Establishing Biotechnology Industry-School District Partnerships: Request for Proposals 2014

Biotech Partners aims to increase STEM interest among all students via a classroom-based program that offers students from underserved populations (e.g. female, low income, minority) a successful career technical education (CTE) – providing a pathway out of underemployment and poverty. Biotech Partners prepares them for post-secondary education to address the growing demand for knowledgeable and skilled biotech technicians and other science professionals. Academic and lab activities will include national Next Generation Life Science Standards of structures of molecules and organisms, biological evolution, and heredity.

Context for this RFP

Biotech Partners is expanding the two-year high school programming currently offered in two Bay Area high schools, Berkeley High School within Berkeley Unified School District (BUSD) and Oakland Technical High School within Oakland Unified School District (OUSD). Expansion will include four additional high schools in one or more Northern California school districts. In so doing, Biotech Partners will support developing and launching an expansion of the current 11th and 12th grade programming into 9th and 10th grades at all high schools (new and current) to increase underserved students’ interest in science education and strengthen their math skills.

Overview of the Biotech Partners Program

Unlike other STEM academies that primarily target top performing students and only provide paid job training to a select few, Biotech Partners targets high school students from vulnerable communities who face prodigious challenges and very low statistical probabilities of academic and professional success due to poverty, pervasive ethnic and racial disparities in health and educational achievement, and in some cases exposure to chronic violence, i.e., domestic, community and gangs, which truncates their potential to achieve. More than 75% of Biotech Partners’ students are young people of color; 50% of all students are female, and 85% come from income challenged families. Biotech Partners’ Biotech Academy is a best-practice model that reduces this vicious cycle of poverty by constructing a strong platform from which students become engaged in life sciences, develop and build their self-confidence, and are empowered to attain economic self-sufficiency through a direct tailored career path in biotechnology.

Achievements

Biotech Partners, throughout its 21-year history, has acquired a solid list of achievements:

1) 100% of students completing the Academy graduate from high school in the last seven years.
2) 98% of high school Academy graduates pursue post-secondary education, including Biotech Partners’ Bioscience Career Institute, a two-year community college-connected certification program.
3) More than 1,000 students have been placed in paid job-training positions, collectively earning more than $3.2 million.

4) In 2013, a record 42 students were placed in high school internship positions at such institutions as Alameda County Sheriff’s Office Crime Lab, Alameda County Medical Center-Highland Hospital, Bayer HealthCare, Children’s Hospital Oakland Research Institute (CHORI), the Joint BioEnergy Institute, Kaiser Permanente Medical Center Oakland, research labs at U.C. Berkeley, and Xoma (US) LLC.

More program description details are in the Attachment section, including a Strategic Plan document.

<table>
<thead>
<tr>
<th><strong>Our RFP Process and Review</strong></th>
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<tbody>
<tr>
<td>Please find below the proposed timeline.</td>
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<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 30, 2014</td>
<td>Release</td>
</tr>
<tr>
<td>October 13, 2014</td>
<td>Response Due</td>
</tr>
<tr>
<td>November 3, 2014</td>
<td>Initial Review Results, Notification</td>
</tr>
<tr>
<td>November 17, 2014</td>
<td>Selected RFPs Interviews, Q and A completed</td>
</tr>
<tr>
<td>December 5, 2014</td>
<td>Determination, Final Negotiations</td>
</tr>
<tr>
<td>January 2015</td>
<td>Planning for Implementation begins</td>
</tr>
<tr>
<td>Fall 2015</td>
<td>Launch Program</td>
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</tbody>
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An ad hoc Review Committee will be created by Biotech Partners, to include Board and Program Committee members, and expert members from the community. Ultimate decision and contract negotiation acceptance remain the purview of the Biotech Partners governing Board of Directors.

<table>
<thead>
<tr>
<th><strong>Next Steps after Decision</strong></th>
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Currently, no funding requirements require any special bidding, negotiation process. After the selection of the prioritized responses, we envision a structured but open dialogue process to negotiate towards financing, development, programmatic solutions and the consequent transactions to move the project forward to meet the vision and expected outcomes.

Contractual terms and conditions will be negotiated, including but not limited to time periods, contract start and end dates, as well as specific clauses for governing law, performance and default, termination and renewal, protest procedures, proposal preparation costs, confidentiality, intellectual property, subcontracting, advertising of the contract award, compliance with laws and regulations, insurance, and indemnity.
REQUEST FOR PROPOSAL

Directions

Please find following sections to be completed by your organizational entity. Please limit your narrative to less than 10 pages. Resumes of participating personnel and budget documents will be considered as attachments.

RFP Response Sections, Questions to be Answered

1. Describe your goals for partnering with Biotech Partners. Why Biotech Partners? Why now?

2. Describe your proposed school site, site selection process, and students, keeping in mind our focus in serving disadvantaged students.

3. Confirm and describe the demonstration of School Site Administration commitment to this expansion.

4. Confirm and describe the demonstration of District leadership commitment to Biotech Partners and its vision, and share your STEM vision going forward.

5. Describe how local/regional government will possibly be part of your proposed participation, and part of this expansion effort.

6. Outline your partnership concept. Who does what?

7. Describe past experiences and plans going forward relative to establishing biotechnology curriculum and industry partnership. How will we jointly secure the resources necessary to remain at your site and ensure sustainability?

8. Describe your current efforts relative to interacting with the biotech and biosciences sectors. How do you expect this to evolve relative to a partnership with our organization?

9. Are there any District-specific legal, funding considerations that we should be aware of, or consider?

10. What are your top three expectations of Biotech Partners?

11. Summarize up to three past successful partnerships involving a community-based educational access organization.

12. List the key contact, roles and responsibilities of your Leadership Team.
13. Budgetary Information. Create a budget of your vision for operating a Biotech Partners program in your District. Who pays for what? (See Example below. For amounts to be determined (TBD) note as such but assign a column, indicating your understanding of responsible party.)

Starter Example:

<table>
<thead>
<tr>
<th></th>
<th>District</th>
<th>Biotech Partners</th>
<th>Other</th>
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<tbody>
<tr>
<td>Start Up Costs</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Teacher Compensation</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
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<tr>
<td>Lab Supplies</td>
<td>TBD</td>
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<td>TBD</td>
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<tr>
<td>Program Support Staff</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
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<tr>
<td>Internship Salaries</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
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</tbody>
</table>

14. Outline your vision relative to a Timeline. (See Example below.)

Starter Example:

<table>
<thead>
<tr>
<th>Item</th>
<th>Date of Completion</th>
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<tbody>
<tr>
<td>Planning Meetings</td>
<td></td>
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<tr>
<td>MOU Negotiations, Approval</td>
<td></td>
</tr>
<tr>
<td>Funding Secured</td>
<td></td>
</tr>
<tr>
<td>Announcement of Program</td>
<td></td>
</tr>
<tr>
<td>Recruitment of Students</td>
<td></td>
</tr>
<tr>
<td>First year of implementation</td>
<td></td>
</tr>
</tbody>
</table>

Proposal Format for all Submissions:

Provide a hard copy and electronic version in MS Word format via email by September 12, 2014.

