THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE The Institute for Excellence in Education Strategic Plan

EXECUTVE SUMMARY AND MISSION

Medical and biomedical teaching and education face significant challenges, but also show great promise. In response, the SOM established the Institute for Excellence in Education (IEE) in October 2009, with an ambitious but achievable plan to meet these needs. The IEE expects to develop into a local, national and internationally resource and leader in medical and biomedical education, with plans to improve and recognize teaching, develop and critically access emerging educational modalities and techniques, encourage and support educational research and scholarship, and foster the professional growth of future local/national/international leaders in medical and biomedical education.

The mission of the Institute for Excellence in Education (IEE) of the Johns Hopkins University School of Medicine is to promote, value and advance the educational mission of the School of Medicine while enhancing the School of Medicine's leadership role in medical and medical sciences education nationally and internationally.

BACKGROUND AND RATIONALE:

The need for expert teachers continues to grow at the same time faculty activities are scrutinized, with increasingly demanding clinical and research productivity goals. Time for teaching is shrinking; time to review teaching is almost non-existent. In addition, educational modalities continue to expand beyond the traditional lecture-based format and learning in the lab or clinical setting, to small group facilitation, case-based learning, simulation, team-based learning and emerging electronic media. Yet, faculty members can be insecure and not sufficiently well versed in some of the new techniques. Individual faculty members can be asked to teach in a new teaching session without a method to receive feedback on their performance. Finally, regulatory bodies overseeing educational programs continue to impose more time consuming rules and regulations regarding teaching, supervision, documentation and reporting. Changes are often implemented without undergoing rigorous study or evaluation. Well-trained teachers, educators and scholars are essential to successfully educate the next generation of great physicians and biomedical scientists, but they not being nourished and cultivated.

However, Johns Hopkins has always led the way. Toward the end of the 19th century, American medical education was in chaos. Medical education was forever transformed with the opening of The Johns Hopkins Hospital in 1889, followed four years later by The Johns Hopkins University School of Medicine. Johns Hopkins ushered in the new era with rigid entrance requirements, a vastly upgraded curriculum with emphasis on the scientific method, the incorporation of bedside teaching and laboratory research as part of the instruction, and integration of the School and Hospital through joint appointments. The Carnegie Foundation's *Flexner Report* (1910) described Johns Hopkins as *the* model for medical education.

Achieving excellence in education deserves as rigorous an approach as clinical care and basic science research. To that end, the Dean established the Martin D. Abeloff Committee on Educational Values and Rewards in 2006. Examining the strengths and challenges of our educational mission, this group put forth a comprehensive plan, including the recommendation to establish the IEE. The Johns Hopkins University School of Medicine remains true to its mission of educating students and growing future leaders in accordance with the highest standards of excellence. We are a school of medicine, an extraordinary place with great tradition, where state-of-the-art research, learning, discovery, and training ensure that our faculty and students are among the world's best.

GOALS:

The School of Medicine plans to grow the IEE into a local, national and international resource and leader in medical and biomedical education. We want to improve and recognize teaching, develop and critically access emerging educational modalities and techniques, encourage and support educational research and scholarship, and foster the professional growth of future local/national/international leaders in medical and biomedical education. On campus, we hope to engender a culture change. Outstanding teaching should be expected and recognized, teachers should seek feedback for ongoing improvement, educational research valued, and there should be excitement coupled with critical review of new curriculum, technologies and methodologies. We will maintain Hopkins' core values and traditions, which have always made a Hopkins' education highly valued and recognized, while moving forward with new ideas. Ultimately, we will grow a "bank" of young, talented faculty to meet the challenges of the 21st century.

The history of Hopkins as the leader in medical and biomedical educational is not lost on us, and the IEE believes that Hopkins is uniquely positioned, given this rich history, outstanding medical school, biomedical graduate programs and world class residency/fellowship training programs. We have expert and dedicated faculty involved in teaching and education at all learner levels, committed to challenging students to develop and grow into tomorrow's leaders. The SOM leadership has already ushered in the 21st Century with a new medical school curriculum, changes to graduate medical education, a state of the art medical education building and a simulation center.

SPECIFIC PLANS:

I: Educational Credit activities reporting system (ECars).

Given the time pressures, it is essential that we have a valid, simple measure of educational productivity of our faculty, paralleling clinical and research metrics. We have included the unique feature of a "quality adjuster" into our measurement, allowing us to reward truly outstanding teachers, while identifying and helping those facing challenges. Over time, we expect the EC to become the "educational currency" on campus.

