known for its emphasis on medical education, primary care, and humanism. Its problem-based curriculum is now widely imitated. These foundations must be supported and enhanced in the years to come.

CHM was among the pioneers in the creation of community-based medical schools. The College must continue to advance this community vision. What should our community campuses aspire to? In this challenging era of health care reform and budget cuts, how can we forge expanded partnerships with our community hospitals and health systems such that education and research can be unifying themes rather than serve as just another way hospitals compete against one another?

How will our need to achieve excellence in all we do be financed? The College is overdependent upon general fund support. We need to expand our clinical practices in appropriate ways. This will be a strategic challenge given that Lansing is a mature clinical community with not a great deal of room for additional physician specialists and subspecialists.

Further, we need to expand research to create the scholarly environment necessary to lead our students into an exciting future. So research, too, is a strategic challenge. We need to select focused areas of research—areas in which we can achieve excellence, recognition, and a critical mass of scientists. We can be strong, for example, in epidemiology, and in health services and clinical research while linking these fields to basic science studies being conducted in many of MSU's colleges, not just the health and life sciences schools but also engineering, arts and sciences, communication arts, and so on.

The College is entering a stage in which development can play a larger role in providing resources to build excellence. Our oldest graduates are coming into a time where they can begin to think about the contribution the College has made to their lives and consider whether they have the resources now or in the future to support its programs, to add those additional dollars that can make a difference in developing a research laboratory or new curriculum component.

This issue of *Vital Signs* highlights professionalism, specifically how this concept is integrated into our curriculum and how scholars from other medical schools are

Professionalism at CHM – Where Are We and Where Are We Headed?
Ruth B. Hoppe, M.D., Senior Associate Dean

It has been nearly 10 years since the CHM Task Force on Professionalism was convened and nearly that long since the all-College retreat that followed. We now take stock of what we accomplished and what challenges remain. Accomplishments include shifting our focus from one of "catching" the small number of students whose behavior digresses from appropriate conduct to one of embracing our entire professional community in a virtues-based system of professional development. The importance and potential impact of this shift cannot be over-emphasized.

The six virtues that the Task Force coined are now a familiar part of our visual (and, we hope, behavioral) landscape (http://www.chm.msu.edu/chmhome/ medicaleducation/2a1over.htm#Professional). All entering CHM students participate in a workshop introducing this system. We have required curriculum across the four year program. Demonstration of professionalism is now a written graduation requirement. Professional behavior is part of the routine assessment of students, in both the pre-clinical curriculum and the clinical clerkships. Students have formed a Professional Development Planning Group and have organized noontime discussion sessions related to the application of the virtues to medicine. For example, students have examined the impact of pharmaceutical advertising on physicians, using a debate format. So, from multiple perspectives, there is evidence that we are indeed *reflecting, talking and acting* as called for by our professional logo.

Remaining challenges reflect our need to: attend to the environment; accord continued vigilance and action in response to instances of misconduct; and develop skill and wisdom in engaging our students to reach for the highest standard of professional conduct. I will address each of these challenges.

First is the crucial issue of *environment*. Much has been written about the powerful impact of the "hidden curriculum". *We need to be clear about what implicit and inadvertent instruction our actions and inactions as faculty and our policies and decisions as educators and administrators generate.* Are our residents who teach our students aware of our emphasis on professionalism? How advanced are our residency programs in their approaches to residents' professional development, and to what extent does the presence or absence of such activity negatively or positively affect our students?

Identifying and acting upon instances of misconduct also poses challenges. Some faculty and administrators speak openly about reluctance of becoming involved with misconduct – it is just easier to look the other way. True misconduct can involve dishonesty or cheating, abrogation of assigned clinical responsibilities, and, rarely, forms of patient abuse. Such instances of misconduct are infrequent, but we must not be shy about calling for such instances to be investigated and, if necessary, acted upon formally. Faculty must take the lead role in dealing fairly but firmly with professional misconduct.

Lastly, I wish to comment on an aspect of professional development that has potential for the biggest impact – engaging our students, our junior colleagues, in *thoughtful reflection about challenges to achieving professional virtue in today's environment*. Our assessments should be heavily formative, focused on behavior and action (not traits or personality), and rendered immediately and in person to students by faculty with clarity, kindness, wisdom and willingness to self-criticize. We should have the skill to discern between true misconduct requiring immediate action and minor digressions that can be handled developmentally, along with willingness to engage each other when this distinction isn't clear. If we overdo summative assessment and methods that are too authoritative, critical, unhelpful, and punitive, we run the risk of driving dialogue and self-corrective action underground or eliminating them altogether. *Ultimately, our wish is for them to reflect back on their relationship with the College as one which collaboratively challenged them to become motivated and skilled at constant reflective examination of their behavior as professionals.* There may be no greater legacy we can leave as faculty, long after the knowledge and procedural skills we have taught have waned or changed. This is my wish for the College.

