

2021 IMPACT REPORT



A vision for the future of science and technology business incubation.



ESTABLISHED
1991



RESEARCH TRIANGLE PARK, NORTH CAROLINA

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MESSAGE FROM THE PRESIDENT

Dear Innovation Community:

2021 was a wonderful and significant year for First Flight Venture Center. We were honored to celebrate our 30th year as the longest-standing North Carolina business incubator focused on science and technology with our expansive community of visionaries, entrepreneurs, stakeholders, and champions of innovation at a special celebration on November 19th. The First Flight leadership team took this unique opportunity to think ahead and plan for the next 30 years of service to help even more innovators turn good ideas into commercial successes.



Though we have been spending a lot of time preparing for a bright future, 2021 was full of many working hours for the First Flight team to make sure we served our innovation community well. We are thrilled to share just a few of our highlights, which are listed below and throughout this report:

- First Flight has graduated over 400 resident companies contributing over \$10 Billion in economic impact to the economy since 1991.
- First Flight was honored by winning a 2021 SBA Growth Accelerator Fund Competition (GAFC) award spurring investment in underrepresented communities targeting the unique needs of pre-revenue, R&D-focused businesses.
- First Flight’s LiftOff grant writing program has generated over \$18.1 million in non-dilutive funding since 2016 for early-stage companies. Companies that have been in the program for 2-1/2 years have a 100% success rate at winning grants.
- Selected as the 2021 SBA Federal and State Technology (FAST) Partnership Program for North Carolina, First Flight was able to expand our LiftOff

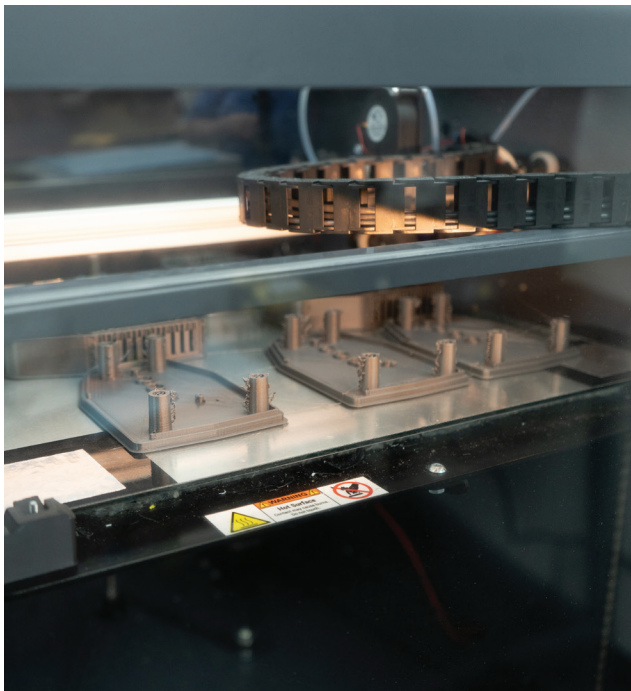
program across North Carolina, leveling the field for underrepresented founders, for the fourth consecutive year.

- First Flight joined the North Carolina Center for Optimizing Military Performance (NC-COMP), a consortium to deliver solutions for critical military performance gaps.
- The Biomedical Advanced Research and Development Authority (BARDA) prize money was awarded to First Flight to help launch our health-security-focused WheelsUP accelerator in 2022.
- Partnered with the NC Manufacturing Extension Partnership (MEP) to win the NC IDEA Partnership grant which helps us propel even more companies from concept to commercialization.
- The state of North Carolina was chosen to receive the designation as one of five “Defense Manufacturing Communities” in the nation. First Flight is proud to support NC State’s Industry Expansion Solutions (IES) whose purpose is to make long-term investments in critical skills, facilities, workforce development, research and development, and small business support to strengthen the national security innovation base.

As a non-profit incubator, First Flight thrives and will continue to serve our community due to the donors and partners who invest in our mission to ensure that science and technology-focused startups have every chance for commercial success. We are so grateful for the support we receive from the innovation ecosystem.

Onward and upward,

Krista Covey,
 President, First Flight Venture Center



(Left to Right) Mary U. Musacchia, Chair, FF Board of Directors with Board members Paul Munana and Larry Wilson.

MESSAGE FROM THE CHAIR

While 2021 may have felt dark to some, at First Flight we continue to be indefatigable optimists. Just like our entrepreneurs, we view every challenge as an opportunity. 2021 saw First Flight celebrating its 30th Anniversary and its history. But at First Flight we don't look back—except to celebrate of course! We look forward, into the future, following First Flight's compass pointing to its 'True North.'

Using that compass First Flight's Board of Directors and President, Krista Covey, completed our next five-year Strategic Plan. That Plan has three pillars: (1) Expand and create new self-sustaining programs such as our award-winning LiftOff™. (2) Develop a vehicle(s) to help provide funding to science focused start-ups. (3) And, most ambitious of all—double our physical building space on our corner of Davis Drive and Cornwallis Road, the heart of the Research Triangle Park.



On December 7, at a gathering in the Executive Mansion First Flight announced its strategic plan and shared its vision of a new facility. Developers have been invited to work with First Flight as we continue to grow North Carolina's innovation science economy. We know this will not be easy. We know this will take time. We know this endeavor cannot be accomplished alone. But we know we can accomplish big things.

Our Board is determined to act boldly addressing the needs of our start-ups, and above all, to be indefatigable optimists. We invite you to join us on our journey!

Mary U. Musacchia
Chair, Board of Directors

A Forward-Thinking Year

2021

Expanding our team to better serve our members.

2021 proved to be a year to remember as it was filled with celebratory events, significant developments, and big initiatives. 2021 was a special year in so many ways, but in particular it saw the expansion of the First Flight team, which has enabled First Flight to expand its programs and opportunities and to reach out and serve even more entrepreneurs.

Celebrating 30 years of innovation, building our vision for the future.

