



Buffalo Niagara Life Sciences

PHARMACEUTICALS/BIOTECHNOLOGY • MEDICAL DEVICES • HEALTHCARE IT



AESKU DIAGNOSTICS

BUFFALO,
NEW YORK

"I am very thankful for the assistance and support provided by Invest Buffalo Niagara and state and local agencies. WNY is a fantastic place to live and work. You can find hard working, sincere, and dedicated employees here."

– Vijay Kumar, Vice President



120-ACRE
BUFFALO NIAGARA
MEDICAL CAMPUS

0% STATE
CORPORATE
INCOME TAX

FOR LIFE SCIENCE
MANUFACTURING COMPANIES

10 YEARS TAX FREE
ON OR NEAR ELIGIBLE
ACADEMIC CAMPUSES



UNIVERSITY AT BUFFALO SPENDS OVER
\$400 M ON RESEARCH
YEARLY



Welcome to Buffalo Niagara

Our region is home to an ever-growing network of life science companies - from spin-offs of Roswell Park Comprehensive Cancer Center and businesses beginning their incubation at the University at Buffalo (UB), to industry leaders like ThermoFisher Scientific. Led by UB, a hub of research, collaboration, and scientific discovery, and the Buffalo Niagara Medical Campus (BNMC), spanning 9 million sq. ft., Buffalo Niagara is a burgeoning leader in the life sciences sector.

Since 2000, Invest Buffalo Niagara has helped more than 35 life science companies expand or relocate to the Buffalo Niagara region.



Dedicated to Life Sciences

The BNMC is 120 acres in the heart of downtown Buffalo and is home to the new state of the art UB medical school, Oshei Children's Hospital, and many of the startups spurring innovation in Buffalo. Over 150 companies and nine member institutions on this multi-anchor campus employ about 16,000 people. Below are just a few examples of organizations that make up this dynamic, collaborative, and exciting space.

+ *Innovation Center* | innovationcenterbuffalo.org 1 2

The largest business incubator in Buffalo, made up of 180,000 sq. ft. in three buildings, the Innovation Center includes idea generation, campus collaboration, business modelers, startup companies, service providers, and scaling post-launch businesses. The BNMC's non-profit organization, 43North, and dig are housed here.

+ *Hauptman-Woodward Medical Research Institute* | hwi.buffalo.edu 8

A Buffalo institute for 60+ years, focused on crystallography, with international recognition. In 1985, Dr. Herbert Hauptman became the first mathematician to win the Nobel Prize in Chemistry. Dr. Hauptman discovered new methods for analyzing crystallographic diffraction data. These techniques have since been used throughout the world.

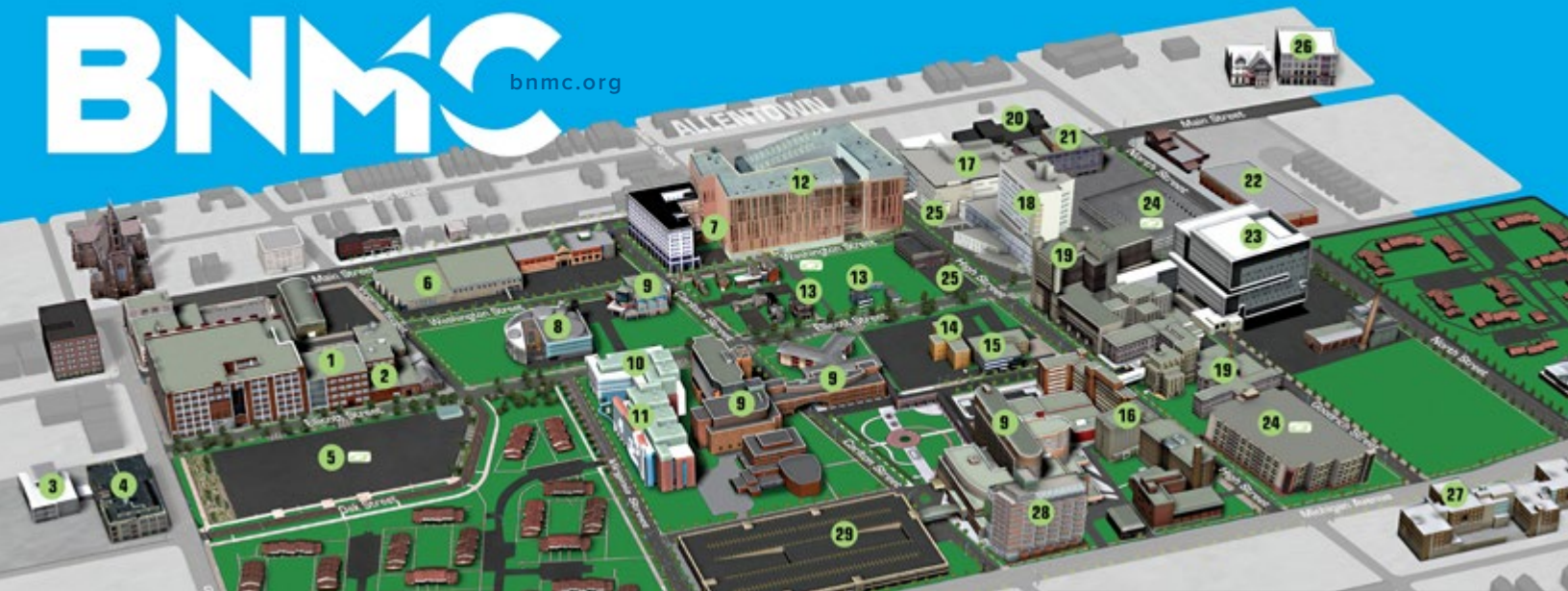
+ *UB NYS Center of Excellence in Bioinformatics & Life Sciences* 9

