

Dr Kirk Jensen

The challenges of developing an independent research career

**School of Molecular and Biomedical Science
Discipline of Biochemistry
University of Adelaide**

Career History:

- 1985** **B.S. in Biological Sciences**
Stanford University
- 1995** **Ph.D. in Chemistry and Biochemistry**
University of Colorado at Boulder
- 1996-2000** **Postdoctoral Fellow**
The Rockefeller University
- 2001-2003** **Research Assistant Professor**
The Rockefeller University
- 2004-present** **Senior Lecturer**
School of Molecular and Biomedical Science

Adelaide History:

- 2004** Arrive in February; write grants immediately!
- 2004** Set up lab; 1st year with one Honours student and one Postdoctoral Fellow
- 2004** Become full member of Centre for the Molecular Genetics of Development (CMGD); substantial funding from CMGD through 2008
- 2004** Awarded NHMRC Project Grant & ARC Discovery Grant with funding from 2005-2007
- 2008** Awarded NHMRC Project Grant with funding from 2009-2011

Current lab:

Two postdocs:

Kate Dredge (former ARC Postdoctoral Fellow, now CIB)
Jane Sibbons (funded from NHMRC Project grant)

Five Ph.D. students:

Jonathan Webb (2005; left for Oxford (Rhodes Scholar))
Peter McCarthy (2005)
Fook Hing (2006)
Sophie Wiszniak (2007)
Bradley Simpson (2007)

Covenor, Discipline Honours Program 2005-present

The first year is very hard...

...but the 2nd, 3rd, 4th ...are even harder.

Starting up issues:

Setting up physical lab (equipment, who sells X, Y & Z)

Balancing teaching, admin and research

Getting PhD students started

Keeping PhD students focused

Finding enough time to keep PhD students focused

Having another senior person in the lab is enormously helpful,
but not a substitute for the lab head

Most pressing issues:

Publish!

Finding balance between high impact work (top tier of molecular biology journals; SCI scores of at least 10 or above) and publishing frequency (must 'fit' papers into three-year granting cycle)

Also:

Keep eye on long-term research goals

Keep students and postdocs motivated and focused

Make sure you have School/Discipline support for your goals

Personal issues:

Finding balance between work and other activities

Health issues affecting performance (2007-present)

Advice to PhD students and postdocs:

You are at a great stage of your scientific career; your project's success likely depends on you alone (or hopefully a small group of researchers) and you are likely not responsible for supervising the career of any other scientist.

Thus, your intelligence, your motivation and your work habits will determine your success.

IMHO- For those considering academic careers (as research fellows or as lab heads), it is important to have an opportunity to do science outside of Adelaide.

The two worst characteristics of life sciences research in Adelaide: 1)
2)

Advice to PhD students and postdocs (continued):

Considering academic career: your first priority should be your publication record. Quality (impact factor, times cited. etc.) is critical! The rest of your CV should never take precedence over this priority.

Read the literature of your field constantly; you should know what type of experiments constitute 'acceptable proof' of a finding or behavior, and your own research should attempt to meet these standards.

High quality research takes time. It can be very difficult for a PhD student to complete the experiments for a first author paper of IF=10 or above in 3.5 years. If you really want a 9-5 job for the rest of your life, you should not consider an academic career in research.