INGENUITY’S CLASS OF 2017 EXCEEDS EXPECTATIONS

Ingenuity’s class of 2017 had 12 perfect 800 SAT and SAT II scores

Almost 100% of Ingenuity class of 2017 will be attending college. Students have been accepted to the following universities (among others): Boston College, Duke University, Emory University, Franklin Olin College of Engineering, Johns Hopkins University, Morgan State University, Purdue University, Temple University, University of Maryland, College Park, Washington University in St. Louis, Yale University

COLLEGE ACCEPTANCE HIGHLIGHTS (2011-2017)

Historical list of Ingenuity acceptances at selective colleges

| University of Maryland, Baltimore County | 99 |
| University of Maryland, College Park | 96 |
| Johns Hopkins University* | 57 |
| Cornell University | 9 |
| University of Chicago | 6 |
| Harvard University | 4 |
| Yale University | 4 |

*Johns Hopkins University accepts more graduates from the Ingenuity Project at Baltimore Polytechnic Institute than from any other program in the world.
- According to the JHU Admission Office.

SAT and SATII Test Scores

<table>
<thead>
<tr>
<th>Test</th>
<th>Ingenuity Average</th>
<th>US Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAT Mathematics</td>
<td>692</td>
<td>527</td>
</tr>
<tr>
<td>SAT Reading/Writing</td>
<td>677</td>
<td>533</td>
</tr>
<tr>
<td>SAT II Biology (taken at the end of 9th grade)</td>
<td>648</td>
<td>617</td>
</tr>
<tr>
<td>SAT II Physics (taken at the end of 10th grade)</td>
<td>642</td>
<td>664</td>
</tr>
<tr>
<td>SAT II Chemistry</td>
<td>718</td>
<td>665</td>
</tr>
<tr>
<td>SAT II Mathematics 1 (taken at the end of 10th grade)</td>
<td>652</td>
<td>605</td>
</tr>
<tr>
<td>SAT II Mathematics 2</td>
<td>734</td>
<td>694</td>
</tr>
</tbody>
</table>
Who We Are
The Ingenuity Project, a non-profit organization, is a joint effort between the Baltimore City Public School System and Baltimore’s science and mathematics community. It is a year-round, comprehensive, advanced math and science instructional program for Baltimore City students in grades six through 12. We are committed to recruiting, identifying, and supporting students who have a high potential and interest in STEM and who reflect the ethnicity, gender, and income of Baltimore City households.

The high school program aligns to the highest standards in math and science, and enables students to enroll and succeed in selective colleges and STEM careers. The middle school program provides students with rigorous STEM courses and experiences that prepare and inspire a pursuit of advanced STEM curriculum in high school.

Who We Serve
This school year, Ingenuity served 547 Baltimore City Public School students in grades six through 12 across three middle schools – Hamilton, Mount Royal, and Roland Park – and a single high school, Baltimore Polytechnic Institute.

Dear Friends,

This school year proved to be a very successful one for The Ingenuity Project. We are immensely proud of our students’ academic growth as they navigate the rigors of this intense program. As a result of their hard work, many of our 2017 graduates are attending the nation’s most competitive universities; and nearly 100 percent of our eighth graders have been accepted into their first choice of selective high schools.

This year also marks the end of year one for Ingenuity Project’s bold strategic plan articulated in 2016 by our board of directors and leadership team. Our goal is to, by 2020, increase the number of high-ability students from underserved communities both enrolled in The Ingenuity Project and accepted into selective colleges. This report not only highlights the strides we have made toward the 2020 strategic plan, but it also celebrates a highly successful 2016–2017 academic school year.

Indeed, The Ingenuity Project would not be possible without the dedication of our master teachers who hold high expectations for all of our students while supporting them throughout the rigorous curricula. Further, we also recognize that our students could not succeed without our strong partnership with Baltimore City Public Schools and the network of parents, mentors, and tutors who support our students as they tackle Ingenuity’s demanding coursework. Finally, we wish to thank you for your commitment to The Ingenuity Project. Your support makes our program possible.

Sincerely,

Ben Yuhas, Ph.D.
Lisette S. Morris, M.S.
Board President
Executive Director
EXPANDING TO CULTIVATE A DIVERSE STEM PIPELINE

INGENUITY PRIORITIES:

➜ to expand the number of available seats
➜ to improve access for a talented, diverse population of Baltimore City students.

EXPANSION

Due to the success of our recruitment efforts and revised application process, Ingenuity recognized it was ready to expand.

+ Mount Royal: Beginning with the 2017–2018 school year, Ingenuity’s Mount Royal program enrolled two sixth-grade classes, with the intention to continue to do so each year until the program has doubled in size.