buffalo.edu/bioinformatics | buffalo.edu/genomics

A hub of innovation and technology-based economic development driving scientific discovery and facilitating collaboration among academia and industry. Genomic medicine is transforming nationally here with an \$100M collaboration between UB and the NY Genome Center in Manhattan. The institute is also home to **UB's Center for Computational Research**, one of the most powerful university-based supercomputers in the country.

+ *Roswell Park Comprehensive Cancer Center* | roswellpark.org 10

Founded in 1898 as the nation's first cancer center, Roswell brings together the best minds dedicated to understanding, preventing, and curing cancer.



+ **UB Jacobs School of Medicine and Biomedical Sciences** 12

| medicine.buffalo.edu

An eight-story site providing students, faculty, and researchers a closer connection to partners on the BNMC. The medical school offers a broad array of educational opportunities as well as research programs, and resources. Students and faculty are embedded into the community through active outreach programs including the Brain Museum, Head Start for Tomorrow's Students, and UB HEALS.

+ **John R. Oishei Children's Hospital** | ochbuffalo.org 18

A 12-story comprehensive pediatric health care facility on the BNMC offering pediatric critical care, Level III neonatal intensive care, and Level 1 Pediatric Trauma.

+ **Gates Vascular Institute** | kaleidahealth.org/gvi 23

Buffalo has become a destination for endovascular surgery training, having had 38 physicians from 17 counties in the last four years spend three days to three months observing procedures, learning new techniques, and exploring latest devices.

+ **The Jacobs Institute** | jacobsinstitute.org 23

A medical device innovation center specializing in heart attack, stroke, and other vascular diseases. The JI inspires the next generation with unique hands-on training with simulation experiences and 3D-printed vascular flow modules. Innovation and product development is the JI's primary focus with its Idea to Reality Center (i2R). The JI's i2R is the smartest, fastest, most cost-effective way to develop and endovascular device idea.

+ **UB Clinical & Translational Science Institute** | buffalo.edu/ctsi 23

Principal investigators and research coordinators have access to the services and resources provided with the CTSI to advance health care solutions from discovery to delivery.



One of the most powerful university-based supercomputers in the country

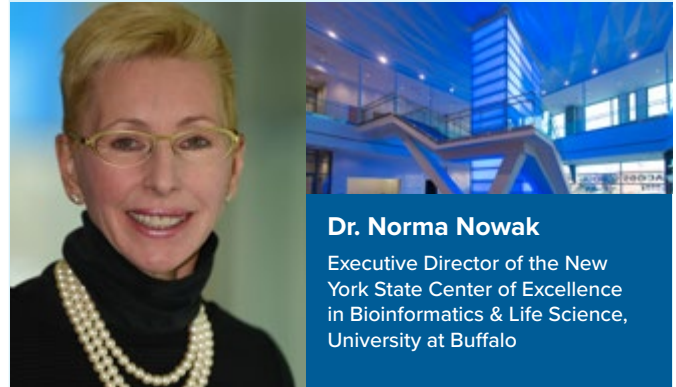
University at Buffalo Center for Computational Research (CCR) provides UB researchers and partners, including industry, with access to high performing computing and visualization resources for software development, computational science, advanced database engineering, big data analytics, and other data driven sciences.