A milestone event in 2021 was First Flight's 30th Anniversary. In the three decades since our founding in 1991, First Flight has served entrepreneurs and innovators working in "high science, high impact" fields through the establishment of educational programs and resources, funding opportunities, and affordable office and lab space. This year, we were proud to celebrate 30 years of helping entrepreneurs and innovators succeed and celebrated with two very special events; a luncheon on November 19 at the Prestonwood Country Club that celebrated our 30 years of innovation, and an evening reception that was held on December 7 at the NC Executive Mansion that unveiled our vision for the next three decades. Both events were key in being able to connect with old and new friends, key sponsors and partners, stakeholders, and public figures, and thank them for their past, present, and future support of First Flight.

New programs. New building. New opportunities.

Above all, 2021 exemplified how First Flight is forging ahead with its mission to serve scientists and entrepreneurs launching their products into the marketplace. With plans for new programs, funding opportunities, and increased square footage in the works for the next period in First Flight's development, it is clear that First Flight is only getting started in its journey as a center of scientific excellence and an international hub of innovation.



First Flight President Krista Covey gives a tour of First Flight facilities to the Caterpillar management team.



Hangar6 member and entrepreneur, Eliza Redmann, talks all about the positive impact Hangar6 has made in helping get her new startup off the ground.



2021: MILESTONES

\$10 billion

in market capitalization since inception

\$85.6 million

Funds raised by equity in 2021

\$288 million

Funds raised by equity since inception

30 Patents

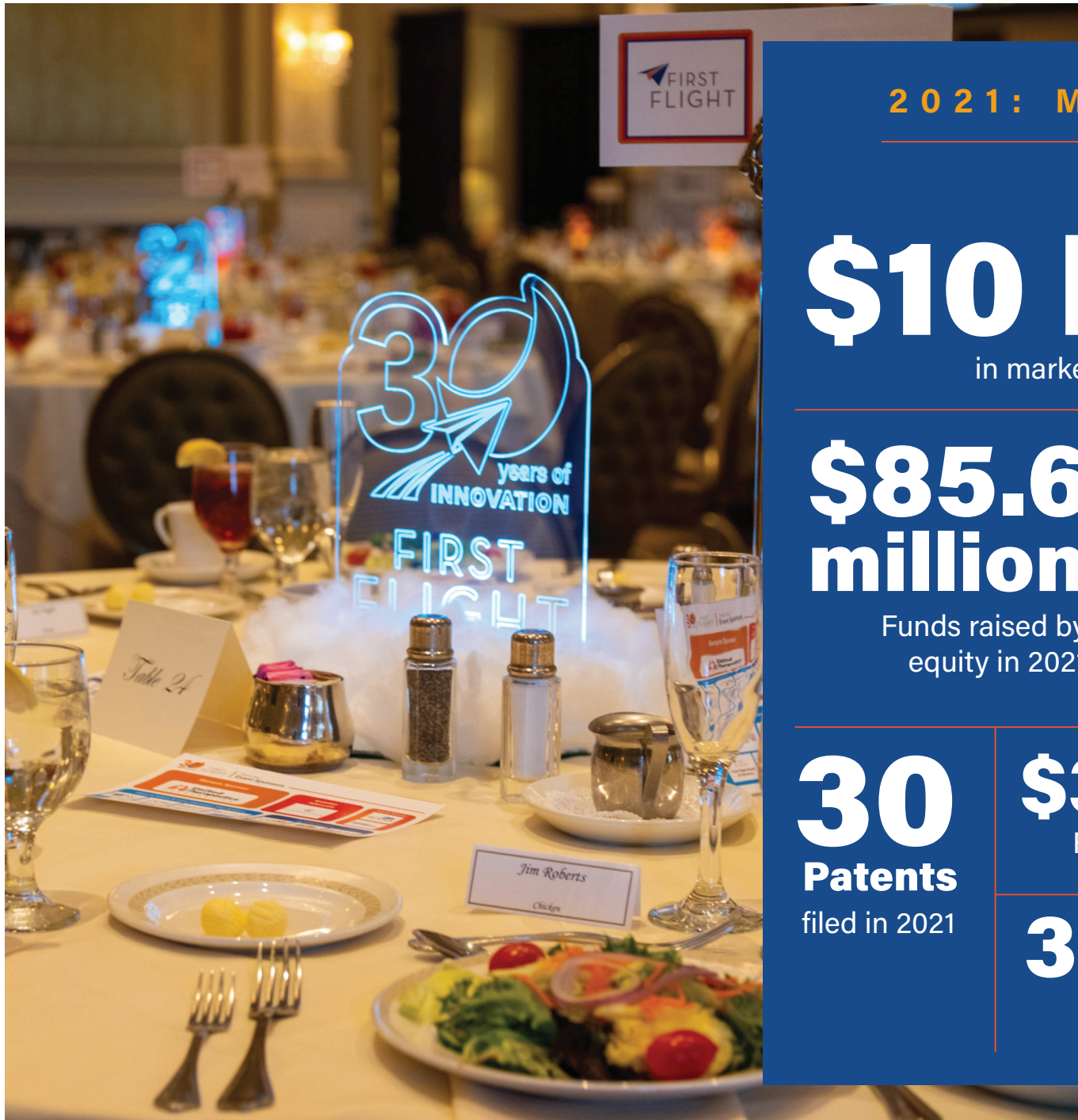
filed in 2021

\$3.7 million

Funds raised by grants in 2021

39%

Minority/Women employed by current First Flight companies



Company Spotlight

Three different companies with different problems to solve.

DRIVE THERAPEUTICS

Developing a cure for blindness.

Drive Therapeutics, a biotechnology company that strives to improve treatment for retinal diseases, joined First Flight as a resident company in 2021, and has been taking advantage of all First Flight has to offer. CTO Ryan Quick has participated in many First Flight programs, including Test Flight, Itineraries, Navigators, the FAST Boot Camp, and Propeller. Significantly in 2021, Drive Therapeutics was awarded a Phase I SBIR grant by the National Science Foundation for the continual development of their innovative aptamer-based inhibitors to angiogenesis and inflammation for retinal diseases.

