The ins and outs of applying for tenure-tracks faculty positions

Kristy Ainslie

Distinguished Professor & Chair

Division Pharmacoengineering & Molecular Pharmaceutics

UNC Eshelman School of Pharmacy

Typical yearly timeline

Ads come out

Typically in the fall when faculty first meet after summer, new positions are decided

Sept-Oct

Apply

Typically ads best accept applications for a month or two

Sep-Nov

Pre-interviews

Phone or Skype/Zoom pre-interviews are becoming more common but are not always used.

Nov - Jan

On Campus

These interviews are usually 2-3 day events

The first choice candidate will come back for a 2nd interview

Jan - Apr

Decisions

All candidates need to be interviewed

1st choice applicants will sometimes negotiate and fall through

Apr-Aug

Do not expect a rejection letter.

Typically start Aug.

Small programs or those without undergrad teaching may use different schedules.

Timing

- It takes a lot of time to seriously prepare these documents. That time usually takes away from your current experiments/job responsibilities, plan according.
- Timing when to apply can be important. You want to have shown productivity in your current position.

Faculty ads

Google is your best bet

- Key words
  - "Nanotechnology", "Cancer", "Drug Delivery"
  - "Tenure-track", maybe "University"

Websites like Science Careers and Academic Keys

University's career site

The individual program's website

Inquire to faculty in the program you may know, are in the research area or have some connection to you

Academic twitter

Conference postings

Things to look at in faculty ads

- Can you live there? No REALLY, can you live there?
- Is it open to Assistant Professors? (aka entry level)
- If a research area is indicated, does your research fall into that area?
  - Are their people in the program who would compete with you?
- Does the university have the research equipment and support I would need to be successful?
- Is it the tier of university I want to be at?
- Note any deadlines and any contact information.

If you inquire to the contact person, 90%+ of the time they will tell you just to apply if you are appropriate.

Application packets

Do

- Start your packet early
- Have multiple people proof it
- Tailor it to the ad
  - Link potential collaborators

Don't

- Make it over complicated
- Give away potential IP
- Propose exactly what your PI does

Nut and bolts of a faculty packet

Research intensive (e.g. Scrips, major universities school of pharmacy, medicine etc.)

- Coverletter
- CV
- Research Statement
- Teaching Statement only if indicated
- References (3-6)

Research and teaching intensive (e.g. engineering departments at major universities)

- Coverletter
- CV
- Research Statement
- Teaching Statement
- References (3-6)

Teaching intensive (e.g. primarily undergraduate institutions)

- Coverletter
- CV
- Teaching Statement
  - Perhaps example lecture
- Research Statement
- References (3-6)

Each of these should be individually tailored to each ad.
Upload or send PDFs whenever possible!

Coverletter

- Use letterhead from your current university
- Aim for 1 page in length and keep it under 2 pages
- Address it to the contact person in the ad, otherwise 'Search Committee Chair'
  - Check and check again the proper way to address the person (e.g. Dr.)
- Paragraph 1
  - State clearly in the opening line what the exact title of the position you are applying
  - State your current position
  - Where you found the ad

Coverletter (con't)

If a primarily teaching organization, highlight your teaching accomplishments as well.

- Paragraph 2
  - Describe your past research and note your accomplishments
    - Give number of publications, awards etc. that underscore your accomplishments
- Paragraph 3
  - Describe your future plans and make sure you use the jargon and nomenclature in the ad.
- Paragraph 4
  - Give your contact information
  - If you are giving a talk at an upcoming conference, particularly the main one in the field mention that.
    - ACS and other orgs will have a poster session for new faculty, look into those as appropriate

Your CV is the most important part of your packet

Proof your CV again, and again and have multiple people look it over for you.

