

TRENDLINES	MIDYEAR 2023	MIDYEAR 2022	MIDYEAR 2022 Y-O-Y	
HOUSTON CPRIT FUNDING	\$64.9 M	\$97.8 M	Ψ	
HOUSTON VENTURE CAPITAL FUNDING	\$258.7 M	\$455.9 M	Ψ	
HOUSTON NIH FUNDING	\$512.7 M	\$613.1 M	•	
LIFE SCIENCES UNDER CONSTRUCTION	600,000 SF	1,146,499 SF	Ψ	

Source: Cancer Prevention & Research Institute of Texas (CPRIT), Pitchbook, Bureau of Labor Statistics, CoStar, Real Capital Analytics, National Institutes of Health (NIH). Transwestern. Arrow color palette indicates property sector agency leasing, management and investor trending assessment(s).

LEADING INNOVATION IN FUNDING & BUILDING DESIGN

Houston #1 in CPRIT Funding

Houston's life sciences sector made strides during the first half of the year. The Cancer Prevention & Research Institute of Texas (CPRIT) awarded nearly \$65 million in research funding to Houston area life sciences programs, eclipsing the total funding awarded for all other major Texas markets combined. Meanwhile, venture capital inflows for the metro reached \$258.7 million by midyear, adding an additional \$113 million since March. Rounding out the funding wins, Houston obtained \$512.7 million from the National Institutes of Health (NIH).

Alexandria Real Estate Delivers First Houston Life Science Building

Meeting the needs of the changing commercial property landscape, Houston's emerging life sciences sector is proactively building and designing spaces with a purpose. For example, in The Woodlands, 8800 Technology Forest Place completed 124,000 square feet of construction of the first of three campus lab buildings designed to ignite innovation with flexible laboratory, office, biomanufacturing and collaboration space.

Incubator and VC Firm Signs Lease in TMC

In other market activity, Portal Innovations, a venture capital firm, leased 30,000 square feet of lab space in the TMC3 Collaborative Building currently under construction to host life sciences startups. In total, Houston building owners have planned over 113,000 square feet of speculative labs, the majority of which are currently under construction.



INDUSTRY NEWS & ANNOUNCEMENTS

Purpose Built Lab Buildings and Spec Labs Driving Activity

- In Houston, speculative suites are emerging as an important part of the metro's life sciences growth. Averaging between 6,000 and nearly 30,000 square feet, these suites feature office, lab and flex space. Over 87,000 square feet of spec labs have delivered this year alone. Two of the three newest suites ranging between 11,000 and 30,000 square feet at 2450 Holcombe Blvd have since been leased. More than 30,000 square feet of suite space between four labs have also been completed at 8800 Technology Forest Place, while an additional 100,000 square feet of speculative suite space is under development, planned or in permitting throughout four projects across the metro.
- McCord Development announced this summer its plans to develop an extensive 45-acre life sciences hub with 500,000 square feet of biomanufacturing, lab and office space northeast of downtown Houston named BioHub Two.
- The Howard Hughes Corporation and Vitrian created a joint venture aimed to develop cGMP/biomanufacturing facilities in The Woodlands. Notable existing tenants in The Woodlands include Cellipont BioServices, Millipore Sigma, VGXI and KBI Biopharma.

Market Activity



Chicago-based venture capital firm Portal Innovation will be opening a 30,000-square-foot lab in Helix Park next year. The space, located in the new 250,000 square foot TMC3 Collaborative Building just off Old Spanish Trail, will host biotech and MedTech startups running therapeutic and diagnostic experiments. Portal's lab space will include both wet and dry labs, as well as \$2 million of best-in-class equipment.



VenoStent executed a lease at TMC Innovation Factory at 2450 Holcombe Blvd. VenoStent is a medical device and tissue engineering company which develops technology to improve the quality and length of life for dialysis patients. They initially received \$16 million in a Series A funding round, and raised \$22.2 million to date.