Budget Format
To be submitted in an Excel based file

Intellectual property, Hold/Harmless Release is attached.
Submission must include signed and dated release.

Submit Final Hardcopy to
Biotech Partners
P.O. Box 2186
Berkeley, CA 94702

Or if you choose, by courier:
Biotech Partners
800 Dwight Way, B52-2
Berkeley, CA 94710

Submit Final Digital Version to:
lgayden@biotechpartners.org
Mission and History

Biotech Partners (BP) was founded in 1993 by Bayer HealthCare and the City of Berkeley to implement a public-private CTE program in biotechnology for low income Berkeley youth. BP is an independent non-profit corporation with a Board of Directors comprised of professionals in the biotech industry, education and government. The current programming is comprised of two interconnected components that combine academic learning, technical lab training, soft skills development and paid internships in professional settings [see Figure 1]:

1) Biotech Academy (Academy) for 11th and 12th graders at Berkeley High School (BHS) and Oakland Technical High School (OTHS).

2) Bioscience Career Institute (BCI), a rigorous certification program in association with Peralta Community College District to provide qualified Academy graduates with more advanced academic and professional work experience.

BP’s transformational programming today involves more than 60 corporate, foundation, government, education and healthcare partners, all committed to both career technical education (CTE) and higher education that prepares the 21st century workforce for skilled, well-paid positions in biotech (and more broadly, life science) and healthcare careers.

Proposed Activities of Biotech Partners’ High School to College to Careers Expansion

To reach hundreds of prospective biotech technicians and scientists and train them to fill the growing number of technical positions throughout Northern California and beyond, Biotech Partners proposes two activities:

1) Expanding the current two-year high school Biotech Academy programming from two high schools, respectively in Berkeley and Oakland, CA, to four other Northern California regional high schools.

Each regional partnership shall consist of the following:
- High school(s) with a significant enrollment of underserved female, low income and minority students; an overall student population large enough to fill at least three 9th grade Biology for Biotech classes of 25 students each [see description of 9th and 10th grade program expansion below], three 10th grade Chemistry for Biotech classes of 25 students each, one biotech class each in 11th and 12th grades of 25 students each; experienced and flexible science teachers, with some industry experience preferred, who are eager to adopt BP’s biotech curriculum and partner with BP program staff.
- Sufficient industry partners to provide the requisite paid student internships, donate necessary lab equipment and materials and provide space for a local Biotech Partners satellite office.
- Local advisory board of school district and government officials, industry executives and scientists and academics.
- Local community college or community college district that offers a full life science curriculum and dedicated personnel to ensure that BP’s BCI students are enrolled in required classes and receive necessary academic support.

Each participating school Biotech Academy will have specific objectives:
- Full enrollment by the sixth year of the Biotech Academy.
- 80% student attendance.
- 75% of 9th and 10th graders will report increased interest in science.
- 100% of qualified 11th graders desiring a paid summer internship will be placed.
- 85% of summer interns will successfully complete the internship.
- 80% of seniors will report that BP helped them make better life decisions.
- 90% of high school seniors who complete the Academy will graduate.
- 85% of Academy graduates will enroll in Biotech Partners’ BCI or pursue other post-secondary education.

BP will measure the outcomes via ongoing evaluation and assessment. Recently, BP completed an extensive, multi-part program evaluation conducted by an independent evaluator that included the creation of a full program survey, Theory of Change and Logic Model, and matrices to track BP student characteristics, progress, graduation status and educational attainment against a broader, national spectrum. BP also launched a comprehensive student and organizational database on the Salesforce platform. The student module was specifically designed to meet BP’s program design needs and provide a vehicle with which to track and manage student data retrieved by the processes established in the program evaluation.

Student, mentor and parent surveys, as well as records on student progress and evaluations maintained by BP, will provide robust data on the successes and needs of the entire program, as well as at the regional and school level. The new position of Evaluation & Special Projects Manager will be responsible for maintaining and organizing this data. Staff will review progress quarterly, as will the Expansion Advisory Board, the local Advisory Committee and Board of Directors at the end of each school year.

2) Developing and launching an expansion of the current 11th and 12th grade programming into 9th and 10th grades at all high schools (new and current) to increase interest in science and science education with underserved students and prepare them for the 11th and 12th grade biotech curricula.

According to a 2011 U.S. Department of Education report card assessing eighth graders’ science knowledge and abilities, students in California scored below the national average, and overall, California ranked 49 (tied with Louisiana) out of all 50 states. Only Mississippi students had a lower average score. Further, the 2012-2013 STEMConnector/myCollegeOptions report notes that less than 28% of high school freshmen declare interest in a STEM-related field—around 1
million students each year. Of these students over 57% will lose interest in STEM by the time they graduate from high school; high school seniors are about 10% less likely to declare an interest in STEM.

To address this decline in interest, BP seeks to expand its programming into 9th and 10th grades. The new curriculum will include activities and experiments in heredity, the structures and processes of organisms, and biological diversity within the framework of the Next Generation Life Science Standards. The expansion will also increase use of education technologies and biotech-related computer curricula to engage younger students in science and strengthen BP’s Biotech Academy, and meet growing needs for more computer-connected work in the industry. BP will work with school officials, science teachers and educational technology specialists to develop a biotech-related curriculum to create a 9th grade Biology for Biotech class and 10th grade Chemistry for Biotech class for two or three class sections each at each school for students in BP’s target population. Components of the new classes would include the following:

- **Lab Experiments** – These will focus on engaging activities such as making cheese and root beer to allow students to experience science as approachable, fun, interesting and relevant to their everyday lives.

- **Technology Tools** – BP will provide students with online academic tools as well as incorporate technology skills and usage in the classes, as researched and devised by the technology consultant.

- **In-Class Presentations by Science Professionals** – BP will bring scientists and biotech professionals (including program alumni), particularly from similar demographics as the students, to class to discuss their career paths, challenges and rewards of having put in the necessary hard work. This exposure will make science and professional careers more recognizable and achievable to students, particularly those from underserved and underrepresented populations.

- **Biotech Academy Peer Mentoring and Student Presentations** – Academy 11th and 12th graders will discuss their experiences, challenges and successes in the program with the students, encouraging them to join the Academy. Academy students will also lead group bonding and teamwork activities.

- **Field Trips** – BP will take students on field trips to professional science labs where they will have the opportunity to see science in action in real world environments.

- **Introduction to the Professional World** – BP Staff will lead seminars on the basics of the job search process (resume writing, cover letter development, interviewing) and begin introducing students to the basics of professional appearance and comportment in order to prepare them for the expectations they must meet in the Academy and the workplace.

- **Math and Science Tutoring** – In order to help students overcome challenges with math, biology and/or chemistry, BP will provide free one-on-one and small group tutoring so that students can master concepts and proceed through the Academy successfully.