Parts of a CV

Education
- Undergrad School
- Grad School

Experience
- Employment

Scholarship
- Peer-Reviewed Articles
- Published Articles
- Books and Chapters
- Poster Presentations
- Oral Presentations
- Patents
- Media Features

Skills
- Laboratory (may be broken down further)
- Computer
- Optional
  - Interpersonal (include workshops, activities)
  - Language(s)
  - Leadership (include workshops, activities)
  - Hobbies (only the highpoints)

Teaching
- TA Experience

Honors
- Fellowships
- Awards
- Achievements

Funding (optional)
- Grants received

Service (optional)
- Volunteer work
- Journal Reviewing
- Committee Work

Header block and style

Stick with the standard fonts (Times New Roman, Arial etc.)

Have font size at least 10, but no more than 12 (except for name)

Margins of 0.5” are acceptable

Adding a picture, martial status, or graphic is not too suitable for a science CV

The top of your CV should have a header block with contact information

- Name (include middle initial if used in publishing)
- Email
- Address
- Phone Number
- Website (optional)

The block should not be obnoxiously large

In general, a conscience CV is good so individuals do not have to scroll over excessive pages

Example of Title Block

KRISTY MARIE AINSLIE

4211 Marsico Hall; 125 Mason Farm Rd.; Chapel Hill, NC 27599

919-962-4556; ainsliek@email.unc.edu; http://ainslielab.web.unc.edu/

Strongly consider setting up a website for yourself that has your CV and links to publications. Keep it professional. http://web.unc.edu/

Also, label your subsequent pages. Either at top or bottom

Education

List undergraduate and graduate programs	• High school should not be included
Name school	• List location if not broadly known
Years attended	• Use 'Expected Graduation' date for pending degrees
Degree(s)	• List of courses not needed
Note any honor related to degree	• Honors college, valedictorian etc. • GPA optional
For graduate program, list thesis title and name of thesis advisor	

Example of Education

EDUCATION

2002-2005 Pennsylvania State University PhD Chemical Engineering
Application of Nanobiomaterials for Biofouling Attenuation Advisor: Michael V. Pishko

2000-2002 Pennsylvania State University MS Chemical Engineering
Effect of Shear Stress on the Contraction of Smooth Muscle Cells Advisor: John M. Tarbell

1995-1999 Michigan State University BS Chemical Engineering

Your post doc experience could be listed here but can be better listed elsewhere.

Experience

Sometimes this can be divided between Research and Professional

- Might have a history of employment in a non-research area, but want to highlight past work history

List dates of employment

- Can hide short term employment by just giving years, rather than months

Title

Advisor (if appropriate)

Company name and perhaps location

Bulleted list (~3, no more than 5) of accomplishments

- Try and be quantitative
  - 'Managed five employees'
- Use action words to start
  - Managed, Optimized, Performed, Achieved…
- Do no list skills, have those in your skills section
  - No: Applied confocal microscopy to HeLa cells

Example of Experience Section

Aug 2006-Jul 2009 Post Doctoral Fellow, University of California, San Francisco Advisor: Tejal A. Desai

- Application of polymeric microdevices for cancer therapy.
- Characterization of immunological responses to nanomaterials.
- Development of materials including polymeric microdevices, hydrogels, and nanowires.

Mar-Aug 2006 Contractor, Naval Research Laboratory Advisor: Lloyd J. Whitman

- Performed DNA based biotoxin assays.
- Developed T-cell based biosensor for HIV/AIDS monitoring.
- Aided in the optimization of surface chemistry on a silicon nitride surface.

2005-2006 Post Doctoral Researcher, Protiveris Advisor: Robert Cain

- Optimized surface chemistry on nanostructured material surface.
- Performed biochemical assays on nanomechanical cantilever array system.
- The investors reduced the funding for the start-up in January of 2006.

2003-2005 Graduate Assistant PhD, Pennsylvania State University Advisor: Michael M. Pishko

- Characterized cell and protein attachment to nanomaterials.
- Applied basic surface chemistry knowledge.
- Gained experience in biosensor technology.

2000-2002 Graduate Assistant MS, Pennsylvania State University Advisor: John M. Tarbell

- Examined calcium ion dependent cellular pathways in vascular smooth muscle cells.
- Imaged calcium ions in real time and cell surface proteins through fluorescent and pharmacological methods.
- Explored topics in fluid flow dynamics as they relate to shear stress.