FUNDING LANDSCAPE

Greater Houston's Venture Capital and Research

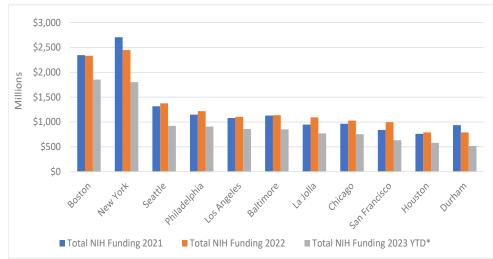
- Venture capital inflows matured during the year as Houston's life sciences ecosystem continues to establish itself. Capsule Corporation, a company which developed a digital pharmacy platform designed to facilitate the delivery of prescription medication, raised \$100 million in funding so far this year. Previously, the company raised \$300 million of Series D funding in a transaction led by Durable Capital Partners in April 2021.
- Houston-based IPS Heart, a biopharmaceutical company developing induced pluripotent stem cells focused on heart disease obtained \$30 million in venture funding to date. Previously, the company procured approximately \$7 million of Series A venture funding 2021.
- Transwestern Research indentified six companies, each of which amassed \$10+ million in their lastest round of funding. Spark Biomedical raised \$16.23 million of Series A venture funding from Capital Factory in May 2023 while VenoStent obtained \$16.06 million through a combination of Series A and Series A1 venture funding from Good Growth Capital in July 2023.
- Houston's top three National Institute of Health (NIH) recipients nclude Baylor College of Medicine, University of Texas MD Anderson Cancer Center, and University of Texas Health Science Center Houston with a combined grant award totaling over \$484.5 million.

TOP TEN VC FUNDED COMPANIES FOR HOUSTON LIFE SCIENCES

Company	Industry	2023 YTD Funding (\$ Millions)	Total Funding All Years (\$ Millions)	
CAPSULE CORPORATION	Pharmaceutical	\$100.0	\$690.0	
IPS HEART INC.	Pharmaceutical/BioTech	\$30.0	\$55.0	
SPARK BIOMEDICAL, INC.	Med Device	\$16.2	\$16.3	
VENOSTENT, INC.	Med Device	\$16.1	\$18.8	
ONCORESPONSE, INC.	Pharmaceutical/BioTech	\$13.3	\$174.0	
GENIALIS, INC.	Pharmaceutical/BioTech	\$13.0	\$15.7	
TACHYON THERAPEUTICS, INC.	Pharmaceutical/BioTech	\$11.5	\$11.5	
RHAEOS, INC.	Med Device	\$10.5	\$12.7	
MEMGEN, INC.	Pharmaceutical/BioTech	\$8.1	\$35.9	
NANOSPECTRA BIOSCIENCES, INC.	Pharmaceutical/BioTech	\$6.1	\$23.4	
TOP 10 GRAND TOTAL		\$224.8	\$1,053.5	
ALL HOUSTON TOTAL		\$258.7	\$1,157.8	

Source: Pitchbook, Transwestern

NATIONAL INSTITUTE OF HEALTH (NIH), TOTAL FUNDING



Source: NIH, Transwestern. Annual calendar year funding, sorted by 2023 in descending order. *Total NIH Funding YTD is through August 2023

HOUSTON LIFE SCIENCES MARKET | SUMMER-FALL 2023

FUNDING CONTINUED

Houston 2023 MidYear CPRIT Awards

- Houston leads the state in funding grants over the past three consecutive years from the Cancer Prevention & Research Institute of Texas (CPRIT), exceeding a total of \$457 million since 2020. CPRIT metro funding for 2023 has nearly reached \$65 million with an additional \$52 million pending.
- The University of Texas M.D. Anderson Cancer Center received a total of \$17.8 million in funding with its top awards given for research on skin, lung and bronchus, the brain, and other nervous systems. The University of Texas Health Science Center was awarded \$4 million for breast, cervix, gallbladder, liver, and HPV-related research. Other Houston CPRIT recipients include 7 Hills Pharma and OncoResponse, each obtaining more than \$13 million in awarded funding so far for 2023.

CANCER PREVENTION & RESEARCH INSTITUTE OF TEXAS, TOP 10

Rank	2023 YTD Top CPRIT Recipients	Amount
1	7 HILLS PHARMA LLC	\$13,439,001
2	ONCORESPONSE	\$13,259,174
3	TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER AT EL PASO	\$6,000,000
4	THE UNIVERSITY OF TEXAS AT DALLAS	\$6,000,000
5	THE UNIVERSITY OF TEXAS RIO GRANDE VALLEY	\$6,000,000
6	TEXAS A&M UNIVERSITY SYSTEM HEALTH SCIENCE CENTER	\$5,998,422
7	OMNINANO PHARMACEUTICALS LLC	\$2,711,437
8	THE UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER	\$2,500,000
9	THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER HOUSTON	\$2,499,492
10	THE UNIVERSITY OF TEXAS MEDICAL BRANCH AT GALVESTON	\$2,257,898

scoring \$2.7 million, while Allterum Therapeutics, located in the TMC, is a biopharmaceutical company focused on developing treatments for acute lymphoblastic leukemia, B-cell malignancies, and lymphomas.