Faculty Lead Curriculum Experiences to Promote Reflective Professional Development

Howard Brody, M.D., chaired the Task Force group that identified CHM virtues as including: competence, honesty, compassion, respect for others, and professional and social responsibility. Dr. Brody's involvement in implementing the professional development curriculum of CHM is reflected in the content and method of the second-year required medical ethics course. Dr. Brody explains that the goal of the Professional Development curriculum is to produce the "virtuous student physician" and to give all members of the CHM community an opportunity to reflect on what that means and how it relates to a life-long commitment to professional standards.

Faculty who welcome this shared responsibility with students include leaders in curriculum components in which professional development is featured. Clayton Thomason, J.D., M.Div., and Gregory VandeKieft, M.D. will assume responsibility for the focus on Professional Development in the Mentor Program. As Dr. VandeKieft explains, CHM has a rich history of innovative educational programs, including the ten-year old Mentor Program. Dr. VandeKieft and Clayton Thomason will continue the leadership of the Mentor Program that was implemented and nurtured under the leadership of Dr. Dianne Singleton in the Department of Psychiatry. Dr. VandeKieft, a family practice physician with advanced training in the humanities, will work with Clayton Thomason, whose formal training includes law and biomedical ethics. The challenge that the new leadership of the Mentor Program has taken is to continue the Mentor Program's tradition of providing a "safe place" that promotes collegial reflection, through the thoughtful discussions fostered by the regular sessions of clinical faculty working with small groups of pre-clinical medical students, while implementing a more structured and consistent focus on professional development. Dr. VandeKieft noted that the potential for achieving this objective is enhanced at CHM by the opportunities that the curriculum governance provides for interdisciplinary and collaborative curriculum planning and leadership. He indicates that criteria for curriculum design includes identification of curriculum materials and experiences that "fit" – that is, curriculum that is developmentally and situationally appropriate for the medical student's four-year journey from lay person to professional healer. In these efforts, the team acknowledges the unique climate for such collaboration that CHM provides.

Student-Led Initiatives Inspire Enhanced Professional Development Education

In interviews with College of Human Medicine faculty for this Vital Signs issue, the active role that CHM students have played was acknowledged and lauded. Among the students whose work the faculty cited as inspirational is Timothy Crone, a fourth-year CHM student. Timothy shares his professional life with his wife, Mandy, and his daughters Alicia and Emma. In addition to his involvement in medical research, Timothy has sought out opportunities for involvement in the College's commitment to medical education that will foster ethical professional development. Timothy's recent efforts toward that goal include his presentation to medical students and faculty on "The Ethics of Medical Education."

In this work, Timothy reviewed research establishing how pervasively medical students observe actions that they believe are unethical and erode ethical principles. This research found that students who witness a single unethical episode are more likely to engage in unethical conduct. His discussion with fellow students in clinical training corroborated that medical students will observe and be affected by unethical behavior during their training. While he acknowledged that students must take responsibility for their actions, he emphasized that the ethical reform of medical education must recgonize the powerful impact of the environment and the role models who "teach us how to think and what to value." Recalling the actions of clinical role models who directly influenced his career, Timothy painted a vivid picture of physicians who took the time during their formal and informal teaching sessions with students to express sincere and enthusiastic appreciation of their shared role as professional healers. He noted how easy it was for students to fall into the routine of belittling the patients and their families they encountered in the long nights of training, or the embarrassment of vulnerable students whose first attempts at technical procedures can fail. In contrast, he voiced his appreciation for teachers who made it clear they were happy to teach, not just to supervise the work that students might be expected to accomplish.

Timothy calls for medical education reform to move from a focus on individual behavior to a focus on institutional etihics. In medical education, this would include basing faculty recruitment and promotion for teaching positions on

Medical Students as Human Subjects in Educational Research and Evaluation: What CHM Faculty Need To Know

Ashir Kumar, M.D., Professor of Pediatrics and Human Development, and Chair,
University Committee for Research Involving Human Subjects

The University Committee on Research Involving Human Subjects (UCRIHS) is charged with reviewing and approving all research projects involving human subjects or materials of human origin before it is implemented.

