

The background features a dark, textured surface with faint, light-colored sketches of scientific and mathematical concepts. These include a globe in the upper left, a large 'V' shape, a microscope, a stack of books, a hand holding a pen, and various geometric shapes and symbols like a percentage sign and a less-than sign.

Career Options in the Life Sciences

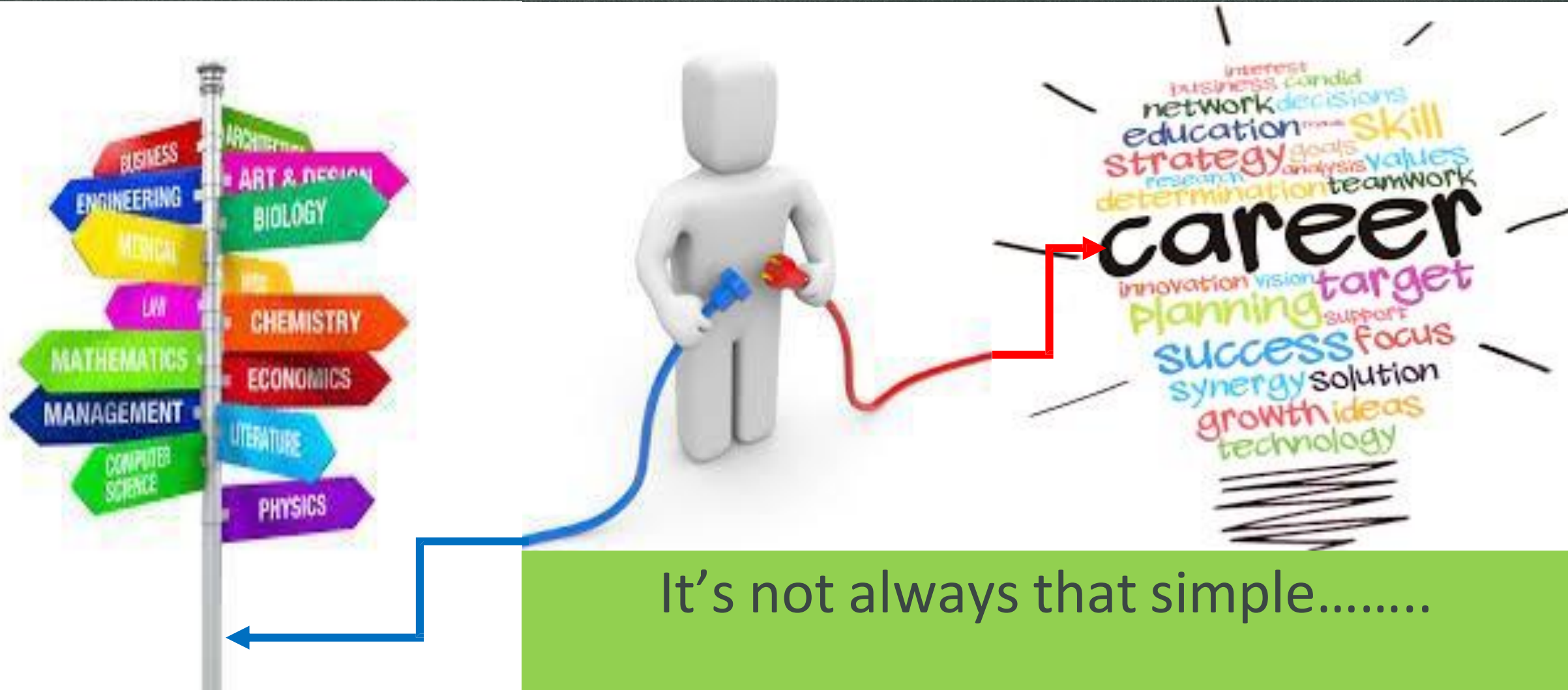
Presented by:

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In collaboration with UCLA's Neuroscience Department