1999– 2000 Staff Engineer, Malcolm Pirnie, East Lansing, MI

- Lansing office Information Technology leader.
- Collected environmental soil and water samples.

Post doc experience

Graduate

Scholarship: Publications, Chapters, Books

Peer-reviewed and non-peer reviewed should be separated and indicated

All authors and a full reference should be listed

- I just copy from what is displayed in a PubMed search or use Endnote

Underline or bold your name

Enumerate each section

Indicate "invited", "cover", or "highlighted" as appropriate

List papers that are not fully published

- "In preparation" – data collected, but not submitted yet
- "Submitted *Journal Name*" – paper submitted to indicated journal
- "In Press" – Accepted by a journal and ready for publication
- "Online" – Accepted, but not given full date yet. Make sure and include journal name

Place in reverse chronological order

Example of Publications

PEER REVIEWED ARTICLES (H-INDEX 25)

1. Pradhan S, Moore KM, Ainslie KM, Yadavalli VK. Flexible, microstructured surfaces using chitin-derived biopolymers. J Mater Chem B. 2019;7(35):5328-35. Epub 2019/08/08. doi: 10.1039/c9tb00965e. PubMed PMID: 31389964.
2. Zahid MSH, Johnson MM, Tokarski RJ, 2nd, Satoskar AR, Fuchs JR, Bachelder EM, Ainslie KM. Evaluation of synergy between host and pathogen-directed therapies against intracellular Leishmania donovani. Int J Parasitol Drugs Drug Resist. 2019;10:125-32. Epub 2019/09/08. doi: 10.1016/j.ijpddr.2019.08.004. PubMed PMID: 31493763; PMCID: PMC6731340.
3. Watkins-Schulz R, Tiet P, Gallovic MD, Junkins RD, Batty C, Bachelder EM, Ainslie KM, Ting JPY. A microparticle platform for STING-targeted immunotherapy enhances natural killer cell- and CD8(+) T cell-mediated anti-tumor immunity. Biomaterials. 2019;205:94-105. Epub 2019/03/26. doi: 10.1016/j.biomaterials.2019.03.011. PubMed PMID: 30909112; PMCID: PMC6594365.
4. Steipel RT, Gallovic MD, Batty CJ, Bachelder EM, Ainslie KM. Electrospray for generation of drug delivery and vaccine particles applied in vitro and in vivo. Mater Sci Eng C Mater Biol Appl. 2019;105:110070. Epub 2019/09/25. doi: 10.1016/j.msec.2019.110070. PubMed PMID: 31546372.
5. Graham-Gurysh E, Moore KM, Satterlee AB, Sheets KT, Lin FC, Bachelder EM, Miller CR, Hingtgen SD, Ainslie KM. Sustained Delivery of Doxorubicin via Acetalated Dextran Scaffold Prevents Glioblastoma Recurrence after Surgical Resection. Mol Pharm. 2018;15(3):1309-18. Epub 2018/01/18. doi: 10.1021/acs.molpharmaceut.7b01114. PubMed PMID: 29342360; PMCID: PMC5999333.
6. Cheng N, Watkins-Schulz R, Junkins RD, David CN, Johnson BM, Montgomery SA, Peine KJ, Darr DB, Yuan H, McKinnon KP, Liu Q, Miao L, Huang L, Bachelder EM, Ainslie KM, Ting JP. A nanoparticle-incorporated STING activator enhances antitumor immunity in PD-L1-insensitive models of triple-negative breast cancer. JCI Insight. 2018 Nov 15;3(22).
7. Krovi SA, Gallovic MD, Keller AM, Bhat M, Tiet P, Chen N, Collier MA, Gurysh EG, Pino EN, Johnson MM, Zahid MSH Cottrell ML, Pirone JR, Kashuba AD, Kwiek JJ, Bachelder EM, Ainslie KM. Injectable Long-acting Human Immunodeficiency Virus Antiretroviral Prodrugs with Improved Pharmacokinetic Profiles. Int J Pharm. 2018 Dec 1;552(1-2):371-377.