RIGHT: Drive Therapeutics, Chief Technology Officer, Ryan Quick



Retinal diseases affect
more than 2.2 million
Americans.

NALA MEMBRANES

Working towards clean water for all.

NALA Membranes, founded by mother-daughter duo CEO Sue Mecham and CTO Judy Riffle in 2018, is dedicated to bringing new reverse osmosis membrane technology to the marketplace in order to expand the availability of treatable water, while also reducing pretreatment. Since joining First Flight in 2019, NALA has participated in multiple First Flight programs, including; Test Flight, Itineraries, Founders Roundtable, Navigators, and Propeller. NALA hopes that their pioneering technology will be instrumental in achieving their goal of clean water being accessible to all.

RIGHT: (L-R) NALA Membranes, Chief Executive Officer Sue Mecham and Chief Technology Officer Judy Riffle

One place to support them all. **First Flight.**



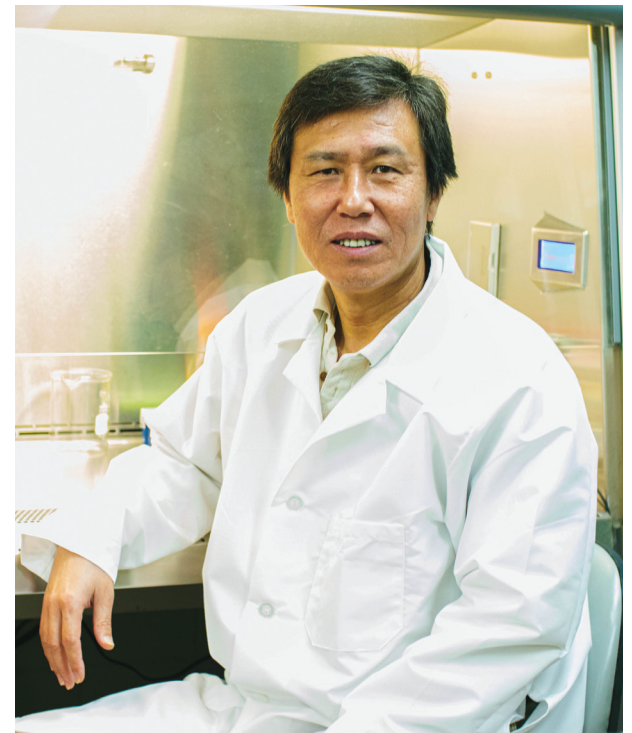
By 2025, half of the world's population will be living in water-stressed areas.

VIRATREE

Developing the virus samples needed to advance research.

ViraTree is a company specializing in virology reagents and services. Its mission is to acquire, authenticate, preserve, develop, and distribute innovative virological materials, information, and technology for the advancement and application of virus research. Founder and CEO Liqun Zhang provides high-quality unique viruses to universities, biotech companies, and medical facilities around the world. ViraTree started at First Flight in 2014 and has been an integral part of the First Flight community ever since. Liqun has participated in our monthly program Itineraries, where resident companies can present their science and receive feedback to help further develop their company.

RIGHT: ViraTree Founder and Chief Executive Officer Liqun Zhang



There are hundreds of corona viruses on the planet. We need to prepare for the next pandemic.

Graduate Spotlight

United Therapeutics: From start-up to success

Launched at First Flight

First Flight is honored to have been the initial “home” of United Therapeutics back in 1996 at the start of its journey to biotechnology success. United Therapeutics was founded and led by Dr. Martine Rothblatt and team to seek a cure for pulmonary arterial hypertension—high blood pressure that affects arteries in the lung and heart—after her daughter was diagnosed with the disease at the age of six.

The firm, which went public in 1999, engages in the development and commercialization of unique products to address the unmet medical needs of patients with chronic and life-threatening cardiovascular and infectious diseases and cancer.

From a quest to a \$9.4 billion market cap

What began as a parent’s quest to find a cure for their child’s illness has since grown into a company with a \$9.4B market cap and the first publicly-traded biotech or pharmaceutical, to take the form of a public benefit corporation whose purpose is to



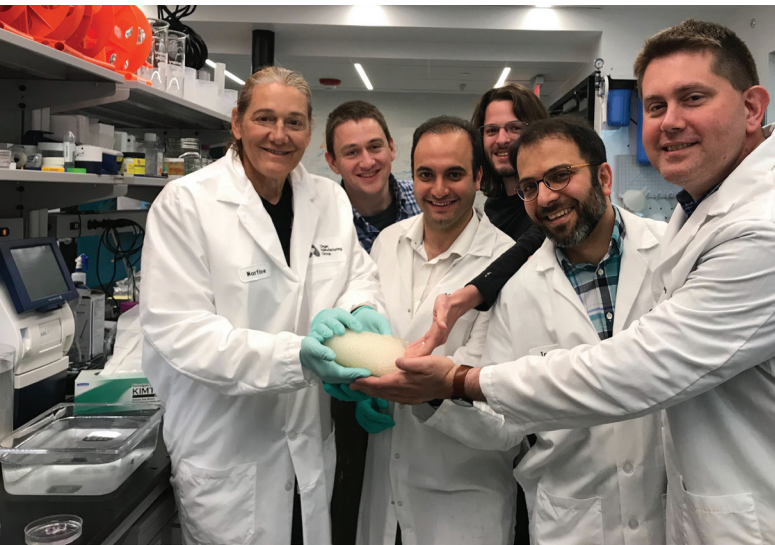
United Therapeutics corporate headquarters and research facility.

provide a brighter future for patients through (a) the development of novel pharmaceutical therapies; and (b) technologies that expand the availability of transplantable organs

Growing without losing your values

It’s clear that United Therapeutics prioritizes not only building on the strength of their research expertise, but also on creating a distinctive, entrepreneurial culture that encourages diversity, innovation, creativity, sustainability, and, simply, fun.