- Housed in a 4,000 sq.ft. machine room
- More than 170T ops of peak performance capacity
- Industrial cluster alone consists of 216 HP SL230 Gen8 servers
- Visualization laboratory featuring a tiled display wall and a VisDuo 3D projection.

Top Six Fastest-Growing Life Sciences Occupations in Buffalo Niagara

- 1 Chemical Equipment Operators and Tenders
- 2 Compliance Officers
- 3 Electrical Engineers
- 4 Computer Systems Analysts
- 5 Packaging and Filling Machine Operators and Tenders
- 6 Biological Technicians

Source: Economic Modeling Specialists Inc. (EMSI) 2018



Dr. Norma Nowak

Executive Director of the New York State Center of Excellence in Bioinformatics & Life Science, University at Buffalo

“Through university-industry applied research collaboration, we develop new, innovative biomedical and bioengineering products and services that spur the life sciences industry, providing maximum impact on the region’s economy.”

Educated and Skilled Workforce

Life sciences represents 2% of all employment in Buffalo Niagara, higher than the national average of 1.6%. Employees in Buffalo Niagara have access to a steady stream of talent graduating from the area’s 21 colleges and universities.

Annual Graduates by Degree

PROGRAM	< TWO-YEAR DEGREE	ASSOCIATE DEGREE	BACHELOR’S DEGREE	ADVANCED DEGREES	TOTAL
BIOLOGICAL AND BIOMEDICAL	5	19	836	215	1,075
BUSINESS	85	896	2,651	878	4,510
ENGINEERING (AND RELATED)	0	40	908	442	1,390
ENGINEERING TECHNOLOGIES	39	237	175	0	451
HEALTH PROFESSIONS	702	1,832	1,164	1,340	5,041
PHYSICAL SCIENCES	0	0	252	48	300

Source: Economic Modeling Specialists Inc. (EMSI) 2018



Affordable Workforce

Buffalo Niagara has an affordable cost of living and competitive labor rates as compared to other Northeast metro areas.

FOR A CUSTOMIZED WAGE COMPARISON REPORT PLEASE CONTACT:

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Research Director

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Median Hourly Earnings

OCCUPATION	BUFFALO NIAGARA	PHILA., PA	BOSTON, MA
TEAM ASSEMBLERS	\$15.37	\$15.35	\$15.74
MEDICAL SCIENTISTS	\$34.44	\$47.33	\$42.15
INSPECTORS, TESTERS, SORTERS, SAMPLERS, AND WEIGHERS	\$18.12	\$20.87	\$21.41
GENERAL AND OPERATIONS MANAGERS	\$43.60	\$62.10	\$52.43
DENTAL LABORATORY TECHNICIANS	\$16.64	\$21.46	\$22.68
ELECTRICAL AND ELECTRONIC EQUIPMENT ASSEMBLERS	\$15.23	\$16.69	\$18.71
PACKAGING AND FILLING MACHINE OPERATORS AND TENDERS	\$15.93	\$14.69	\$14.92
MECHANICAL ENGINEERS	\$38.46	\$42.62	\$45.15
SOCIAL SCIENCE RESEARCH ASSISTANTS	\$14.15	\$22.18	\$25.08
FIRST-LINE SUPERVISORS OF PRODUCTION AND OPERATING WORKERS	\$29.62	\$31.30	\$31.60
COMPLIANCE OFFICERS	\$35.51	\$35.60	\$38.10
BIOLOGICAL TECHNICIANS	\$18.28	\$24.20	\$26.15

Source: Economic Modeling Specialists Inc. (EMSI) 2018



Emily Lutyens
CEO, LegWorks

“ There are practical reasons that drove our move to Buffalo - access to great talent, cost-effective living, a budding entrepreneurial ecosystem - but what truly made it a success for LegWorks was the support, guidance, and openness of the incredible community here.”