Jaclyn Robbin & Aftin Whitten

FINDING THE RIGHT FIT: CONNECTING YOUR MAJOR TO A CAREER



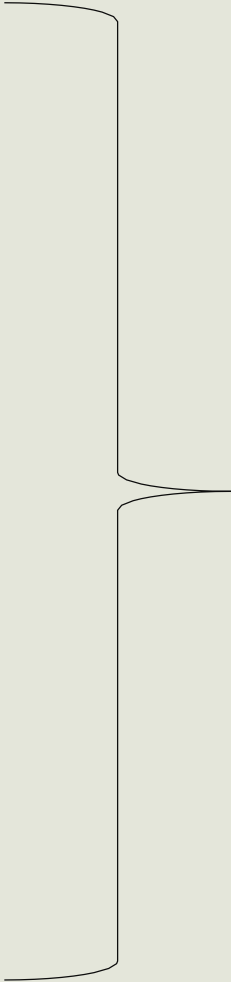
Myths

- Your major is directly related to a career
- Choose a career carefully because you cannot change later
- Begin graduate/professional school immediately
- A career will come to you one day
- There are no jobs 'out there'
- You need to find your passion before you get started

Medicine and Health	Work as physicians, dentists, pharmacists or veterinarians
Drug Manufacture and Design	Develop and produce vaccines and drugs, and design new or improve existing tools for diagnosis and detection of disease
Agriculture and Related Industries	Create genetically engineered crops that are more resistant to frost, drought, spoilage, diseases and pests. Develop diagnostic agents and tools for bioremediation (removal of contaminated material from the environment)
Forensic Science (Crime Lab Science)	Work on criminal investigations through the examination of biological samples
Education	Engage in science education as biology or chemistry teachers, professors, or museum curators
Communication	Science policy, science writing, science reporting, biological and medical illustration
Government	Patent Law, Intellectual Property, Departments of Agriculture, Health, Interior, etc.

Life Science Majors

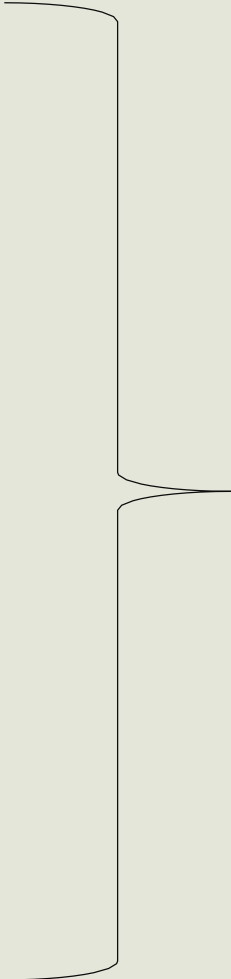
- Biology
- Cognitive Science
- Computational and Systems Biology
- Ecology, Behavior and Evolution
- Human Biology and Society
- Marine Biology
- Microbiology, Immunology, and Molecular Genetics
- Molecular, Cell, and Developmental Biology
- Neuroscience
- Physiological Science (Integrative Bio & Physiology)
- Psychobiology
- Psychology



Options:
Research
Medicine
Health
Business
Education
Communication
Government
And more..