II: Recognize and reward outstanding teachers and educators, while improving teaching. We believe that creating a system of short, online modules, coupled with peer feedback and self review, links to our existing, superb faculty development programs, coupled with individualized mentoring/coaching, will improve teaching. It will help identify expert teachers who can be recognized and lead the next generation, while promoting a culture of enhanced diversity and respect for those who teach. We plan to partner with successful programs already available on campus, including (but not limited to) the Johns Hopkins Faculty Development

Program, the Office of Faculty Development, the Office of Curriculum, the School of Nursing, the Master of Education in the Health Professions and the Office of Academic Computing.

To begin, we will focus on: (1) lectures, as approximately 50% of SOM foundational courses still involve formal lectures and (2) small group facilitation. Soon thereafter, we expect to build modules for teaching in the clinical setting, followed by other modalities as new technologies develop. For each modality, the aim is to:

- 1. Identify and create a **resource of the very best teachers**. This process, in part, will mimic a method used to identify role models⁴ by:
 - (a) Appraising electronic student evaluations, possibly along with class surveys.
 - (b) Reviewing winners of previous school wide teaching awards.
- (c) Surveying course directors and section leaders of the courses "Clinical Foundations of Medicine," "Scientific Foundations of Medicine" and, "Genes to Society", along with clerkship directors, to identify their most successful teachers in each of the modalities, and giving reason why the person was selected.
- (d) Soliciting input from our SAPE (Student Assessment and Program Evaluation) which performs detailed, specific and regular evaluations of the medical school course, the Graduate Medical Education Committee and the MA/PhD Committee.

Once identified, these experts will be recognized and celebrated on the IEE website, and asked to participate with the additional items listed below.

- 2. Create a series of **peer-selected education awards**, for example "outstanding innovation in education", "outstanding course leadership" "outstanding lecturer" "Outstanding small group leader" etc.
- 3. Create short, **on-line modules**, to be posted on the IEE web site (http://www.hopkinsmedicine.org/IEE) that will include:
- (a) A video library of examples of outstanding sessions as well as mini-video clips from these sessions that best demonstrate effective strategies. Foundational medical school lectures are already recorded, as are some sections of "Scientific Foundations of Medicine."
- (b) School-wide recommendations for "how best to develop and run" a session. Development will be an iterative process based on literature review, input from the existing faculty development programs, colleagues from the School of Nursing and the School of Education, and expert opinion.
 - (c) Evaluation tools that will be used for peer feedback and self review.
 - (d) Facilitate interest groups.
- 4. We have already created a new section on the IEE website labeled "Improve Your Teaching" and have posted "Writing and Mapping Learning Objectives", links to "Faculty Development Programs for the Educator" and (c) a link to the 2011 GMEC retreat entitled "GME in the Era of Individualized Patient Care." We expect to expand this section extensively over the next several years.

- 5. Develop and test a *voluntary* system to request and provide **formative peer feedback** for those seeking to improve. Student evaluations of faculty have become increasingly common, though there are questions concerning the validity and usefulness of such evaluations.⁵ Some data suggests that in evaluation of clinical bedside teaching, peer evaluations are more reliable than residents' assessments.⁶ But, there seems to be no systematic approach to provide formative peer feedback, and little guidance on how to do a self review. The review process has to be coupled with opportunities for faculty development. Studies suggest that faculty development activities focusing on teaching effectiveness in medical education are highly valued by participants. More importantly, those participating report changes in learning and behavior.⁷
- (a) Create, test and implement modality specific, short review forms, based on literature review and expert opinion.
- (b) Work with our established faculty development programs and the new Johns Hopkins Master of Education in the Health Professions to develop short curriculum for those who will perform the peer review. We will also actively collaborate with our School of Nursing, which has an established peer feedback process, and our School of Education. The literature suggests that faculty involvement in determining a cohesive set of criteria for review along with proper peer rater training is important. With a credible and reliable process, faculty trust in feedback increases, and may even inform the academic promotion process. ^{8, 9}
- (c) Pilot and report on an innovative web-based review method developed by our Office of Academic Computing that permits reviewers to embed and classify (positive, negative, neutral) comments at specific points within a video, blinded to others' comments. A coordinating reviewer then determines areas of consensus and disagreement among reviewers for feedback. This specificity also provides an opportunity to demonstrate concrete examples at specific points during a feedback session.
- (d) Develop and post guidelines, based in part on peer feedback, for faculty to perform **self review** of their sessions.
- 6. As program implementation moves forward, survey faculty, students and leadership to refine and streamline the program and determine if it is meeting its stated goals of improving teaching, encouraging recognition of the educator and **creating a culture** that values the time needed to improve teaching.
- 7. Establish, based on SOM wide competition, *Named* Education Scholars, who will be given time and funding to participate in teaching development programs and/or develop and complete an educational research projects, coupled with formal mentoring.
- 8. *Named* Visiting Education Professorship (to Hopkins). We envision this as a 2 day visit, meeting with educational leaders, junior faculty with a focus on education, and students and residents, culminating in Education Grand Rounds.
- 9. As our program evolves, reach out to peer institutions to share our process and learn of their programs, with an eye toward collaboration and broad dissemination. The ultimate goal is to work toward a **national peer review process** for teaching, for those seeking promotion as an educator, with the same rigor common to scientific investigation.