+ Baltimore Polytechnic Institute (Poly): For the 2017–18 school year, Ingenuity will enroll an additional 30 students in its high school program. These applicants demonstrated the academic abilities to make them successful.

+ Middle School Expansion: Ingenuity’s desire to serve a greater population of students across Baltimore City has led to preliminary plans to expand to a new site by 2020.

DID YOU KNOW?

The overall number of applicants marking 1st and 2nd choices for Mount Royal and Hamilton is on the rise. This increase in preference assures us of the ability to add a second class of 6th graders at our Mount Royal location for the 2017–18 school year, which is an important step towards fulfilling our strategic priorities.
To reach our goal to better reflect the Baltimore City population, Ingenuity focused on targeted recruitment at several K-5 schools surrounding the Mount Royal and Hamilton programs. These efforts resulted in triple the number of applicants from those particular schools. However, we are still not serving many students in the southwest and southeast quadrants of the city.

**Removing Barriers, Increasing Demand:** In fall 2017, Ingenuity had a record number of applications for the 2017-2018 school year for both the middle and high school programs. This surge was the result of a new online application that took families just five minutes to complete from any mobile device. Instead of requiring parents to submit multiple sources of data and assessment on their child, Ingenuity developed a streamlined process with Baltimore City Public Schools to gather candidate information.

---

*Graph showing the number of applicants for The Ingenuity Project from 2014-2015 to 2017-2018.*

- **High School Applicants**
- **Middle School Applicants**

*Graph showing Ingenuity applicants by city quadrant.*

- **North West:** 38%
- **North East:** 43%
- **South West:** 7%
- **South East:** 12%
PROVIDING AN EXEMPLARY STEM EDUCATION

For the second year, The Ingenuity Project refined and implemented a 26-week advanced STEM Capstone Challenge for high-performing middle school students. The 2016–2017 Capstone Challenge served 316 seventh-grade students across nine schools. This included 120 students enrolled in The Ingenuity Project and 196 students from other public and charter schools across the city. The Challenge was designed to foster achievement, academic competition, and complex problem solving using math, science, technology, and engineering design skills.

Number of students applying for Ingenuity from participating Capstone Challenge schools

The Capstone Challenge has been an effective tool for the identification of talent. As a result of the initiative, Ingenuity tripled the number of applicants and enrolled four times the number of students from the participating schools.

COLUMBUS CENTER AND THE CHESAPEAKE BAY WATERFRONT PARTNERSHIP GIVE BACK

The culmination of the Capstone Challenge took place as an exhibition at UMBC’s Columbus Center, a hub for faculty and students from the University System of Maryland, scientists from around the world, and Baltimore’s blossoming tech start-ups. Over 300 students attended the exhibition to showcase their projects, and more than 25 scientists and engineers served as role models and judges. We are grateful for the Columbus Center’s generous donation of its beautiful space.

Ingenuity would also like to thank the Chesapeake Bay Foundation for providing educational resources for our participating teachers and a fantastic Chesapeake Bay trip for the winning Capstone Challenge teams.
Ingenuity Poly Senior Receives National Recognition

Amy Zhang, Ingenuity senior at Baltimore Polytechnic Institute, was selected as a national scholar in the 2017 Regeneron Science Talent Search. Her research involved the modification of a cell-sized mechanical tool called a microgripper that could potentially aid in the capture and retrieval of a single cell. This work can be used in microsurgery and medical research to understand the fundamental characteristics of cells.

Amy performed her research at the Johns Hopkins University Department of Chemical and Biomolecular Engineering and was mentored by Dr. David Gracias and Qianru Jin. Amy will be attending Yale University in the fall of 2017.

High School Research Practicum

The Ingenuity Research Practicum is a three-year program that spans sophomore through senior years, and serves as an incubator for future scientists, engineers, and mathematicians. During the Research Practicum experience, students work with mentors at local colleges, universities, and other research institutions to develop independent research projects.

Students contribute to the body of research and, in some cases, have their work acknowledged in scientific papers.