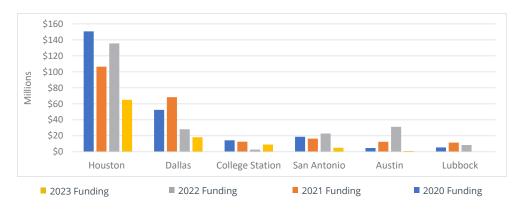
Other local pharmaceutical and biotechnology companies on the rise

include OmniNano Pharmaceuticals, a start-up company working to

develop a proprietary drug delivery system for treating pancreatic cancer,

CPRIT FUNDING BY TEXAS METRO 2020 - 2023YTD

Location	2020 Funding	2021 Funding	2022 Funding	2023 YTD Funding	
HOUSTON	\$150,659,803	\$106,435,373	\$135,550,932	\$64,985,368	
DALLAS	\$52,448,736	\$68,316,485	\$28,196,499	\$18,174,221	
COLLEGE STATION	\$14,320,044	\$12,609,211	\$2,737,468	\$9,048,422	
SAN ANTONIO	\$18,772,436	\$16,444,802	\$22,797,823	\$5,041,458	
AUSTIN	\$4,749,616	\$12,482,808	\$31,247,839	\$1,050,000	
LUBBOCK	\$5,427,427	\$11,457,349	\$8,456,656	-	
REMAINING TX	\$4,731,250	\$13,905,671	\$9,209,044	\$8,257,898	
Totals	\$246,378,062	\$227,746,028	\$238,196,261	\$106,557,367	



Source: CPRIT, Transwestern. Annual calendar year funding, sorted by 2023 in descending order.

Source: CPRIT, Transwestern. 2023 YTD funding, sorted by awarded amount in desending order.

PURPOSE BUILT LIFE SCIENCES BUILDINGS

HOUSTON LIFE SCIENCES MARKET | SUMMER-FALL 2023

Under Construction

TMC3 COLLABORATIVE BUILDING

The four-story, 250,000 square foot, state-of-the-art building is expected to deliver in September 2023. Building features include a 43,000 square foot joint research lab, office/co-working space along with a shared IT infrastructure to facilitate synergistic research initiatives for four founding institutions: MD Anderson, Texas A&M University Health Science Center, the University of Texas Health Science Center at Houston, and TMC.



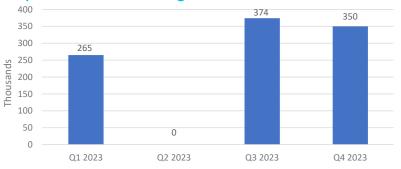
DYNAMIC ONE

The construction of Phase One of Dynamic One at TMC Helix Park began in September 2021 and is scheduled for completion in Q4 2023. It will span 350,000 square feet and feature a market-leading tenant amenity package, anchored by retail and restaurant space, opening onto the vibrant Helix Park.

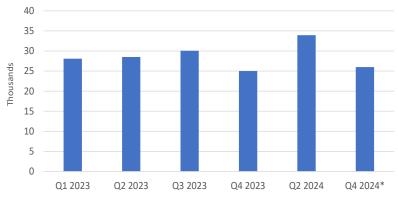


DELIVERY SCHEDULE

Purpose Built Lab Buildings



Class A Speculative Labs



Source: Transwestern. RBA: Rentable Building Area. Quarters without projected deliveries not shown.

*Space is currently in a planning stage and has not yet started construction

9	Building Name	RBA (SF)	Expected Delivery	Percent Leased	Quoted Rate	OPEX	Owner
der	TMC3 COLLABORATIVE BUILDING	250,000	Q3 2023	100%	\$65.00	\$20.00	TMC, MD Anderson, Texas A&M, and UT Health
Und	DYNAMIC ONE	350,000	Q4 2023	32.7%	\$65.00	\$24.00	Beacon Capital and CalSTRS
3	TOTAL	600,000		59.9%	\$65.00	\$22.33	

	Building Name	Address	RBA (SF)	Delivered	Percent Leased	Quoted Rate	OPEX	Spec Lab (SF)
Recently Delivered	LEVIT GREEN - PHASE 1	3131 Holcombe Blvd	265,000	JAN 2023	4.0%	\$65.00	\$22.00	25,000
Rece Deliv	8800 TEHNOLOGY - BLDG 100	8800 Technology Forest Pl	124,110	AUG 2023	37.5%	\$50.00	\$18.00	30,067
	TOTAL		389,110		14.7%	\$60.22	\$20.72	55,067

LIFE SCIENCE OCCUPIERS BY SUBMARKET & SQUARE FEET

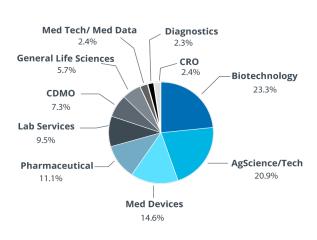
HOUSTON LIFE SCIENCES MARKET | SUMMER-FALL 2023