- **Engagement Activities with Parents and Guardians** – As BP has found that family engagement is an element critical to student success in the Biotech Academy, BP will host events for 9th and 10th grade parents and guardians to provide a better understanding of contextualized education, the tremendous possibilities for successful careers in STEM, and the benefits and expectations of the Biotech Academy and BCI.
BP will measure outcomes using both entry and end-of-year surveys, attendance, participation and grades.

This component is expected to improve student outcomes of developing a science identity, acquiring industry-specific biotechnology skills, becoming more knowledgeable about career opportunities, understanding the importance of workforce competencies and increasing self-confidence. In addition, students will understand that increased academic expectations enable them to succeed in not just biotech but also their other classes.

Please see attached documents for further reference. Organizational contact for additional information is listed below.

Caroline Kane, Ph.D. Lynda Gayden
Biotech Partners, Board President Biotech Partners, Executive Director
Professor Emerita, UC Berkeley 510 705 5192
kanecm@berkeley.edu lgayden@biotechpartners.org

For background and RFP response, additional attachments are:

- Fact Sheet, Student Flow
- Strategic Plan
- Sample Curriculum
- Intellectual Property, Hold Harmless Release

Our enclosed Strategic Plan describes our plan to expand Biotech Partners to additional school districts and sites, and we have secured expansion-funding support from the Toyota USA Foundation for two years, working on garnering even more support from other funders.

Though not exhaustive, past and current funders also include:

Alameda County Health Pipeline Partnership Mary A. Crocker Trust
(ACHPP) Miranda Lux Foundation
Amgen Foundation Mitchell Kapor Foundation
Bayer Novartis
Boehringer Ingelheim Morris Stulsaft Foundation
California Endowment City of Oakland
City of Berkeley Sartorius Stedim Biotech
Crescent Porter Hale Taproot Foundation
FHL Bank AHEAD TK Foundation
Genentech Foundation Union Bank
June & Julian Foss Y & H Soda Foundation
2013-2016 STRATEGIC PLAN
THE TIME IS NOW:
SCALING UP TO MEET
NEW OPPORTUNITIES IN STEM
EDUCATION AND EMPLOYMENT
DEAR COLLEAGUES, FUNDERS, SUPPORTERS AND FAMILIES,

On behalf of our Board of Directors, staff and partners, we are pleased to share Biotech Partners’ (BP) 2013-2016 Strategic Plan. This bold and exciting plan identifies future strategies for program refinement, growth, expansion in STEM (science, technology, engineering and math) and the strengthening of our communications to ensure that we are sharing our experiences, achievements and learnings.

As we developed this roadmap for our future we had the advantage of building on twenty years of accomplishments including documented success with creating pathways to education and careers in bioscience for underserved youth from 11th grade to community college. The program includes a customized industry-focused curriculum, paid internship experiences and supportive services.

We are very proud of our achievements, including a 100% high school graduation rate, 100% college matriculation rate, and 100% placement of certificate recipients desiring employment in biotechnology into full-time technical positions.

This Strategic Plan evolved from a process of gathering input from a wide variety of stakeholders, examining our past approaches, and making a firm decision to ramp-up to deliver even higher-quality programming in a radically shifting environment. We are grateful to everyone who took the time to participate in surveys, focus groups and interviews. We were desirous of an inclusive process and your input was invaluable.

While our fundamental mission will remain the same, armed with your feedback, best practice research and facilitated Board and staff discussions, we are firmly committed to geographic and programmatic expansion. Over the next three years, we will refine our curriculum to increase the involvement of STEM professionals in classroom education and to better leverage technology through online components; extend the Bioscience Academy to the 9th and 10th grades; and expand our reach to add another Bay Area county to our service area.

None of this can be accomplished without resources and support from our current and future partners including students, families, teachers, alumni, partners and funders. We are firmly committed to methodically building the infrastructure to support our growth and delivering an efficient response to the urgent call to address the pressing issue of increasing the pool of educated and trained youth to fill the growing number of California-based jobs in the STEM sector.

We sincerely hope we can count on you to help leverage and build the resources and support required to support our expansion plans. The time is now for BP to broaden its impact on underserved youth.

Best regards,

Caroline Kane
Deborah Bellush
Overview of Biotech Partners’ 2013-2016 Strategic Direction

After hiring an independent third party with strategic planning expertise and spearheading a collaborative process including Biotech Partners’ Board, staff, youth, parents, teachers, employers and funders, Biotech Partners is aligned and committed to implementing the following Strategies and supporting Goals in 2013-2016:

**ENHANCE MARKETING & COMMUNICATIONS**
- Increase Media Presence
- Strengthen Internal & External Communications
- Emphasize Program Impact
- Establish Alumni Database & Facilitate Involvement
- Publish a Field-Building Book or White Paper

**REVISE CURRICULUM & TEACHING MODEL**
- Engage Professionals in Classrooms
- Modify Curriculum to Include Technology
- Explore Creation of Fee or Subscription-Based Curriculum

**EXPAND THE NUMBER OF STUDENTS & EMPLOYERS SERVED ANNUALLY**
- Explore New Counties
- Encourage Expansion to 9th & 10th Grades at Existing Schools
- Conduct an RFP Process to Select New Schools

**STRENGTHEN INFRASTRUCTURE TO SUPPORT GROWTH**
- Establish an Advisory Committee
- Expand & Rebrand Beyond Bayer
- Strengthen School MOUs
- Leverage Nonprofit Alliances
- Add 3 Cross-Site Positions

**DIVERSIFY & STABILIZE FUNDING**
- Secure a Planning Grant
- Establish a Reserve Fund
- Apply for Federal Funds
- Define & Promote Sponsorship & Naming Opportunities
- Appeal to Alumni
Table of Contents

Introduction page 4
Methodology page 6
Organizational Health page 8
Marketplace Analysis page 10
2013-2016 Strategies page 13
Appendices page 18
Introduction

In 1993 a bold plan was launched by Bayer HealthCare, a bioscience market leader committed to the communities it serves, and the City of Berkeley, renowned for its leadership in civic engagement. What started as a straightforward property development agreement between two parties with mutual interests to provide employment opportunities for local disadvantaged youth has blossomed into Biotech Partners (BP), an award-winning non-profit with more than 60 corporate, foundation, government, education and health care partners working together in an innovative model for transforming the lives of underserved youth by connecting them to the world of biotechnology. BP now serves approximately 130 students annually in a school-to-career linked learning model that provides specialized science curriculum from 11th grade through community college, paid summer internships and Co-Op jobs (year-long paid job training opportunities for BP’s community college students) and support services to help each student achieve success.

MISSION
To provide underserved youth with personal, academic and professional development experiences that increase participation in higher education and access to fulfilling science careers.

VISION
Youth will be transformed into prepared, confident and successful professionals who contribute to science and their communities.

