

## Illinois Mathematics and Science Academy®

*igniting and nurturing creative, ethical, scientific minds that advance the human condition*

### REPORT OF THE PRESIDENT José M. Torres, Ph.D. May 17, 2017

#### LEADERSHIP MATTERS

The following provides an update on my leadership of the Academy.

#### IMSA Leadership Profile

To provide Trustees with a report of activities and efforts of note, I organize the Report of the President, where appropriate, around the **Priorities for 2016-2017** (a) Finalize and publish an “IMSA Operational Excellence Dashboard;” (b) Strengthen identity as a learning laboratory as expressed through grand challenges; (c) Develop and nurture my direct reports’ leadership orientation, equity commitment, and systems level management; and (d) Prepare original material suitable for publication as evidence of IMSA thought leadership and the **Leadership Profile Components** used by the Trustees to evaluate the President’s performance: (1) Institutional Planning (and Executing); (2) Financial/Business Model; (3) Innovations in Teaching and Learning and in STEM Talent Development; (4) Institutional Research and Scholarship on Program Effectiveness and RoI; (5) Thought Leadership in STEM Education Policy; and (6) Stakeholder’s Positive Action(s) on Behalf of IMSA. For additional information and updates on IMSA, please see my [Personal Reflections](#) that provide general observations shared with IMSA stakeholders throughout the year.

#### Strengthen Identity as a Learning Laboratory as Expressed through Grand Challenges

The Advancing the Human Condition Oversight Team, under the leadership of Dr. Marie Dahleh, Dr. Robert Hernandez, Dr. Jeffrey Margolis, and Dr. Norman “Storm” Robinson III continue to develop a framework, evaluation criteria, and communication plan for how IMSA will address the UN 17 Sustainable Grand Challenges as part of our current focus on being a learning laboratory.

The History Department’s contribution to the Grand Challenges Project this spring was to lead and facilitate a 3-month seminar for interested sophomores entitled the “Real World Seminar.” Dr. Rob Kiely informed me that the focus was on one case study per month; one on Energy, one on the Environment, and one on Security. More follow up on lessons learned is forthcoming.

#### Develop and Nurture my Direct Reports’ Leadership Orientation, Equity Commitment, and Systems Level Management

The 360 feedback reviews for Cabinet members and myself were completed by April 3, 2017. Cabinet members and I discussed how we can learn from this feedback.

On April 3, 2017 the Human Resources department launched the annual performance review process for all non-faculty staff. Appraisal conferences and finalized appraisals were to be completed by May 2017. An important component of the performance appraisal process is the creation of performance

goals for the FY18 academic year. Managers and employees are to work together to create SMART goals—Specific, Measurable, Achievable, Relevant, and Timely.

### **Prepare original material suitable for publication as evidence of IMSA thought leadership**

I had an article, *To engage students in STEM, engage them in the world*, published in the April 2017 edition of the *Phi Delta Kappan* magazine. *Kappan* receives 10 to 12 manuscripts every week and accepts about 10% of all submitted manuscripts.

### **Institutional Planning (and Executing)**

We had a very successful IMSA30 Celebration and IN2 ribbon cutting on March 30. During mid-day, Chairman Griffin presented the alumni awards. Dr. Julie Comerford '98 and Major Vincent Enriquez '99 received the Alumni Distinguished Leadership award. Unfortunately, neither of them could be present, but both sent video remarks that were shared with the students and staff. Ms. Jessica Droste Yagan '95 received the Alumni Titan Award and Ms. Claudia Flores '93 received the Alumni Trailblazer Award. Jessica and Claudia were able to spend the day/evening with us and participated in an IMSA30 fireside chat moderated by John Pletz, Crain's Chicago Business. Other panelists were Steve Chen and Dr. Nigel Lockyer, Fermi National Accelerator Laboratory.

There were approximately 350 attendees at the event. After the virtual ribbon cutting the attendees toured the facilities, were treated to shrimp cocktails served in test tubes (A-wing Science Labs), and had the opportunity to participate in PFS activities such as creating a functioning lung prototype. Thanks in part to Steve Chen's participation; the Academy received excellent media coverage—there were over 40 million impressions from 25 media sources including the local affiliates of CBS and NBC.

