

How to Get a Faculty Position at Big State U.

Neal Evans

**With input from Cynthia Froning
and Adam Kraus**

Caveats

- **Most advice is universal, but...**
- **Criteria, process will be different if**
 - **You are primarily an instrumentalist**
 - **You are applying to an institution which primarily focuses on teaching**
 - **You are applying to an observatory or non-teaching institution**
 - **You are applying in another country**
- **Any controversial opinions herein are the responsibility of N. Evans**

Big Picture

- **Start building your career on day 1**
- **Demonstrate ability to get oversubscribed resources and funding, publish, and talk**
- **Become a leader in your sub-field and part of the conversation in a larger field**
- **Tailor your application**
- **Do your homework before interviews**
- **Give a great talk**
- **Get lucky!**

First Steps

- **–10 to –5 years: Build your career**
 - **Publish, publish, publish!**
 - 3 papers while grad student is a MINIMUM
 - Dutch students: 5-9 papers in less time
 - But quality counts too!
 - Mix of 1st author and team work is good
 - **Find a way to give talks at meetings**
 - **Show ability to get grants, oversubscribed time**
 - **Get some real teaching experience**
 - **Contribute to diversity**
 - **Learn about fields other than yours**
 - **Talk to old people at meetings**
 - They are more likely to be on search committees

Publications: the Facts

- **Stats from those who visited in 2017**
 - **Number of papers: 28-213**
 - **No./year since first: 4.5-16; mean = 9.1**
 - **Citations: 191-4687**
 - **Cites/yr: 38-334; mean 154**
 - **1st author: 12-30**
 - **No./year: 1.5-3.8; mean 2.9**
 - **Citations: 59-824**
 - **Cites/yr: 12-74; mean 45**

Comments on Pubs

- **Note the big range of numbers**
 - Mostly due to big range in career years
 - Range is less in Numbers/year
 - But all the metrics are substantial
- **Opinions differ on which pub metrics are meaningful**
 - Some focus on first author, recent numbers
 - Balance between numbers and quality of papers varies among committee members
 - Make them all as good as you can

Career Building

- **Opinions differ on some of these!**
 - **Try for prize postdocs**
 - “Everyone has one”
 - But there will be fewer: harder, but more meaningful
 - **Postdocs abroad may be problematic**
 - Keep connections in US IF you want to return
 - This depends on field too.

The Application

- **Elements**
 - **CV and Publications**
 - **Research Statement**
 - **Teaching Statement**
 - **Service/Diversity Statement**
 - **Letters of Recommendation**
 - **Most critical, but least immediate control**
 - **Depends on actions long before**

How to: The Application

- **–2 months: Construct applications**
 - **Homework: who, what, why?**
 - **Tailor application to interest faculty**
 - **Stand out among ~ 200 applications**
 - **Focus on places where you fit the job description**

Guidelines and Suggestions

- **From committee members**
 - **Committee will not be all in your field**
 - Avoid jargon, acronyms, details of your field
 - Explain how your work fits into big picture
 - Describe a vision for the future at that place
 - **Tailor your application**
 - Do your homework; know people and facilities
 - Be specific; with whom would you interact?
 - What observational facilities would you use/bring?
 - Be brief; we don't need to know
 - All observing runs, programming or spoken languages, hobbies, marital status,...

The Letters!

- **Phrases from letters for top 8:**
 - **Brilliant, bold, creative, and dedicated leader**
 - **the leading untenured person in the US in ...**
 - **outstanding addition to your department**
 - **a leading scientist in our community**
 - **precocious ability to publish timely and compelling results in highly competitive fields**
 - **remarkable scientific (and social) maturity for his age**
 - **an outstanding candidate for an Assistant Professorship**
 - **a great catch for a faculty position**
 - **absolutely THE top in ...**
 - **a truly remarkable young scientist**

The Letters!

- **Phrases from letters for bottom 6**
 - an excellent and very independent researcher
 - will be able to contribute
 - a dedicated and responsible person
 - easy to get along with
 - very skillful in software development and programming
 - straightforward to deal with
 - a strong, independent intellect
 - I have very much enjoyed working with...
 - remarkably talented
 - I think he would be an interactive and engaged member

Comments on Letters

- Nobody says anything negative
- The committee is “reading tea leaves”
- Some people now discount letters because there is so little dynamic range
- Still, you can see the difference between these
- Everyone who visited had very strong letters

How to get good letters?

