Precarity

Precarity

Precarity is a major concern in academia (e.g. Webb et al. 2021 : https://ui.adsabs.harvard.edu/abs/2021sf2a.conf...35W/abstract)

Difficult to move institutes/countries every year or two (costly (€ aswell as time), disruptive, leave friends/ family / support network behind, ….)

Uncertainty in future (permanent job in astrophysics, or industry, or …. ???)

All create high levels of stress

POST-PADAWAN

Young Padawan, the time has come. Your training is complete.

Th–thank you master! Does this mean I am a Jedi now?

No, no, no. Of course not... Now you are a Post-Padawan

What...?

Your first task is to apply for funding in order to buy a light saber

Also, moving to the other side of the galaxy is well seen by fundining bodies.

Is it too late to join the Dark Side?

Your call

PEDROMICS

What can be done ?

We can not, unfortunately, create 100 new jobs !!

Advice to maximise chances of being hired :

- ✔ Prepare your application with the people in the lab. you want to be hired in
- ✔ Demonstrate in the application how you will work with the people in your chosen lab
- ✔ Show how you independantly conduct research projects
- ✔ Prepare your application in advance and get different people to read it (specialist, non-specialist) and provide feedback
- ✔ In France, it is not necessary to have a very long list of publications
- ✔ Ask a previously successful candidate to show you their application
- ✔ In your application, show your contribution clearly (but do not overclaim)
- ✔ Stick to the guidelines provided
- ✔ Run a spell checker and proof read

Keep an open mind, there are many other fascinating jobs out of academia

Permanent jobs in academia

In France : CNRS / CNAP / University

CNRS, primarily sections 17 (système solaire & univers lointain) & 18 (Terre et planètes telluriques : structure, histoire, modèles), but also 1 (Interactions, particules, noyaux, du laboratoire au cosmos), 2 (Théories physiques : méthodes, modèles et applications), 4 (Physique des atomes, molécules et plasmas. Optique et lasers), 7 (Sciences de l'information : signaux, images, langues, automatique, robotique, interactions, systèmes intégrés matériel-logiciel), 55 (Sciences et données)
University : primarily section 34, but also 35, 28-30, …

Example for 2024 : CNRS section 17 (CRCN) : 6 posts, sect. 18 : 6 posts, sect. 55 : 4 posts + 13 posts oriented towards astro in sections 1, 2 and 7
CNAP (Astronome-adjoint) : 4 posts
Lecturer (section 34) : 1 post (chair prof. junior)

It is also possible to become a Research engineer (IR)

There are also jobs in other countries

Widening your options, some transferrable skills

- Collaboration
- Statistical methods
- Numeracy
- Programming/coding
- Data management and analysis
- Simulations/Modelling
- Autonomy
- Motivation
- Note taking
- Prioritising
- Resolving problems
- Fluent English (and other langages!)
- Written communication
- Public speaking
- Project management
- Leadership
- Critical thinking

Options open to you….

Statistician

Researcher

Information technology

Critical thinking, problem solving

Collaboration and team leading

Teacher

Mental agility and adaptability

Initiative and entrepreneurial skills

Efficient communication

Big data

Access and analyse information

Work in the aero-space industry

Curiosity and imagination

Imaging/ Medical techniques

Scientific Writing/communication

Places actively recruiting PhDs and postdocs

Big groups in Aeronautics/Aerospace

CapGemini (Engineering) (previously Altran) https://www.capgemini.com/fr-fr/

CS Group https://www.csgroup.eu/fr/

ALTEN https://www.alten.com

AKKA https://www.akka-technologies.com

EXPLEO https://www.joinexpleogroup.com

Smaller businesses "fournisseur de service" (Toulouse)

CELAD www.celad.fr

HEDON Technologies https://www.hedontechnologies.com

Businesses focussed on artificial intelligence :

Elter https://elter.fr/en/home/

Datalab by Extia - https://www.extia.fr/assets/pdf/datalab.pdf

LumenAI (à Pau) http://www.lumenai.fr/

Datactik https://www.datactik.com/

Delair.A https://delair.aero/delair-ai-visual-intelligence-for-enterprise-asset-management/

Places actively recruiting PhDs and postdocs

Other subjects:

WeatherForce https://weatherforce.org/

CLS Group (Collecte Localisation Satellites) https://www.cls.fr/en/

Continental https://www.continental.com/fr-fr

Thales https://www.thalesgroup.com/

Noveltis https://www.noveltis.fr/en/home/

Some Start-ups (Toulouse) :https://www.toulouseisai.fr/referencer-sa-structure

How to get recruited

Make an attractive CV that is oriented towards industry/engineering

Put it on the website APEC (www.apec.fr)

Keep your options open

Great Heroes
May 14 at 1:00 PM · 🌐

A father said to his daughter "You have graduated with honors, here is a car I bought many years ago. It is pretty old now. But before I give it to you, take it to the used car lot downtown and tell them I want to sell it and see how much they offer you for it."

