The North Carolina Biotechnology Center

Report to the Joint Legislative Commission on Governmental Operations and the Fiscal Research Division

Contents of report:

- Prior State fiscal year program activities, objectives, and accomplishments.
- Prior State fiscal year itemized expenses and fund sources.
- Detail schedule of awards

Required by Section 15.17.(d) of Session Law 2015-241

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Submitting entity: The North Carolina Biotechnology Center

North Carolina Biotechnology Center 2016-17 Activities and Accomplishments

NCBiotech's vision is North Carolina: a global life science leader. The numbers continue to show the impact of the Biotech Center's activities. A 2016-17 report by TEConomy showed $86 billion in economic activity can be traced back to the state's 650 life science companies. The sector directly employs 63,000 people, which grows to 260,000 total jobs in North Carolina's economy. This activity generates $2.2 billion in state and local revenues.

Following our 2016 strategy document, the Biotech Center continues our unique approach to technology based economic development. The strategy pillars are build community, develop partner networks, invest to catalyze innovation and company growth, and communicate the state's global life science brand. These pillars work to develop technologies, companies, sectors and regions for the benefit of North Carolina. The following document organizes NCBiotech's many activities in these development areas, adding a section of activities that develop and promote the state's life science ecosystem.

Company and Technology Development

NCBiotech invested a total of $7,411,700 in fiscal year 2017, the majority of which supports technology development, company creation and company growth.

Catalyzing Company Start-up and Growth

Taking products from lab to market requires innovative technology, talented entrepreneurs, timely access to capital, critical connections, and a supportive environment. NCBiotech's Business and Technology Development program seeks out start-up companies with promising technologies and talented teams, provides funding to meet key business and product development milestones, and provides services to help the companies grow.

This comprehensive approach helps innovative life science companies in North Carolina attract the follow-on investment that leads to significant job growth. Since program inception, portfolio companies have received an average of $103 in follow-on funding from external sources for every $1 in business funding from NCBiotech. This has led to the creation of more than 3,800 North Carolina jobs within these portfolio companies, and many more in support companies.

Funding applications are reviewed by BTD's team of business and science experts, often with input from external experts, and are awarded by a subcommittee of NCBiotech's board of directors. Award totals for the 2016-17 fiscal year were:

- Company Inception Loan (3) $225,000
- Small Business Research Loan (10) $2,450,000
- Strategic Growth Loan (3) $1,300,000

Priming the innovation pipeline

NCBiotech also works prior to company formation, priming the innovation pipeline at the university level through research grants managed by its Science and Technology Development program. These grant programs are designed to build statewide research capacity, seed collaborations between companies and academic researchers, explore commercial applications of university innovations, and enable the licensing of these inventions to commercial interests.

For each $1 granted by NCBiotech, grant recipients on average subsequently received $26 in follow-on grant support, reflecting the strong leveraging impact of Biotech Center funding.

Grant applications are evaluated by SciTech staff and by outside reviewers with relevant scientific or product development expertise. Awards are approved by a subcommittee of the NCBiotech board of directors. Grant awards totaling $2,888,619 were made in FY2017 and were allocated as follows:

- Institutional Development Grants (11) $1,553,989
- Collaborative Funding Grants (1) $100,000
- Biotechnology Innovation Grants (8) $784,830
- Technology Enhancement Grants (6) $449,800

Investing in Infrastructure

The Biotechnology Center's Bioscience Industrial Development team collaborates with North Carolina communities to attract life science economic development projects. In addition to providing industry-specific expertise and resources, NCBiotech also provides an Economic Development Award for project-related investments that provide sustainable benefit to the company and community. The awards up to $100,000 are linked to job creation and retention milestones. The team awarded four EDAs totaling $350,000 this year.

Additional awards are detailed in the body of this report. A full list of NCBiotech funding is available at http://www.ncbiotech.org/past-awards.

Sector Development

This year, NCBiotech continued its work in agricultural biotechnology and bio defense. Development of the marine biotechnology sector continued via the Marine Biotech Center of Innovation. NCBiotech also formally launched the North Carolina Precision Health Collaborative.