In 2021, among its many awards and recognitions, United Therapeutics was named by Newsweek as one of America’s most responsible companies in 2021. “We’re honored to be recognized as one of America’s most responsible companies,” said Martine Rothblatt, Ph.D., Chairperson and Chief Executive Officer of United Therapeutics. “Our inclusion on the list reflects our longstanding philosophy of operating responsibly for all our stakeholders while helping our patients live better lives.”



CLOCKWISE FROM TOP LEFT: United Therapeutics seeks to address unmet medical needs, particularly in the areas of cardiology, oncology, and infectious diseases. United Therapeutics was presented with the inaugural "High Flyer" award at the November 2021 celebration. The company works to develop novel pharmaceutical therapies for patients

"The early days of United Therapeutics (UT) when we occupied FF were some of the most exciting and rewarding days of my career. We were a small company just starting out that had a singular focus of striving to create better treatments for a horrible disease. The days were busy and long but the close knit environment provided by FF provided a place we could call our own and the security we felt by working in FF during those early days was invaluable. Many of the friendships and connections that were formed during our residency in FF still exist today. Although Highway 54 is much busier and there are many more dining options available these days, it's reassuring that FF has continued its mission of being an effective incubator for startup companies in our rapidly growing area.

Finally, being a North Carolina native, I'm very proud that FF has been so successful in my home state and very importantly, it allows successful companies to hopefully put down roots in our area for the future.

Thank you."

Jeff Sigman
Senior Vice President, Clinical Operations
United Therapeutics Corp.

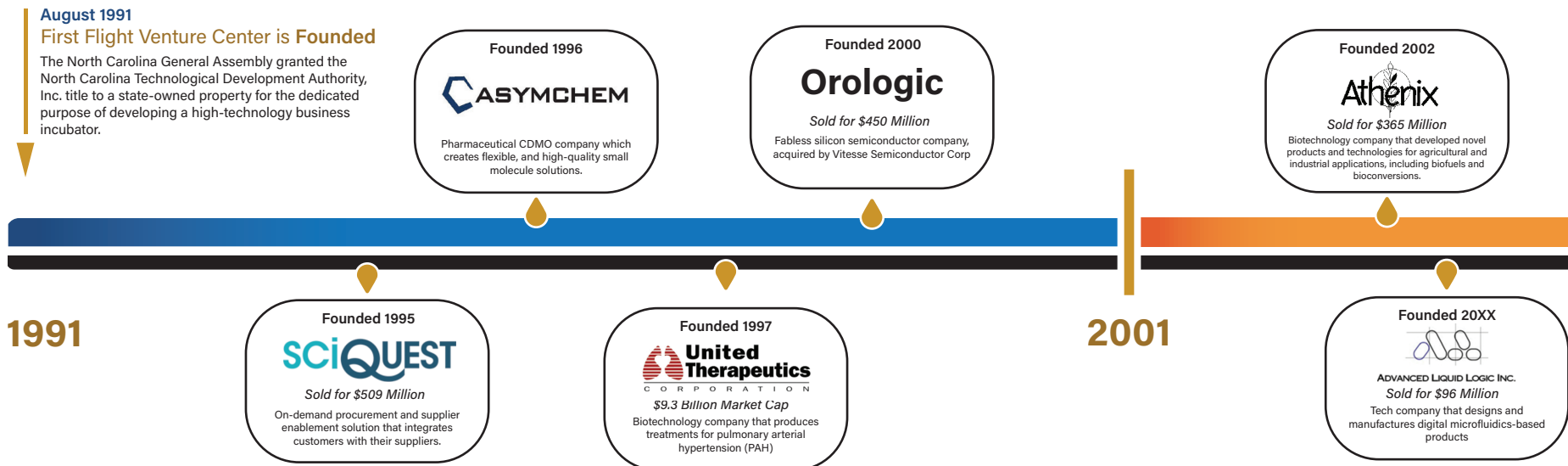
BEFORE THE VENTURE CENTER

Before First Flight Venture Center was established in the 1990's, our building was home to the Triangle University Computation Center (TUCC). TUCC was a venture between Duke University, UNC-Chapel Hill, and NC State University to provide computing services to the universities.

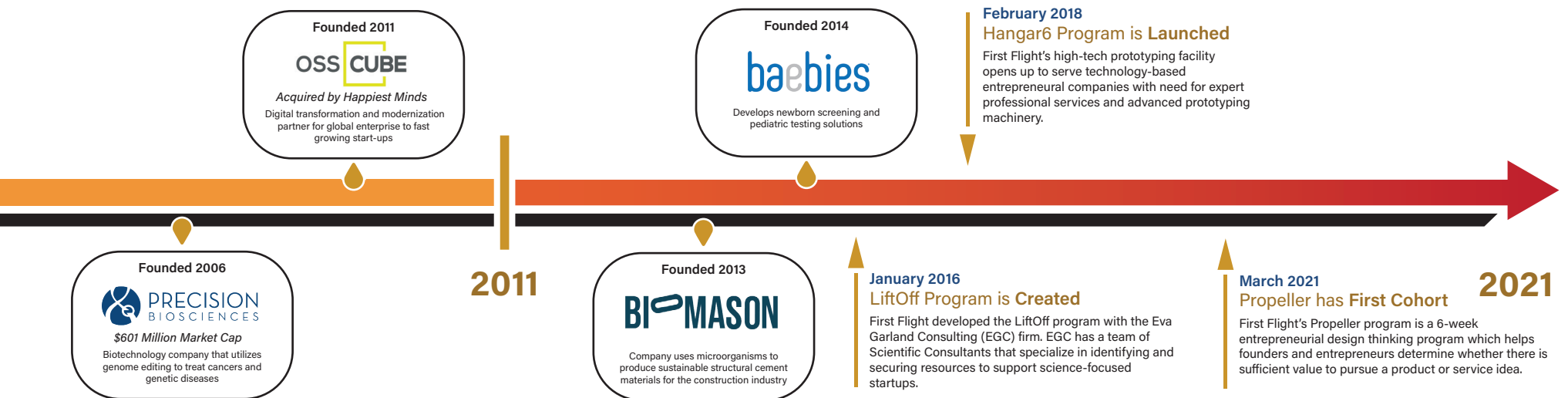


30 Years of Innovation

We've built a legacy of success, but we never rest. First Flight continues to add new programs, new sources of funding, and new workspaces to support and grow the next generation of North Carolina-born science and technology companies.