Life Sciences Subcategory	Industrial	Flex*	Office	Total
ВІОТЕСН	285,107	159,544	954,386	1,399,037
AGSCIENCE/TECH	1,254,881	-	-	1,254,881
MED DEVICE	426,303	224,617	229,339	880,259
PHARMACEUTICAL	374,193	135,336	157,649	667,178
LAB SERVICES	234,464	269,213	70,692	574,369
СДМО	34,771	110,798	291,121	436,690
GENERAL LIFE SCIENCES	208,484	62,542	69,942	340,968
MED TECH/MED DATA	2,000	7,700	167,033	176,733
DIAGNOSTICS	-	112,868	29,957	142,825
CRO	97,488	-	44,421	141,909
GRAND TOTAL	2,917,691	1,082,618	2,014,540	6,014,849

Source: Transwestern, Costar

*Flex A type of building(s) designed to be versatile, which may be used in combination with office, research and development, quasi-retail sales, and includes distribution uses. Transwestern identified 60,000 SF of occupiers located in strip centers with 26,000 SF coming from Near Southwest.

HOUSTON LIFE SCIENCES COMPOSITION



Life Sciences Category	SF Occupied
BioTech	1,399,037
AgScience/Tech	1,254,881
Med Device	880,259
Pharmaceutical	667,178
Lab Services	574,369
CDMO	436,690
General Life Sciences	340,968
Med Tech/Med Data	176,733
Diagnostics	142,825
CRO	141,909
TOTAL	6,014,849

Source: Pitchbook, Bureau of Labor Statistics, Real Capital Analytics, Revista, Transwestern, Costar. Does not equal 100% due to rounding.

TOP LIFE SCIENCES EMPLOYERS IN HOUSTON































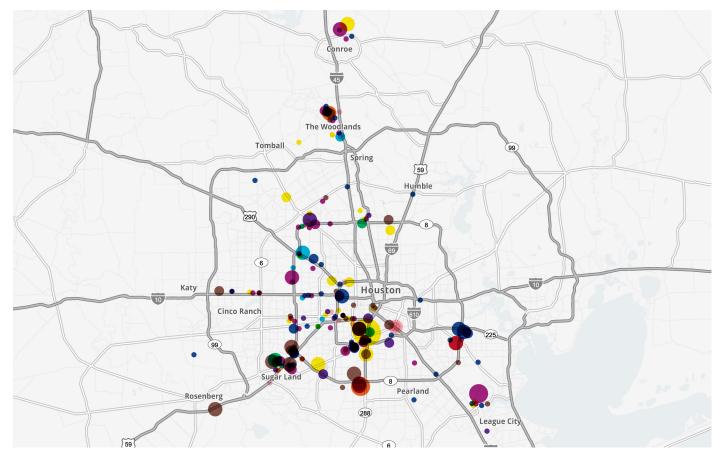


	Indu	strial	Flex*		Office		Total	
SUBMARKET	RBA	% Leased	RBA	% Leased	RBA	% Leased	RBA	% Leased
BAYTOWN/CHANNELVIEW	269,334	100%	-	-	-	-	269,334	100%
CLEAR LAKE	-	-	-	-	47,229	100%	47,229	100%
NEAR SOUTHWEST	-	-	100,449	80%	903,693	89%	1,004,142	88%
SOUTH	56,117	100%	91,366	100%	276,770	100%	424,253	100%
THE WOODLANDS/CONROE	-	-	390,764	97%	394,213	40%	784,997	68%
ТМС	-	-	28,252	93%	1,990,164	78%	2,018,416	78%
HOUSTON GRAND TOTAL	325,451	100%	610,831	94%	3,612,069	79%	4,543,230	82%

HOUSTON LIFE SCIENCES MARKET | SUMMER-FALL 2023

PURPOSE BUILT LIFE SCIENCE PROPERTIES BY SUBMARKET & SQUARE FEET

Source: Transwestern, Costar *Flex A type of building(s) designed to be versatile, which may be used in combination with office, research and development, quasi-retail sales, and includes distribution uses. Transwestern identified 60,000 SF of occupiers located in strip centers with 26,000 SF coming from Near Southwest.



HOUSTON LIFE SCIENCES OCCUPANCY BY LOCATION

- AgScience/Tech
- **BioManufacturing CDMO**
- BioTech
- CRO
- Diagnostics
- Lab Services
- **General Life Sciences**
- Med Device
- Med Tech/Med Data
- Pharmaceutical

Source: Transwestern, Costar, ZoomInfo. *Size of circle is relative to SF occupied



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