CORE VALUES
- **PARTNERSHIP:** We collaborate effectively with our youth, schools, educators, employers and volunteers.
- **ACCOUNTABILITY:** We demonstrate responsibility and commitment and expect it of our youth and other partners.
- **INNOVATION:** We are open to change and seek to creatively improve our processes, programs and outcomes.
- **PASSION:** We enthusiastically approach our vital work and encourage and motivate our youth.
- **OPPORTUNITY:** We promote skill development and opportunities for our staff and youth to grow and excel.
- **PROFESSIONALISM:** We exhibit integrity, produce quality work and bring our talents to all that we do.
- **COMMUNITY:** We create a family environment providing tough love and support to ensure our youth succeed.

In its first 20 years Biotech Partners has educated more than 2,000 youth and made more than 1,000 placements into paid training positions with students’ earnings to-date totaling approximately $3.2 million. BP’s unique model and strong impact was recognized in 2011 with the Ashoka/Changemakers national Partnering for Change competition Innovations in Life Sciences Prize for “…an innovation that promotes partnerships between scientists and science educators…”

**THEORY OF CHANGE**
To lead its youth, who are from populations underrepresented in science and who do not have access to STEM mentorship and opportunities, to success through inspiration, academic preparation, individualized support, paid internships and skill building that instills confidence.

The cornerstone programming that BP has created as a comprehensive pipeline of youth development is the **BIOTECH ACADEMY** (the Academy), the high school program in operation at Berkeley High School (BHS) and Oakland Technical High School (OTHS), and the **BIOSCIENCE CAREER INSTITUTE** (BCI), the community college program in operation within the Peralta Community College (PCC) District. The Academy and BCI curriculum and program components are developed and updated through periodic review by teachers, industry representatives and staff to ensure alignment with trends in biotechnology and regional workforce needs. Completion of the program leads to a Certificate of Achievement in Bioscience, leveraged to obtain relevant full-time jobs. We are extremely proud of BP’s outcomes:

- 100% high school graduation
- 56% community college completion (twice the national average for community college certificate programs)
- 100% placement of certificate recipients desiring employment in bioscience in full-time technical positions, far exceeding local, regional and national averages.

BP has recently expanded its supportive services launching innovative initiatives including: **ROPE** (Resources, Opportunities, Preparation & Encouragement), a specialized support program targeting African American male students and their families; **POP** (Parent Outreach Program), providing seminars and information to help parents/guardians encourage and support
the efforts of their children to achieve academic and life success; and CASP (College Access & Support Program), a pilot initiative supporting graduates of the high school and/or community college programs who choose to pursue science degrees at four-year colleges and universities.

BP has exceeded expectations with a talented and committed staff and governance by a 15-member Board of Directors with substantial leadership experience in bioscience, education and administration. The Board receives direct input from student representatives from each partner school. In fact, in 2012, Executive Director Deborah Bellush was named one of the Most Influential Women in Bay Area Business by the San Francisco Business Times. However, BP and its corporate, foundation, government, education and health care partners recognize that THE TIME IS NOW for BP to build upon its “model that works” and scale up to meet the extraordinary opportunity to capitalize on the mounting national and global focus on STEM (Science, Technology, Engineering and Math) education and employment.

STEM is truly the buzz word in Washington and across the nation and with 20 years of demonstrated excellence BP is well-poised to be at the forefront of enhancements to science education and academic and industry partnership. The support for STEM education and career initiatives extends all the way to The White House with President Barack Obama lifting it up in his 2013 State of the Union address “announcing a new challenge to redesign America’s high schools so they better equip graduates for the demands of a high-tech economy.” To reinforce its commitment the Obama administration has committed $3.1 billion to improve STEM education nationwide with a focus on training educators, sparking students’ interest at earlier ages and promoting partnerships between high schools, colleges and employers. BP has the institutional knowledge to be a leader in the evolution of STEM education in California and beyond and THE TIME IS NOW to determine how best to expand its model and influence with the support of its funders and partners. It is in this context and with a sense of urgency that this Strategic Plan begins.
This Strategic Plan has been a long time coming for Biotech Partners. Over the past three years, the organization has been engaged in evaluating its systems and methodology, as well as codifying its processes. Now, with a foundation of strong leadership, a unique and established model, stellar outcomes, and data systems in place, BP is ready to don its planning hat and plot out a measured course for growth. BP is prepared to identify and hold itself accountable to stretch goals. Recognizing the weight of this task for the organization, BP hired an independent third party with strategic planning expertise, Walker and Associates Consulting, to facilitate the collaborative planning process which is summarized below:

The Strategic Planning Committee held a Kick-Off Meeting on November 5, 2012 and the dedicated group consisted of the following key staff and Board members along with the Walker and Associates Consulting team:

**BP’s STRATEGIC PLANNING COMMITTEE**

- Deborah Bellush, J.D., Executive Director
- Meghan Colgan, Program Director (former)
- Rochelle Conner, Operations Manager
- Tina Etcheverry, Ph.D., Board Member
- Caroline Kane, Ph.D., Board President
- Jerry Metzker, Development and Marketing Manager

The Assess Phase included an internal and external organizational assessment as well as an analysis of key trends and other program models. Critical inputs included:

- Board and Staff Surveys
- Core Stakeholder Focus Groups
  - BHS Academy Students
  - OTHS Academy Students
  - Academy Parents
  - Academy Teachers
  - BCI Students
- Alumni, Partner and Funder Interviews
- Marketplace Analysis

**Methodology**

1. **Commit:** Form a Planning Team, Secure Resources & Select a Consultant to manage the process without bias

2. **Assess:** Conduct Organizational Health Research with Board, Staff, Funders & other Key Constituents

3. **Vision:** Hold a facilitated Staff Ideation Session & a Board Retreat to Determine the Course for Growth

4. **Strategize:** Write a 3-5 Year Plan with Goals, Outcomes, Responsible Parties & Resource Development Tactics

5. **Implement:** Execute the Plan, Share the Plan with Funders, & Review & Revise the Plan Annually

Strategic Plan

guided by the needs of our youth and parents, aligned to trends in STEM education and employment and that charts a course for growth requiring organizational investment!
“BP really wants the kids to succeed. My daughter says ‘If I don’t get at least an 80% I have to go over the material again and make sure I understand it before my labs.’ I don’t see those expectations in her other classes.”

BP Biotech Academy Parent Strategic Planning Focus Groups

BIOTECH PARTNERS’ SPHERE OF STAKEHOLDERS

Teachers & Administrators

Funders & Policy Makers

Parents

Board

Students

&

Alumni

Employers

Staff
The Organizational Health Assessment provides a real-time snapshot of the organization from the viewpoint of its key constituents. This part of the process, along with the Marketplace Analysis, is critical because it helps to identify strengths, weaknesses, opportunities and threats (S.W.O.T.) that can be leveraged, improved upon, capitalized on and proactively addressed through strategic and dynamic goals for the future. Once an organization is grounded in where it is now, it becomes much easier to determine where it wants and needs to go in the future.

A few key messages emerged from the Board and staff surveys; stakeholder focus groups; and the alumni, funder and partner interviews:

- BP is well respected and there is high admiration for its programming
- The Academy and BCI have strong outcomes
- Paid, professional, skill-building internships are the major attraction to the program for students
- BP’s personal connection with and support of students and families is valued
- The Academy and BCI Program scale is currently limited
- In turn, BP’s funding is constrained and new sources of support will be needed to foster growth

Overall, BP has created a model that is desired, needed and working. Stakeholders are proud to be associated with BP.