Consider stetting up a Google Scholar account and listing the link here.

Use endnote or other reference manager to format pubs, posters, and publications in the same format to minimize errors.

Scholarship: Poster and Oral Presentations

Reference should include all authors, title, conference name, conference location and year

Can indicate 'invited' as appropriate.

Enumerate

Underline or bold name

Place in reverse chronological order

Conference proceedings and conference published abstracts should also be listed, separately

Example of Poster Presentations

Poster Presentations

1. Chen N, Johnson MM, Collier MA, Gallovic MD, Bachelder EM, Ainslie KM. Optimizing Adaptive Immune Responses to Universal Flu Vaccines via Acetalated Dextran Microparticles. GRC, Mt. Snow, VT 2018.
2. Gallovic MD, Schully KL, Bell MG, Elberson MA, Palmer JR, Darko CA, Bachelder EM, Wyslouzil BE, Keane-Myers AM, Ainslie KM. Acetalated Dextran Microparticulate Vaccine Formulated via Coaxial Electrospray Preserves Toxin Neutralization and Enhances Murine Survival Following Inhalational Bacillus Anthracis Exposure. GRC, Waterville Valley, NH 2016.
3. Hoang KV, Borteh HM, Rajaram MVS, Peine KJ, Curry H, Collier MA, Homsy ML, Bachelder EM, Gunn JS, Schlesinger LS, Ainslie KM. Acetalated dextran encapsulated AR-12 as a host-directed therapy to control Salmonella and Francisella infection GRC, Waterville Valley, NH 2014.
4. Sharma S, Schully K, Pesce JT, Bachelder EM, Keane-Myers A, Ainslie KM. Microparticulate Carrier for Rapid Vaccination Against Anthrax AAPS, Washington, DC 2011.
5. Kanthamneni N, Guerau M, Huss D, Smith A, Lovett-Racke AE, Bachelder EM, Ainslie KM. Novel Microparticulate Treatment of Multiple Sclerosis with Dexamethasone and Myelin Oligodendrocyte Glycoprotein Loaded Acetalated Dextran AAPS, Washington, DC 2011.

Grouping poster and oral presentations is just bad form, split them up unless you only have like one of each.

Scholarship: Patents

- Be careful of listing provisional patents
- Enumerate
- Bold or underline your name
- List patent number(s) when available

PATENTS

1. Ting JPY, Junkins R, Johnson B, Ainslie KM, Bachelder EM, Gallovic MD, Collier MA, Chen N. Methods and Compositions For Inducing An Immune Response. November 2016.
2. Ainslie KM, Bachelder EM, Gautam S, Peine K, Satoskar A. Compositions and Methods for Inhibiting Leishmania, #14/924,605, October 2015.
3. Ainslie KM, Bachelder EM, Gallovic MD, Keane-Myers A, Schully K, Wyslouzil BE. Immunogenic Compositions and Methods for Development of An Anthrax Vaccine. Provisional, September 2015.

Scholarship: Media Features

- This is a vague term for many things including Podcasts, videos, science write ups, and other things that disseminate science knowledge
- Try to include as much information as possible and relevant information

MEDIA FEATURES

Dec 2016	Carolina Scientific *The Macrophage's Bouncer*
May 2010	Medical News Today et al.: *Effects of Vaccines for HIV and Other Disease Could be Boosted by Prescription Drug*
May 2010	Pharmaceutical Formulation & Quality: *Delivery Platform Could Improve Vaccines*
June 2011	PodCast: Mammalian Cell Facts for Engineers. Fundamentals of Engineering
Jun 2008	Chemical Technology: *Hydrogel helps the medicine go down*
May 2008	Technology Research News: *This chip is a pill*

Teaching

This should list Teaching Assistant and other teaching related activities

- As a grad student, often there are two hats: Graduate Assistant and Teaching Assistant
  - List these both in your CV

Course title and number

University

Mention professor who managed the class

Make a bulleted list of accomplishments

- Try and be quantitative
- Use action words to start
- Do no list skills, have those in your skills section

Example of TA listing

2002 Teaching Assistant, Pennsylvania State University; Instructor: Michael V. Pishko

- Taught eight lectures focused on fundamental mass transfer topics.
- Developed and taught curriculum for a lecture based on components of mass transfer constitutive equation.
- Graded quizzes and examinations.