Research Award Highlights:

- Alida Schott won first place in the physical science category at the Intel International Science and Engineering Fair (ISEF), and then went to the 2017 ISEF in Los Angeles, where she won third place.
- Stephen Grabowski was named the grand prize winner in the biological sciences category at the Baltimore Science Fair for his project, “Dethiosulfovibrio Strain F2b, a New Non-Thiosulfate Reducing Bacterium that Degrades Mariculture Waste.” He also went to Los Angeles in May to compete at the 2017 ISEF.
- Aishwarya Shettigar received second place at the Maryland Junior Science and Humanities Symposium (JSHS). She, Rebecca Brody, and Claire Wayner won a trip to San Diego to compete at the National JSHS.
- Rebecca Brody received second place at the National Junior Science and Humanities Symposium and first place at the Baltimore Science Fair, both in the biological sciences category.
- Claire Wayner won the U.S. Stockholm Junior Water Prize at both the regional and state levels.
SUPPORT THE WHOLE STUDENT

UPCOMING HIGH SCHOOL ENRICHMENT PROGRAMS

+ **SQUAD**: A peer mentoring group for students of color led by Ingenuity juniors and seniors, this program is designed to help freshmen and sophomores develop their abilities to balance academic success with social wellbeing. SQUAD’s goal is to retain students of color in The Ingenuity Project for four years, and then inspire them to apply for and enroll in selective colleges. The meetings provide a safe space for mentorship around academic, cultural, and social issues.

+ **Connections**: Students who are at risk of falling below an 80 percent average in their math and science courses participate in the Connections program, which provides individualized academic and social/emotional support. Students participate in one-on-one meetings bi-weekly or monthly to troubleshoot and set goals for success.

+ **Peer Tutoring**: Ingenuity juniors and seniors are paid by Ingenuity to work with individual students or small groups to improve study skills or better understand concepts taught in class.

DID YOU KNOW?
Several Ingenuity Alumni volunteer each year to be matched with current Ingenuity students who are seeking guidance on their career paths in STEM.

SHANI ORTIZ
Shani Ortiz has been working in education for almost 15 years. She has been a part of the Ingenuity team since 2006, working first as the admissions coordinator, then moving into college counseling. Her strong belief in the intrinsic value of education and commitment to providing the best possible support to all Ingenuity students make her passionate about working with students and families as they navigate the journey to and through college. Next year, she will become full-time as Ingenuity’s dean of student engagement. In this role, Shani will create several enrichment opportunities and experiences to help students succeed along the rigorous academic pathway of Ingenuity at Poly.
AFTER-SCHOOL LEARNING CLUB

Ingenuity middle school students are invited to participate in after-school learning clubs where they receive support from their classroom teachers to complete homework and get help with concepts taught that day. The Learning Club has shown to improve student performance year after year.

BUILDING MATHEMATICAL BRILLIANCE

+ High School: Ingenuity juniors Vivian Borbash, Alida Schott, Ezra Szanton, and Claire Wayner were all accepted into the Future Scholars Program at the Johns Hopkins University Department of Mathematics. This notable opportunity will allow them to take rigorous college-level math courses during their senior year in high school.

+ Middle School MathCounts Teams: Each year, Ingenuity’s dedicated team of math teachers prepares students to compete in the regional MathCounts competition at McDonogh School.

+ Building Future Coders: All incoming sixth-grade students participate in a two-week summer orientation, and Ingenuity partnered with Code in the Schools to pilot a coding program for students in the Mount Royal and Hamilton programs. During the 2017-2018 school year, all ninth-grade Ingenuity students will take an Introduction to Computer Science course, paving the way to high-demand careers in STEM.

GALE FLETCHER
Dean of Students

Gale Fletcher is best described by one of our longtime Ingenuity middle school teachers:

“Mrs. Fletcher is often the voice of reason that our parents and students need to hear. The perspective she brings to conversations are invaluable. When teachers come to her for advice or support around parent/student issues, she has the gift of seeing the whole forest, not just the trees. She is an amazing resource — both wise and soft-spoken while still getting her point across. I love our Fletcher Fridays; Mrs. Fletcher shows up for afterschool learning programs to sit and teach youngsters how to organize their “stuff,” and then returns a few weeks later to make certain the students have put those organization skills to practice. She’s the best!”
Foundation and Government Support
Abell Foundation
Baltimore City Public Schools
Alvin and Fanny B. Thalheimer Foundation
Baltimore Polytechnic Institute Foundation
Harry and Jeanette Weinberg Foundation, Inc.
Lockhart Vaughan Foundation
Robert W. Deutsch Foundation
The Jacob and Hilda Blaustein Foundation
The Society for Science and the Public
The Thomas Wilson Sanitarium for Children
T. Rowe Price Foundation, Inc.