**Board and Staff Surveys**

Both BP’s Board of Directors and staff took a reflective online survey of over 20 quantitative and qualitative questions. Although both parties were very engaged and vocal throughout the process this was an important step to allow each individual to provide one’s personal perspective and ideas and there was 100% participation. Results were overwhelmingly positive and supportive with a vast majority of respondents saying that the organization is “thriving” or “performing well” and expressing high hopes for BP’s future.
With 91% of the Board and 100% of staff saying that they are “very satisfied” or “satisfied” with their experience with BP the survey results also revealed that:

- BP is a healthy organization with an optimistic Board and staff that enjoy being part of the organization and contributing to the transformation of students’ lives
- BP is ready for growth but the organization lacks the necessary funding and plans to get there
- Board development and recruitment is required to take the organization to the next level
- Opportunity exists to strengthen relationships and communication, especially with alumni, employers and even with schools, parents and other nonprofits

### Core Stakeholder Focus Groups

The focus groups with Academy students, parents and teachers and BCI students were particularly illuminating. Each focus group session was well-attended and all groups were very engaged in discussion about BP and its programming. Key overall findings included:

- The opportunity for paid, professional, skill-building internships is the major attraction to the program
- BP’s academic support and tutoring provided beyond the curriculum are extremely beneficial to helping BP youth to become “better students” overall
- The “tough love,” personal support and coaching received is highly valued, especially in the Academy
- The “classroom experience,” including class size and management, varies across sites and teachers and can be important to the students’ perception of the program and success
- More consistent and timely communication about opportunities and events would be appreciated

Key stakeholder-specific opportunities uncovered included:

- **Academy Students** expressed that their curriculum could be better differentiated from classes such as Biology and that labs could be even more challenging
- **Academy Parents** were very positive about BP’s impact on their children and want to know more about what to expect from the program as their child progresses
- **Academy Teachers** could use more support in the classroom and want to be more involved in the breadth, depth and evolution of the program specifically curriculum development, interaction with employers, the internship experience and teacher training and development
- **BCI Students** communicated the complexities of pursuing the Certificate of Achievement in Bioscience as the requirements can hinder their ability to complete an Associate’s Degree within two years or to transfer to a four-year institution on schedule since some BCI courses are not transferrable

### Alumni, Funder & Partner Interviews

A representative group of alumni, funders and partners were selected to participate in one-on-one interviews to solicit in-depth feedback and ideas for improvement and growth. Across the board, these conversations revealed that BP is regarded as an innovative model with need and room to grow. Key stakeholder-specific findings from the one-on-one interviews were as follows:

- **Alumni** credit the program for their professional growth and express interest in wanting to stay connected to BP and mentor those youth coming behind them
- **Funders** are happy with BP’s results which often earns them repeat grants but awards are limited by the relatively small scale of the program
- **Partners** would love to see BP’s programs in every school and want to do more to help but recognize that the costs are high and that the schools and school districts have limited resources

“I want to finish the Certificate so that I have extra leverage in getting a job.” —BP BCI Student

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**Strategic Planning Focus Groups**

“...”
It is important for today’s nonprofits to dedicate time and resources to incorporating business-like practices such as environmental scans and competitive benchmarking that can uncover trends that may impact its course; help the organization assess its value, role and position in the competitive environment; and inspire new ideas. BP competes for students, employers and resources alongside other organizations providing services that meet similar needs. Therefore, BP seeks to understand its surrounding landscape and continuously improve to remain unique and value-added.

The goal of the Marketplace Analysis was two-pronged:
- To identify future trends in biotechnology and STEM education and workforce requirements leveraging resources from reputable industry sources such as BayBio, California Biotechnology Foundation, STEMconnector, Opportunity Equation and the California STEM Learning Network; and
- To analyze BP’s competitive environment by highlighting best practices gleaned from a diverse set of nonprofit benchmark organizations (a cohort of five nonprofits from across the country serving a similar population or with related missions and programs).

Overall, the analysis affirmed the need for BP’s programming but also highlighted ways that it can be adapted to better incorporate students’ interests, more closely align to the market’s requirements and opportunities and utilize best-in-class STEM models and nonprofits with a history of growth. Key findings by topic are outlined below:

**STEM Education**
- The U.S. Department of Education-sponsored “The Nation’s Report Card: Science” publications reported that in 2009, fewer than half of the students at the 4th, 8th and 12th grade levels were proficient in science and no more than 1-2% were advanced.
- In a science assessment of 8th graders conducted in 2011, California performed well below the national average and the U.S. also scored well behind other nations.

### STEM Interest
- STEMconnector and My College Options’ 2012-2013 report on “Where are the STEM Students? What are their Career Interests? Where are the STEM Jobs?” revealed that students’ engineering and technology interests are on the rise while interest in science and mathematics is decreasing.
- The top five STEM careers of interest to students in California are Mechanical Engineering, Biology, Science, General Engineering and Game Design/Developer.

### STEM Jobs Projection

<table>
<thead>
<tr>
<th>Rank</th>
<th>State</th>
<th>2018 STEM Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>California</td>
<td>1,148,000</td>
</tr>
<tr>
<td>2</td>
<td>Texas</td>
<td>758,000</td>
</tr>
<tr>
<td>3</td>
<td>New York</td>
<td>477,000</td>
</tr>
<tr>
<td>4</td>
<td>Florida</td>
<td>411,000</td>
</tr>
<tr>
<td>5</td>
<td>Virginia</td>
<td>404,000</td>
</tr>
</tbody>
</table>

### Average Scale Score for all Students

<table>
<thead>
<tr>
<th>SCALE SCORE</th>
<th>SCIENCE, GRADE 8 SCALE: (0-300)</th>
</tr>
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<tbody>
<tr>
<td>155</td>
<td></td>
</tr>
<tr>
<td>150</td>
<td></td>
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<tr>
<td>145</td>
<td></td>
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<td>135</td>
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<table>
<thead>
<tr>
<th>YEAR</th>
<th>2009</th>
<th>2011</th>
</tr>
</thead>
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<tr>
<td>SCALE SCORE</td>
<td>NATIONAL PUBLIC</td>
<td>CALIFORNIA</td>
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- The 2012-2013 STEMconnector report also projected that 8.65 million STEM jobs will exist in the United States by 2018 and California leads the way with 1,148,000 jobs projected, the highest of any state.
- 47% of jobs will be in Computer and Math Science, 28% in Engineering, 12% in Life and Physical Science (where BP currently focuses), 7% in Social Science and 6% in Architecture.
- The largest STEM occupations are technology-related.
- U.S. Bureau of Labor Statistics’ 2012-13 Occupational Outlook Handbook and online job portal data shows that Certificate and Associate’s Degree jobs exist but are limited in availability, salary and career growth.
- Most entry level biological technician jobs require or prefer a Bachelor’s degree.
Competitive Benchmarking

• Best-in-class STEM and non-STEM classroom-to-career models include mentorship by industry professionals and their participation not only in curriculum development but also in class instruction
• Nonprofits with a history of successful growth have done so only with increased, significant and multiyear support from lead funders and partners including foundation grants, corporate sponsorships, naming opportunities and in-kind donations

The Marketplace Analysis elucidates that STEM is the future and education must improve and evolve so that our children learn the fundamentals of science early on, so their interest in STEM is not only sparked but maintained, and they have easy access to the latest technology and are better prepared to compete for STEM jobs. BP’s programming is clearly aligned to national education and job growth goals. With long-term significant funding BP is certain to grow in reach, impact, influence and outcomes.