Marine Biotechnology

The Marine Biotech Center of Innovation, created by NCBiotech, continues to work collaboratively with partners to nurture the commercialization of marine technologies for the state. The MBCOI works with faculty from all the marine institutes to better understand where commercial opportunities exist. This year, MBCOI supported an STTR proposal from UNC-Wilmington spin-out, Sea Tox Research, which is developing user-friendly, fluorescence-based assays to detect marine toxins. Acting as a commercialization partner, MBCOI helped guide the business portion of this Phase II proposal to a successful outcome that will bring $1.5 million to Sea Tox that will allow continued development of this technology. A company that the MBCOI helped get started last year, Sandbar Oyster Company, has continued to grow their business. This year, in partnership with MBCOI, Sandbar formally established their business and deployed their

technology to increase NC-based oyster production. They are also discussing a second application of their technology in shoreline restoration, which will be a new business opportunity for the company.

In March 2017, MBCOI collaborated with UNC-Wilmington's Center for Innovation and Entrepreneurship on an NC IDEA Ecosystem Partner Grant proposal that was successful. This funding allowed MBCOI to lead the coordination and hosting of the Southeastern region Fish 2.0 Workshop - an international competition that connects seafood businesses and investors to grow the sustainable seafood sector. Of the 16 organizations that participated and advanced to Phase 2 of the workshop, seven are from NC.

Bio Defense

NCBiotech has taken a broad view of this sector to bring more military, defense (DoD) and homeland security (DHS, BARDA) funding to North Carolina companies and universities. Life science applications include vaccines and novel technologies that will protect our soldiers, heal those who sustain wounds in battle, and protect the food supply.

The Bio Defense initiative leveraged the existing NCBiotech infrastructure to provide new loans and grants targeting Bio Defense applications with a total funding of **$400,000**. Loan investments went to InnAVasc, MAA Laboratories, Clinical Sensors, Locus Biosciences and RFPi. North Carolina State University received two bio defense related awards, while Elon University and Wake Forest Innovations each received one. (These funding awards are reflected in previous grant and loan totals and are available on our website.)

NCBiotech also hosted the following events, which linked local researchers and companies with federal agency and military representatives:

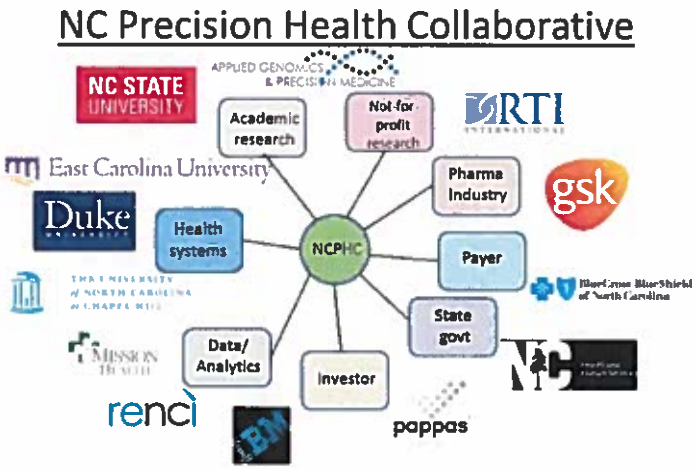
- Medical, Biomedical and Biodefense: Support to the Warfighter Symposium (co-hosted with the NC Military Business Center)
- Cape Fear Research Consortium meeting
- National Defense University, Eisenhower School, U.S. Department of Defense Senior Service School, Biotechnology Industry Study Group

Center staff continued efforts to better connect NC life sciences to the defense sector by engaging and collaborating with many military support groups including the NC Military Business Center, the NC Military Foundation and the NC Defense Business Association. Additionally, the direct relationships that the Center staff has established with the defense, military and homeland security personnel have allowed several referrals for potential funding and collaboration opportunities.

Precision Health

Widely thought to be the future of healthcare in the United States, precision medicine tailors medical treatment to each patient, accounting for genetics, family history and environment. Ideally, precision medicine tools provide effective treatments for those who will benefit, but spare expense and side effects for those who will not.

North Carolina possesses the capacity in its research and healthcare institutions, biomedical research and development capabilities, and information technology companies to become a global leader in precision health. In FY17, to help develop the state's full potential in this important area, NCBiotech and a seminal group of committed partners have established the North Carolina Precision Health Collaborative (NCPHC). By stimulating growth in the precision health sector, the NCPHC and its partners can foster significant new innovations, create new precision health-based companies and jobs that draw investment capital to the state – all while improving the health of North Carolinians.