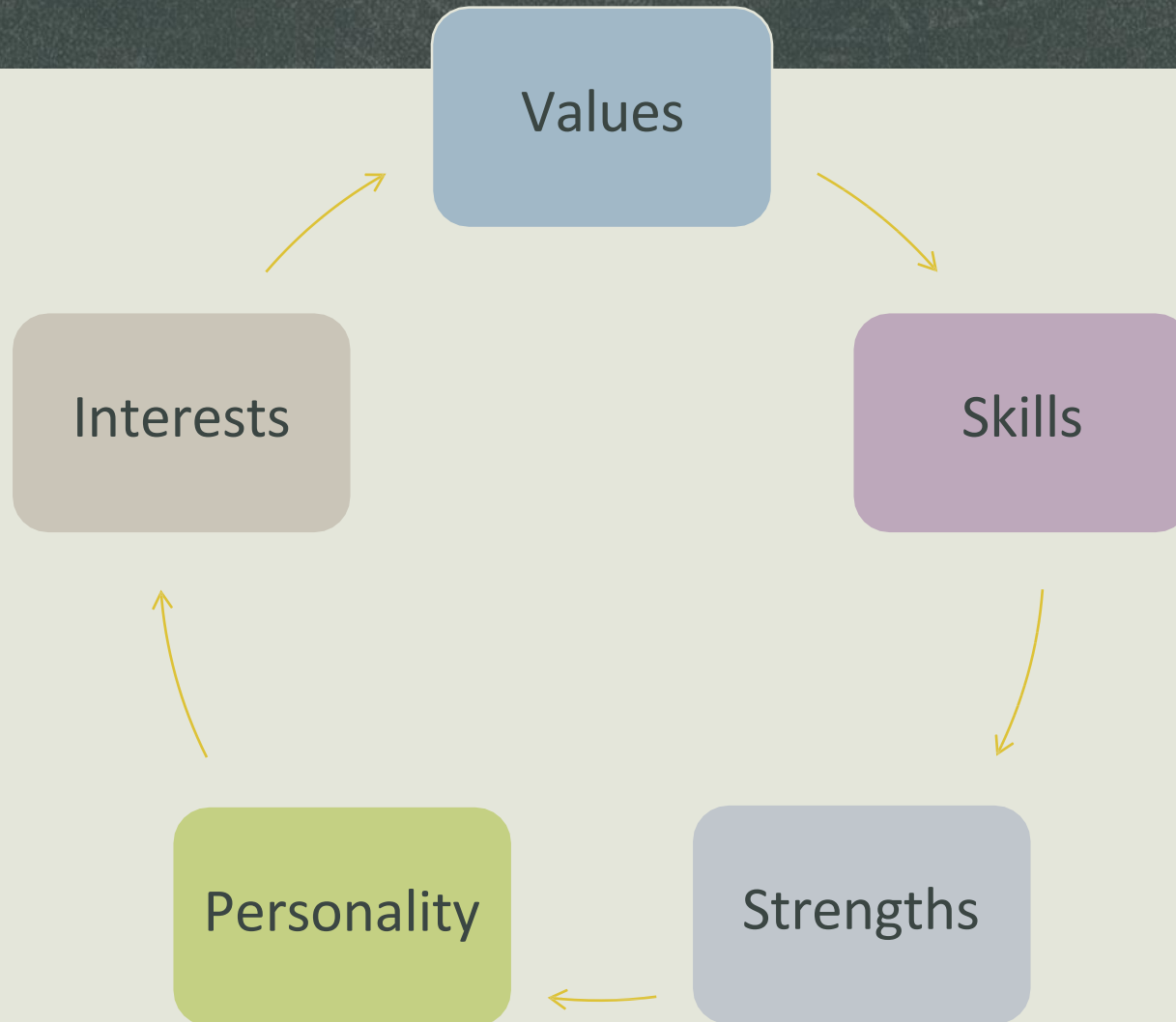
What makes the difference?

- Interests
- Skills
- Aptitudes and abilities
- Personality
- Values
- Motivation for studying science



The
difference
is you

Assessing Self



Career Development Process



Nature of Personality Interests – Holland Theory

Assessments can help clarify – a tool

- Career Center workshops

- **“Making Impactful Decisions Through Career Exploration”** series

- Feb 20th and 26th

- Focus 2 – Handshake



Self Assessment

Questions to ask yourself

- *Why did you choose this major?*
- *What do you like about your studies?*
- *What do you dislike about your studies?*
- *What was your "best job ever?" Why?*
- *When was a time you felt really energized in your work or studies?*