III: Increase educational research, scholarship and dissemination.

In order to stimulate the study innovations and new techniques, determine what works (and what doesn't), and where technology and innovation best fits in the curriculum, formal study is needed.

- 1. Critically evaluate and generate scholarship on the items and programs listed in Section II above.
- 2. Partner with the Master of Education in the Health Professions, a SON, SOE, SPH, SOM and Carey School of Business, where certificate and masters candidates will have a requirement to complete a practicum.
- 3. Partner with the new Perdana University School of Medicine (Malaysia), that is working in collaborate in the JHUSOM to develop its first fully integrated private four-year graduate medical school and teaching hospital
- 4. Establish, based on SOM wide competition and nominations, *Named* Education Scholars, who will be given time and funding to participate in teaching development programs and/or develop and complete an educational research projects, coupled with formal mentoring. (As above)
- 5. To grow quality medical and biomedical education research, the IEE needs to provide core services to (junior) faculty who wish to conduct educational scholarship, and grow some into educational researcher leaders. The IEE will need to provide:
 - (a) Project design and review
 - (b) Mentoring and linkage to mentors
 - (c) Core support as well as statistical support
- (d) Time and project funds. We hope to pair with departments on grant funding and protected time for faculty members.

IV: Develop an Educators Leadership Development Program.

The JHH already has a sophisticated and developed Leadership Development Program (LDP). In our needs assessment, midlevel and senior faculty identified a pressing need for developing specific educational leadership skills. With funding, we will create a program similar to the LDP, but focused fostering on future educational leaders.

V: Promote Community Building and Culture Change.

On campus, we hope to become the home for the educator, providing the necessary tools, and support in order for them to grow into outstanding teachers, innovators, and scholars. We want to spotlight and celebrate our educators, foster collaboration across the community, and work toward a better promotions process for the educator. Community building, along with culture change, takes time to grow and cannot be forced. However, it can be fostered, by:

1. Medical and Biomedical Education Grand Rounds. These have been successful in their inaugural year, with a combination of local and visiting speakers. They are available on the web real time, as well as archived. As we grow, we envision more interactive sessions, with opportunities for faculty development.

- 2. Continued enhancements and growth of the IEE website with the options noted above.
- 3. Encouraging collaboration, and explore the use of newer technologies to build on-line community techniques, discussion groups, wikis to allot for a broad cross-section of Hopkins to interact.
- 4. An annual IEE/SOM Education retreat and meeting.

FUNDING:

The program outline above is ambitious, but we believe feasible and necessary. As education needs expand and deepen, as the challenges faced by faculty grow, we need a creative, innovative, sophisticated, and skilled faculty to teach, study education and move us forward. Our enhanced purpose to groom the next generation of great educators. Expert faculty with special strengths will be identified and celebrated, and mentor junior faculty. Over time, our program will promote a culture change: excellence will be expected, peer feedback and self review with the goal toward continual improvement the norm, educators will be fully respected, the pool of talent grow and diversify, and the influence of Hopkins spread nationally and internationally.

The pace at which we can enact our program depends, in large part, to the generosity and determination of donors, coupled funding from the School of Medicine. The IEE has received modest additional funding (beyond the School of Medicine's initial support) to establish endowments to support a *named* educational scholar. The IEE will continue to seek funding from grants and gifts from private donors, and will recognize, protect and honor those contributions. The establishment of endowment funds will serve to assure ongoing support, and provide an unequaled opportunity to maintain the Hopkins tradition of great education married to a view of the future.

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