First Flight Venture Center was established 30 years ago in 1991 by the NC Department of Commerce. Developed as a 501(c)(3) corporation, First Flight set up shop in the Research Triangle Park in order to provide resources, guidance, and space to “high science, high impact” startups and entrepreneurs looking for market commercialization success. In the three decades since our founding, First Flight has hosted over 400 companies, including notable alumni such as United Therapeutics, Cell Microsystems, SciQuest, Athenix, and many more. We are proud to be the longest-serving science and technology incubator in North Carolina and look forward to our future as an international hub of innovation.



The Next 30 Years The First Flight Strategic Plan

In December 2021, First Flight President, Krista Covey announced First Flight's

refocused mission statement "to propel early-stage science focused companies through the delivery of comprehensive resources and to empower the innovator to transform good ideas into great success."

To deliver that mission and mitigate gaps that impede the growth and sustainability of early-stage science-focused companies, First Flight's NEW strategic plan centers around these strategic imperatives announced in 2021.

The first is an opportunity to expand our physical space to serve more entrepreneurs with offices, labs, startup resources, and a community of support. The second, is a focus to expand our programming to serve more innovators with a priority on underserved and underrepresented founders across North Carolina. The third goal allows leadership to explore more funding opportunities for our early-stage founders which is always a challenge on their startup journey. The specific goal is to make it easier, available, and more accessible.



New Programs

Innovative and educational programs are at the heart of what First Flight offers to its resident companies and the entrepreneurial community. In collaboration with the Biomedical Research and Development Authority (BARDA), Wheels UP is a mentor-driven program that will rapidly advance early-stage teams through intensive business and technical education. With the implementation of Wheels UP and other education/training programs launched in 2021 like Test Flight pitch practice and Talking Shop prototyping support group— First Flight is ever mindful of how to provide entrepreneurs with the support they need no matter what stage of development.



Access to Capital

Adequate funding for startups to survive the "valley of death" is a recognized critical need and Flight will respond with the creation of a new capital fund or other financial program to provide essential financial support for the long runway to success that science-focused companies face.

OUR VISION :

To be a global center of excellence empowering science innovators to impact positive change.



Expanded footprint

First Flight's 25,000 sq.ft. science/technology incubator is bursting at the seams and at capacity to serve science-focused startups with the lab space they need in the early stages of their development. We intend to maximize our prime RTP location to serve more innovators and provide a needed intermediate space for growing companies.

"Flad Architects is excited to partner with First Flight to develop expanded lab space, consolidate prototyping assets, and centralize programming resources to maximizing their RTP location!"

Roula Qubain,
FLAD Architects

Our Programs

At First Flight, our programs and resources are at the heart of fulfilling our mission to propel early-stage science companies to market, and to empower innovators to transform good ideas into great successes. Our programs span the entirety of the business lifecycle, from ideation to commercialization, and are designed to meet startups at various stages in their company's business development life cycle.

PROGRAMS OFFERED AT ALL STAGES

TALKING SHOP

A monthly event where Hangar6 and First Flight inventors, entrepreneurs, and makers can come together and discuss the latest issues and developments in prototyping and manufacturing.



First Flight's mentoring program, where seasoned executives, entrepreneurs, scientists and others can serve as mentors for resident First Flight companies and entrepreneurs.



The Research Triangle's premier advance prototyping and design assistance facility that enables startups to easily design and build prototypes.



A monthly pitch practice event where First Flight companies can practice their business pitch and receive feedback from fellow entrepreneurs, scientists, and potential investors.



Brings together small groups of non-competing entrepreneurs for monthly private discussions with peers in order to share best practices and solve problems.



First Flight programs are designed to meet entrepreneurs at various stages in their company's life cycle.



Growth

DRIVE

- Accelerates the research, development, & availability of countermeasures to protect against health security threats
- Identifies & helps organizations obtain BARDA (Biomedical Research and Development Authority) funding, & improves fundable pipeline

Pre-growth

Lift-Off

- Helps identify and secure non-dilutive funding
- Assists companies with the grant-writing process

Wheels UP

- Comprehensive accelerator providing collaboration & skilled mentorship to target needs through new product innovation

Start-up

Incubator

- Access secure on-site office/lab space, expert business & investor readiness advice, educational programs, & interaction with entrepreneurs

FAST

- Enables individuals, and businesses in underserved communities to gain access to SBIR/STTR grant funding

Ideation

Coworking

- An economical option for early stage science-focused entrepreneurs to access to the First Flight facility & resources, to advance commercialization.

Propeller

- Helps find the business value in new ideas
- Enables innovators to obtain the business direction and value of their idea, & how to present in an investor-ready pitch



Propeller is an entrepreneurial design thinking program which helps entrepreneurs determine whether there is sufficient value to pursue a product or service idea. Propeller helps entrepreneurs identify potential markets, develop a path to market strategy, and learn how to communicate the value of the idea to early stakeholders and adopters.



2021 was a big year, as it marked the launch of our Propeller program.

Over the course of the year, First Flight hosted three different cohorts of our entrepreneurial design thinking program, where companies and founders can determine whether it is worth it to pursue a potential product or service idea. This year, we are proud to say that we had a total of 15 graduates from our three cohorts, 12 of which came from underrepresented and underserved communities.



Programs Manager Emil Runge teaches First Flight's Propeller program.