The average annual salary is around $40,000, just below the U.S. average across occupations, while most STEM jobs far exceed the U.S. average

STEM Policy

• STEM is truly the buzz word in Washington and across the country
• President Barack Obama lifted STEM up in his 2013 State of the Union address, touting the importance of STEM courses at earlier ages, high schools partnering with colleges and employers and of our high school graduates being prepared for immediate work or educational opportunities via Certificates and community college credits
  ▪ President Obama stated: “Let’s also make sure that a high school diploma puts our kids on a path to a good job. Right now, countries like Germany focus on graduating their high school students with the equivalent of a technical degree from one of our community colleges, so that they’re ready for a job. At schools like P-Tech in Brooklyn, a collaboration between New York Public Schools, the City University of New York, and IBM, students will graduate with a high school diploma and an associate’s degree in computers or engineering.”
• The Obama administration also committed $3.1 billion to improve STEM education nationwide with a focus on training educators, sparking students’ interest at earlier ages and promoting partnerships between high schools, colleges and employers
• Several STEM bills and initiatives are brewing across the nation
  ▪ On February 26, 2013 the House of Representatives passed a resolution creating a national STEM competition for students
  ▪ Massachusetts House Speaker Robert A. DeLeo is proposing the creation of a new STEM Starter Academy at Bay State Community Colleges to help put students on the path to job readiness

“I didn’t expect BP’s staff to pay such attention to detail. Their commitment is amazing. The connection that my son made with his mentor was also pleasantly surprising.”

BP Biotech Academy Parent Strategic Planning Focus Groups
The following SWOT analysis helps to synthesize the implications of the key findings from the Organizational Health Assessment and the Marketplace Analysis:

**STRENGTHS**
- Innovative school-to-career linked learning model
- Attractive & enriching paid internships
- Partnerships with corporations, foundations, government, education & health care
- 20 year history
- Stellar outcomes

**WEAKNESSES**
- Small annual reach
- Slow growth constrained by tight resources
- Low alumni engagement
- Limited geographic footprint

**OPPORTUNITIES**
- Enhance curriculum to meet students’ interests & employers’ needs
- Reach students earlier in their education
- Expand program footprint beyond Berkeley High School, Oakland Technical High School & Peralta Community College District
- Increase brand awareness, improve marketing & develop new & stronger partnerships

**THREATS**
- Limited &/or diminishing funding
- Other innovative models may arise & gain prominence in the Bay Area, state & country

The Assess Phase findings and implications became the inspiration and spring board for the five overarching Strategies, and their supporting Goals and Outcomes, that will lead BP fearlessly into a period of refinement and growth.

“The job experience helps reinforce what we’re learning and alleviates financial stress.”

“BP makes sure my students are on top of their grades and wherever there is a problem, particularly in math and science, they support them through tutoring and encouragement.”

BP Biotech Academy Teacher
Strategic Planning Focus Groups

BP BCI Student
Strategic Planning Focus Groups
STRATEGY #1: DIVERSIFY & STABILIZE FUNDING

Many nonprofits face cash flow struggles as a result of a failure to diversify their funding base to include more flexible, longer-term or reliable sources of funding and to establish adequate reserves to mitigate against delayed grant payments or the unexpected loss of a major source of income. BP is no exception and over the next three years will focus on strategies to increase income from government grants and individual donors, which contributed 27% and 5% of total income respectively in 2012, and establish a minimum reserve equal to six months’ operating expenses.

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<td>Establish a reserve fund equal to six months’ operating expenses.</td>
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<td>4th Quarter, 2014</td>
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<td>Research &amp; apply for grants from federal agencies promoting STEM education and careers.</td>
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**STRATEGY #2: STRENGTHEN INFRASTRUCTURE TO SUPPORT GROWTH**

Failure to invest in a robust infrastructure can jeopardize an organization’s ability to fulfill its mission. Yet, many nonprofits routinely put off investments in technology enhancement, staff development and facility maintenance/improvement in an effort to keep indirect costs to a minimum and spend most of the money they raise on direct services. BP is in the enviable position of deriving the bulk of its indirect support from Bayer HealthCare in the form of subsidized rent, utilities, and office equipment. However, a small centralized staff develops, delivers, supports and evaluates programs operating at Berkeley High School, Oakland Technical High School and within the Peralta Community College District. As BP contemplates expansion to Contra Costa and San Mateo Counties and beyond, it must consider options for strengthening its infrastructure to ensure that the quality of services is not diminished.

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<td>BP's brand is further differentiated as an independent identity positioned to attract additional funders and partners.</td>
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<td>Strengthen Memorandums of Understanding to increase support and commitment to the Biotech Partners career technical education (CTE) linked learning model.</td>
<td>Strengthened school-based support and communications.</td>
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<td>Leverage strategic alliances with other youth oriented non-profits (YMCA, Community College Districts, etc.).</td>
<td>Additional management and operations that free BP's staff to develop opportunities to expand to new school districts.</td>
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<td>Add three new positions to work cross-site: Program Coordinator, Evaluation &amp; Special Projects Manager, and a Development &amp; Marketing Associate.</td>
<td>Expanded staff will be able to support growth.</td>
<td>1st Quarter, 2015</td>
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STRATEGY #3: EXPAND THE NUMBER OF STUDENTS & EMPLOYERS SERVED ANNUALLY

In response to the increased demand for a skilled labor force to fill STEM jobs in California, over the next three years, BP will increase the number of students and employers served annually. Strategies include: extending BP’s services to students in the 9th and 10th grades at BHS and OTHS; adding new high schools and a community college in Contra Costa County and/or San Mateo County; developing online curriculum that can supplement and/or live beyond BP school sites; and offering BP classes to community college students who did not complete BP coursework in high school. BP will also ramp up its outreach to industry to create additional internships in Alameda, Contra Costa and San Mateo Counties as the internship experience is critical to grabbing students’ attention, solidifying classroom learning and developing students’ skills.

