Palm Beach County Life Science Industry Action Plan

- 1) Develop a Life Sciences Leadership Group.
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 2) Foster the Development of a Life Sciences "Aware Community"
 3) Expand the "Behind the Gates" Program to Identify Industry-Specific Investment Capital and to Bolster the C-Suite Expertise Available for Palm Beach County and Regional Life Science Firms
 4) Enhance Sector-Focused Networking Efforts
 5) Develop a Regional Definition & Identity
 6) Enhance the Vertical Entrepreneurial Support Ecosystem
 7) Partner with FAU, other Regional Universities and the Non-Profile **Available for Palm Beach County and Regional Life Science Firms**

 - 7) Partner with FAU, other Regional Universities and the Non-Profit
 - Institutes to Catalyze Life Sciences Entrepreneurial Efforts

Some action steps are "low hanging fruit" that can be begun immediately. Suggested "first priority" short-term action steps are bolded in blue. Some action steps require much longer time frames and more substantial commitment.



Economic Development Resource

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Recommendation #1: Develop a Life Sciences Leadership Group

Private sector-led group to provide ongoing insight into industry trends, company needs, and unique opportunities relevant to the Palm Beach County market. This group shall have a high profile and active role in the BDB's effort to promote and implement a successful life science strategy.

- 1. Revamp and expand the existing BDB Life Science Task Force into a wider Life Science Leadership Group (by July, 2016)
- 2. Develop work plan benchmarks for review and input from Life Science Leadership Group (by July 2016)
- Leverage LSLG to aid in achieving collaborative goals necessary to successfully implement long range strategic goals, and to address capital and c-level experience challenges (July 2016 through 2019)



Recommendation #2: Foster the Development of a Life Sciences "Aware Community"

Address the majority of Palm Beach County residents and business community members who are not conversant about the life science industry and the opportunities it presents for potential employment for county residents and their families; and about the potential of commercializing technologies that may one day impact health, longevity, environmental resources, climate, or food supply and security.



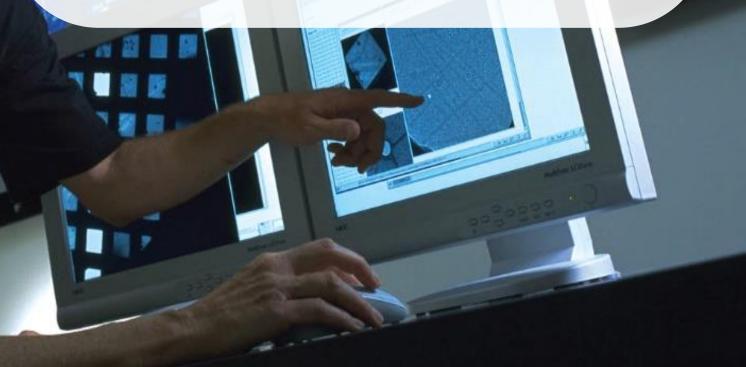
- 1. Articulate BDB life science strategy to all stakeholders including chambers, govt., developers, land owners and larger business community (begun by June 2016, continuing through 2019)
- Engage a life science marketing firm to devise and implement a "Know Your Bio" campaign (FY 2016-17)
- Embark on a public/government (both local and statewide) education program on what life science is (and isn't) and on what potential there is for future employment; include the history of the establishment of Scripps/Max Planck in PBC (FY 2016-17)
- Reach out to educate new government officials when they are elected (begin 2017, ongoing through 2019)
- Address, clarify and correct statements so that expectations are managed and there is a realistic understanding that the industry is still 10-15 years out from early maturity (begin FY 2017, ongoing through 2019)

- Educate on the role of basic research institutions, the value of research, the differences between basic and translational research; reset expectations of timing for spin-offs (begin FY 2017, ongoing through 2019)
- 7. Market the vision to the community of what needs to be done to build and to sustain this industry (begin FY 2017, ongoing through 2019)
- 8. Work to build consistent investment and support that over time will facilitate the creation of meaningful tax credits, training programs, organized collaboration efforts, and local and statewide political engagement (begin FY 2017, ongoing through 2019)
- Develop a list of shovel-ready sites appropriate for pharma/specialty med device companies looking to expand or relocate to Palm Beach County. Begin to market list of sites as specific to that purpose. (FY 2017)
- 10. Target sub-sectors: (begin FY 2017, ongoing through 2019)
 - Large pharma/specialty med device manufactures (if shovel-ready sites are found) Companies that screen/analyze/create molecules and proteins
 - Specialty personalized med firms (offer intros to universities/ hospitals/ Scripps Florida/ Max Planck Institute)
 - Anti-aging product firms (hormones, nutraceuticals, skin care); align with FAU pillars of personalized medicine, neuroscience, aging
 - "Dry science" operations (scientific writing, business support, vendor contract management, medical contact, proofreaders, clinical trial managements, and back- office support)

Recommendation #3: Expand the "Behind the Gates" Program to Identify Industry-Specific Investment Capital and to Bolster the C-Suite Expertise Available for Palm Beach County and Regional Life Science Firms

Identify sources of early stage and ongoing investment capital to support product development needs over 10-15 year development timelines. Educate PBC's active investment community about investing in life science transactions. Identify Palm Beach County high net worth individuals who invest in life science companies in other locations.