The wonderful thing about Propeller is the rapid growth seen in the individual companies and entrepreneurs. In just 6 weeks, they can better communicate their pitch, and share their value to prospective investors, potential customers, or for grant opportunities. Propeller also leverages our Navigators (mentors/entrepreneurs in residence) to assist the cohorts by sharing their experiences, perspectives, and lessons learned. The program culminates in a "Demo Day," which serves as a community celebration of the work that the entrepreneurs have done.



At the conclusion of each Propeller cohort, participants are given the opportunity to present at a special Demo Day event.

"The Propeller Program at First Flight is one of the best career promoting experiences of my life. As a physician entrepreneur, I have an idea but needed the skills to successfully execute the idea. This high science program offered me the tools to successfully build upon my idea to launch the business."



Madhavi Reddy, M.D.,
Founder,
Rocana Health LLC



The LiftOff program provides companies with expert strategic planning and grant-writing services at reduced up-front rates to increase the chances of obtaining non-dilutive funding through federal government grants.

“As a UNC faculty-founded bio-tech startup, we feel incredibly fortunate to be part of RTP’s innovative ecosystem, with which our best experience has been that of the LiftOff program. LiftOff has brought us EGC’s expert consulting service for grant applications at virtually no cost. This is truly valuable for us as an early-stage innovation company with very limited financial resources. Thank you FirstFlight for trusting us. We hope more startups can lift off with LiftOff!”



Yanchung Song, Ph.D.
*President/
 Founder,
 Delgen
 Biosciences
 Inc.*

In 2021, First Flight and grant-writing partner, Eva Garland Consulting, continued to meet a critical need of entrepreneurs with science-focused companies to secure early-stage non-dilutive funding, funding that does not require them to give away equity in their company. Startup companies, particularly companies who may need regulatory approval and years of clinical trials have a significantly longer “runway” along their path to commercialization.

Early-stage companies with limited resources may not have in-house technical writing capacity to obtain a Small Business Innovation Research (SBIR) or a Small Business Technology Transfer (STTR) grant.

The LiftOff program fills that gap with subsidized professional grant writing services to not only create a strategic funding plan to map out their possible funding sources across federal agencies, but also to submit a high caliber grant submission which increases the chance to win an award.

IMPACT OF LIFTOFF PROGRAM
 Since inception in 2016

49 companies participated in LiftOff

\$18.1M funding received

110 Phase I & II proposals submitted

FAST is the Federal and State Technology (FAST) Partnership program, funded by the U.S. Small Business Administration. FAST supports state/regional organizations to increase competitive SBIR/STTR grant proposals submitted and awards won by underrepresented businesses.



FAST

First Flight selected as NC FAST Awardee for 4th consecutive year!

35 early-stage companies experienced Grant Readiness Boot Camp.

First Flight's FAST program included:

- How to WIN SBIR Education Programs
- How to obtain Department of Defense Education Programs
- 2 Day SBIR Grant Readiness Boot Camp for 35 early-stage companies to better prepare companies to submit competitive, winning grant proposals and to provide business experts as mentors for personalized coaching
- Direct grant writing support to 21 companies for their Phase I SBIR/STTR submission
- NC SBIR Celebration Summit, Sept. 22, 2021, a half-day series of panel presentations featured SBIR winning companies sharing lessons learned, investors sharing insights on how to successfully raise capital, experts in opportunities for Department of Defense funding, and SBIR Program Managers discussing priorities and best practices.

14 SBIR/STTR Phase I grants were submitted by FAST supported underserved companies in 2021!

Topics ranged from a device startup focusing on pain relieving wearables so users can customize optimal recovery through a combination of heating, cooling and compression to a technology for converting agricultural byproducts into high quality probiotics to the development of an immunity score as a companion biomarker for breast cancer immunotherapy.

2021 FAST participant SBIR grant wins

\$256,000 Phase 1 SBIR grant, National Science Foundation awarded to **Drive Therapeutics**

\$256,000 Phase 1 SBIR grant, National Science Foundation awarded to **Tree-Co**

\$255,935 Phase 1 SBIR grant, National Science Foundation awarded to **Smart Girls**

"The FAST boot camp hosted by FFVC was exactly what my start-up needed. The program helped reveal the best practices behind writing an SBIR and allowed me additional face time with the grant writing experts at EGC! Highly recommended for the science/tech startups and I plan to apply again this year!"



*Justin Dues,
Founder
& CEO,
Prohuman
Tech*



In 2022, First Flight Venture Center is launching Wheels UP, a comprehensive 12-week, cohort-based, sector-focused accelerator for science startups. Wheels UP is a mentor-driven program that will rapidly advance early-stage teams through intensive business and technical education.

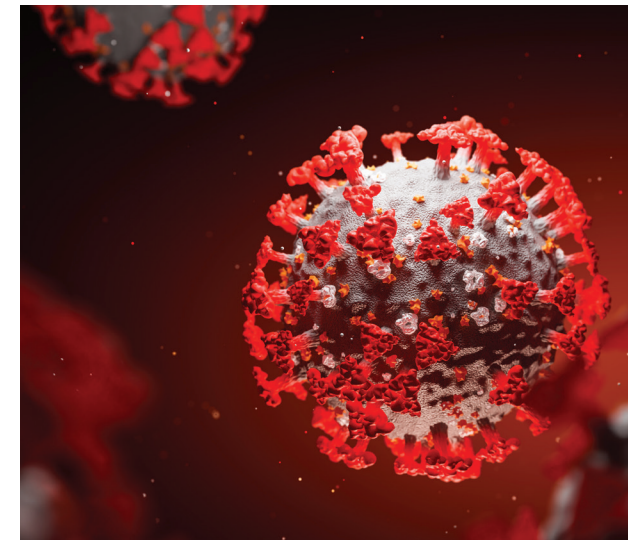
"First Flight is proud to support companies at the forefront of scientific innovation in North Carolina. We evaluate the needs of early-stage companies and develop new programs to fill critical gaps that impact success. I am happy to announce the 2022 launch of the Wheels UP program, a comprehensive 12-week, cohort-based, sector-focused accelerator for science startups. In collaboration with the Biomedical Advanced Research and Development Authority (BARDA), the first Wheels UP cohort will accelerate the ability of entrepreneurs to scale disruptive biotechnology and health security solutions."