Sample of the NCPHC's FY17 activities:

- Defining "precision health" in close collaboration with a team of engaged, motivated stakeholders.
- Creating a strategically coordinated and aligned vision for our Collaborative, with strong buy-in and commitment from members.
- Secure NC-representation on National Academy of Medicine PH Round Tables and Action Collaboratives.
- Evaluation and planning for statewide, PH pilot projects in targeted population screening for hereditary cancers and/or pharmacogenomics (PGx).
- Submission of comprehensive health care provider education and engagement plan under the *All of Us* Research Program.
- Hosting of precision health stakeholder discussion with *All of Us* Director, Eric Dishman.
- Building and strengthening enabling partnerships with relevant program directors within NC DHHS and with Area Health Education Centers (AHEC).

Agriculture Initiative

Agriculture and agribusiness – food, fiber and forestry – generate $84 billion in annual revenues for North Carolina's economy. NCBiotech has positioned N.C. as a global ag biotech leader by combining the state's biotechnology base with its agricultural assets. Market forces have slowed growth of the big global ag tech firms with consolidation activity continuing. Mid-sized company growth and start-up activity will offset a portion of the large company moves during this fiscal year. The ag tech sector generally has seen investment growth in innovation companies particularly those with cash flow. Local examples are AgBiome, Precision Bioscience – Ag Division, and Advanced Animal Diagnostics. Several successful recruitments added diversity to the sector through additional focus areas such as high-tech feed supplements (Premex), soil health (Soil Health Institute), and plant microbiome (Plant Impact).

Activities of the AgBiotech Initiative are guided by the N.C. AgBiotech Advisory Council consisting of 16 leaders from industry, academia and government who meet three times annually. Key activities include:

- **Ag Biotech Entrepreneurial Showcase 2017 –** The Showcase is certainly an international event with presenters coming as far as Norway, an application to present from Australia, and the 2016

awarded best presenter from Portugal. Changing the venue, reception and program structure further improved the event with feedback from attending investors of "someone from our team will be at the Showcase each year" and "this is one of the top three ag tech investor events that we attend each year."

- **Ag Biotech Leadership Roundtables** – The leadership roundtables were started late in the year, in an effort to bring together the leadership from companies across the state, to discuss predominantly how the NC ecosystem suited their needs and what aspects of the ecosystem needed to be better developed so that it would help them with their plans to grow their companies further. Cohorts of 5-7 leaders convene over lunch for an informal conversation. Three roundtables were facilitated, one in the Greater Charlotte region and two in RTP. The feedback from the CEO's has been overwhelmingly positive. Several of them have agreed to act as "ambassadors" for NC and to work with us to expand and grow the ecosystem.
- **Crop Commercialization Center** – The Crop Center accelerates crop improvement to provide a trifecta of economic development value – escalating N.C. researchers as part of larger collaborations and increased project funding, providing higher-profit crop choices to N.C. farmers, and improving opportunities for existing or new agribusinesses. The Crop Center is deploying external funding support of $2,622,301 from the Golden LEAF Foundation, Murphy Brown LLC, N.C. Pork Council, United Sorghum Checkoff Program, and the USDA NIFA to support improvement of grain sorghum for animal feed and biomass sorghum as a source of cellulosic biomass. Additional projects supported with seed funds from NCBiotech include winter oilseeds such as canola and camelina, food ingredient crops such as stevia and black carrots, and an evaluation of statewide botanical extraction facilities.
- **Ag Biotech Professional Forum** – This professional networking forum facilitates the buildup and growth of the ag ecosystem by bringing together people from different ag companies, universities, institutes, and allied professions. Five forums were coordinated last year each on a selected, currently appropriate technical topic with professional presentations prior to networking. About 600 people attended the 5 events; about 200 people attended more than one event, suggesting that about 380 people attended due to their interest in the topic. The attendees represented 148 separate organizations. In addition, the summer social event included a presentation by the Agriculture Commissioner, Steve Troxler with attendance by 174 people from 54 organizations.
- **AgBio[sphere]** – This N.C. Ag ecosystem brand's website, which was updated last year, was maintained. It was transformed to be largely a static site, but able to convey sufficient information to the ex-N.C. viewer to entice them to contact us with queries regarding collaboration and/or relocation to N.C. Monthly news updates have kept the site current.
- **Ag Biotech Industry in the Classroom** – This weeklong program trained a total of 25 ag and STEM teachers from middle and high schools across the state. The curriculum provided them knowledge, tools, training, and resources focused on technology in agriculture to take back to their classrooms. In the five years of this ag-focused program, 125 teachers have been trained and the information shared has reached on an average about 60,000 students (assuming every teacher reaches 100 students a year, for on average 6 years, and with some attrition due to retirement, change in grade or subject level for instruction and need for retraining).
- **Ag Biotech Summit 2016** – 154 registrants convened for the biennial Ag Biotech Summit titled "Technology's Impact on the Food Value Chain". Participant surveys were very positive on the location and content of the program. The most significant input received was the timing of the event during the third week of September – a number of existing ag meetings limited participation, especially by C-suite leaders, input which caused a move to February for our 2018 event.

