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Keystone Life Sciences Collaborative

Quarterly Meeting
June 5, 2024

The logo features a stylized arch of seven white diamonds above the text 'Keystone LifeSci' in a white sans-serif font. Below this, the word 'COLLABORATIVE' is written in a smaller, white, all-caps sans-serif font, enclosed within a white rectangular box.
Keystone LifeSci
COLLABORATIVE



Grow the Talent Pipeline by Promoting Life Science Careers

Business Champions

Sharon Willis, Co-founder & VP of Sales and Customer Relations, Integral Molecular

Cheryl Custard, Director, Global Head GMP Training & Data Integrity, Adaptimmune

Tom Burke, President & CEO, AOIC LLC

Jamie Schmid, Head of Talent Acquisition, Spark Therapeutics

Laurie Thibodeau, Head of Community Relations, Spark Therapeutics

Brian Stocker, Vice President, Human Resources, Commercial, Corporate & HR Process Excellence, West Pharmaceutical Services

Focus – What is Our Priority?

- Increasing the number of **young people** (middle school, high school and post-secondary) **excited about and actively pursuing careers in the life sciences industry.**
- Creating more **opportunities for young people to gain hands-on, applied experience in the industry** and chart career paths into high-demand fields.

Actions – What are Early Wins?

- Develop an **industry-facing central resource that “unites all the opportunities to engage”**: make it easy for industry partners to understand the volunteer opportunities across programs and for programs to efficiently connect with more companies.
- Explore **partnership with eCLOSE Institute**: video spotlights, annual symposium, student work on company projects.
- **FAQ for companies** engaging with school district (developed by public partners).



Build Talent Development and Acquisition Infrastructure

Business Champions

Greg Russotti, Chief Technology Officer, Century Therapeutics

Lee Kandt, Vice President of Business Development, Lampire

Audrey Murphy, Vice President, Human Resources, Harmony Biosciences

Tom Burke, President & CEO, AOIC LLC

Mark Rohlfig, Vice President, Operations, Almac Clinical Solutions

Greg Krug, President, Lampire

Jamie Crawford, Vice President, Commercial Manufacturing, Iovance Biotherapeutics

Brian Stocker, Vice President, Human Resources, Commercial, Corporate & HR Process Excellence, West Pharmaceutical Services

Focus – What is Our Priority?

- Reimagining partnerships with education and training providers, **creating more streamlined partnerships that allow companies to shape programming at multiple education and training institutions.**
- Structuring and supporting **pathways for non-degree talent**, including creating targeted solutions to address specific skill gaps.
- Creating **shared talent acquisition programs**, like career fairs and job posting board, to communicate jobs.

Actions – What are Early Wins?

- Work as a collaborative with universities on professional-track talent acquisition. **Create a shared life sciences job board with collaborative company postings** and get it to the right people/ departments in local universities.
- **Scale existing programs for non-degree skilled workforce** to increase breadth of what they provide or the companies they serve.
- **Possible:** Create a career advancement program for full-time employees to obtain degrees. (Need more champions to commit.)

Solution #1: Shared Life Sciences Job Board

- Develop **central online location to post life sciences job openings** across the region. Power of all our companies together to get current job postings to right students at universities in the region.
- **Decide scope of positions included in shared job board. How broad?**
 - Target early career job seekers?
 - Degree-level: Bachelor, Masters, PhD, Medical, Fellowship?
 - Occupations to include: target science and tech degrees or broader focus that includes HR, finance, etc?

Shared Life Sciences Job Board

- Start outreach to universities. Better understand how universities distribute job posting info – through career office vs. departments. What is your career development system like? Do most use Handshake to connect students to jobs?
- Which universities to reach out to and who are the right partners/contacts at each university?

Initial List of Universities for Outreach

- UPenn
- Drexel
- Temple
- Villanova
- St Joseph's
- Thomas Jefferson
- DeSales
- University of Delaware
- Rutgers
- LaSalle
- TCNJ

Solution #2: Boosting Skills-Based Workforce

- Developing a **non-degree skilled workforce gives us competitive edge** as a region.
- Goals:
 - Identify the non-degree occupations that are in high demand across collaborative companies, identify common skills standards (what are the basics we need in the life science industry), work with public partners to improve/create programs.
 - Develop **shared understanding of continuing education pathways** and approach (and possibly develop a joint approach).