2001 Teaching Assistant, The Pennsylvania State University; Instructor: Alfred Carlson

- Created lectures based around professor supplied sample questions.
- Taught fifteen recitations sections.
- Developed and lectured from PowerPoint presentations on weekly topics and problem sets.

In the version I used after grad school, I listed the course name. Apparently at some point I dropped it.

Teaching Listing if Taught in Lecture

TEACHING ACTIVITIES

Year	Course name	Course Number	Lectures Taught	Enrollment	Course type	Overall Evaluation
2019 SP	Pharmaceutics II	PHCY 512	4	154	Professional	
2018 AU	Advanced Drug Delivery	MOPH 864	5	8	Graduate	4.5/5 (course ave: 4/5)
2018 SP	Pharmaceutics II	PHCY 512	4	154	Professional	NA
2018 SP	Advanced Physical Pharmacy	MOPH 862	3	6	Graduate	NA
2017 AU	Advances in Drug Delivery and Nanomedicine	DPMP 868	5	8	Graduate	NA
2017 SP	Pharmaceutics II	PHCY 512	4	125/25	Professional	4.25& 4.27/5
2017 SP	Advanced Physical Pharmacy	MOPH 862	3	6	Graduate	NA
2016 AU	Advances in Drug Delivery	MOPH 868	6	6	Graduate	4.6/5
2016 AU	Nanomedicine	MOPH 738	4	7	Graduate	4.6/5
2016 SP	Pharmaceutics II	PHCY 512	4	125/25	Professional	4.25& 4.27/5
	Advanced Physical Pharmacy	MOPH 862	3	6	Graduate	
2016 SP	Advanced Pharmaceutics	MOPH 862	3	8	Graduate	NA
2016 SP	Seminar	PHRS 899.004	14	30	Graduate	NA

Honors

- List your achievements
- If you do not have anything significant, do not include this section
- Give date and brief description

HONORS

2012	OSU Council of Graduate Students James M. Siddens Distinguished Faculty Advising Award
2009	Controlled Release Society Outstanding Oral Drug Delivery Award
2007	Controlled Release Society-Capsugel Post-Doc Award for Innovative Aspects of Oral Drug Delivery & Absorption
2005	Walter R. and Aura Lee Supina Graduate Fellowship in Chemical Engineering
2000	The Pennsylvania State University Life Science Consortium Graduate Fellowship
1999	Commencement Speaker for Michigan State University College of Engineering Graduation Ceremony

Funding

If you have received competitive funding, then make sure and list it

Name of funding organization

Grant number if available

Funding dates

Total funding amount

Name of PI

Your role if not PI

Title

Percent effort committed to the grant (optional)

Perhaps a sentence or two regarding what the grant is about

Example of a funding section

CURRENT SUPPORT

5R01AI125147-02 (PI: Ainslie (lead)/Blough) 4/22/2016 – 3/31/2021 3.0 calendar
NIH/NIAI $5,961,014
Host Targeted Therapy for Drug Resistant Salmonella and Francisella infection

Description

R01AI137525-01A1 (PI: Ainslie) 7/1/2018-6/30/2023 2.4 calendar
NIH $1,891,998
Biomaterials to study tolerance immune induction kinetics

Description

1R01AI147497-01A1 (PI: Ainslie) 09/01/2019 - 08/31/20024 1.8 calendar
NIH $2,919,766
Optimizing a Universal Influenza Subunit Nano/Microparticulate Vaccine

Description

1R41AI140795 (PI: Ainslie (lead)/Goyal 06/1/2018 – 10/31/2019 1.35 calendar
IMMvention Therapeutix/NIH $104,140 Amount
STTR: Advancing Formulation of STING agonist for Universal Flu Vaccine

PA2018TierA_ID26 (PI: Ainslie) 01/01/2019 - 12/31/2019 0.12 calendar
PharmAlliance $49,840
Filling an unmet need with Malaria vaccines: an antibody inducing blood-stage microparticulate subunit vaccine

Description

You can list current, pending and completed support.