Contemporary protections for human subjects of research are based on three founding documents: the Nuremberg Code, the Declaration of Helsinki, and the Belmont Report. Based on the ethical principles set forth in these documents, the Federal Government requires that each University receiving federal research funds file an assurance that it has established policies and procedures for protecting human subjects of research. At MSU, this is the responsibility of UCRIHS.

Under Federal regulations, the following categories of research are classified as exempt from *full committee review*:

(1) Research conducted in educational settings involving normal educational practices. This would include (i) research on education instructional strategy, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula or classroom management methods;

(2) Research involving educational tests, survey procedures, interview procedures or observation of public behavior, unless information obtained is recorded in such a manner that human subjects can be identified directly or through identifications linked to the subjects and any disclosure of the human subjects' responses outside the research could place the subjects to a variety of risks.

Even though the categories of education research described above are classified as "exempt from review" **the regulations state that the investigator must not make that determination**. At MSU, UCRIHS reviews all research identified by the investigator as exempt from review. Student's data or records that can be identified directly or through identifications linked to the subjects, the research requires *expedited* rather than *exempt* review; if data collection includes voice, video, digital or image recordings, the research also falls under *expedited* review.

Clearly if any research involves more than "minimal risk", it is reviewed by the full committee. The review process for exempt and expedited protocols usually takes 2-3 weeks, while the protocols requiring a full committee review may take as long as 6-8 weeks.

Almost a year ago, the CHM Senior Associate Dean and OMERAD developed a consent form applicable for *exempt* educational research; this form was approved by UCRIHS. The Office of Academic Programs and OMERAD have implemented procedures for obtaining medical students' consent for educational research. Faculty collecting or using educational research data that uniquely identifies each student must exclude students who have declined to participate. This applies to abstracts, manuscripts and presentations at professional meetings or other educational institutions.

Once students sign the consent and authorize release of their "routinely collected data related to the ongoing evaluation of curricular outcomes" these data are available to other investigators for analyses provided they have UCRIHS approval for the specific research proposal and the research proposal falls under the *exempt* category.

As with any approved research proposal UCRIHS will continue to monitor if this process results in non-compliance issues or subject's complaints. It is expected that this effort will help CHM faculty involved in research and evaluation based on the curriculum by reducing the burden on them for developing additional consent forms while assuring that medical student rights are adequately protected.

> ### FOR MORE INFORMATION
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> For more information about UCRIHS policies and procedures, and for application forms, phone 355-2180 or visit http://www.msu.edu/unit/ucrihs/.
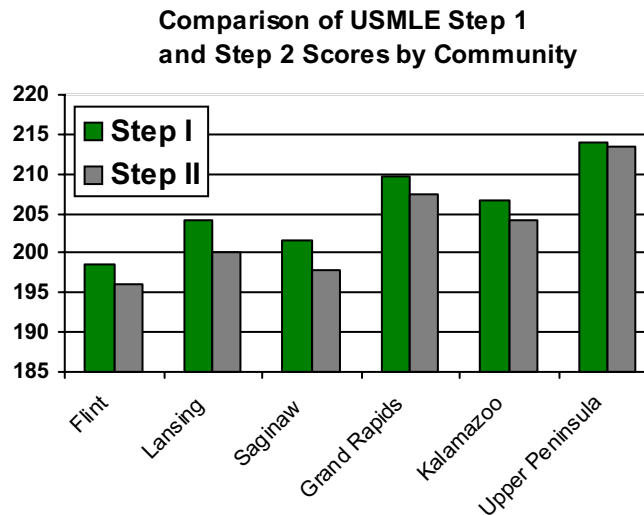>
> For information about the CHM consent form or the status of students with regards to participation in educational research and evaluation, contact the Office of Academic Programs or OMERAD.

Community Differences Reflect Student Choice of Community

One of our constant concerns at CHM is assuring that students receive a high quality consistent educational experience across all six community-integrated campuses. Since our students train in a "real-world" community setting, this is a complex issue that probably never can be fully addressed. One important indicator is performance on USMLE Step II. If one looks solely at Step II performance, there appear to be meaningful differences among the students in the six communities. The key question is whether the differences in Step II performance reflect differences in the educational experience students receive in the various communities.