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<td>The case for outreach and expansion to areas with high industry presence and schools with the interest and capacity to partner with BP is made. Research findings are acted upon leading to measured growth.</td>
<td>3rd Quarter, 2014</td>
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<td>Encourage leaders at existing high schools to expand BP’s programs to the 9th and 10th grades.</td>
<td>Students are exposed to STEM education and career options at a younger age increasing demand for BP’s program.</td>
<td>3rd Quarter, 2015</td>
</tr>
<tr>
<td>Issue an RFP to selected schools in Oakland Unified School District, Richmond Unified School District, San Francisco Unified School District and Contra Costa College; develop the RFP evaluation protocol; and complete the selection process.</td>
<td>BP programs are established at 1-2 new high schools and one community college.</td>
<td>3rd Quarter, 2015</td>
</tr>
</tbody>
</table>

STRATEGY #4: REVISE CURRICULUM & TEACHING MODEL

To better prepare BP students for the rising number of technology-related STEM occupations, BP must increase the involvement of STEM professionals in the design and teaching of the BP curriculum. BP must also employ cutting edge strategies to make the information more accessible and interesting to a greater number of students.

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<tbody>
<tr>
<td>Engage more STEM professionals in classroom instruction.</td>
<td>Enhanced classroom learning experience promotes higher levels of industry engagement in BP programs.</td>
<td>1st Quarter, 2014</td>
</tr>
<tr>
<td>Modify the BP Curriculum to include technology components.</td>
<td>BP Curriculum is refined to meet current and future industry trends.</td>
<td>3rd Quarter, 2014</td>
</tr>
<tr>
<td>Conduct research and develop fee or subscription-based curriculum and training modules.</td>
<td>Curriculum and training modules are developed and integrated in BP classroom training and/or used as supplemental training options.</td>
<td>1st Quarter, 2016</td>
</tr>
</tbody>
</table>
**Strategy #5: Enhance Marketing & Communications**

For some, BP is still a well-kept secret. Many California-based school districts are struggling with how best to incorporate STEM education in their curriculum. This creates an opportunity for BP to enhance its communication with all stakeholders and market its educational and assessment tools.

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</thead>
<tbody>
<tr>
<td>Increase BP's print, TV and Social Media Presence.</td>
<td>A consistent and established media identity exists for BP.</td>
<td>2nd Quarter, 2014</td>
</tr>
<tr>
<td>Strengthen internal and external communications with all stakeholders.</td>
<td>Regular channels for communication with parents, students, alumni, policymakers and industry leaders are established and/or enhanced.</td>
<td>4th Quarter, 2014</td>
</tr>
<tr>
<td>Clearly, consistently and innovatively communicate program impact.</td>
<td>The evaluation protocols devised by See Change are implemented and outcomes are consistently prominent in communications.</td>
<td>3rd Quarter, 2014</td>
</tr>
<tr>
<td>Establish an Alumni Database leveraging social media and facilitating networking events.</td>
<td>BP Alumni remain engaged in all BP programs.</td>
<td>2nd Quarter, 2014</td>
</tr>
<tr>
<td>Publish a book or white paper on effective school-to-career partnerships in STEM.</td>
<td>BP is further established as a leader in the field and documents its organizational learnings.</td>
<td>4th Quarter, 2015</td>
</tr>
</tbody>
</table>
BP is at the epicenter of STEM job growth in the Bay Area and has the established public-private model to be a leader in the field. BP’s paid internship serves as the carrot to draw students in and their interest in science grows as they experience the hands-on curriculum and other enrichment activities. Why shouldn’t BP be the next organization that President Obama cites in his 2014 State of the Union Address as a national example of excellence and innovation? With expanded support from existing and new partners and funders, BP can and will strengthen its infrastructure; revise its curriculum and teaching model; enhance its marketing and communications; expand the number of students and employers it serves; and diversify and stabilize its funding. BP is the right organization at the right place at the right time for growth and the 2013-2016 outlook is bright!

THE TIME IS NOW!

“We’ll reward schools that develop new partnerships with colleges and employers, and create classes that focus on science, technology, engineering, and math – the skills today’s employers are looking for to fill jobs right now and in the future.”

President Barack Obama
2013 State of the Union Address
February 12, 2013
A. Biotech Partners
Board, Staff & Strategic Planning Committee

B. Biotech Partners
2013-2016 Strategies, Goals & Responsible Parties

C. Biotech Partners
Fact Sheet

D. Biotech Partners
Theory of Change
A. Biotech Partners Board, Staff & Strategic Planning Committee

Special thanks to everyone who took time out of their busy schedules to assist in the development of this Strategic Plan, including BP’s Board, Staff, Teachers, Parents, Students, Funders and Partner Agencies.

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**Jerry Metzker**  
Development and Marketing Manager

**Marithess Rico**  
Biotech Academy Program Manager

**Rylan Rosario**  
Program Coordinator

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President

**Jeannine Walker**  
Vice President, Marketing & Communications

**Duane Poe**  
Senior Associate

**Jim Bracken**  
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<td>1st Quarter, 2014</td>
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<td>A cushion is built to mitigate against a future cash flow bind.</td>
<td>Board Development and Finance Committees, Executive Director, &amp; Development and Marketing Manager</td>
<td>4th Quarter, 2014</td>
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<td>Research &amp; apply for grants from federal agencies promoting STEM education and careers.</td>
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<td>Strengthened school-based support and communications.</td>
<td>Executive Director &amp; Biotech Academy Program Manager</td>
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<td>Leverage strategic alliances with other youth oriented non-profits (YMCA, Community College Districts, etc.).</td>
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<td>Encourage leaders at existing high schools to expand BP’s programs to the 9th and 10th grades.</td>
<td>Students are exposed to STEM education and career options at a younger age increasing demand for BP’s program.</td>
<td>Board Program Committee, Deputy Director, &amp; Program Director</td>
<td>3rd Quarter, 2015</td>
</tr>
<tr>
<td>Issue an RFP to selected schools in Oakland Unified School District, Richmond Unified School District, San Francisco Unified School District and Contra Costa College; develop the RFP evaluation protocol; and complete the selection process.</td>
<td>BP programs are established at 1-2 new high schools and one community college.</td>
<td>Board Program Committee, Deputy Director, &amp; Ad-hoc Industry Partners</td>
<td>3rd Quarter, 2015</td>
</tr>
</tbody>
</table>

**STRATEGY #4: REVISE CURRICULUM & TEACHING MODEL**

To better prepare BP students for the rising number of technology-related STEM occupations, BP must increase the involvement of STEM professionals in the design and teaching of the BP curriculum. BP must also employ cutting edge strategies to make the information more accessible and interesting to a greater number of students.

<table>
<thead>
<tr>
<th>Goals</th>
<th>Outcomes</th>
<th>Responsible Parties</th>
<th>Completed by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engage more STEM professionals in classroom instruction.</td>
<td>Enhanced classroom learning experience promotes higher levels of industry engagement in BP programs.</td>
<td>Board Program Committee, Biotech Academy Program Manager &amp; Ad-hoc Industry Experts</td>
<td>1st Quarter, 2014</td>
</tr>
<tr>
<td>Modify the BP Curriculum to include technology components.</td>
<td>BP Curriculum is refined to meet current and future industry trends.</td>
<td>Board Program Committee &amp; Ad-hoc Industry Experts</td>
<td>3rd Quarter, 2014</td>
</tr>
<tr>
<td>Conduct research and develop fee or subscription-based curriculum and training modules.</td>
<td>Curriculum and training modules are developed and integrated in BP classroom training and/or used as supplemental training options.</td>
<td>Board Program Committee, Deputy Director, Program Director &amp; Consultant</td>
<td>1st Quarter, 2016</td>
</tr>
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For some, BP is still a well-kept secret. Many California-based school districts are struggling with how best to incorporate STEM education in their curriculum. This creates an opportunity for BP to enhance its communication with all stakeholders and market its educational and assessment tools.