The daughter went to the used car lot, returned to her father and said, "They offered me $1,000 because the said it looks pretty worn out."

The father said, now "Take it to the pawn shop." The daughter went to the pawn shop, returned to her father and said,"The pawn shop offered only $100 because it is an old car."

The father asked his daughter to go to a car club now and show them the car. The daughter then took the car to the club, returned and told her father," Some people in the club offered $100,000 for it because "it's an iconic car and sought by many collectors."

Now the father said this to his daughter, "The right place values you the right way," If you are not valued, do not be angry, it means you are in the wrong place. Those who know your value are those who appreciate you......Never stay in a place where no one sees your value.

Cultural & Administrative Problems

Moving institute/ country is already stressful without administrative/cultural problems

Problems raised when responding to the survey :

◆ Large amount of paperwork, especially moving to France

◆ Language barrier – administrative staff / paperwork often in French only

◆ Little/no information provided to new arrivals in a lab. about how things work (where is the code of conduct, where to notify about holidays, ….)

◆ Reimbursement delays necessitating bank loans

◆ Difficulty seeking medical (other) attention due to the language barrier

Living apart from family/friends

Constantly moving institutes/countries due to short term contracts means people often living apart from loved ones for extended periods
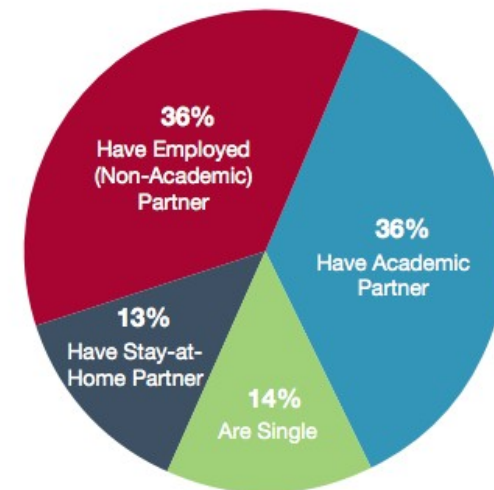
Adds to stress and can lead to further financial stress

Removes the important support network often necessary for a balanced life (health, but also childcare, etc)

The « two-body » problem is frequent in academia (e.g. Gagliano Taliun, 2021, Nature), may be as many as 36 % of researchers !

FIGURE 1: PARTNER STATUS OF U.S. ACADEMIC WORKFORCE^*‡

9,043 Full-Time Faculty from 13 Leading Research Universities

- 36% Have Employed (Non-Academic) Partner
- 36% Have Academic Partner
- 13% Have Stay-at-Home Partner
- 14% Are Single

Seventy-two percent of full-time faculty in this study have employed partners. Thirty-six percent have academic partners.

^ All data derive from the Clayman Institute's Managing Academic Careers Survey unl
* Percentages do not add to
‡ See Appendix

Where to get help

Obviously, try to avoid letting things overwhelm you. To do that, try to
 - keep a balanced life – have an interest outside of work (good for the CV too!)
 - get enough sleep
 - keep communication open with your supervisor, the majority really do want the best for you
 - if not possible, speak with an intermediary (someone you trust)
 - ask for support from family and friends – everyone goes through bad patches and people are willing to help

If things are bad :
 - speak to your doctor
 - speak to the University/ CNRS support services

CNRS

Preventative medecine, including stress related issues, find your contact here :

http://www.dgdr.cnrs.fr/SST/CNMP/med_prev_serv/annu-serv.htm
http://www.dgdr.cnrs.fr/drh/protect-soc/fiches_rps.htm

Where to get help

University (example, Toulouse)

https://welcomedesk.univ-toulouse.fr/le-service-interuniversitaire-de-m-decine-p r-ventive-et-de-promotion-de-la-sant-simpps

Preventative medecine (some English speaking staff)

- Generalist doctors, Gyneacologists, vaccinations
- Social services (help with university, family, personal, administrative & financial problems
- Psychiatrists and psychologists
- Nutritionists, sexologists, doctors to help with addiction

See also resources here :
https://www.astrobetter.com/wiki/Mental+Health

Cultural & Administrative Problems

Solutions proposed by respondants to survey (Webb et al. 2021) and transmitted to INSU:

- Prepare arrival of new hire (find office space, meetings with key people, etc)
- Where possible provide paperwork in English if necessary and help out with translating if need be
- Provide information to new arrivals with how things work, may be as an introductory booklet
- Organise meetings to provide information about the lab with all new arrivals
- Inform whole laboratory (via Newsletter) of new arrivals that week/month
- Instigate a mentor programme (can be beneficial to all)
- Organise scientific and non-scientific events to facilitate meeting colleagues and creating a team spirit
- Reinforce inclusivity
- Hold discussions in English when non French speakers are present
- ...