Corporate Program Sponsors
Johns Hopkins University, Center for Educational Outreach
T. Rowe Price
University of Maryland, Baltimore County (UMBC)

$10,000 +
Gary Pasternack, MD, Ph.D.
Alec and Felicity Ross

$5,000 – $9,999
Torin and Kristine Caverly
Lawrence Brody and Sonye Danoff
Charles and Elizabeth Reichelt
Sarah Woodson and Steven Rokita

$1,000 – $4,999
Paul and Karol Costa
John Dean
Jeffrey Gray, Ph.D.
Peter J. Griffin III
A. Michael Hill
Martin Lee
Melissa Martinez
Kurt and Evynn Overton
Edward Restelli and Catherine Harrison-Restelli
Sarah Szanton and Emma Downing
James E. Edward West
Steven Farber, Ph.D. and Christine Weston, Ph.D.
W. Stephen Wilson
Miriam and Robert Zadek

$500 – $999
Ben Yuhas and Jana Carey
Raveesh Dewan
Christopher Gibson
Dorothee Heisenberg
Elizabeth Hutter
Dennis Jutras
Bonnie Legro
Colleen Magee
Atul and Jayoti Patel
John and Lois Saylor
John Sacci and Nancy Dodson Sacci
Andrew Alper and Angela Venza
Martin Watts

$200 – $499
Adam Allston
Daniela Amzel
Jacqueline and Joseph Bershard
Richard Ash and Margaret Carruthers
John Easterling and Kathy Poole
Harris Eisenstein, Esq.
Andrea Erdas, Ph.D. and Christy Chang, Ph.D.
Robert and Sandra Fink
Douglas Harrison
Rick Santiago and Jean Heller
Fred Froelich and Susan Henley
Lucie Jones
Stephanie Miller
Nancy Murray
Wayne Nelms
Christopher Novashinski
Jeffrey and Elinor Kotzen Spokes
Herbert and Brooke Thomas
Andrew Wolfe and Hie Jung Yoon

Up to $199
Noraida Ankobia
Marie Anthony
Elaine Baruwa
Amy Jo Bastian
Vilma Bethea
Satyanarayan Bhat
Martin and Juliet Bishop
Cameron and Vernise Bolden
Greg Bowden
Anne Brodsky
Jennifer Broderick
Debra Celnik
Mina Cheon
Stephen and Karyn Chisolm
Shannen S. Coleman
Karen Coughlin
Kenyotta Daniels
Leonard and Anna Eckenrode
Lisa Eimer
David Fishkin and Jill Feinberg
Ryan and Abigail Frederick
Kimberly Glover-Stanton
Brendan Cormack and Rachel Green
Rodney and Bridgette Hardrick
Melanie Herrera
Andrea Tovonia Howard
Robert and Michelle Hunt
Brigette and Michael Jacobson
Breauna Johnson
Ciara Johnson
Tonya Johnson
Jesse Polansky and Michele Hong
Brandon Jones
Elizabeth Karcha
Isabelle and Jeremy Kargan
Robert and Marcia Kargan
David LaVorgna
Jennifer Lewis
Andrew Martin and Margie Lindsey
David and Sharon Lucas
Donald Lumpkins
Benjamin and Rebecca Malmin
Robert and Jane Marinelli
Ervin and Stephanie McDaniel
Danielle Miller
Liset S. Morris and Christopher J. Morris, Ph.D.
Charles Njau
Molly Parker
Kathleen Perez
Sarah Polk
Tierra Poole
Lakshmy Prabhakaran
Kyle and Megan Prue
Maxine E. Reid
Tracie Rhodes
Sheryl Robinson
Lamarana Sall
Shanaysha Sauls
Zac and Jackie Secor
Valerie and Gilbert Serrall
Aaron and Jodi Sherber
Cat Smith
Angelique Taylor
Faith Ward

DONOR LIST
### STATEMENT OF FINANCIAL POSITION

**JUNE 30, 2017 AND 2016**

#### ASSETS

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$262,366</td>
<td>$221,971</td>
</tr>
<tr>
<td>Certificate of deposit</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cash restricted</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Grants receivable</td>
<td>$130,000</td>
<td>$217,876</td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>$13,087</td>
<td>$9,986</td>
</tr>
<tr>
<td>Net property and equipment</td>
<td>$41,351</td>
<td>$47,344</td>
</tr>
<tr>
<td><strong>Total Current Assets</strong></td>
<td><strong>$446,804</strong></td>
<td><strong>$497,177</strong></td>
</tr>
</tbody>
</table>

#### LIABILITIES

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deferred revenue</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>$10,248</td>
<td>$2,731</td>
</tr>
<tr>
<td>Accrued Salaries</td>
<td>$13,827</td>
<td>$8,706</td>
</tr>
<tr>
<td><strong>Total Current Liabilities</strong></td>
<td><strong>$24,075</strong></td>
<td><strong>$11,437</strong></td>
</tr>
</tbody>
</table>