<table>
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<tbody>
<tr>
<td><strong>Increase BP’s print, TV and Social Media Presence.</strong></td>
<td>A consistent and established media identity exists for BP.</td>
<td>Development and Marketing Manager &amp; Development Committee</td>
<td>2nd Quarter, 2014</td>
</tr>
<tr>
<td><strong>Strengthen internal and external communications with all stakeholders.</strong></td>
<td>Regular channels for communication with parents, students, alumni, policymakers and industry leaders are established and/or enhanced.</td>
<td>Executive Director, Development and Marketing Manager &amp; Development Committee</td>
<td>4th Quarter, 2014</td>
</tr>
<tr>
<td><strong>Clearly, consistently and innovatively communicate program impact.</strong></td>
<td>The evaluation protocols devised by See Change are implemented and outcomes are consistently prominent in communications.</td>
<td>Executive Director, Development and Marketing Manager &amp; Program Committee</td>
<td>3rd Quarter, 2014</td>
</tr>
<tr>
<td><strong>Establish an Alumni Database leveraging social media and facilitating networking events.</strong></td>
<td>BP Alumni remain engaged in all BP programs.</td>
<td>Development and Marketing Manager &amp; Development Committee</td>
<td>2nd Quarter, 2014</td>
</tr>
<tr>
<td><strong>Publish a book or white paper on effective school-to-career partnerships in STEM.</strong></td>
<td>BP is further established as a leader in the field and documents its organizational learnings.</td>
<td>Executive Director &amp; Consultants</td>
<td>4th Quarter, 2015</td>
</tr>
</tbody>
</table>
FACT SHEET

Our Mission
To provide underserved youth with personal, academic and professional development experiences that increase participation in higher education and access to fulfilling science careers.

History
- An independent non-profit organization since 1993
- Originally established as part of a property development agreement between Bayer HealthCare and the City of Berkeley
- Award-winning organization that has been featured in *The New York Times*, *The San Francisco Chronicle* and on *NBC Nightly News*; named 2009 Biotechnology Educator by BayBio, the 500-company member organization serving Northern California’s life science industry; recipient of the Innovations in Life Sciences Prize in the Ashoka/Changemakers national Partnering for Change Competition
- Nationally recognized school-to-career and linked-learning model
- Engaged today with more than 60 corporate, foundation, government, academic and health care partners

Curriculum & Program Components
- A specialized science and technology curriculum from 11th grade through community college
- Paid summer internships for Biotech Academy high school students (~$1,400 in earnings)
- Paid co-op jobs for Bioscience Career Institute community college participants (~$10,000/year in earnings)
- Community college component graduates receive a Certificate of Achievement in Bioscience
- No-fee support services to help each student achieve success (scholarships, tutoring, clothing and transportation stipends, personal and career counseling, etc.); job placement and continuing support for graduates
- Periodic review by industry representatives, instructors and staff guides curriculum and program development to ensure that the training is aligned with trends in bioscience and regional workforce development

Academic Partners
- Berkeley Unified School District; Berkeley High School (since 1992)
- Oakland Unified School District (since 1996); Oakland Technical High School (since 2008)
- Peralta Community College District (since 1995)

Success Rates
- Over 2,000 students educated; more than 1,000 internship and co-op training position placements resulting in student earnings of approximately $3,200,000 to-date
- 100% high school graduation rate
- 100% of BP high school graduates pursue post secondary education, as opposed to ~51% of California public high school graduates
- More than 56% completion rate for community college component (more than twice the national average for completion of community college certificate programs)
- 100% placement of certificate recipients in full-time technical positions

Organizational Management & Oversight
- Managed by a five-person staff that provides support to 120-130 students annually
- Governed by a 15-member board of directors with leadership experience in bioscience, secondary and post-secondary education, government and administration, with student representatives from each participating school
Biotech Academy—Junior Year

- Biotech classes 1 & 2
- Preparing for a career in science
- Developing lab skills
- Job readiness: resume writing, interviewing skills
- Free support services: tutoring, career counseling
- Improved GPA
- STEM Career Awareness Day

8-Week Paid Summer Internship ($1,400)

- Train at a biotech, science or healthcare institution
- Seminars: Time Management, Goal Setting, Financial Management, Dress for Success
- Guest Speaker presentations
- Poster Exhibition & Celebration

Biotech Academy—Senior Year

- Biotech classes 3 & 4
- More advanced biotech studies
- Student Board member opportunities, guest speakers, study groups, tutoring
- College application & prep support services
- Graduation Ceremony

Bioscience Career Institute
Community College Program

- Peralta Community College District
- Paid job training-$10,000/year
- Scholarships & Stipends
- Free tutoring support
- Job preparedness & life skills seminars
- Certificate of Achievement
- Job placement assistance

4-year college or university

- "BP gave me a leg up by getting me the internship at Bayer. I think that's one of the major reasons why I got accepted in the Biological Sciences program at UC Davis."
- Tinzen Paldron
  Biotech Academy Graduate

Entry-level technical positions

- Employment $35-45k/year
- Profit sharing / 401K
- Medical & dental benefits

Continued education
Transfer to 4-year college or university

Community College
2 years Complete pre-requisites

Transfer to 4-year college or university

Company-paid tuition
D. Biotech Partners Theory of Change

**How Biotech Partners Transforms Lives**

**Recruit Youth**
- Inspires youth
  - From groups typically underrepresented in the field of science and technology
  - From public high schools near a science employment hub
  - Who lack access to STEM mentorship and opportunities

**Academic Preparation**
- Provides academic preparation and individualized support
  - Academic and technical training
  - Personalized problem solving and Psychosocial counseling
  - Tutoring
  - Financial support

**Paid Internships**
- Places youth in paid internship
  - Mentoring
  - Soft skills
  - Professional standards
  - Positions requiring responsibility and independence
  - Engaged in current technology

**Instills confidence**
- Sense of belonging
- Increased self-esteem
- Shift to growth mindset
- Academic and intellectual self-efficacy
- Professional Identity

**Generates opportunity**
- High school graduation
- Community College Bioscience Certificate
- Marketable skills for employment
- Post-secondary degree

**Success**
- Engaged in current technology
- Instills confidence
- Sense of belonging
- Increased self-esteem
- Shift to growth mindset
- Academic and intellectual self-efficacy
- Professional Identity

**How Biotech Partners Transforms Lives**

- Biotech Academy—Junior Year
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  - Developing lab skills
  - Job readiness—resume writing, interviewing skills
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