What non-degree, skilled positions are high-demand, hard to fill?

- Manufacturing and lab technicians
- Analytical techs (QA, QC) – microbiological, life sciences, small molecule
- Trades – welding, electricians, equipment, HVAC techs
- IT

Solution #2 Next Steps

- Action team maps industry needs, role-specific competencies, and continuing education pathways for priority occupations. (For example: defining the skills that *must* be included in a program curriculum and specific skills that *may* be included.)
- Action team works with training partners to match needed skills to programs that meet these common standards.



Policy Change

Business Champions

Scott Shandler, Founder & CEO, Longevity Biotech

Anne Brooks, Senior Vice President, US Commercial, Iovance Biotherapeutics

Dave Radspinner, CEO, Vinta Bio

Steve Sandor, Vice President, Paratek Pharmaceuticals

Matt Meehan, State Government Relations, Pfizer

Lake Paul, Founder, BioAnalysis

Focus – What is Our Priority?

- Action team discussed four policy areas – access to capital, infrastructure, transportation, and patient access. **Decided to focus on access to capital.**
- Improving **access to capital would have most significant impact on region's competitiveness.**



Market the Region

Business Champions

Fred Vogt, Interim CEO and General Counsel, Iovance Biotherapeutics, Inc.

Dave Radspinner, CEO, Vinta Bio

Focus – What is Our Priority?

- Shaping strategy for **promoting strengths of the region as a life sciences hub**, spreading the word that Philadelphia is a biotech hub (in collaboration with the Greater Philadelphia Chamber and other key partners).
- **Connecting the existing work to support life sciences** that is done by organizations that aren't always working together or with businesses.



Business to Business Connections

Business Champions

Benjamin Doranz, CEO, Integral Molecular

Jing Li, President (USA), Pharmablock

Melina Bles, Site Director, Biolabs

Focus – What is Our Priority?

- Create **regular opportunities for companies to share best practices on specific topics** (e.g. build effective hybrid workplaces, develop leadership, hiring practices, employee training and development)
- Cultivate connections across companies and **build the life sciences industry by creating a go-to forum for life sciences leaders** to meet and collaborate
- Create a **single go-to digital resource** that links to the Philadelphia-area ecosystem

Guiding Principles:

- Don't reproduce what is already out there, but add to it and bring it together
- Provide resources for all stages: startups, relocations, mature companies
- Keep the resource peer-led, neutral, and unbiased, welcome to all
- Keep the resource easy to manage current with low effort (e.g. quarterly updates)
- Create a simple way for anyone to submit information for review and inclusion

Manifestation of Goals

1. Professional Peer Group Forums

- Connect to existing professional forums and create new ones

2. Ecosystem Support Organizations List

- Startup support (incubators, accelerators, etc.)
- Ecosystem groups (Life Science Cares, BioSP, etc.)

3. Professional Service Provider Recommendations

- Law firms, accounting firms, insurance providers, etc. (posted only by clients)

4. Philadelphia-area Core Facilities and Scientific Service Providers

- Core facilities, biotech contractors, vendors, CROs, etc.

5. Centralized Education and Training Programs List

- Resources for cost-effective training in safety, marketing, management, hiring, HR, etc.

6. Recurring Events Calendar

- Larger recurring events + links to existing calendars

7. List of Relevant Incentive Programs

- Links to info about KIZ/KOZ, R&D tax credits, SITES grant program, etc.

