

State of the School

Address by Bart S. Ng, Acting Dean, at the 2009 School of Science Fall Convocation

August 25, 2009

Thank you, Jim, and welcome again, Dean Sukhatme, Dean Luzar, and Members of the School of Science Faculty and Staff.

You will recall that I closed my State of the School address last year by declaring that the state of our School, in every respect, [was] good. I'm pleased to begin this year's address by stating unequivocally that the state of our School has never been stronger, and that we may well be standing at the threshold of a new era of unparalleled opportunities and significant growth.

During the past 6 months, as a more complete and far more positive picture on the fiscal future of our School was emerging, I was only too happy to begin some long-term planning for the School. I have never been more optimistic about the future of our School during my 34 years at IUPUI than I am now. With some thoughtful planning on our part, I believe we now have the resource base to elevate the School to an entirely new and much higher level.

Let me begin with an overview of some of our accomplishments during this past academic year.

We have done marvelously well in faculty recruitment. We made a total of 11 tenure-track appointments—three in Biology, two in Chemistry, one in Computer & Information Science, three in Mathematical Sciences, and two in Psychology. Using replacement positions, we also made two senior lecturer appointments—one in Psychology and one in Mathematical Sciences.

It is now my great pleasure to introduce our new colleagues to you. I would like each of our new faculty members to stand up as his or her name is called, and I ask the audience to please hold their applause until all new faculty members have been introduced.

Biology

GREGORY ANDERSON (PhD Washington U; post-doc Dartmouth)

HUA-CHEN CHANG (PhD Purdue; post-doc IU School of Medicine)

GUOLI DAI (PhD Jilin U, China; post-doc University of Kansas Medical Center; work supported by NIH)

Chemistry

HAIBO GE (PhD Kansas; post-doc at UC San Diego Scripps Institute)

LEI LI (PhD Johns Hopkins; post-doc Michigan; work supported by an NIH *Pathway to Independence* grant)

Computer & Information Science

James Hill (PhD Vanderbilt)

Mathematical Sciences

PATRICK MORTON (PhD Michigan; formerly of Wellesley College, joint appt. with UCASE; Full Professor with tenure)

RYAN MARTIN (PhD–Statistics Purdue University)

ROLAND ROEDER (PhDs U. de Provence and Cornell; post-doc at SUNY Stony Brook)

WILLIAM CROSS (PhD Michigan; Sr. Lecturer)

Psychology

STEVEN BOEHM (PhD Oregon Health Sciences U; post-doc Texas, Austin; Associate Professor with tenure, formerly of Binghamton U., work being supported by NIH)

MELISSA CYDERS (PhD Kentucky)

ROB STEWARD (PhD Toronto; post-doc IU School of Medicine; Sr. Lecturer)

Welcome all of you to IUPUI and the School of Science!

Our School is very fortunate that we were able to recruit such a talented group of new faculty. Let this serve as a preview of more to come. I have every intention to continue and even accelerate our aggressive recruitment effort in the coming year.

Now let me turn to some progress we made on budgetary issues. At last year's convocation, I expressed grave concern for the lack of procedures, transparency and clearly articulated budgetary priorities in the way the School manages its fiscal affairs. I further noted that this glaring weakness has undermined much of our past strategic planning effort, and at times even created a sense of mistrust among some departments.

To address these shortcomings, we have now in place a number of new policies to ensure that we can plan and invest our resources for maximum return in the future.

These include

- New rules governing expenditures of start-up funds
- A new policy for granting and processing tuition waivers for graduate students
- A new policy for the distribution of indirect cost recovery funds
- New procedures for determining laboratory fee rates and distributing laboratory fee income

What is more important is that while we were developing these new policies, we have also gained a much clearer understanding of the cost structure of all aspects of our operations. At the same time, we became more confident in our ability to control cost and make income and expenditure projections.

