

Aniah Matthews
3/28/22
ENGW 105
Sulkosky

Journals:

The journal of molecular biology is a transformative journal that covers areas of all molecular biology. This includes but is not limited to cell cycle, cell growth, dna replication, gene expression and so fourth. The journal accepts submissions of multidisciplinary studies to address biological questions unanswered. This journal publishes reviews, mini-reviews, experimental, and theoretical works. This will clearly be useful in the field of molecular biology, but it can all help in fields connected to this kind of research, to help to get a better understanding of cells which is what everything on earth is created out of.

Website: <https://www.journals.elsevier.com/journal-of-molecular-biology> for purchase.

The journal of ecology focuses on the publication of original research papers regarding all aspects of ecology, including algae. This journal aims to look at the ecosystems as a whole, and does consider papers about cultivated plants and agricultural systems if they can relate to the ecosystem in which they thrive in. Studies of plant communities is important as it provides focus on the ecology of the plant. This journal accepts experimental and theoretical works to be published along with descriptive or historical accounts.

Website: <https://besjournals.onlinelibrary.wiley.com/journal/13652745>

Genome biology is a peer reviewed open access journal publishing the leading original research covering evolutionary biology and genomics. This journal publishes findings including populations genomics, proteomics, diversity, and so much more. The information included in these works investigates at all forms of life and taxonomic levels. the start of this magazine came from the need of proper research specifically the area of genome evolution and comparative

genomics. There is a very large field of research for the human genome alone as there is so much information we still do not know about it. This journal takes a smaller approach to look at more specific areas to gather a better understanding of the discipline as a whole

website: <https://academic.oup.com/gbe>

Key term list:

Biology- the study of living organisms, divided into many specialized fields that cover their morphology, physiology, anatomy, behavior, origin, and distribution (Oxford)

Chemistry- the branch of science that deals with the identification of the substances of which matter is composed; the investigation of their properties and the ways in which they interact, combine, and change; and the use of these processes to form new substances.(Oxford)

Physics-the branch of science concerned with the nature and properties of matter and energy. The subject matter of physics, distinguished from that of chemistry and biology, includes mechanics, heat, light and other radiation, sound, electricity, magnetism, and the structure of atoms.(Oxford)

Genetics-the study of heredity and the variation of inherited characteristics.(Oxford)

Scientific method- a method of procedure that has characterized natural science since the 17th century, consisting in systematic observation, measurement, and experiment, and the formulation, testing, and modification of hypotheses.(Oxford)

Chemical-a compound or substance that has been purified or prepared, especially artificially.(Oxford)

Genome-the haploid set of chromosomes in a gamete or microorganism, or in each cell of a multicellular organism.(Oxford)

Evolution-the process by which different kinds of living organisms are thought to have developed and diversified from earlier forms during the history of the earth.(Oxford)

Ecology-the branch of biology that deals with the relations of organisms to one another and to their physical surroundings.(Oxford)

Immunology-the branch of medicine and biology concerned with immunity.(Oxford)

Undergraduate organizations or honor societies:

NIH (national institute of health): the national institute of health is one of the most well known organizations within the health industry. This institute has something for every one from research to internships as well as education opportunities. Here the NIH “seeks fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to enhance health, lengthen life, and reduce illness and disability”(NIH 2022). The NIH holds events in their building for undergraduate students that are in community college, universities, and more. Being able to work with the NIH is a longstanding goal that many students of science aspire to reach. Many of the applications submitted at the NIH are looking for an interest in science, grades, cover letters, and other basic application necessities.

Sigma Xi Howard university: Sigma Xi is a part of the STEM education that focuses on the companionship among scientists and engineers. This research program at Howard does research on a wide range of fields including mechanical engineering, reproductive biology, bioinformatics, optics, and photonics. Established in 1957 this organization has 35 charter members, including women researchers. Sigma Xi holds conferences that are held to represent students from underrepresented groups, and here students achievements are able to be recognized. To become a member of this organization you must be nominated by two members and students as well as non students follow the same review process for membership. It is clearly not easy to become a member of this prestigious organization, and though beneficial is scarce to come by.

