

Master of Science in Biomedical and Health Informatics

Thinking beyond the possible



**Manage, analyze and interpret data to reshape the way
we think about health care.**



SCHOOL OF MEDICINE

CASE WESTERN RESERVE
UNIVERSITY

Master of Science in Biomedical and Health Informatics

Big data is driving the next evolution of health care. The need has never been greater for professionals who can manage, integrate, analyze, and interpret that data to make recommendations that accelerate research, improve clinical care, and shape public policy. Yet demand in the job sector is outpacing supply.

That's where Case Western Reserve University (CWRU) School of Medicine is stepping in. We've developed an innovative, cutting-edge master's program in Biomedical & Health Informatics to train students who want to have a positive impact, change people's lives, and reshape the way we think about healthcare at a mass scale.



An Education Built Around You

The duration of our program is flexible so you can pursue your degree on a schedule that works for you, with **11-months**, **1.5-year** or **part-time** study options.

You'll have the chance to choose a course from each of our three focus areas to tailor your degree to your needs and aspirations. Additionally, you'll have the option to choose one of these areas as an area to focus your studies on. With your exposure to these focuses, you'll gain the skills and experience you need to kickstart your career.

- In our **Biomedical and Health** focus, you will be trained to characterize the information needs of health professionals and researchers, lead or participate in the development and use of Electronic Health Record systems, and understand and apply epidemiology study methods for population health and clinical research.
- In our **Computation and System Design** focus, you will gain experience developing, implementing, and improving informatics systems. You'll learn to implement software engineering techniques on informatics projects and apply database management systems fundamentals.
- In our **Data Analytics** focus, you will see first-hand how to use data analysis techniques, biostatistics, probabilistic and stochastic processes, and software-based techniques to solve biomedical data challenges.

#1
 medical school
 in Ohio for
 research
*U.S. News
 and World Report*



A career field of endless possibilities

Our interdisciplinary education and innovative approach to studying Biomedical & Health Informatics ensures you'll be ready for wherever this evolving career field takes you. **You'll have the opportunity to craft a unique plan of study with faculty from our School of Medicine, Weatherhead School of Management, and Case School of Engineering.** This tailored plan of study will complement the program's core competencies.

10-15

students in the program per year, which means you'll get lots of individual attention



Many paths, many outcomes

We know there is no one direct journey to career success in this field. **Students in our program come from all kinds of academic backgrounds—from computer and data science to biology, pre-health and health sciences, business management, math/statistics and so much more.** And their career outcomes are just as varied as their academic backgrounds.

During your program, we'll support your career discovery by connecting you with hands-on internships, research-intensive coursework, and collaborative team environments. We work closely with nationally ranked health systems, medical providers, and industry partners to make sure your education is both theoretical and practical. You'll learn from practitioners in the field to gain the professional experience and leadership skills you'll need to forge a path of transformative impact throughout your career.



Top 5 state

in the U.S. for professional employment related to health care, with an increased emphasis on biomedical and health informatics



22% projected growth

in employment within the biomedical and health informatics field, according to the U.S. Bureau of Labor Statistics

Nationally ranked health systems, medical providers and health departments are typical internship partners, including: **Cleveland Clinic, MetroHealth Medical Center, University Hospitals, Louis Stokes Veteran Affairs Medical Center, Cleveland Institute for Computational Biology, Local Health Departments**

About Case Western Reserve University

A member of the Association of American Universities (AAU), Case Western Reserve is an urban research university distinguished for its excellence across a range of disciplines and approaches. The university is among the nation's:

Top 25

medical schools

U.S. News & World Report, 2021

Top 15

in commercialization of research

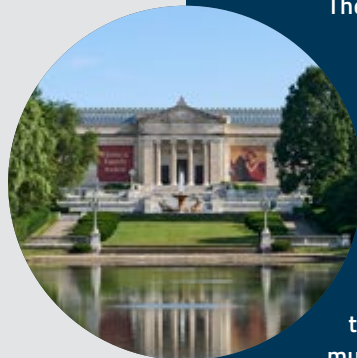
Brookings Institution

Top 20

in innovation

Nature Index Innovation

Case Western Reserve is also home to the **Dittrick Medical History Center** and sits within **University Circle**, a one-square-mile district that features the **Cleveland Museum of Art, Cleveland Museum of Natural History, Cleveland Orchestra** and Uptown—a dining, retail and residential development that has won high praise from *The New York Times*, among other media.