Speaking of projections, perhaps we have been too conservative all along. But I am very happy to report that we closed FY 2008–09 with a \$3.9M surplus and we have wasted no time in

putting this surplus to good use. First off, we set aside \$1M to start a building fund for the Multidisciplinary Laboratory and Classroom Building currently being planned. Dean Sukhatme will bring us up to date on developments regard the MLC building later. Second, renovation of existing space and improvement of our research infrastructure are very high on our School's priority. We therefore set aside \$450K for the reconfiguration of the entire faculty office suite of Earth Sciences and other smaller renovation projects. We also budgeted over \$500K to support upgrade or purchase of multi-user core research equipment, or to make modifications to facilities to encourage interdisciplinary research. I understand from Dean Murphy that many of you are already hard at work trying to take advantage of this internal funding opportunity. Third, we added \$1.6M to the School's start-up reserve, bringing the current balance of that account up to \$4M as we begin another aggressive recruiting season. Finally, we put aside \$200K to jump-start a new Office of Student Services, and an expanded Office of Development & External Affairs. I will say more about the operations of these offices later.

Even before it became certain that we would close this past year with a very substantial surplus, I slowly came to the realization earlier this spring that the School might soon find itself in a far stronger financial position than it has ever been before, and we must not miss this opportunity to develop a bold vision that would take full advantage of our expanding resource base. All the budgetary data I have examined since then only reinforced this assessment. I trust that all of you have now received a copy of the draft Strategic Plan for our School, together with a budgetary projection spreadsheet, that I put together earlier this summer. I am convinced, based on my budgetary analysis, that we should have sufficient resources to plausibly support a very significant increase in the size of our faculty within the next few years! This will finally enable us to staff our School at a level comparable to other institutions that are our peers.

Given the dire financial strait we were in just a couple of years ago, it would be fair to ask, "What has changed?" It is clear that our state funding has not risen. In fact, to be prudent, we must assume that state funding will continue to decline in the foreseeable future. On the other hand, the single largest source of our School's revenue—student tuition and fees—now accounts for nearly 85% of our total income, and has been rising steadily for the past three years. This increase is clearly driven by higher enrollment. We then must ask the questions, "What drives our enrollment increase?" and "Can we possibly sustain this positive trend in the next few years?"

The answers to both of these questions, I believe, lie in the rapidly evolving profile of IUPUI's incoming students, especially those who choose to major in Science. Ever since Ivy Tech took on the responsibility as the primary provider of developmental education in the state, admission to IUPUI has become more competitive. Bluntly put, we are no longer viewed as the college of last resort for unprepared high school graduates, as we were during the 1990s. At the same time, the publicity campaign promoting IUPUI as "the Life and Health Sciences campus of Indiana where impact is made" further helped raised the visibility of our campus and our School.

Increasingly, high-ability students are choosing to come to IUPUI and the School of Science because of the quality and richness of our academic programs, the cost advantage we have over Bloomington and West Lafayette, and the excitement to learn and work in an urban environment. In other words, our School is becoming increasingly attractive to serious students who desire a first-class science undergraduate education. As evidence of this trend, I can point to the continuing rise in the number of majors in our school, the rise in credit hours after the bottoming-out three years ago. All this is happening despite our significant loss of credit hours at the developmental level. Surely, the current weak economy has had an effect on our enrollment.

However, I would argue that this effect is only secondary. The underlying factors driving our recent enrollment growth were already in play starting in the early 2000s, if one examines carefully our enrollment data for the past ten years.

How then can we build on these positive shifts in student perception and market trends, so that we can sustain our enrollment growth well into the next decade? First and foremost, I believe we must do everything we can to meet the rising expectations of our increasingly well prepared and highly motivated students.

On the academic side, we must find ways to continue to improve our undergraduate curriculum and make it more exciting, and more interdisciplinary. Later on, you will hear from Kathy Marrs, our new Associate Dean for Academic Affairs, about a proposal to the Howard Hughes Medical Institute (HHMI) that she is working on which would support transformative changes in undergraduate science education. I hope you will lend your support to Dean Marr's effort because faculty involvement is essential here.