- 1. Leverage Life Science Leadership Group to aid in achieving collaborative goals necessary to successfully implement long range strategic goals, and to address capital and c-level experience challenges (July 2016 through 2019)
- 2. Identify and educate a broad base of early stage and angel investors interested in "investing in the life sciences at home" (begin May 2016, continue through 2019)
- 3. Identify Palm Beach County high net worth individuals who invest in life science companies in other locations (FY 2017, ongoing through 2019)
- Improve messaging about regional discoveries, regional industry assets, eco-system assets, networking opportunities, and the best way to engage (begin FY 2017, ongoing through 2019)
- 5. Educate PBC's active investment community about investing in life science transactions (begin FY 2017, ongoing through 2019)



Recommendation #4: Enhance Sector-Focused Networking Efforts

In a vibrant sector-focused cluster, networking occurs both intentionally and spontaneously. The best networking results in continually growing collaborations and expanded business and personal partnerships and serves to break down silos of expertise.



- 1. Attend meetings of the Northern Palm Beach County Chamber's life science committee; invite other chambers to participate in the effort to enhance the industry (begin July 2016)
- 2. Work with BioFlorida and its South Florida Chapter (begin May 2016)
- Further clarify and add detail to information about PBC life science companies to facilitate connections; share company list with all life science companies in PBC (begin July 2016)
- 4. Leverage the World Stem Summit, Max Planck and Scripps symposiums, FAU's events, BIOFlorida networking, and DePuys Synthes' training events to create meaningful events that target founders/c-level executives; invite outside visitors/BDB company targets to them (begin FY 2016, ongoing through 2019)
- 5. Host discussions wherein hospital systems can work together in identifying areas of strengths and challenges and ways to address them such as forming partnerships for research (begin FY 2017, ongoing through 2019)
- Act as liaison between hospitals (including Veteran's Administration) and Scripps Florida /Max Planck Institute /FAU; look for ways for them to build up patient/clinical research (begin FY 2017, ongoing through 2019)
- Catalyze a stronger collaboration between hospitals, non-profits, and bioscience companies to create a 'clinical research county' using existing resources (begin FY 2017, ongoing through 2019)

Recommendation #5: Develop a Regional Definition & Identity

Align the interests of the region and its partners under a single identity that positions the region as a unified entity for life science and biomedical development

- 1. Celebrate life science firms' success more vocally and frequently (begin July 2016, ongoing through 2019)
- Host talks between government and university leaders to develop a regional MOU/partnership for branding and marketing, and to engage a marketing firm to carry out a campaign (begin FY 2017, ongoing through 2019)
- 3. Develop personalized medicine niche/reputation (begin FY 2017, ongoing through 2019)
- 4. Develop "Clinical Research County" moniker (begin FY 2017, ongoing through 2019)

Recommendation #6: Enhance the Vertical Entrepreneurial Support Ecosystem

Focus on enhancing efforts to grow indigenous companies, to result in long-term, sustainable benefits including diversifying and growing the overall economy and creating high-paying jobs.

Action Steps:

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- 1. Reach out to Scripps and Max Planck and work to restart the Palm Beach State College partnership for regular classes on technology transfer and entrepreneurship. Include Small Business Innovation Research program workshops – make them open to all. (begin Summer 2016, ongoing through 2019)
- 2. Engage FAU Research Park on expansion exploration talks, with regard to wet lab space. (begin June 2016; continue through FY 2017 and ongoing through 2019)
- 3. Participate more with Gold Coast Venture Capital Association and promote meetings (begin June 2016)
- Work with Jupiter Medical Center and partners to explore establishing research lab/incubator space (begin May 2016; continue through FY 2017 and ongoing through 2019)
- 5. Build a talent pool of retired professional c-levels (begin May 2016; continue through FY 2017 and ongoing through 2019)