Student preference plays a large role in determining which of CHM's six communities a student matriculates for their clinical education. Students apply specifically for and matriculate into the rural medicine program in the Marquette Community. Students can also request special consideration in being sent to a specific community due to personal needs. The rest of the class indicate their community preference and if there are not enough slots in a community to accommodate the students requests, assignment is by lottery. The impact of this self-selection provides another possible explanation for the differences seen in USMLE Step II performance.

USMLE Step I is taken before students matriculate into the communities and has been shown to be highly predictive of Step II performance. For these reasons Step I performance provides a useful benchmark for determining the impact of self-selection on USMLE Step II scores within the communities. The graph below presents the Step I and Step II scores of students from the matriculating classes of 1993-1995 by the community in which they received their clinical training. The graph suggests the differences in Step II performance among the students in each community closely parallel differences in Step I performance; we also tested this question statistically. We first tested for differences in Step II performance among the communities and found these differences to be highly statistically significant. When we controlled statistically for differences in Step I performance, the differences among the communities were no longer statistically significant.

While there is no direct way to "prove" that students receive an equivalent educational experience in each of CHM's six community integrated campuses, we find no evidence suggesting otherwise at least in terms of USMLE performance.

Comparison of USMLE Step 1 and Step 2 Scores by Community

Monitoring CHM Students Through the Outcomes Report and Database

Concerns such as the consistency of the educational experience across clerkships are common in maintaining a medical school curriculum. To help address these evaluation issues and provide an easily accessible source of information concerning the curriculum, the Office of Medical Education Research and Evaluation (OMERAD) maintains a database that tracks student characteristics and performance from the time they apply for admissions through their professional practice. These data are also summarized in the form of a comprehensive statistical abstract called the CHM Outcomes Report, which is updated twice a year.

Outcome data are obtained from a variety of sources. Demographic information comes from admissions data supplied by the American Medical College Applications Service (AMCAS). Other external suppliers of data include the Association of American Medical Colleges (AAMC), the National Board of Medical Examiners (NBME), the National Residency Match Program (NRMP) and the American Medical Association (AMA). Data from within the College come from the Admissions Office, student transcripts, and surveys of CHM alumni and their residency directors conducted by OMERAD.

The CHM Outcomes Report is distributed to members of the Dean's staff, department chairpersons and community assistant deans. A set of procedures is also available for faculty members who wish to access data for research and evaluation projects.

Tracking Specialty Choice

CHM has a long history of leadership in the training of primary care physicians. The Department of Family Practice is frequently recognized by the Society of Teachers of Family Medicine for graduating large numbers of seniors who select family practice as their residency choice. US News and World has similarly given CHM much national visibility as an institution known for its primary care emphasis. Does this mean we are a "Primary Care Medical School?"

If one looks more closely at specialty choice of this period, the rise in the percentage of CHM graduates choosing to enter primary care has been largely due to a dramatic increase of graduates entering family practice residency training during the early and mid 1990s. Over the last four years there has been an equally dramatic decrease in the number of graduates entering family practice. While the shift in the interest in primary care and more specifically in family practice is similar nationally, these shifts have been