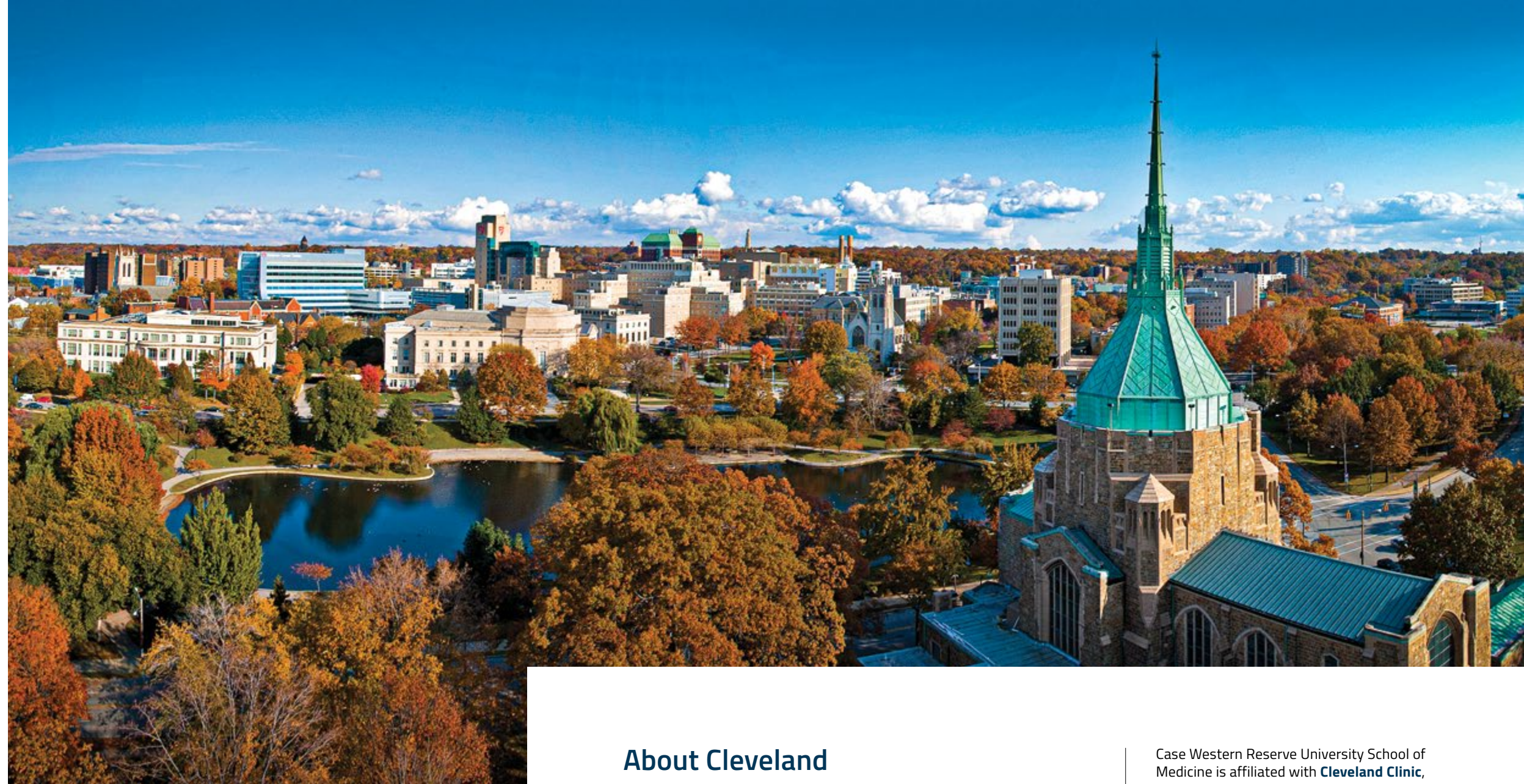


“Our students get more than just algorithms. They are in class with physicians and students in epidemiology, biostatistics, health management. They learn from each other’s perspectives.”

— Mendel E. Singer, PhD, MPH
Director Biomedical & Health Informatics MS Program

“I found that the faculty was incredibly helpful and incredibly supportive. There is a project in nearly every class, which lets you apply material. I look forward to working with large data sets and making music out of noise.”

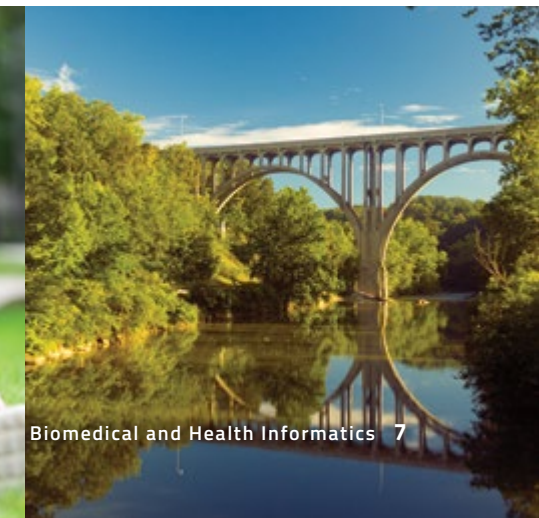
— Anna May '25



About Cleveland

Fewer than 5 miles from Case Western Reserve’s campus is Cleveland’s bustling downtown, complete with the Rock and Roll Hall of Fame, renowned restaurants, major league teams, and Playhouse Square, the nation’s No. 1 arts district, according to *USA Today*. Nearby, there’s also Lake Erie and access to a 24,000-acre public park system.

Case Western Reserve University School of Medicine is affiliated with **Cleveland Clinic, Louis Stokes VA Medical Center, University Hospitals** and **MetroHealth Medical Center** (a county hospital). The first three are within walking distance, while MetroHealth is just a 15-minute drive. The school ranked No. 22 in annual National Institutes of Health funding in 2020 by Blue Ridge Institute for Medical Research.





Application Details

Graduates from our program go on to reshape healthcare and improve patient experiences through roles as data scientists, data analysts, data programmers, project managers, medical information officers, and so much more. We prepare our graduates by working with practitioners in the field to make sure our students have career experiences that prepare them for job demands now and well into the future.

How to Apply

Complete your application online at applygrad.case.edu/apply.

Include required materials:

- School-issued unofficial transcripts, scanned and uploaded for all colleges or universities attended.
- Resume/CV
- Letters of Recommendation (3)
- Statement of Purpose
- Application Fee (\$50)
- For international applicants:** If you are not a citizen of an English-speaking country, or if your previous college or university program was not taught in English, please submit an English proficiency exam (IELTS, TOEFL, or PTE).

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Request more information

Need to know more about course offerings, faculty members or something else?
Fill out a request form at applygrad.case.edu/register/med-info.

Reach out directly

Have specific questions? Contact us at informatics@case.edu.



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