Professional Peer Group Forums

| Forum | Focus | Contact* |
|----------------------------|--|--|
| HR Forum | Human Resources professionals informal discussion group, meets monthly | Anu Thomas (athomas@integralmolecular.com) |
| Finance Forum | Finance and accounting professionals informal discussion group, meets monthly | ? |
| Marketing Forum | Marketing professionals informal discussion group | to be started |
| Business Development Forum | Business Development professionals informal discussion group | to be started |
| LabOps Unite | Lab management group, national but there's a Philly chapter now. Not open to service providers | https://labops.community/ (Web forum + in-person meetings) |
| Biotech email listserve | [add details] | Matt |

* Contact information would be available only through a form

Professional Service Providers

| Organization | Service | Representative Clients* |
|-----------------|----------------------|-------------------------|
| Morgan-Lewis | Legal Services | Integral Molecular |
| Goodwin | Legal Services | Integral Molecular |
| Duane-Morris | Legal Services | Integral Molecular |
| Troutman-Pepper | Legal Services | Integral Molecular |
| Cozen-O'Connor | Legal Services | Integral Molecular |
| Armanino | Accounting | Integral Molecular |
| Eisner-Amper | Accounting | Integral Molecular |
| Centri | Financial Consulting | Integral Molecular |
| Risk Strategies | Insurance Brokers | Integral Molecular |

* This list would be populated by clients willing to disclose who they work with, available only to member organizations

Philadelphia-area Core Facilities & Scientific Services

| Provider | Services provided* |
|-----------------------------------|---|
| Integral Molecular | MAB discovery and development, specificity/safety testing, virology, protein engineering |
| Cell Surface Bio | Catalog of extensively validated recombinant MAbs with unparalleled specificity |
| Rockland | Custom services, reagents, and antibodies |
| Lampire | Animal immunizations |
| Cocalico | Animal immunizations |
| Pocono Rabbit Farm | Animal immunizations |
| Charles River CRDL | Animal facility |
| Jackson Immunologics | Secondary antibodies |
| Wistar Institute Shared Resources | Animal facility, imaging core, bioinformatics facility, biomedical research support facility, flow cytometry core, genomics core, histotechnology facility, humanized model facility, molecular screening & protein expression core, proteomics and metabolics core |

* Organizations can provide/edit their own 1 line description

Recurring Events

| Title | Provider | Time-frame* |
|-------------------------------------|--|---------------------|
| BioBreak | Biobreak.org | Quarterly |
| Venture Café | Science Center + CIC | Every Thursday 4:00 |
| BioLabs Investor Day | BioLabs (& partners) | Annually in spring |
| Life Science Tech Transfer Showcase | BioLabs & BioStrategy Partners | Annually in fall |
| Biotech Jobs Fair | BioLabs, BioSP, BioBuzz | Annually |
| Annual Dinner & Showcase | Life Science PA | Annually in winter |
| CIC Vendor Showcase | CIC | Annually in summer |
| Annual LSPA Tailgate | Life Science PA | Annually in summer |
| Annual Symposium | Builds Bio+ | Annually in summer |
| Philly Biotech Forum | Wendy Nelson organizing, hosted at BioLabs | Annually in fall |
| Union League Bio Club | Union League | Annually in spring |

* Goal is to track larger events that do not change frequently, and link to others' calendars for more details