On the administrative side, we are building a new Office of Student Services that will

- Accelerate the recruitment of high-ability students because they will contribute long-term to our School's reputation as a "school of choice" for serious science undergraduates;
- Provide better services—including quality academic advising and career counseling—to increase the retention and graduation rate of our current students
- Develop more internships, externships, and research opportunities for our undergraduates because such opportunities will help keep students focused and help them with career choices.

Our new Associate Dean for Student Services, Jeff Watt, will provide leadership for this new office. We are also very fortunate that, under the current very difficult economic climate, we are able to develop a new revenue stream of almost \$0.5M in our budget base to support this new office in its first year of operation. The money will come from a new Science program fee approved by the IU Board of Trustees in July. I want to take this opportunity to publicly thank Andy Gavrin for his swift action in putting together a program fee request literally on a 24-hour notice. (Thank you, Andy, and best of luck in your new role as Chair of Physics.) We are also very grateful for the support expressed by our School's Undergraduate Student Organization. This perhaps underscores the fact that more than anyone else, our students see a real need for such an office.

Now let me turn to the matter of development and external affairs. You may recall that this is a subject that I carefully avoided in my address last year because of my ignorance. Not that I have suddenly become an expert—far from it—but I did develop a much deeper appreciation for the role that funding-raising and good publicity play in the growth of any educational institution. And if our expectation is that the School of Science should compete nationally at a level that would commensurate with the quality of our faculty and their scientific prominence, we must lay the groundwork now for generating more philanthropic and community support.

For this reason, we will expand, methodically over the next two years, our Office of Development and External Affairs. Aside from being held to specific funding-raising goals, this office will be responsible for

- Creating a brand for the School of Science that would transcend departments;

- Projecting the School of Science as a “School of Choice” for prospective students and their parents;
- Coordinating all development and publicity efforts to ensure consistency of purpose and follow-through;
- Increasing our outreach efforts to our alumni, celebrating their success as examples of the value and quality of a School of Science education, and involving them as ambassador to the community;
- Helping to articulate and publicize a bold academic vision to better position the School for the next Capital Campaign for IUPUI.

In both of these efforts—enhancing our student services and expanding our development capabilities—our School is moving into territories where we have not paid much attention before. But move ahead we must, if our School is to succeed in a future environment that would undoubtedly require that we think and operate in a far more entrepreneurial fashion.

In my service as your Dean, I see it as my duty to put the School in the best possible financial position long-term so that our academic and research enterprise will continue to strengthen and flourish. I have just laid out for you my thinking and some key pieces of my strategy that I believe would be critical to our achieving this goal. Though the language I used today may strike some of you as overly business and marketing oriented, my deepest concern is ultimately academic. So I want you to read the draft Strategic Plan and keep in mind that it is really only a rough road map pointing to a brilliant future that could be ours if we are able to protect, maintain and enlarge our resource base. It is not at all fortuitous that our resource base now depends so critically on what we do with our students. It is only fitting that in an educational institution like ours, if we do well by our students, we will do well by ourselves. Adding a philanthropic dimension should also help.

As in the draft Strategic Plan, I hardly touched on our research aspirations today, but that is intentional. I do believe that we have an unprecedented opportunity to build a school with unique interdisciplinary strengths that are the envy of our peers. After all, how often does any school have the prospect of growing the size of its faculty by as much 35% in less than a decade? However, I firmly believe that the faculty needs to take up its responsibility in defining more sharply the academic and research areas where we want to concentrate our resources to ensure maximal impact and returns. Thus I urge every department to use the draft Strategic Plan to frame its discussion on how to strengthen and further develop its research and academic programs in support of the overall mission of the School. I look forward to working with all of you in the next several months as we move forward in our planning effort.

I hope that the ambitions of our faculty and the boldness of our plan would match the richness of opportunity that stands before us.

Let me close by quoting Jyoti Sarkar, the President of our School’s Faculty Assembly. In his email earlier today encouraging faculty attendance at this event, Prof. Sarkar expressed his optimism and wrote, “**LET US SEIZE THE MOMENT TO SECURE OUR FUTURE!**” I could not have said it better.

Thank you, and have a great year!