Careers in Healthcare: <http://explorehealthcareers.org/>

Healthcare Practitioners	Nursing/PA	Associated Careers and Therapists	Technologists and Technicians	Rehab Therapists	Healthcare Administration	Insurance Industry
Physicians Chiropractors Dentists Optometrists Podiatrists Veterinarians	Licensed nurses Registered nurses Nurse anesthetists Nurse midwives Nurse practitioners Home health aides Surgeon assistants Nurse's aides Physician Asst.	Acupuncturists Audiologists Dental hygienists Dietitians and nutritionists Genetic counselors Pharmacists Psychologists Occupational therapists Opticians Orthotists and prosthetists Physical therapists Recreational therapists Respiratory therapists Pediatric occupational therapists Biomedical engineers Biomedical equipment techs Biomedical photographers Biomedical writers Child life specialists Dietary managers Geriatric social workers	Anesthesiologists Blood bank techs Cardiovascular techs Radiology techs Clinical lab techs Cytotechnologists Cardiovascular Nuclear medicine Dental assistants Dental lab techs Diagnostic medical sonographers Diagnostic imaging Dietetic techs Electroencephalograph Emergency techs Paramedics Food techs Histology techs Ophthalmic techs Optometric techs Perfusionists Phlebotomists Pulmonary techs Radiation therapy techs Surgical techs Veterinary assistants	Art therapists Certified athletic trainers Dance movement Home health aides Music therapists Occupational therapists Patient reps Physical therapists Psychiatric aides Recreational therapists Rehab counselors Respiratory therapists Social services aides Speech language pathologists Substance abuse counselors	Admitting officers Accounting and finance Coordinators of health wellness Environmental health and safety Food service Health education Health information technologists Human resources Librarians Public relations Nursing home directors QA directors Geriatric care managers Medical records Medical billing, claims, patient accounting Medical secretaries Mental health workers	Administration Actuaries Agents and brokers Claims adjusters Loss control specialists Medical insurance billing and coding reps Medical claims reviewers Public relations Service reps Sales and marketing Underwriters

Allied Health Training

The UCLA Department of Pathology & Laboratory Medicine offers and/or participates in six Allied Health training programs.

- [Clinical Cytogeneticist Scientist Program](#)
- [Clinical Immunohematology \(Blood Banking\) Scientist Program](#)
- [Clinical Genetic Molecular Biologist Scientist \(CGMBS\) Program](#)
- [Clinical Laboratory Scientist Program](#).
- [Clinical Microbiologist Scientist Program](#).
- [School of Cytotechnology](#)

<https://www.uclahealth.org/pathology/allied-health-training-programs>

CLINICAL LABORATORY SCIENTIST (CLS)

- Clinical laboratory testing plays crucial role in detecting, diagnosing, and treating diseases.
- Clinical Laboratory Scientists (CLS) perform and supervise laboratory testing in the clinical laboratory specialty areas of biochemistry, hematology, medical microbiology, immunohematology, immunology, molecular diagnostics, serology and clinical microscopy.
- Licensed CLS perform diagnostic testing in hospital clinical laboratories, commercial reference laboratories, or in research and development for biotechnology companies.

After BS, you need 1 year of school and one of internship. Starting salary at UCLA = \$80K

Hidden Gems in Healthcare: Clinical Laboratory Scientist:

<https://www.youtube.com/watch?v=y0G0lO6HO8U&t=1s>

Public Health

Public health professionals are involved in everything from identifying diseases to creating public policy to helping refugees integrate into new communities.

<https://ph.ucla.edu/>

<https://ph.ucla.edu/degree-programs>

Public Health

UCLA Public Health Scholars Training Program

The program provides undergraduate students the opportunity to explore the field of public health through hands-on training, structured workshops, group events, volunteering opportunities, and leadership and professional development.