Buffalo Niagara's Strengths in Life Sciences

Pharmaceuticals/Biotechnology



DIAGNOSTICS • DRUG DEVELOPMENT • ONCOLOGY • THERAPEUTICS

TOP COMPANIES: AMRI, Athenex, Fresenius Kabi, Immco Diagnostics, Tactiva Therapeutics, Thermo Fisher Scientific, Trinity Biotech

“It can be done - Athenex is a success case that shows it can be done, you can do it here in Buffalo.” - Dr. David Hangauer, Athenex Co-founder

Medical Device



DENTAL • DISPOSABLES/PLASTICS • IMAGING • SURGICAL • VASCULAR

TOP COMPANIES: Baxter, Harmac Medical Products, Interger, Polymer Conversions, Tapecon, Inc.

“Our people have the soft skills. They’re very articulate and very well-educated. We’re just raising nice people.” - Ben Harp, Polymer Conversion, COO

Healthcare IT



BIOINFORMATICS • GENOMICS & PROTEOMICS • BIG DATA ANALYTICS • POPULATION HEALTH

TOP COMPANIES: Applied Sciences Group, Circuit Clinical, IBM Buffalo Innovation Center, Patient Pattern

“We are available in over 3,000 facilities across the country; and working to make it accessible to many more.” - Steven Buslovich, Patient Pattern Co-founder & CEO



Johnson Y.N. Lau
MBBS, MD, FRCP
Chief Executive Officer and
Board Chairman, Athenex

“With this partnership, millions of cancer patients around the world will benefit from the oncology drugs made in New York.”



DOWNLOAD OUR FULL INCENTIVES GUIDE FOR MORE INFORMATION: BUFFALONIAGARA.ORG/INCENTIVES



Valuable Incentives

New York State and the Buffalo Niagara region offer valuable incentives to companies expanding or relocating in the region. Invest Buffalo Niagara can facilitate the process of identifying and applying for applicable incentive programs.

+ *0% state corporate tax rate*

Net income base of manufacturers is **taxed at 0% in New York State**. Manufacturers are also exempt from paying taxes on machinery, equipment, and inventory.

+ *The Buffalo Institute for Genomics and Data Analytics (BIG)*

BIG leverages the University at Buffalo's leading supercomputing capabilities and expertise in genomics and patient data analytics to advance the technology development and commercialization of partner companies. BIG has an **allocation of New York State dollars to financially incentivize growing companies to create jobs** in Buffalo Niagara.

BIG supports the application of advanced analytics and provides access to genomic expertise and healthcare informatics.

+ *Brownfield Clean-Up Program*

Refundable tax credits up to 20% of eligible expenditures, including tangible personal property (e.g. buildings and equipment). Eligible expenditures may be incurred at any point within 10 years following completion of remediation.

+ *Excelsior Tax Credit Program*

Refundable tax credits available to new and existing companies in New York State based on job creation, capital investment, and investment in research and development.

+ *Low-cost hydropower*

New York Power Authority has power allocation incentives available for businesses locating and growing within 30 miles of the Niagara Power Project. **Low-cost hydropower** is an inexpensive, green power source.

+ *Refundable investment tax credits*

New companies to New York State are eligible to receive a **5% cash refund** on any capital spending up to \$350 million for the first five years of operation. Spending over \$350 million in the first five years is eligible to result in a 4% cash refund.

+ *Start-Up NY*

Helps new and expanding businesses through tax incentives and academic partnerships. Companies operate **10 years tax free** on or near eligible academic campuses.

+ *Training incentives*

A credit of **50% of eligible training costs**, up to \$10,000 per employee receiving eligible training.

Venture Capital Access

Buffalo companies are successfully raising angel and venture capital from local, national and international sources.

- Athenex \$200M
- Tactiva Therapeutics \$35m
- OminSeq \$10+M
- Garwood Medical Devices \$1.8M
- Circuit Clinical \$1.75M



Easily Accessible

100 daily flights with non-stop service to 22 cities and 26 airports. Average one-way fare is only \$183.



Invest Buffalo Niagara is a non-profit economic development agency.

Founded in 1999, Invest Buffalo Niagara represents the eight counties of Western New York. We are the region's nonprofit, privately funded economic development organization focused on job creation. Our mission is to attract new employers to the Buffalo Niagara region through outreach to growing companies around the world.

buffaloniagara.org/lifesciences

INVEST BUFFALO
NIAGARA

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