Even if you wrote a grant and/or generated all the data for it, you can not list it as yours if your PI or someone else is technically PI. Exception is of course fellowships.

Service

Service can be related to science or not

Can have several sub sections

- Public Service
- Service to Publications (e.g. ad hoc reviewer for journals)
- Service to Professional Organizations
- Service to Companies
- Service to Administrative Committees
- Others?

List date

List name of activity, perhaps location and organization

For activities with a high level of commitment, indicate accomplishments with bullet points

Service Examples

PUBLIC SERVICE

2016	NC Museum of Natural Sciences Final Friday Nanotechnology Expert – answering questions of general public
2016	UNC Women in Science, Panelist
2015	UNC Women in Science, Speed Networking, Mentor
2015 - Pres	Mary Scroggs STEAM Workshop, Who Broke the Cookie Jar? and hovercraft demonstration with help recruited for division graduate students.
2009-2013	Judge, Fundamentals of Engineering, OSU
2008	NSF Expanding your Horizons in Science and Mathematics, San Bruno, CA.
	Nanotechnology Program for PBS *DragonflyTV investigation*, St. Paul, MN.
2007	Community Resource for Science, Berkeley, CA.
2001 – 2005	Science Lions; K-12 Interdisciplinary Science Outreach Organization, State College, PA.

- Founded and resided as president for three years.
- Enlisted funding for initial start-up and continuation: > $15,000.
- Developed organization structure that is used to currently maintain group without self-involvement.

1996 – 1999 Science Theatre; K-12 Interdisciplinary Science Outreach Organization, East Lansing, MI.

- Developed three chemistry, engineering, and biology related presentations.
- Created engineering department and recruited initial members and funding estimated at $1,000.

Service Examples

SERVICE TO PUBLICATIONS

Journal Reviewer: Biomedical Microdevices, Langmuir, Acta Biomaterialia, ACS Nano, Advance Drug Delivery Reviews, The Journal of Biomaterials Science: Polymer Edition, Accounts of Chemical Research, Chemical Reviews, Biomaterials, Molecular Pharmaceutics, Journal of Controlled Release, Carbohydrate Chemistry, Acta Materialia, Biochimica et Biophysica Acta, Science

SERVICE TO PROFESSIONAL ORGANIZATIONS

2017 - Pres	AAPS UNC Student Chapter Faculty Advisor
2015 - 2016	Co-organizer for Fusion Conference, Host Directed Therapeutic Strategies to Combat Infection and Reduce Emergence of Drug Resistance Conference
2011 - 2014	ISPE OSU Student Chapter Faculty Advisor
2010 - 2014	AAPS OSU Student Chapter Faculty Advisor
2009 - 2011	Controlled Release Society Oral Drug Delivery Committee Leader

SERVICE TO COMPANIES

2012 - 2014	Scientific Advisory Board Member, Peptineo, Albuquerque, NM
2017	Co-Founder IMMvention Therapeutix, Durham, NC
2017 - Pres	Scientific Advisory Board Member, IMMvention Therapeutix, Durham, NC

Service Examples

SERVICE TO ADMINISTRATIVE COMMITTEE

University Activities

2018 – Pres	UNC, CHANL Advisory Committee
2016 - 2018	UNC, Eshelman School of Pharmacy, Dean Search Committee
2016 - 2018	UNC, Graduate School Administrative Board Member
2016 - 2018	UNC, Academic Policy Committee Member
2012	OSU, College of Pharmacy, Dean Search Committee
2011	OSU, Consultant for CCTS Webpage Development
2012	OSU, Summer Research Opportunities Program, Judge and Mentor
2010 – 2014	OSU, Ohio State Information Committee Chair; Immunology Round Table