<https://ph.ucla.edu/action-advocacy-training-programs/ucla-public-health-scholars-training-program>

Specialties Within the Public Health Field

- Biostatistics and Informatics

- Biostatistician
- Medical and Health Services Manager
- Health Informatics Specialist

- Community Health

- Health Care Administrator
- Health Educator
- Community Health Worker

- Epidemiology

- Epidemiologist
- Field Investigator
- Research Analyst

- Environmental Health

- Environmental Scientist
- Quality Investigator
- Environmental Engineer

- Global Health

- Refugee Coordinator
- HIV/AIDS Educator
- Project Manager

- Health Policy and Management

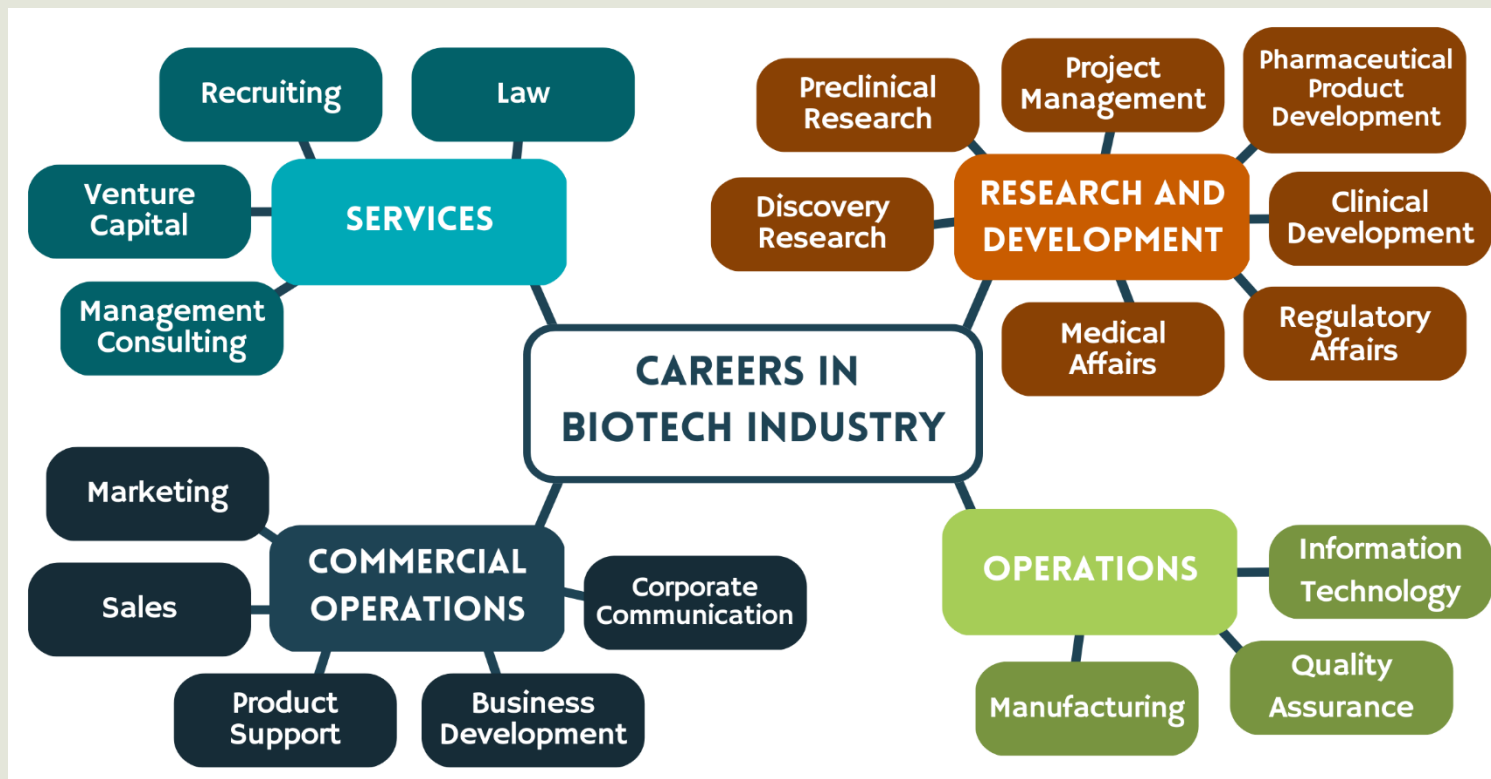
- Health Services Manager
- Health Department Administrator
- Government Policy Analyst

