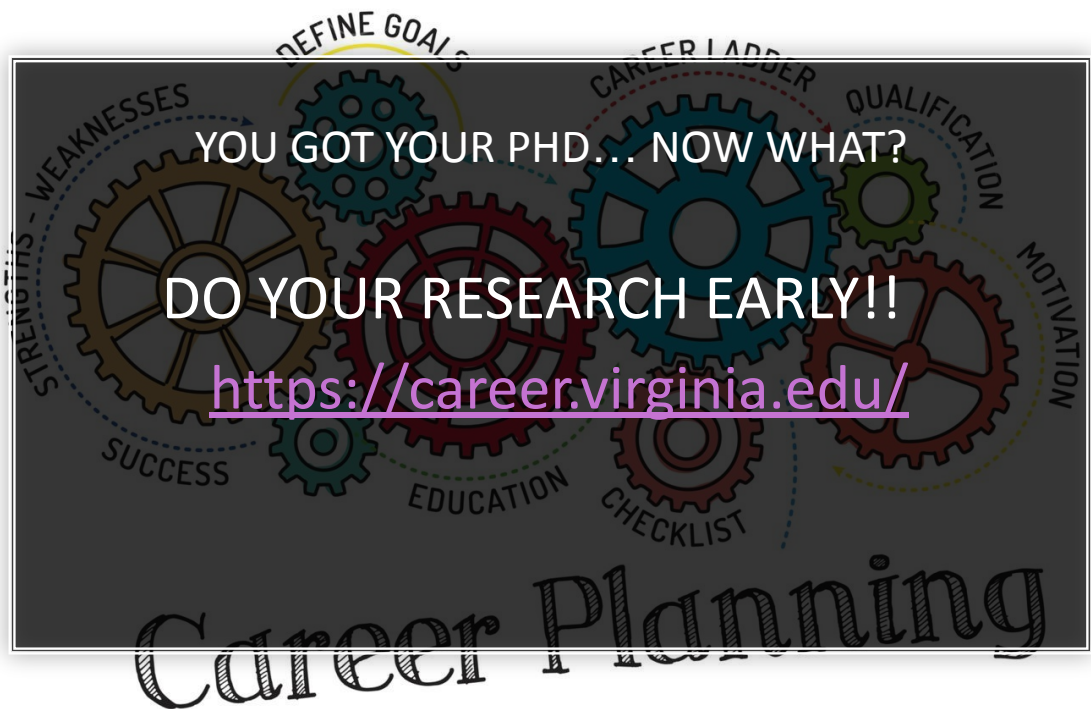




MAKING MONEY OUTSIDE OF ASTRONOMY WITH A PHD

LIANIS V. REYES ROSA (a local chemist)



UVA has loads of free resources that you can use with career planning. It is best to do thing early, like your first year, so that you have a list of career options and plans that you can use when life doesn't go your way.



WHICH SECTOR IS RIGHT FOR YOU?

GOVERNMENT

ACADEMIA

INDUSTRY

The workforce is typically separated into three sections. Each section has their benefits. It is up to the person to decide what is their best fit when it comes to their lifestyles and values.

SEPARATE AND IDENTIFY YOUR SKILLS



HARD SKILLS



SOFT SKILLS

Most jobs are going to look at your experience. Most experiences can be separated into two distinct categories. Hard skills and soft skills. Hard skills are also known as technical skills. This includes computer languages, laboratory skills, and equipment you have worked with. Technical skills can also include your education and certifications. Soft skills are more so the communication skills and language skill you have that benefit the job. This can include ease of communication evidence of working in large collaborations, showcasing leadership roles etc.

Hard Skills:

Python

CASA

Mechanics

Bachelors and PhD

Soft Skills:

Public Outreach

Teaching

presentations

Writing

leadership roles

INDUSTRY



ASTROPHYSICS/ASTRONOMY =
PHYSICS/MATHEMATICS/STATISTICS

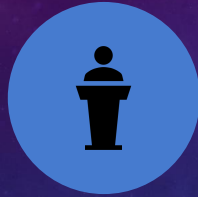


STATISTICS/CODING SKILLS ARE A
HUGE PLUS

NOTABLE JOBS: QUANTITATIVE FINANCING & SOFTWARE ENGINEERING

One of the biggest benefits we have as astronomers is that we have a multitude of skills that can be transferred. Industry sees astrophysicists as individuals who can do statistics, mathematics, and physics. Coding and statistics are highly sought after skills that are being fought over in industry. If you can show case that you have a good grasp of the skills and have a strong set of communication skill. Industry can give you many benefits to it. It is easier to negotiate these benefits in industry.

ACADEMIA



PUBLIC
SPEAKING



K-12 SYSTEM

In this section the focus will be on academia outside of university/college. Focusing on the public speaking/influencer and K-12 system. Unfortunately, the benefits in this area are a little bit riskier. The K-12 system doesn't offer much pay unless in private school. There is a lot more personal investment involved. Public speaking and influencing require a level of communication that can reach to all audiences. This is a very difficult task as hard topics can not so easily be simplified. Overall, academia beyond college is an interdisciplinary field that always has you adapting to new situations.



GOVERNMENT:
US CITIZENS

MILITARY

DEFENSE
CONTRACTOR

Most government jobs will unfortunately only take US Citizens. Some make exceptions but it is more often than not the former. There two areas in the government that you can go for as a career path: Military and Defence contracting. These give a lot of benefits for the work you do, however it comes at the cost of certain liberties. These types of jobs require to sign contract and stick to the contract. Military contracts can run minimum for 4 years, while defense contracts will depend on the company. Jobs that are in high demand is cybersecurity officer.

SOME OTHER JOBS/CAREERS: MAY REQUIRE SOME EXTRA PREP



PATENT LAW



MEDICAL LAB TECHNICIAN/ ANALYST

Here are a couple of other options outside of astronomy. They require more education or a certification. Patent law is a high paying job that requires you to have a law degree and pass the bar exam (Law final). The medical lab technician/analyst require a small certification. This is much shorter than the law degree. Lab technicians also get paid very well as usually they are the only one who know how to operate the instruments.

Another field of focus is Cyber security it is in very high demand demand due to the constant changes in technology. One of the many famous incidents include a 15 year old boy hacking NASA computers in 2006.