Incubators and Organizations in the Biotech Community

| Resource | Category | Description* | Website/Contact Info |
|---------------------------------|--------------------------------|---|--|
| Life Sciences PA | Industry Connections | PA biotech community organizer, events, education, networking | lifesciencespa.org |
| Chamber of Commerce | Industry Connections | Life science advocacy, focus on attracting companies to Philadelphia | chamberphl.com/advocacy-initiatives/life-sciences |
| BioLabs Philadelphia | Real Estate | Biotech incubator supporting startups, hosts events, at Curtis Center. Part of an international network. | biolabs.io/philly |
| Curtis Center | Real Estate | Urban research park, hosts events, BioLabs | keystone.us/property/the-curtis |
| University City Science Center | Real Estate | Urban research park, hosts events, CIC, Venture Café | sciencecenter.org |
| Navy Yard | Real Estate | Urban research park for larger companies | navyyard.org |
| Pennovation | Real Estate | Incubator supporting startups (biotech+other), at Gray's Ferry | pennovation.upenn.edu |
| CIC | Real Estate | Biotech incubator supporting startups, at Science Center | cic.com/philadelphia/ |
| B+Labs | Real Estate | Biotech incubator supporting startups, at Cira Center | brandywinerealty.com/blabs |
| Ben Franklin | Funding | State-supported funding source | benfranklin.org |
| BioAdvance | Funding | State-supported funding source | bioadvance.com |
| BioStrategy Partners | Industry Connections | Coalition of tech transfer offices; hosts regular events, web recordings of panels, etc. | biostrategypartners.org |
| Philly Startup Leaders | Industry Connections | New Biotech arm of a long-lived group | phillystartupleaders.org |
| Nucleate | Industry Connections | Startup group for student entrepreneurs | nucleate.xyz/locations/philadelphia-pa/ |
| Life Science Cares | Industry Connections | Nonprofit helping life science companies to connect with volunteer opportunities | lifesciencecares.org/philly/ |
| BioBuzz Calendar | News and Events | Events calendar (free to add events) | biobuzz.io/events/ |
| BioCalendar | News and Events | Philadelphia-area events calendar associated with Big4Bio (pay-to-play to add events) | big4bio.com/philadelphia-events/ |
| Big4Bio | News and Events | Ecosystem newsletter – event and job listings are pay-to-play, but news is free | big4bio.com |
| BioBuzz | News and Events | News provider + recruiting | biobuzz.io/philadelphia-life-sciences-hub/ |
| Cup of Sugar Program | Industry Connections | Email list to request to borrow (or offer to donate surplus) lab supplies in the Philadelphia area. Managed by BioLabs Philly, but open to all. | philly@biolabs.io |
| World Trade Center Philadelphia | Industry Connections | Provides resources for companies exporting or importing products overseas | wtcphila.org |
| PharmaBlock(USA), Inc | Contract R&D and Manufacturing | Pharmaceutical d+C12:C23and its key intermediates | |

* List will be sortable or divided into categories. Organizations can provide/edit their own 1 line description

Centralized Education and Training Programs

| Training Topic | Provider* |
|-----------------------|-----------|
| Red Cross Safety | |
| Marketing | |
| Management | |
| Hiring best practices | |
| Workplace safety | |
| | |
| | |
| | |

* Goal is to link to others' existing training and education programs so everyone aware of resources, creation of joint training programs for discounts

<https://dev.keystonelifesci.org/resources/>

- Will work on PC, phone, pdf

Resources – Keystone LifeSci

dev.keystonelifesci.org/resources/

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ABOUT ▾ INDUSTRY LEADERS RESOURCES CALENDAR NEWS CONTACT

Resources

Peer Groups Incubators and Organizations Recurring Events

| RESOURCE | CATEGORY | FOCUS | WEBSITE/CONTACT INFO |
|-------------------------|----------------------|--|--|
| Life Sciences PA | Industry Connections | PA biotech community organizer, events, education, networking | lifesciencespa.org |
| Chamber of Commerce | Industry Connections | Life science advocacy, focus on attracting companies to Philadelphia | chamberphl.com/advocacy-initiatives/life-sciences |
| BioLabs Philadelphia | Real Estate | Biotech incubator supporting startups, hosts events, at Curtis Center. Part of an international network. | biolabs.io/philly |
| Curtis Center | Real Estate | Urban research park, hosts events, BioLabs | keystone.us/property/the-curtis |
| University City Science | Real Estate | Urban research park, hosts events, BioLabs | keystone.us/property/the-curtis |

Outcomes

What does success look like two to five years from now? What is the end result? How will we know we've made change?

- A website guide for resources, community, and events in the Philadelphia life sciences ecosystem
- Feedback from companies that it's easy to come to Philadelphia and get set up and get connected to the community
- Companies can find resources when needed, supplements face-to-face advisors, able to turn to something other than just Google
- Professional peer forums are actually used and useful

Questions and Feedback

- Best practices we can use from other ecosystems?
- Would you be willing to share what professional service providers you use?
- How do we raise awareness of the resources' existence?
- Is there overlap with existing resources?
- How to allow submission/editing of information (web form + quarterly update?)
- Order of lists: alphabetical (to avoid bias/appearance of bias)
- Sensitivity to professional firms
- Private vs. Public facing information