#### NET ASSETS

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unrestricted</td>
<td>$262,729</td>
<td>$370,740</td>
</tr>
<tr>
<td>Temporarily restricted</td>
<td>$160,000</td>
<td>$115,000</td>
</tr>
<tr>
<td><strong>Total Net Assets</strong></td>
<td><strong>$422,729</strong></td>
<td><strong>$485,740</strong></td>
</tr>
</tbody>
</table>

**Total Liabilities and Net Assets**

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>$446,804</strong></td>
<td><strong>$497,177</strong></td>
<td></td>
</tr>
</tbody>
</table>

### STATEMENT OF ACTIVITIES

**June 20, 2017 and 2016**

#### Revenues and Other Support

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baltimore City Public School System</td>
<td>$368,000</td>
<td>$368,000</td>
</tr>
<tr>
<td>The Abell Foundation</td>
<td>$425,000</td>
<td>$450,000</td>
</tr>
<tr>
<td>Foundation and corporate grants</td>
<td>$324,000</td>
<td>$301,500</td>
</tr>
<tr>
<td>Other Revenue</td>
<td>$198,866</td>
<td>$171,179</td>
</tr>
<tr>
<td><strong>Total Revenues and Other Support</strong></td>
<td><strong>$1,315,866</strong></td>
<td><strong>$1,290,679</strong></td>
</tr>
</tbody>
</table>

#### Expenses

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program services</td>
<td>$1,120,654</td>
<td>$1,068,577</td>
</tr>
<tr>
<td>Management and general</td>
<td>$216,960</td>
<td>$192,316</td>
</tr>
<tr>
<td>Fundraising</td>
<td>$41,263</td>
<td>$35,035</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td><strong>$1,378,877</strong></td>
<td><strong>$1,295,928</strong></td>
</tr>
</tbody>
</table>

Loss on Disposition of Property

- -

#### Change in Net Assets

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>$(63,011)</strong></td>
<td><strong>$(5,294)</strong></td>
<td></td>
</tr>
</tbody>
</table>

Net Assets at Beginning of Year

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>$485,740</td>
<td>$490,989</td>
<td></td>
</tr>
</tbody>
</table>

**Net Assets at End of Year**

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>$422,729</strong></td>
<td><strong>$485,740</strong></td>
<td></td>
</tr>
</tbody>
</table>
BOARD OF DIRECTORS

Chair
Ben Yuhas, Ph.D.
Principal, Yuhas Consulting Group, LLC

Vice Chair
Steven A. Farber, Ph.D.
Department of Embryology, Carnegie Institution of Science

Treasurer
John Easterling, AIA, LEED AP BD+C
Senior Associate, GWWO, Inc./Architects

Secretary
Bonnie Legro, MAT
Program Officer, The Abell Foundation

Andrea Bowden, Ph.D.
Assistant Principal, Digital Harbor High School

Raveesh Dewan
Sr. Director – Centers of Excellence for Technology, CareFirst BlueCross BlueShield

Harris W. Eisenstein, Esq.
Rosenberg Martin Greenberg, LLP

Christopher P. Gibson
Relationship Manager – U.S. Institutions, Brown Advisory

Peter J. Griffin III
Consultant, Relations Associate – Assistant Vice President, T. Rowe Price

Douglas E. Harrison, MBA
Senior Director, Marketing – Tuition Financing, Inc., TIAA Financial Services

Stephanie Miller, MAT
Ret., Bryn Mawr School

Lara Ohanian
Director, Differentiated Learning, Baltimore City Public Schools

Gary Pasternack, MD, Ph.D.
Chief Executive Officer, Asklepieion Pharmaceuticals, LLC

Dr. James E. West
Professor, Departments of Electrical and Computer Engineering, Mechanical Engineering, Johns Hopkins University

STAFF – ADMINISTRATIVE TEAM

Lisette Morris, M.S.
Executive Director

Sergei Zverev, Ph.D.
Associate Director

Gale Fletcher, MAT
Dean of Students

Shani Ortiz, M.S.
Dean of Engagement

Jocilyn Harris, MSW
Admissions Coordinator

Keyha Royster
Office Manager

Shannon Katona
P/T Computer Lab Supervisor

STAFF – INSTRUCTIONAL TEAM

Mikhail Goldenberg, Ph.D.
Mathematics Department Head

David Nelson, M.S.
High School Math Teacher

Lisa Fridman, M.S.
Dean of Research

Judy Egerton
Middle School Math Teacher

Felicity Ross
Middle School Math Teacher

Alka Sharma
Middle School Math Teacher

Maya Spicinetsky
Middle School Math Teacher