Specialties Within the Public Health Field

- Health Promotion and Communication
 - Health Education Specialist
 - Health Promotion Coordinator
 - Public Relations Manager
- Maternal and Child Health
 - Breastfeeding Support Coordinator
 - Nurse Midwife
 - WIC Nutrition Specialist
- Minority Health and Health Disparities
 - Public Health Nurse
 - Minority Health Office Administrator
 - Minority Health Research Analyst
- Social and Behavioral Health
 - Social Worker
 - Psychologist
 - Psychiatric Nurse

Career Opportunities in Biotechnology

- *Careers in Biotechnology:* <https://www.biotech-careers.org/careers>



The areas of Biotech and Drug Development

- Pharmaceuticals
- Biotechnology
- Biotools, Reagents & Services
- Medical Devices
- Biofuels
- Healthcare

Example of available positions in Biotech Industry

- Research scientists
(BS, MS accepted)
- Preclinical development experts
- Clinical trials managers
- Statistical analysts
- Clinical trials scientists
- Medical communications
- Medical writing
- Regulatory affairs
- Manufacturing
- Quality assurance
- Intellectual property management
- Sales
- Marketing

BIOMEDICAL SCIENCES

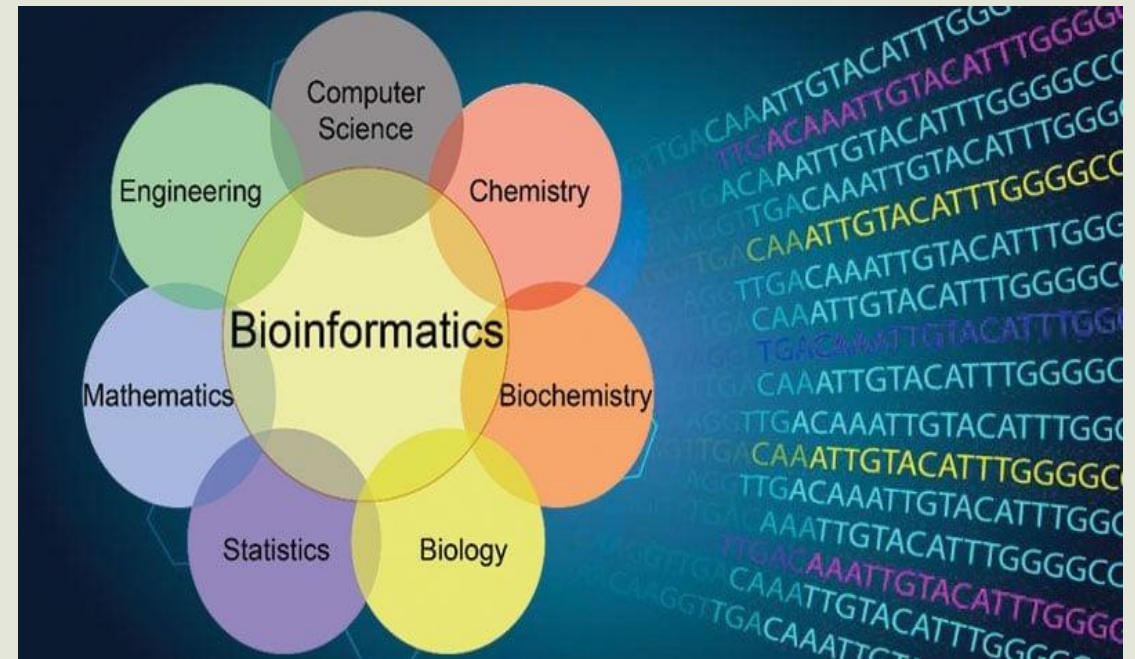
Some Areas of Specialization:

- Biophysics
- Biochemistry
- Cellular and Molecular Biology
- Genetics
- Immunology
- Pathology
- Pharmacology
- Physiology
- Virology



BIOINFORMATICS

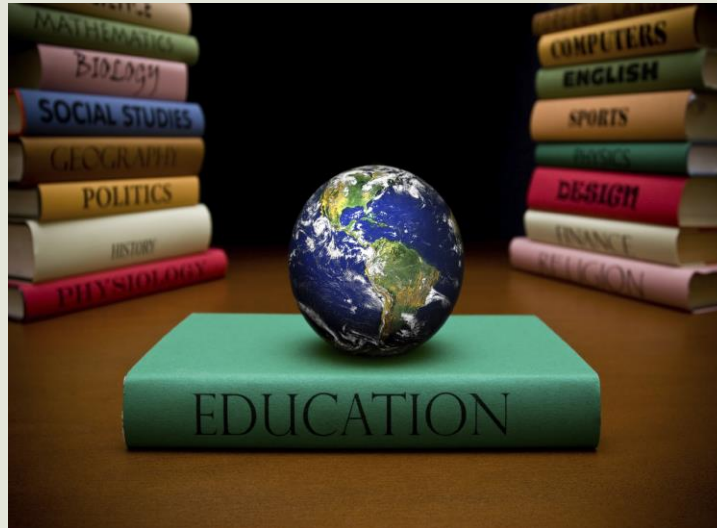
- Algorithm and Statistical Techniques
- Data Analysis and Interpretation
- Information Management
- Organization and Retrieval



EDUCATION

Teaching


- HIGH SCHOOL
- COMMUNITY COLLEGE
- UNIVERSITY
- MUSEUMS
- HEALTH EDUCATOR



Academic Environment

- ACADEMIC ADVISOR
- PROGRAM MANAGER
- COLLEGE COUNSELOR
- CAREER COUNSELOR
- ADMISSIONS OFFICER

MENTAL HEALTH

- SOCIAL WORKER (MSW)
 - PSYCHOTHERAPIST (LMFT/LCSW/LPCC)
 - EDUCATIONAL PSYCHOLOGIST
 - SUBSTANCE ABUSE COUNSELOR
 - GENETIC COUNSELOR
 - HEALTH PSYCHOLOGY
- MILITARY PSYCHOLOGIST
 - PSYCHIATRIST (MD)
 - PSYCHOLOGIST (PHD/PSYD)
 - PSYCHIATRIC NURSING
- 
- A word cloud graphic with a magnifying glass focusing on the words 'MENTAL HEALTH'. The word cloud contains various terms related to mental health and wellness, including 'WELLNESS', 'FITNESS', 'CARE', 'ENERGY', 'RELAXED', 'LIFE RUN', 'MENTAL HEALTH', 'HEALTHY', 'DIET', 'NUTRITION', 'WELLNESS', 'FITNESS', 'CARE', 'ENERGY', 'RELAXED', 'LIFE RUN', 'MENTAL HEALTH', 'HEALTHY', 'DIET', 'NUTRITION'. The magnifying glass is positioned over the words 'MENTAL HEALTH' in the center.



U.S. Food and Drug Administration

Protecting and Promoting *Your* Health

In general, FDA regulates:

- **Foods**
- **Drugs**
- **Biologics**
- **Medical Devices**
- **Electronic Products that give off radiation**
- **Cosmetics**
- **Veterinary Products**
- **Tobacco Products**
- **Advertising** The [Federal Trade Commission](#) is a federal agency that regulates many types of advertising.
- **Alcohol** The [Department of the Treasury's Alcohol and Tobacco Tax and Trade Bureau \(TTB\)](#)
- **Consumer Products** The [Consumer Product Safety Commission \(CPSC\)](#) works to ensure the safety of.
- **Drugs of Abuse** The [Department of Justice's Drug Enforcement Administration \(DEA\)](#)
- **Meat and Poultry** The [U.S. Department of Agriculture's Food Safety and Inspection Service](#)
- **Pesticides** The [Environmental Protection Agency \(EPA\)](#) regulates many aspects of pesticides. EPA
- **Vaccines for Animal Diseases** The [U.S. Department of Agriculture's Animal and Plant Health Inspection Service](#)
- **Water** [Environmental Protection Agency \(EPA\)](#)

Training and skill development

What will you need to pursue this field?

