# **CAREER SERVICES** HAT CAN I DO WITH MY MAJOR? OINFORMATICS

Bioinformatics combines biology, computer science, and information technology to analyze and interpret biological data. It focuses on developing and using computational tools and techniques to understand complex biological systems and advance research in areas such as genomics, proteomics, and molecular biology

# COMMON JOB TITLES \*additional education or certification required post graduation

#### **ENTRY & MID LEVEL POSITIONS**

**Bioinformatics Analyst** Structural Analyst Research Scientist / Technician\* Data Analyst\* Genomics Technician Biostatistician\*

Computational Scientist Physician\* Medical Informatics Analyst Bioinformatics Software Developer Statistical Geneticist\* Professor\*

# AREAS OF EMPLOYMENT: WHERE DO BIOINFORMATICS MAJORS TYPICALLY WORK?

**Laboratories**: UNMC, Boys Town **Government**: National Institute for Health, CDC, FDA **Pharmaceutical Companies**: Pfizer, Johnson & Johnson **Universities/Colleges**: UNO, UNL, NE Wesleyan

Hospitals/Healthcare Companies: UNMC, CHI Health, Children's Medical Center, Methodist Agricultural/Environmental Org.: NE Dept. of Agriculture, Environmental Protection Agency **Nonprofits**: American Cancer Society, American Heart Association, Cystic Fibrosis Foundation Software/Tech Companies: Aurora, Ocuvera, Valmont, Celerion, Proxim Diagnostics **Clinical Research Organizations (CROs)**: Velocity, Quality **Research Institutes**: Suzanne & Walter Scott Research Institute

# **IMPORTANT QUALITIES:**

#### **Transferable Skills Gained:**

**Analytical Skills** Scientific Writing Skills Attention to Detail Software Development Critical Thinking Skills

#### **Concrete Skills Gained:**

Microsoft Office Python **JavaScript** Other Statistical Software/Scripting Languages

# HOW TO DEVELOP YOUR SKILLS:

Attend events at the **UNMC Center for Biomedical Informatics Research and Innovation** to learn about research projects and gain new knowledge Join a UNO Student Organization within the College of IS&T or College of Arts & Sciences to connect with other students & work on projects Look out for opportunities within the **Bioinformatics Research Lab** to receive hands on experience and collaborate with faculty



# MAJOR + MINOR SPECIALIZATION: HOW CAN I SPECIALIZE IN SOMETHING BEFORE I GRADUATE?

\* additional education or certification required post graduation

Bioinformatics + Computer Science minor = Bioinformatics Software Developer

<u>Bioinformatics</u> + <u>Mathematics minor</u> = <u>Biostatistician\*/Research Scientist\*</u>

Bioinformatics + Public Health minor = Medical Informatics Analyst

## OCCUPATIONAL OUTLOOK:

Computer & Information Research Scientists

Medical Scientists

Data Scientists

Statisticians

# **EMPLOYMENT OPPORTUNITIES:**

Check out daily job postings on **Handshake** related to accounting jobs, internships, and opportunities to boost your student experience

# **ADDITIONAL EDUCATION:**

A **Masters degree** or **Doctoral Degree** may be beneficial or required after graduation depending on your desired career path. Advanced degrees offer opportunities for specialized study, research, and development

#### **More information**:

UNO Biomedical Informatics M.S. UNO Biomedical Informatics P.h.D UNO Biology Graduate Programs

## OTHER RESOURCES:

UNO Biomedical Informatics & Bioinformatics : College of IS&T
UNO Bioinformatics: College of Arts & Sciences
Career Exploration in Career Services

## NEED SOME EXTRA HELP?

Book an appointment with <u>Career Services</u>
Book an appointment with your Advisor:
<u>College of Arts and Sciences</u>
<u>College of Information Science & Technology</u>

### Career Services



**◎** 6001 Dodge Street, Omaha, NE 68182