- **Start early; impressions built over time**
- **Work with several people**
 - **Especially outside your institute**
 - **Collaborate, but find a way to lead**
 - **Demonstrate competence AND originality**
 - **Don't be satisfied with "good enough"**
 - **Choose your advisor and collaborators wisely**
 - **Don't alienate your letter writers**
 - **Marketing: find a way to get noticed**
 - **Letters from pundits who don't know you well are usually not helpful**

Making the Cuts

- Different institutions/committees may work differently
- We considered the following criteria:
 - Research productivity, creativity, innovation, impact, and leadership (included synergy for some)
 - Teaching experience, interest, and ability
 - Professional Maturity (ready to be a faculty member)
 - Compatibility with the search objectives stated in the job ad
 - Potential to contribute to diversity of the department
- Different weights by different committee members; research always high
- For me, 40, 15, 5, 30, 10 during initial ranking
- Maturity became more important in interview process

The Process

- All given scores in 5 areas, weighted, averaged
- Cut to 60, then 30
- Decided on 18 for Skype interviews
- If you get this far...

The Skype Interview

- **Do MORE homework**
- **Know everything you can about the place, the people, the committee (if you can find out who they are)**
- **Make sure you have a good connection from a non-distracting environment**
- **Think of obvious questions and be prepared**
- **Have a sensible question ready to ask the committee**

Some of our questions

- Why are you interested in Texas?
- Aside from your own research, how would you add to the overall research effort at UT?
- What are some projects that graduate students and postdocs could begin while you are building your group?
- How would you approach teaching classes of 100-200 students?
- How will the facilities available at UT enhance your research program?
- How would you enhance diversity at UT?
- What makes your research program unique in your field?
- What is the most important problem in your field and how do you plan to attack it?

The Visit!

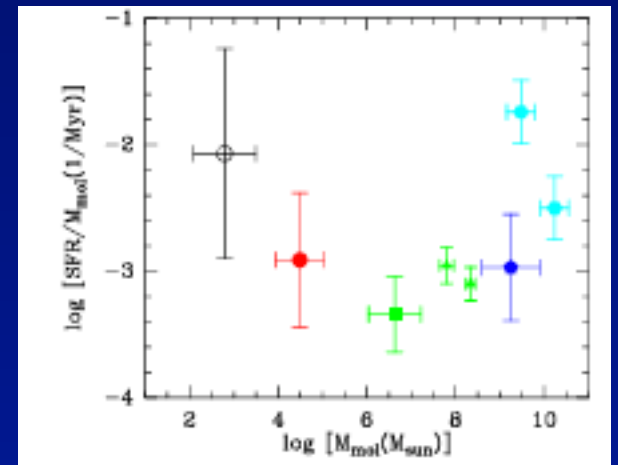
- We had to pick 8 out of the 18, very hard
- If you make it this far, you are in top 5%
- MUCH more homework
- Know everything you can about people, telescopes, instruments
- Have a plan to talk to each person about what interests THEM