Krista Covey,
President, First Flight Venture Center

First Flight is looking forward to launching our brand-new accelerator program, Wheels UP, in 2022. This program is a platform that can be tailored by industry to accelerate the ability of entrepreneurs to scale disruptive innovations, technologies, and solutions. Wheels UP will increase the quality and quantity of viable companies and lifesaving technologies and will catalyze investor interest in these sectors.

The Wheels UP program will encompass a wide variety of topics that are vital to entrepreneurs and start-ups, including business education, technical education, mentorship sessions, funding support, access to networking and resources, and the opportunity to present at a Demo Day in front of potential customers, investors, and stakeholders at the Biomedical Advanced Research and Development Authority (BARDA) Industry Day.

Wheels UP will be a comprehensive 12-week, cohort-based, sector-focused accelerator. It is designed to rapidly advance early-stage teams through intensive business and technical education. Cohorts will meet weekly for the core education sessions that will focus on technical instruction and business infrastructure education. Additional time will be spent with mentors, coaches, technical teams, and potential customers and investors. There will also be funding opportunities, with \$100K in total prize money from BARDA being distributed to the first cohort.



First Flight has been selected by the US Dept. of Health and Human Services for the DRIVe (Division of Research, Innovation, and Ventures) Initiative. Part of the BARDA (Biomedical Advanced Research and Development Authority) program, DRIVe is working to identify and fund companies who solve priority threats.



First Flight is honored to have been selected by the U.S. Department of Health and Human Services as one of 13 national innovation hubs tasked with finding solutions to protect the world from health security threats.

This DRIVe (Division of Research, Innovation and Ventures) initiative is part of BARDA (Biomedical Advanced Research and Development Authority) and is designed to identify and fund companies who solve priority threats to health security.

The first Wheels UP accelerator cohort will collaborate with BARDA to help 10 entrepreneurs scale disruptive biotechnology and health security solutions. There will be a total of \$100K in prize money. The initial cohort will be offered virtually to accommodate a national/global pool of applicants.

Other highlights of 2021 include First Flight leading a national effort to create a 4-part reverse pitch series for BARDA that focused on funding opportunities that included all 13 BARDA accelerators. This marked the first time an initiative of this kind has been done by BARDA. First Flight also hosted the National Sepsis Reverse Pitch, and the Mask Challenge Regional Summit.

“The resources and programs at First Flight Venture Center have been essential in defining a translational and development pathway for novel inventions with commercial potential. ECU is appreciative of this valuable partnership.”



Marti Van Scott,
ECU



Hangar6 is a unique space for companies, entrepreneurs, and startups to engage in early-stage prototyping, one-on-one design assistance, and educational programs and events. Offering access to professional-grade equipment, we aim to lower the hurdles entrepreneurs face on their path to commercialization.

“Hangar6 is an integral part in growing the abilities of the statewide North Carolina Manufacturing Extension Partnership. We are excited to expand our collaboration to help smaller NC manufacturers to innovate by using Hangar6’s expertise with advanced capabilities such as 3D scanners and printers in designing, building, and modeling prototypes. Congratulation to First Flight Venture Center on 30 years of service and innovation.”



***Phil Mintz,**
Executive Director,
Industry Expansion
Solutions & Director,
North Carolina Man-
ufacturing Extension
Partnership NC State
University, College of
Engineering*

Over the course of 2021, Hangar6 was able to deliver a significant impact for our members and entrepreneurs. This year we were able to hold technical assistance meetings with our members, where our team helped solve critical design and engineering issues that were hampering progress on their projects, contributing to the launch of novel prototypes for our member companies.



Hangar6 Shop Manager, Sam Dirani, explains equipment, and helps people understand how valuable having a prototyping facility on hand can be for many entrepreneurs.

Along with the technical assistance meetings related to specific design issues, our Hangar6 team also conducted hundreds of coaching sessions to help members think through the commercial aspects of their product development, making sure that the community we serve is analyzing and ideating around how they are going to turn their idea into a business in a more holistic way.

2021 was above all a year for partnership, collaboration, and community. Through a new grant award from NC IDEA, Hangar6 is now able to further assist low-income entrepreneurs by reducing the financial burden of working on advanced equipment, such as our MetalX metal 3D Printer, ensuring more equitable access to important technology. Collaborations with organizations and partners allowed Hangar6 to help ever more entrepreneurs and prototypers in 2021. We look forward to another exciting year of building community through these educational seminars, events, and partnerships.

Hangar 6 Success Stories: Rapid prototyping accelerates time-to-market.

Redbud Labs: Rapid prototyping and iteration

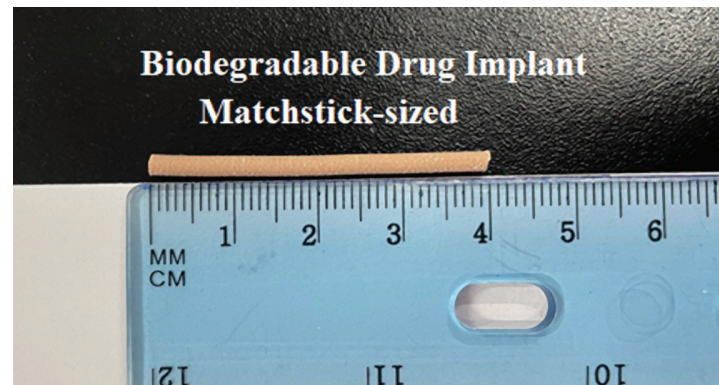
Longtime Hangar6 member Redbud Labs is launching NAExtract, a new benchtop platform for laboratory automation, in 2022. By combining smart engineering, breakthrough microfluidics, and rapid prototyping and iteration, Redbud was able to develop NAExtract in record time. Redbud Labs collaborated frequently with Hangar6 throughout the development of the product, and Hangar6 is delighted to have contributed to the progress of the NAExtract team.