Not to be outdone, WGN-TV conducted a live "Around Town" broadcast from IN2 on Monday, April 17, 2017

The Selection Committee met the week of [April 17<sup>th</sup>](#) to identify the students that **will be joining IMSA in the fall of 2017**. 583 submitted applications were reviewed for admission. On [May 1<sup>st</sup>](#) decision letters were mailed to 253 highly qualified applicants offering admission to the Academy, along with an additional 85 students placed in the Waitpool

### **Innovations in Teaching and Learning and in STEM Talent Development**

Under the leadership of Dr. Adrienne Coleman, on May 3 the Academy hosted a "Diversifying STEM Think Tank." STEM professionals, educators and diversity/inclusion officers were invited to the event to strategize on how to diversify and strengthen the STEM education to career pipeline. Approximately 70 people attended and participated in a roundtable discussion with Mike Salazar, President of the Chicago Chapter of the Society of Hispanic Professional Engineers; Dr. Anna Kaatz, Director of Computational Sciences at the Center for Women's Health Research, University of Wisconsin-Madison; Dr. Michael Horn, Assistant Professor at Northwestern University; Dr. Lateefah Stanford, Senior Scientist—Separations and Mass Spectrometry at BP and Dr. Terrance Mayes, Associate Dean, Graduate Education and Director, Stanford University's School of Medicine. Here is the [link](#) to the presentations.

Earlier in the day Dr. Kaatz spoke to the IMSA community about "Gender Bias under the Microscope: Broadening the Diversity of the Science and Medical Workforce."

A paper written by Dr. Sanza Kazadi and four of his students (George Jenó, Xinyu Guan, Nick Nusgart, and Andriy Sheptunov) was selected, by vote of attendees, as the best paper at the 28<sup>th</sup> Modern Artificial Intelligence and Cognitive Science Conference. The paper, “Decision-Making Swarms,” was presented at the conference held at the University of Indiana Purdue Fort Wayne campus this past April.

Three of our students (Sushil Upadhyayula, Pranav Upadhyayula and Meghana Kamineni) were named semifinalists for the U.S. Presidential Scholars Program. Out of approximately 3.5 million students expected to graduate from high school this year, more than 5,000 students were in the initial candidate pool and only 723 emerged as semifinalists. The students are selected based on their academic success, artistic excellence, essays, school evaluations and transcripts, as well as evidence of community service, leadership, and demonstrated commitment to high ideals. Sushil and Pranav were selected as two of the 161 U.S. Presidential Scholars. Only eight were selected as Scholars from Illinois. They will be traveling to Washington, D.C. this June to accept this award. The teacher chosen by Sushil and Pranav to be recognized is Devon Madon.

### **Thought Leadership in STEM Education Policy**

I have accepted the invitation to be a member of the External Advisory Board to the UIC Center for Urban Education Leadership. The Board will provide advice to the Center on: a) supporting a program of continuous improvement in school leadership development practice and research, and b) improving the Center’s impact on school leader development policy and practice in local, state, and national contexts.

I was an invited panelist at the ASU GSV Summit in Salt Lake City on May 8, 2017 *Solving Global Problems in K-12: Using Grand Challenges in the Classroom*.

*Today’s* students are growing up with globalization on the rise and an increasing necessity to become globally competent and ready to engage as citizens in an ever changing world. What are the skills needed? What can teachers do to engage students with global challenges? What are the compelling examples and stories of students collaborating to solve problems? What policies need to be in place and what barriers are there to engaging all students? These questions and more will be addressed by these experienced panelists.

**Moderator:** Karen Cator –CEO, Digital Promise

**Panelists:** Matt Doyle - Interim Superintendent, Vista Unified School District, Michael Furdyk - CEO, TakingITGlobal, Jose Torres - President, Illinois Math and Science Academy, and Terry Godwaldt, founder and executive director of The Centre for Global Education at Edmonton Public Schools

### **Stakeholder’s Positive Action(s) on Behalf of IMSA**

On April 6, 2017 we testified before the House Appropriations Committee. We testified before the Senate Appropriations Committee on May 9, 2017. Having made our case, we now wait for a State budget to be approved.

On April 18, the Academy hosted a donor recognition luncheon celebration honoring Bruce, Barbara, and Jennifer ’97 Tietz for his \$100,000 gift for equipment for the B-Wing Science Lab project. Representative William Davis was also visiting the Academy and was able to join us for the luncheon.

**Leadership Update from Cabinet Members**

Dr. Dahleh and Dr. Hernandez will provide brief updates during our May 17, 2016 Board meeting. These will appear as attachments to my report.