CHM Specialty Choice Over Time
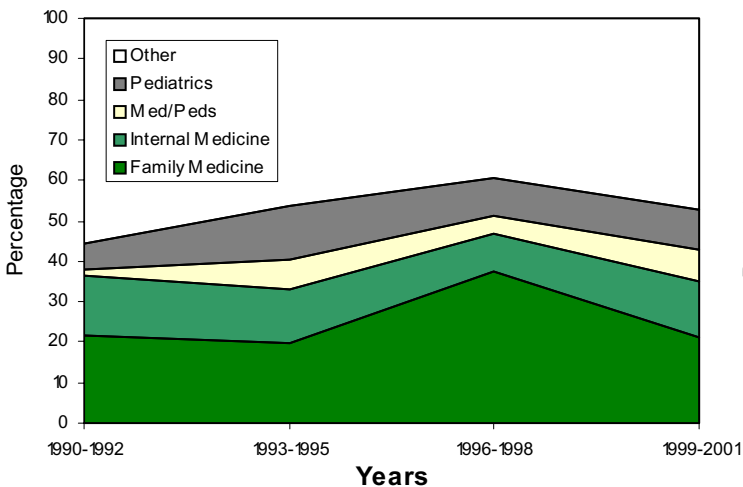
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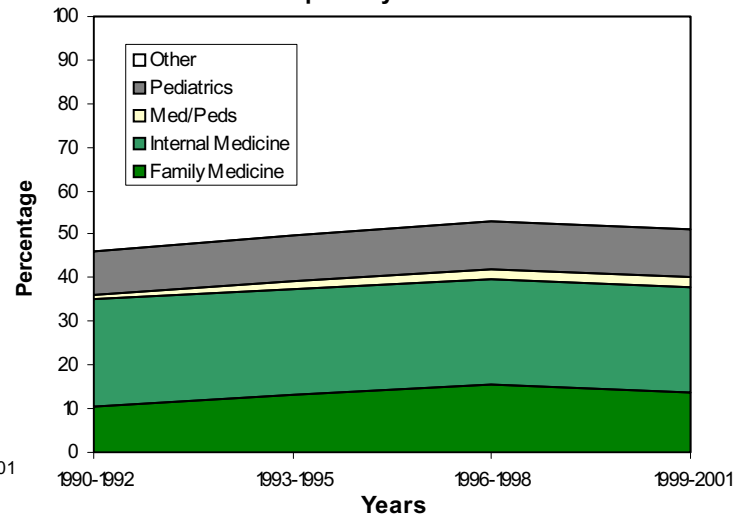
During the past decade, considerable attention has been directed to primary care and residency selection as a measure of that preference. In the 90's private foundations, federal and state governments developed sizable programs designed to promote primary care as a career choice that was thought to provide tangible benefits to the public. Around 1990, when many of these initiatives were first implemented, nationally more than 50% of medical school graduates were selecting non-primary care specialties. At this point in time, a majority of CHM graduates also were choosing non-primary care specialties. As can be seen in the graph above, the College experienced a significant rise in primary care specialty choice through the mid to late 90's with a peak in 1997 when 60% of the graduates chose primary care. The increase in the percentage of CHM graduates choosing primary care training far exceeded the national average during this period. Since that time there has been a significant decline in primary care residency choice both nationally and within CHM. Currently, the percentage of CHM graduates choosing primary care is fairly similar to national trends.

much more gradual. It is not clear why these treads have been so much more pronounced at CHM and it should also be noted that during this whole period the percentage of CHM graduates entering family practice residency training has consistently exceeded the national average. Part of the sizable variation in specialty choice among CHM graduates may well be random variation due to the relatively small number of students that graduate from the college each year. These trends, however, should be monitored.

As one might expect, national trends are more resistant to the variability seen at an individual institution. For over a decade the balance between specialty and primary care medicine has been extremely close to 50%. What we have noticed at CHM is that within the primary care designation, there have been swings of interest emerging. One recent case in point is the increased interest in Pediatrics and Medicine/Pediatrics. There are many factors that influence a student's residency choice, even within CHM, where there is a traditional interest in primary care. Residency choice has varied considerably over the years. It is never easy to explain the collective decisions of our seniors.

Differences In Career Satisfaction for Female and Male Physicians

Career satisfaction has been shown to influence patient care, retention in the medical profession and physicians' effectiveness. Historically, the College of Human Medicine has graduated a higher proportion of female graduates than the nation's other medical schools. Women have made up approximately half of our graduates compared to 40% nationally. Therefore, given CHM's unique positioning, the role of gender on career satisfaction is an important issue to our alumni and the medical education program.

We examined the contribution of various descriptive and environmental factors on the career satisfaction of female and male physicians. These results were found by analyzing selected items from CHM's *Ten-Year Graduate Follow-Up Survey*. Our findings indicated that career satisfaction for female physicians was associated with relationship-orientated factors. In contrast, career satisfaction for male physicians was influenced more by the work environment and its efficiency.

Increases in *administrative responsibilities*, the only significant descriptive factor, was found to be negatively associated with career satisfaction for female physicians. Work environment factors indicated that female physicians were less satisfied when *increasing professional responsibilities affected their personal lives*. However, *good personal relationships with non-physician personnel* were associated with increased career satisfaction. Male physicians' career satisfaction was higher when the work environment was *intellectually stimulating*. Their satisfaction, however, was slightly lower when the *workplace had adequate manpower*. This finding is not intuitive and the explanation for it remains unclear.