Jobs:

Microbiologist: the description for this job includes studying microorganisms and how they interact with other living things, a large part of this job is research. For this job a bachelors in microbiology or closely related field is a requirement. To complete independent research one must have a Ph.D. the researchers must also be familiar with technology as a lot of work is done on computers and using equipment to study the organisms, some of which cannot be seen by the naked eye. The average salary for this job is around 64,895 according to data bases on indeed websites. To be able to do this job having a degree in biology is not the only skill to get the job done. Perseverance, time management, and math skills are also involved in a microbiologist as these characteristics are crucial to not only starting research but finishing it as well.

Link:

<https://www.indeed.com/viewjob?jk=4d10aa5592294e29&from=tp-serp&tk=1fv8r2gjit4ss8>

02

Biology teacher: the job of teaching comes with more than just knowing about biology. For this job, the person pursuing this should be able to work well with others, especially kids and have the patience to teach and help them learn. A degree in biology is not required, but preferred. A teaching degree also may be required. The job is full time and aims to encourage students and to build confidence when presented with a challenge. A teaching job is more than just being able to ingrain information into a child's mind. Teachers in this stage are pivotal to the success of the students and being able to help them grow into young adults. While the biology side is very important, this teaching job comes with other responsibilities.

Link:

https://careercenter.aisgw.org/jobs/16399207/upper-school-environmental-science-biology-teacher-grades-9-12?utm_campaign=google_jobs_apply&utm_source=google_jobs_apply&utm_medium=organic

Critical care physician: This job is the general physician for a critical care unit, and does routine check ups for the patients. To obtain this job the applicant does not need a biology degree, but they can use the biology degree among others to be able to go to medical school. Getting a doctorate in the school of medicine opens many doors for students to go into the medical field which has so many different opportunities within the scope. This job comes with health benefits along with competitive pay and growth opportunities. The starting pay for the physician job is between 80 and 100,000 dollars. This is one of the more social jobs available for this degree, research or clinicals have a more isolated group to be worked with, for this listing the applicant must also be able to work with others well and be able to deal with patients.

Link:

https://www.theladders.com/job/physician-critical-care-ascensionorg-baltimore-md_51336560?utm_campaign=google_jobs_apply&utm_source=google_jobs_apply&utm_medium=organic

Style Guide:

Style name: APA (American Psychological Association)

Generic citation:

Bakare, O. *Experimental Organic Chemistry. 2014-2015 Howard University Edition;*

Academx Publishing Services: Sagamore Beach, MA. 2014.(120-130)

Example mix:

Bakare explains that the reaction is an Aldol condensation reaction, done using no reagents (122).

Page 127 refers to the balanced equation used in this report. (Bakare)

Benzoic acid will react with sodium bicarbonate, a weak base, but 2-naphthol will not (Bakare 125).

References:

Katz, L. (n.d.). *Genome biology and evolution* . Academic.oup.com. Retrieved March 28, 2022, from <https://academic.oup.com/gbe>

Oxford. (n.d.). *Oxford languages and google*. Oxford Languages. Retrieved March 28, 2022, from <https://languages.oup.com/google-dictionary-en/>

SigmaXi. Becoming a member. (n.d.). Retrieved March 28, 2022, from <https://www.sigmaxi.org/members/becoming-a-member>

society, british ecological. (n.d.). *Journal of Ecology*. besjournals. Retrieved March 28, 2022, from <https://besjournals.onlinelibrary.wiley.com/journal/13652745>

U.S. Department of Health and Human Services. (n.d.). National Institutes of Health. Retrieved March 28, 2022, from <https://www.nih.gov/>

wright, P. (n.d.). *Journal of Molecular Biology* . Journal. Retrieved March 28, 2022, from <https://www.journals.elsevier.com/journal-of-molecular-biology>