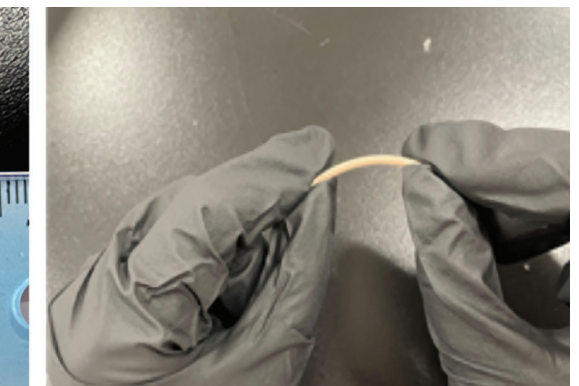
NAExtract is Redbud Labs' latest product, and was partially developed at Hangar 6.

Zymeron: Prototyping multiple devices simultaneously

Hangar6 member Zymeron has been making great strides in the development of multiple prototypes. Having received federal funding from the National Institutes of Health (NIH) and the Defense Advanced Research Project Agency (DARPA), Zymeron is well on its way to developing both an innovative point of care diagnostic tool and a new microfluidic filtering device. In addition to the Hangar6 facility, Zymeron has also made use of, and participated in First Flight's Propeller Program, designed to help entrepreneurs find the business value in their product or idea.



Zymeron has developed several prototypes through their work at Hangar6, including a diagnostic tool and a microfluidic filtering device, among others.



Champions of Innovation Funding the First Flight mission.

First Flight's donor recognition program, Champions of Innovation, reflects the far-reaching support from key federal agencies, government/civic donors, foundations, corporations, university partners, individuals, and a diverse range of innovation stakeholders. Giving levels represent cumulative financial and matching gifts over the 2021 calendar year.

The journey from idea to commercialization is a long one in the life sciences sector and it would be impossible for First Flight to provide the programmatic and strategic support it does without not only funding but also the "roll up the sleeves and get involved" attitude of our unique donor community.

THANK YOU to all who are part of the First Flight community, and we are happy to recognize YOU as a "Champion of Innovation."

The Wright Society (\$100,000 and beyond)



Captains Circle (\$25,000-\$99,999)



Mary U. Musacchia

North Carolina Biotechnology Center

NCDIDI
NORTH CAROLINA DEFENSE INDUSTRY DIVERSIFICATION INITIATIVE



Office of Research Commercialization



Aviator's Club (\$10,000-\$24,999)



Co-Pilots of Excellence (\$1,000-\$9,999)

Attivo Marketing Design	O'Brien Atkins
Breezi*	Radius Social*
Caterpillar	Redbud Labs*
CSC Leasing*	Regency Centers
Dan Webb Designs*	Research Triangle Park Foundation
East Carolina University,* Office of Innovation and New Ventures, Division of Research, Economic Development and Engagement	Plantd*
Ecliptic	Powered Research
ECSI Fibrotools*	Seneca Devices*
Financial Directions	Shop Bot*
Goldfinch Sensor* Technologies and Analytics LLC	Synthesis
Hutchison, PLLC	StoredTech
Insight Strategies*	RTP Capital
Morningstar Law Group	Tadlock Partners*
NC Biosciences Organization	<i>Individual contributions from:</i>
NK Patent Law	Jean Davis
	Mary Beth Thomas
	Paul Munana,
	Don O'Korn

The Flight Crew (Under \$1000)

The Launch Place	Kenneth Tindall
Peter Ginsberg	Larry Wilson
Norris Tolson	



Meet the 2021 First Flight Team

Krista Covey, President

Bridget McMinn, Director of Operations and Partnerships

Emil Runge, Director of Programs

Sam Dirani, Shop Manager (Hangar6)

Caroline Brinkley, Digital Marketing & Events Coordinator

David Cheatham, Office Manager

Jonathan Collins, Innovation Programs Manager

Katherine Snow, Hangar6 Intern

Dan Webb, Marketing Intern



Everest

One of several First Flight
"Pets-in-residence."

"As owner of Touchstone 3D, it has been my sincere pleasure to collaborate with First Flight and Hangar 6 in community outreach to expand our region's innovation ecosystem. We are proud to offer our product development expertise to help educate the next generation of entrepreneurs in our area. As First Flight is celebrating its 30th Anniversary, we are excited for the prospects the next 30 years will bring."

Allen Moore, President, Touchstone 3D



FIRST
FLIGHT

OUR MISSION:

To propel early-stage and technology focused companies through the delivery of comprehensive resources, and to empower innovators to transform good ideas into great successes.

For information about our incubator program or to schedule a tour, visit FFVCNC.ORG

What people are saying about First Flight.

"First Flight has all the elements of a successful technology business incubator—people, information, support, and facilities—in large quantities and at high quality. Few organizations can say they've played such a pivotal role in incubating the next generation of North Carolina's economy. First Flight has had a great first 30 years, and it is well positioned to soar even higher in its next 30 years and beyond."

John Hardin, Executive Director of the Office of Science, Technology & Innovation

"First Flight has been a long-standing source of innovation and inspiration in our ecosystem. They have played an integral role in empowering the entrepreneurial spirit and helping transform raw ideas into viable companies. We at NC IDEA are proud to be in the company of such organizations in our collective pursuit to support economic advancement throughout the state of North Carolina."

Thom Ruhe, President and CEO, NC IDEA Foundation

"First Flight has been an important catalyst and a launching pad for many North Carolina bio-tech startups. A perfect example is First Flight's SBA FAST grant, which supports North Carolina companies applying for SBIR and STTR grants. This program will become exponentially more valuable now that the General Assembly has made a recurring annual appropriation of \$2 million for the state's SBIR/STTR incentive match, the One NC Small Business Program."

Laura Gunter, President, NC Biosciences Organization