Each year, CHM surveys graduates at one, two, six and ten years post graduation. The CHM ten year Graduate Follow-up Survey was administered from 1990 through 2000 to physicians. The survey responses of 216 female and 310 male alumni who expressed definite feelings of satisfaction or dissatisfaction with their medical career were used in this study. The responses from the 122 respondents who had "mixed feelings" concerning career satisfaction were excluded from the analysis. As the graph indicates, the majority of physicians are satisfied with their careers in medicine.

The *Ten-Year Graduate Follow-Up Survey* is designed to gather information about the career satisfaction and practice characteristics of CHM's alumni. The descriptive items included questions about medical specialties, practice and employment arrangements, ethnic and economic patient characteristics, patients' insurance coverage and the percentage of time spent in caring for patients. Some of the work environment items investigated various working relationships, income levels, lifestyle issues and organization roles and responsibilities.

Through this research we were able to identify several descriptive and work environment factors that are associated with career satisfaction for female and male physicians. Although the study did not identify specific factors that accounted for large differences in career satisfaction, it did contribute to a more thorough understanding of this multifaceted topic and the areas future researchers might pursue as they delve further into this issue.

Career Satisfaction for Physicians by Gender
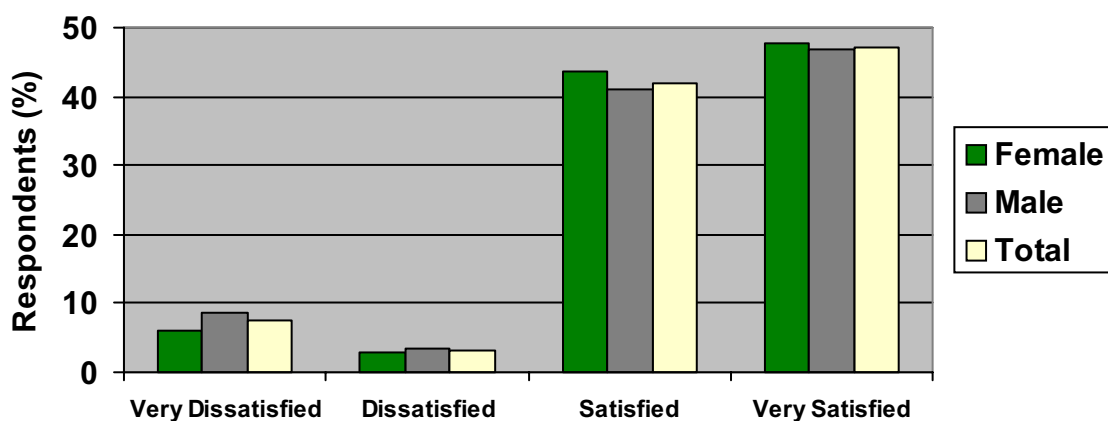
examining it. As a new dean and member of the American Board of Psychiatry and Neurology, I have challenged myself to examine critically the AAMC's Medical School Objectives Project guidelines on professionalism as well as review those principles required by the Accreditation Council for Graduate Medical Education to understand how CHM will respond to these directives.

A further challenge for professionalism is recognizing the need to address new domains of competency required in medical practice. For example, medical informatics and information technology are emerging core competencies that will spread throughout the curriculum and ultimately into practice.

Clearly it is an exciting time to be a dean. I am looking forward to working with students, faculty, and alumni in advancing a strategic agenda that will bring recognition to the College but, more importantly, train the best doctors for Michigan.

proven effectiveness as positive role models. In addition to education for medical students that would help them anticipate ethical challenges, he emphasizes the need for faculty development sessions for residents and faculty to increase awareness and effectiveness in role modeling. The students and faculty who heard his presentation laud his insights and encourage his continuing work.

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This Issue of *VitalSigns:*

Honoring Scholarship in Professional Development: The Maatsch Scholar Award

In the first Vital Signs issue that explored professional behavior, we turned to **Dr. Louise Arnold** to summarize the status of efforts to assess professional behavior in medical training and practice. In this issue, we are pleased to acknowledge the continuing exemplary work in the assessment of professional behavior that Dr. Arnold has conducted. In May 2001, OMERAD formally awarded the Maatsch Scholar Award to Louise Arnold for her contributions to medical education assessment in assessing professional development. Dr. Arnold developed an original and comprehensive scholarly lecture and paper summarizing what can be done in assessing professional development. A copy of this paper and the annotated bibliography is available on the OMERAD Web page (http://omerad.msu.edu/maatsch/LouiseArnold_MaatschLecture.pdf).

Join the Discussion!

Send your reactions to *VitalSigns*

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