State funding was supplemented by grants and sponsorships to achieve these outcomes.

Statewide development

Programs that develop technologies, companies and sectors, above, are applied statewide with the assistance of NCBiotech's regional offices. The offices' executive directors match regional strengths, life science technologies and NCBiotech programs to grow companies and technologies, developing economic drivers for each region.

In addition to developing companies and technologies within the state, NCBiotech works with statewide partners to bring life science companies to the state. With low business costs and specialized strengths in vaccine and pharmaceutical production, cancer research and medical research, North Carolina has a strong value proposition for companies looking to locate new facilities.

Regional offices

The regional offices collectively ensured the benefits of biotechnology – high paying jobs and economic growth – made their way to the regions. Several recruitment projects landed in North Carolina, attracted to regions that have been strengthened by efforts of the regional offices. Regional activities are guided by leaders from industry, academia and economic development, who meet quarterly to discuss strategy and tactics for each region. The Regional Impact of Statewide Engagement across North Carolina (RISE_NC) initiative was created and launched in the regions. It links NCBiotech resources with regional strengths and interest to seed life science cluster growth statewide.

Eastern Office

The Eastern Office is continuing to build on the previous growth and expansion opportunities of the pharmaceutical manufacturing facilities at Patheon and Mayne Pharma, located in Greenville. To support these growth initiatives, the North Carolina Pharmaceutical Services Network (NCPSN) was created. This initiative was supported with a $36,100 award. This one-of-a-kind collaboration provides a continuum of pharmaceutical education and training to new and existing companies in North Carolina and beyond.

The programs consist of the following:

- The Pharmaceutical Services Network at ECU (PSN@ECU), which is a laboratory-based education and training network. Offerings include Good Manufacturing Practices (GMP) and Good Laboratory Practices (GLP) courses, short courses and analytical services

- The Pharmaceutical Services Network at Pitt Community College (PSN@PCC) provides a pilot plant type-manufacturing environment and lab scale equipment to teach oral solid dosage theory and manufacturing technique. Coursework includes weighing, milling, granulating, blending, tableting, tablet coating and encapsulation

The goals include:

- Instruct new and incumbent workers in formulation development, production and process optimization, equipment performance and vendor demonstrations

- Educate students and workers for the highly-regulated pharmaceutical development and manufacturing environments

- Enable workers to be immediately productive in complex jobs requiring multi-disciplinary skills
- Reduce costs associated with mistakes made by new hires
- Prepare a workforce with sufficient cultural, business and regulatory knowledge to succeed within the global pharmaceutical industry

The office planned, designed and administered a commuting and mobility survey of pharmaceutical and life science related companies located east of Raleigh in 2016. The office updated the results in 2017: 14 companies have 7,900 employees commuting from 53 counties. This represents a significant impact to the many rural counties across multiple regions of the state.

Greater Charlotte Office

The Charlotte Office has been engaged with the North Carolina Research Campus in Kannapolis since its inception nearly a decade ago. Given their focus on human health, nutrition, and agriculture, we share a mutual interest in growing the campus which has resulted in a multi-faceted relationship that continues to deepen and evolve.