- Graduate school
- Professional school
- Courses
- Certifications
- ???



Ideas need action for something to happen - Next steps



- Talk to people! Informational interviews
- Speak to your professors
- Read the news/ journals related to your studies
- Check out professional association websites
- Attend the conferences if possible
- Attend Employer Information sessions & career fairs
- Review graduate programs – what do the grads do
- UCLA ONE
- LinkedIn

Ideas need action for something to happen - Next steps:



- Join listserve of your academic department
- Join a club – often have guest speakers
- Attend career events at the Career Center
- Look through jobs that are posted – **indeed.com; LinkedIn**
- Attend open house or webinar for academic programs of interest
- Watch Career Center webinars on YouTube!

Ideas need action for something to happen - Next steps:



- Do an internship in the field
- Do research in a department of interest
- Volunteer / Shadow professionals
- Attend academic workshops and symposiums
- Review company websites to see what they do, who they hire

Resources



- [UCLA Career Guide: https://cdn.uconnectlabs.com/wp-content/uploads/sites/230/2023/09/UCLA-Career-Guide.pdf](https://cdn.uconnectlabs.com/wp-content/uploads/sites/230/2023/09/UCLA-Career-Guide.pdf)
- O*Net Online: <https://www.onetonline.org/>
- Occupational Outlook Handbook: <https://www.bls.gov/ooh/>
- Pre-Health at UCLA website: <https://prehealth.ucla.edu/>
- <https://explorehealthcareers.org/>
- Career Center YouTube: <https://www.youtube.com/user/UCLACareerCenter/featured>

24/7 Digital Resources



Access the Career Center's workshops, panels, job board, recruiting events, appointments, and virtual resources.



Get detailed feedback on your resume's content and format anytime, anywhere, 24/7.



Apply for paid, micro-internship opportunities for students of all majors, class years, and degree levels.



Complete virtual work experience programs designed by top companies to build competitive skills.



Match your interests, personality, values, and skills to different career options. Explore different occupations and build a personalized career plan.



Gain access to over 120 industry-specific career guides from accounting and law, to biotech and real estate.



Peruse over 100 country and international city career guides. Access an international job and internship search portal and a H1B sponsorship database.



Watch recorded webinars on a wide variety of career topics on the Career Center's YouTube Channel: <https://www.youtube.com/@UCLACareerCenter/featured>

UCLA Career Center - Services

career.ucla.edu/undergraduate/virtual-services

1

Virtual/In-Person Career Advising

30-minute 1:1 consultations are available Monday – Friday. Schedule an appointment through Handshake.

2

Virtual/In-Person Drop-in Sessions

15-minute sessions are available every **Tues – Thurs from 10 AM - 12 PM & 1 PM – 3 PM** to discuss resume/cover letter reviews, job/internship search, or interview skills.

3

Virtual/In-Person Events & Workshops

Access a variety of career education workshops and programs around everything from job/internship search to interviewing to graduate or professional school preparation.

4

Virtual/In-Person Employer Information Sessions

Employers host forums to keep students informed of job & internship opportunities and their recruitment processes.

5

On-Campus Recruiting

Employers schedule On-Campus Interviews attached to jobs postings in Handshake.

6

Articles & Digital Resources

Our website offers a wide range of articles and resources to offer expert tips and up-to-date career advice. Access information anytime, anywhere.

Questions?



Thank you!