- 6. Work with partners to develop a tri-county initiative to address c-suite team needs and building an operational bridge fund (begin FY 2017, ongoing through 2019)
- 7. Work with the Cities of Jupiter and Boca Raton to look for space; invite other municipalities to engage in this effort (begin summer 2016, ongoing through 2019)
- 8. Create a concentrated effort to support the growth needs of all PBC life science companies (begin FY 2017, ongoing through 2019)
- 9. Work with the County to train permitting people to work with life science companies (begin FY 2017, ongoing through 2019)
- Advocate for improved funding for School District of Palm Beach County for more competitive STEM teacher salaries and updated STEM facilities and curricula (begin FY 2017, ongoing through 2019)
- 11. Advocate/work toward an incubator/accelerator program and increased industry specific training programs (begin FY 2017, ongoing through 2019)
- 12. Advocate/work toward favorable biotech tax policies (local and state); and an impact grant program for business/product development (begin FY 2017, ongoing)
- 13. Lead the effort to increase funding opportunities (begin FY 2017, ongoing through 2019)
- 14. Build a roster of advisors and mentors (begin June 2016, ongoing)



Recommendation #7: Partner with FAU, other Regional Universities and the Non-Profit Institutes to Catalyze Life Sciences Entrepreneurial Efforts

An unprecedented opportunity for the County and its academic partners to take a critical look at collective commercialization outcomes under the present framework.



- 1. BDB works as a facilitator to foster and to encourage business acumen and entrepreneurship to help encourage these institutions to take entrepreneurship to the next level (begin FY 2017, ongoing through 2019)
- 2. Meet with FAU's research centers to set the stage/begin collaboration efforts (summer and fall, 2016)
 - The Center for Biomedical and Materials Physics
 - The Center for Complex Systems and Brain Sciences
 - The Center for Molecular Biology and Biotechnology
 - The Harbor Branch Oceanographic Institute
 - The Jupiter Life Science Initiative
- 3. Meet with Keiser University to explore and establish means for Keiser to partner with industry. Continue similar connections with Palm Beach Atlantic University. (summer and fall, 2016)

- 4. Focus on supporting the formation of (and possible recruitment of) genomics, sequencing and computational companies, to align with FAU priorities (begin FY 2017, ongoing through 2019)
- Establish a pro-active, in the field, commercialization liaison at Scripps, Max Planck and FAU, and let other universities know that they can use this liaison (begin FY 2017, ongoing through 2019)
- 6. Connect fully with the Life Science South Florida university group, and work with it to explore expanding its mission (begin summer 2016)
 - Host university talks to form a Regional Research Alliance (begin FY 2017, ongoing through 2019)
- 7. Focus on building these already-budding areas, and tie in FAU's pillars wherever possible (begin FY 2017, ongoing through 2019)
 - Nutraceuticals/Supplements that are pharmaceutical grade
 - Proteins, molecules, and raw materials for pharmaceutical manufacturing
 - Compounding pharmacies, contracted research, and small batch manufacturing
 - Stem cell, plasma, blood banks
 - Medical devices and tools. Connect these companies to Max Planck for possible collaboration of resources.
- Work with FAU to help with recruitment efforts of faculty (especially those that can increase FAU's federal research dollars and status) (begin FY 2017, ongoing through 2019)
- 9. Work with FAU to develop partnerships for various business and industry specific opportunities (begin FY 2017, ongoing through 2019)









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Life Sciences Advisory Council Members

<u>Hospitals:</u>

John Couris, President & CEO, Jupiter Medical Center (Co-chair) Gina Melby, CEO, JFK Medical Center (Co-chair)

Education:

William "Bill" Fleming, Jr., President, Palm Beach Atlantic University John Kelly, Ph.D. President, Florida Atlantic University Ava Parker, J.D., President, Palm Beach State College Robert Avossa, Ed.D., Superintendent of Schools, School District of Palm Beach County

Government:

Mary Lou Berger, Mayor, Palm Beach County Board of County Commissioners Shannon LaRocque, Assistant County Administrator, Palm Beach County

Research:

David Fitzpatrick, Ph.D., CEO, Research Group Leader, Scientific Director, Max Planck Florida Institute for Neuroscience [Future Appointee], Scripps Florida

Medical Device:

Tony Cutshall, Worldwide Senior VP Marketing and Development, DePuy Synthes David Josza, Corporate Vice President and General Manager, Dental Division, Biomet 31, a Zimmer Biomet Company

Pharmaceutical / Nutraceutical:

Fred Sancilio, Ph.D., Founder, Chairman, President & CEO, Sancilio & Co

Venture Capital:

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Technology Transfer:

David Day, Assistant Vice President for Technology Transfer / Director, Office of Technology Licensing, University of Florida (ex-officio)

Economic Development:

Kelly Smallridge, President and CEO, Business Development Board of Palm Beach County