This year marked the Charlotte Office's full integration into the Campus Development Team, which is charged with strategy development and project implementation. The team's efforts have led to numerous successes, here are two exceptional examples. A new 10,000 square foot pilot facility entitled, the Food Processing Innovation Center (FPIC) will be located on campus to address growing industry demand. A state appropriation of $4.4M, with $700K in recurring funds has been allocated to the project, which is a collaboration with NC State's Plants for Human Health Institute and the North Carolina Department of Agriculture and Consumer Services. And, Standard Process, a nutritional supplement company, has announced their plan to establish a 10,000 square foot Center of Excellence on campus for their research and development operations.

In response to feedback from our regional stakeholders, the Charlotte Office created, planned, executed, and sponsored a structured quarterly informational seminar series to more consistently share our platform of programs and services in the region. This year, these highly interactive presentations and networking events featured Center expertise from our Science and Technology Development and AgBiotech units. In the next iteration, the region will host our Life Science Intelligence, Business and Technology Development, and sector units. The results, thus far, include increased interest among researchers in our grant programs and direct links to our AgBiotech initiatives.

Our region is also home to seven Exchange Groups, including two new groups created this year, Chem 101(NC Research Campus) and Charlotte Biology and Biotechnology (UNC Charlotte).

Piedmont Triad Office

The Piedmont Triad office continued to work closely with an engaged advisory committee to recognize biotechnology excellence, help advance disruptive technologies in R&D and identify industry growth needs related to workforce. Efforts are underway to partner and support sector-focused economic development in an effort to attract additional investment and job growth. Focused sectors include Labs and Diagnostics; Medical Technology & Devices; Nanobiotechnology; Ag Biotech; and Regenerative Medicine.

Examples of specific outcomes include:

National recognition as a growing life sciences ecosystem:

- Diverse global companies and small start-ups: 9,416 employees at 74 companies supported by 243 life science focused service companies.
- The Greensboro-High Point MSA joined Durham/Chapel Hill as one of the six MSAs with specialization in four areas of life sciences.
    - Burlington is #1 in the nation for small MSAs in research, testing and medical labs. TEConomy Report, BIO 2016

Successful Triad BioNight 2017, an iconic regional excellence awards event with statewide impact:

- Led by the Piedmont Triad Office and the Advisory Committee for Biotechnology in the Piedmont Triad with over 40 community volunteers.
- LabCorp Chairman and CEO, David P. King was Keynote Speaker with his presentation entitled, "Improving Lives Through Innovation"
- 400 key leaders from industry and academia attending with the highest percentage of industry engagement and sponsorship dollars raised to date.
- Marked the sixth time for the regional Excellence Awards in five categories. Research & Development; Entrepreneurial; Academic Development; Community Leadership; and Service/Support.
- Inaugural Innovation for Impact Prize statewide competition co-sponsored by the Piedmont Triad office and Sobran Inc. for researchers and emerging companies. The Grand Prize Winner received a pre-clinical research study and $1,000 cash prize along with four finalists each receiving a $500 award.
- In recognition of each excellence award and prizewinner, The Greater Gift Initiative donated a life-saving vaccine to a child in a developing country.

Relevant education and workforce development focused on future career pathways and existing industry needs.

- Advisor and partner in the formal establishment of Center of Excellence for Biotechnology at Alamance Community College with newly announced Executive Director and two new areas of study; Histotechnology and Bio-informatics.
- Successful engagement with the National Center for the Biotechnology Workforce at Forsyth Tech and the Community College Consortium as speaker and contributor in support of its efforts to develop core skill standards for bioscience technicians.
- Overall increased activity including rural outreach for activities related to K-12 STEM education; Entrepreneurship; Investment; and Intellectual exchanges.

Southeast Office

The Southeast Office worked on many projects related to company relocation/recruitment and expansion, as well as entrepreneurial venture creation. Projects included OptimaKV and Carbon Cycle Energy in Duplin County, to support the region's focus on industrial biotechnology.

The Southeastern office sponsored the Fish 2.0 regional conference to promote entrepreneurship in oyster farming. The office also initiated several company visits, relocations, and business line expansions to the UNCW MARBIONC Biotech Building, in support of the regional marine biotech cluster.

As part of the NC Coast Clinical Research Initiative, the Southeast Office hosted an event series for clinical research professionals and students and continued its work to implement a clinical research workforce development program with UNCW's College of Health and Human Services. The program is funded initially by a $390,000 grant from Duke Energy, with significant matching support from UNCW.