The Job Talk

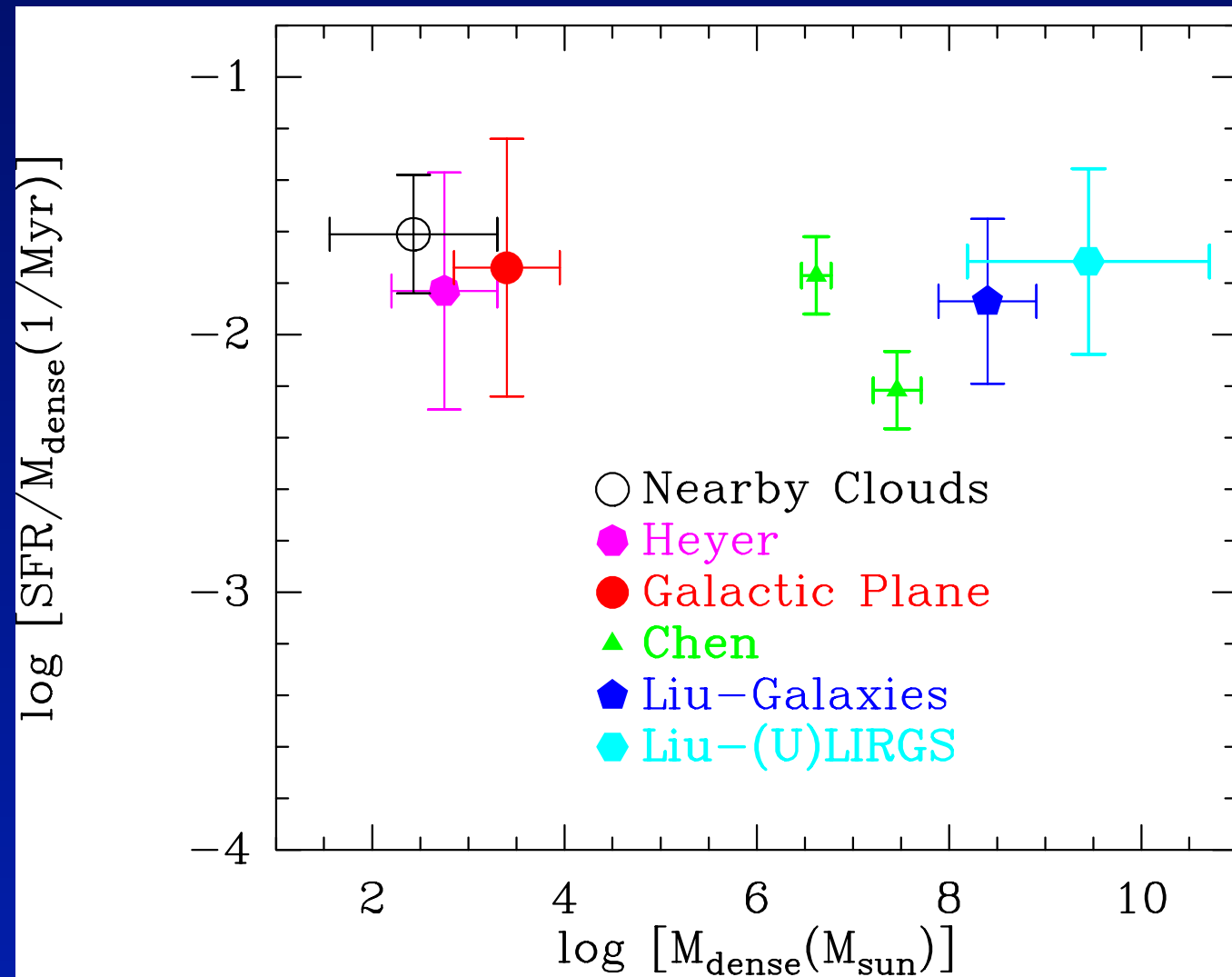
- **Frame with Big Picture (intro and conclusions)**
- **Connect to fields of current faculty whenever possible**
- **Express long-term vision and how to get there**
- **If possible, tell a story**
 - **A puzzle, detective story, engage the audience so they are thinking about it**
- **Pace yourself; not too fast, not too slow**
- **Be ready to answer tough questions**
- **Ask a grandparent to read your slides and axis labels from the back row; if they can't, fix it!**

Can you read the labels?

Rest of slide filled with other stuff, figures, text, etc.



How about now?



Meetings with Groups

- **When meeting with under-graduate students**
 - Show interest in teaching, working with UGs on research; know about courses
- **When meeting with graduate students**
 - Act like a professor, not a student
 - Have some ideas for projects
 - Show interest in what THEY are doing
- **When meeting with postdocs**
 - Mostly the same, but interact more as peer

Meeting with Anyone

- **Know about their research**
- **Ask them about it; try to connect**
- **Convey enthusiasm about the institution**
- **Listen, but don't pile on, if they want to whine about the place**

Last Step

- **Get Lucky!**
- **Seriously, there IS a lot of luck involved**
- **If you don't get the job but made the interview, be encouraged**
- **If you didn't make it to any Skype interviews, it may be time to consider other options**