Western Office

The Western Office has worked closely with university and economic development leaders to identify regional opportunities and support business growth and recruitment efforts. The Western Region had a number of exciting announcements this past fiscal year. Avadim Technologies Inc., which has developed patented topical therapies for infection prevention, neuromuscular disorders and skin repair, has announced a major expansion in Buncombe County. The company will build a new 100,000 square foot headquarters in Black Mountain and anchor the new Medical Technology Park. The planned expansion will potentially create 550 new jobs in the county. Avadim also made Inc. magazine's top 500 fastest growing private companies, landing at 235 on the list.

The fermentation sector continues to grow and thrive in the west. White Labs, a San Diego-based company and the largest U.S. supplier of liquid yeast for fermentation, has opened its new facility in downtown Asheville and announced that in addition to its laboratory and production facilities, they will be adding a taproom, restaurant and educational facility on site. The Asheville facility is planned to employee 65 people when the expansion is complete.

Finally, Exela Pharma Sciences in Lenoir has announced a $5 million expansion that will create up to 50 new jobs over two years. The company, which currently employees about 180 people, manufactures injectable and ophthalmic pharmaceutical products.

Bioscience Industrial Development

The Center's recruitment team continues to work closely with the new Economic Development Partnership of North Carolina (EDPNC) and the NC Department of Commerce on projects with new potential for job creation and investment. At the time of this report, 21 projects with more than 5,291 jobs and $1.1B in potential investment are being recruited. Significant news of the 2016-17 fiscal year:

- **INC Research** expanded its Wake County presence in a move from Raleigh to Morrisville. The company is investing $37.9 million and creating 550 jobs.
- **Perspectum Diagnostics** announced 40 jobs in Wake Forest. The company develops non-invasive medical imaging software tools.
- **Integrated DNA** invested $13M in RTP and plans to create 40 jobs. The company manufactures DNA and RNA oligonucleotides custom-made for research projects. It is based in Coralville, Iowa.

Ecosystem Development

For a state to be a global leader in life science, it needs a strong, vibrant community to keep it moving forward. The sum total of technology, company, sector and regional development is an ecosystem or community that connects and grows the resources to support a global leader in life science.

NCBiotech produces a range of events and other activities to seed and grow this connected community. Events generally bring together a large number of people around a specific topic and include:

- Intellectual exchange groups connect academic and industry professionals who share common interests. The Center provides funding, meeting space, event management and/or bookkeeping services to these groups. In FY2017, 13 Center-sponsored IEGs convened 140 meetings, which attracted 4,900 attendees. A new IEG was created to capitalize on growing academic and corporate activity relating to the microbiome.
- Training in grant-writing skills, which bring additional funding to North Carolina's universities. This year, the program was funded with $5,000.
- An Industrial Internship Program to link companies with undergraduate and graduate scientific talent, as well as MBA students. The program awarded $30,000 this year.
- A dozen regional exchange groups convened across the state on topics of interest to each region. Topics include clinical research, laser microscopy, genomics, and entrepreneurial and economic development.
- The NCBiotech Jobs Network welcomed hundreds of mid-career professionals, postdoctoral fellows, corporate hiring managers and staffing agency recruiters over the course of the year.
- The business and technology team develops relationships with technology scouts from large companies, then organizes strategic partnering meetings (41 in FY2017) to match company needs with North Carolina technology. Of particular note, seven representatives of Johnson & Johnson Innovations visited the Center on April 12, presenting J&J's partnering needs to an audience of nearly 200 in the Center's auditorium and holding 32 one-on-one meetings with leaders of North Carolina small businesses. BTD organized this event in collaboration with the SciTech unit and the North Carolina Biosciences Organization.

NCBiotech also makes many individual connections through its website, coaching sessions and other targeted activities, which this year included:

- Coaching and mentoring sessions – consultations between the business and technology team and company management to advise on critical company needs (112 in FY2017).
- Program marketing and consultations - SciTech staff gave nine presentations at universities and research institutes across the state and conducted 106 consultations with prospective grant applicants in FY17.
- Investor introductions – BTD develops relationships with investors and connects promising North Carolina life science companies to them. In FY2017 Center staff made 58 investor introductions.
- BATON - a network of more than 200 service providers (staffing agencies, accountants, attorneys, grant writers, etc.) committed to supporting startup companies, often at a discount. North Carolina entrepreneurs searched this database nearly 1000 times in FY2017.
- NCBiotech jobs board – 652 jobs were posted and 4,136 job seekers registered.
- Library lunch and learn events – 129 people attended these sessions designed to connect companies to the information available in the NCBiotech library.

Hundreds of visitors also used the NCBiotech Life Science Intelligence team's business resources. The research analysts logged 142 research requests from external clients, in addition to an ongoing service contract with BD Technologies. Over 230 unique companies used the services of the Life Science Intelligence team.

NCBiotech organizes a variety of local and regional events that showcase the Center's and North Carolina's strengths to the world. This year's events included partnering meetings at BioEurope, and a recruitment and investor breakfast at the annual Life Science Conference. Several partners, including Longfellow and

Wake County Economic Development, contributed to the re-launch of the North Carolina Reception at BIO. The event drew 200 life science executives from around the world.

A community needs a location to gather, and NCBiotech's Hamner Conference Center provided that for nearly 1,800 meetings involving more than 28,000 people. These events involved intellectual exchanges, biotechnology industry education, corporate and nonprofit meetings and training events, and industry trade shows. The HCC was closed for four weeks of FY2017 for remodeling. Additionally, the Center provided $126,981 to support 32 events and meetings in FY17.

Looking to the Future

NCBiotech has begun its 2018 fiscal year, and will continue maximizing state resources to create high-paying jobs for North Carolina. Already, promising companies fill our loan application pipeline. Technologies close to commercialization are being considered by our grants team. Our precision health initiative is gaining national attention. Regional initiatives are extending the impact of life science further into rural areas. And a new emphasis on global marketing, company recruitment and company retention will imprint North Carolina's brand around the world.

In December, the Center received a $4M grant from Pfizer, Inc. to design, launch and administer a postdoctoral fellowship program aimed at creating a local hub of gene therapy expertise. The Pfizer-NCBiotech Distinguished Postdoctoral Fellowship in Gene Therapy was announced in late February and the first class of Fellows will be placed in November.

For the most up-to-date information on the Biotech Center, please visit our Web site, www.ncbiotech.org.

North Carolina Biotechnology Center
Report of Awards by Program
Fiscal Year Ending June 30, 2017

Program Area Program Category	Record Count	Amount	Percent of Total
Business Financing			
Company Inception Loan	3	$ 225,000	6%
Small Business Research Loan	10	$2,450,000	30%
Strategic Growth Loan	3	$1,300,000	13%
Industrial Internship Program	10	$ 30,000	< 1%
Total Business Financing	26	$4,005,000	50%
Event Support			
Grantsmanship Training Grant	1	$ 5,000	< 1%
Biotechnology Event Sponsorships	21	$ 45,311	< 1%
Biotechnology Meeting Grants	11	$ 81,670	< 1%
Total Event Support	33	$ 131,981	1%
Research and Equipment Support			
Biotechnology Innovation Grant	8	$ 784,830	17%
Collaborative Funding Grant	1	$ 100,000	4%
Institutional Development Grant	11	$ 1,553,989	16%
Technology Enhancement Grant	6	$ 449,800	6%
Total Research and Equipment Support	26	$ 2,888,619	44%
Sector and Region Support			
Economic Development Award	4	$ 350,000	5%
Presidential Initiative Award	1	$ 36,100	< 1%
Total Sector and Region Support	5	$ 386,100	5%
Grant Totals	**90**	**$7,411,700**	**100%**

North Carolina Biotechnology Center
Report of Fund Sources and Expenses
Fiscal Year Ending June 30, 2017

Fund Sources:

Unrestricted Revenues	
State Appropriation	$13,600,338
Hamner Conference Center	448,839
Other, net	1,206,871
Restricted Revenues	
Contributions	6,197,339
Total Revenues	$21,453,387

Expenditures:

Science & Technology Development	$ 3,569,620
Business & Technology Development	2,475,397
AgBio initiatives	1,710,879
Statewide development	1,112,756
Bioscience industrial development	1,421,718
Sector development	936,463
Life science intelligence	1,418,567
Other Programs	200,034
Hamner conference center	719,643
General & Administrative	2,810,405
Total Expenditures	$16,375,482

Note: Figures above are on an accrual basis. The final quarterly report filed with the Department of Commerce is on a cash basis. This schedule will reconcile to our audited financial statements as of June 30, 2017.