College Activities

2017 - Pres	UNC, PharmD Accreditation Self-Study Group Assignments - Standards (18-19): Faculty and Staff Quantitative and Qualitative Factors
2018 - Pres	UNC, Core Curriculum Committee, Chair
2018 - Pres	UNC, COGSS: Committee for Optimization of Graduate Student Selection, Chair
2017 - Pres	UNC, Graduate Visionary Committee
2016	UNC, Advanced Inquiry into Pharmacy, Curriculum Transformation Committee
2015	UNC, Graduate Program Governance Committee
2015	UNC, Family Day Vaccine Session Co-Organizer
2014, 2016	UNC, Candidates' Day Faculty Interviewer
2014	UNC, Pharmaceutics Curriculum Transformation 2nd chair
2014 - 2016	UNC, Scholastic Achievement and Progression Committee

Fine Details

Have someone read it through

- Post doc in lab or a concerted editor who is a friend

Check for spelling and homonym use

Are you consistent with punctuation?

- Do some bullets end in periods and others do not?

Is your formatting consistent?

- Are all your publications, poster and other references structured the same?
- Is your listing of information in the different areas consistent?
- Is your font all the same and the same size in similar formatted area?

Is your spacing consistent?

- Use find and replace to replace a double space with a single one

References

It is good to communicate to your references in advance that you will list them as a reference

How to ask a person to be a reference

- Prepare your CV and attach it to your email
- Open with a warm greeting
- Remind them how they know you if they are not an advisor or someone you see regularly
- Let them know you are looking for jobs and what that ideal job entails
  - Could help you with their connections!

When references requested

- Provide name, title, email, phone, address, and relationship (how do you know this person)

Research statement

- Open with a paragraph on your research philosophy, in general
  - May summarize previous research as it relates
- You need three unique research ideas
  - Not one platform applied to three different diseases
  - These should not overlap with your advisor(s) a lot
- Use pictures that can be read easily
  - Be careful of too small font or too complex pictures
  - Cite pictures taken from published sources
- Reference yourself and your works as well as other
- Frame things in perspective as to what in both pre-clinical and FDA approved that competes with your idea
  - What are other people doing and why is your better?

Breakdown of Research Idea Write Up

Some people summarize their previous research findings here, which is fine, but can also be done in the coverletter.

- 3 ideas
- 1 page per an idea (keep it short!)
  - Should be written for a general science audience
- Use simple and clear graphics to explain things
- Discuss related work and identify why yours is better
- Include preliminary data you may have
- Indicate where you might find funding
  - e.g., NIH, NSF, foundations
- A breakdown of projects and long-term goals are commonly seen

How to write Innovation

Explain how your project is innovative and will add significantly to existing knowledge.

- Do not assume that your reviewers will understand why your project is innovative.

DO NOT overreach.

- You do not have to propose something entirely new:
  - You can simply improve on - or propose a new application of - an existing concept, method, or clinical intervention
  - You can be innovative in any number of ways, e.g.: an innovative hypothesis, methodology, instrument, OR intervention

You probably should not be so far off the beaten track that you think you will shift a paradigm

- Be close to the edge, but do not go over the cliff

Kristy Ainslie, UNC Eshelman School of Pharmacy

General Points for ALL scientific writing

Define acronyms at first use

Don't use contractions in formal writing

Do not start sentences out with the same word or phrases in the same paragraph or consecutively

Avoid spelling mistakes, fragments and run-ons

- Use grammar check in Word – switch language to English
- For compound words (e.g. nanoparticles) use a space between the words to check both parts and then combine into one word.
- Add commonly used to your dictionary.
- Use Google to check uncommon science words for spelling

Spell out words for numbers one through ten, except in reporting concentrations or other results

- We used eight mice to explore….
- 0.5 mg/mL of BSA in PBS…

Use transitions between sentences and paragraphs to have flow

- Use transition words, but do not over use them

Writing at an understanding not appropriate for the audience

Assume most people will just read your CV and not anything else, even the search committee!

Consider your audience when you write, think about what they will likely know and explain what they would not know

To increase understanding by a broad audience

- Limit excessive use of acronyms and topic specific jargon
- Use simple schematics to present overly complex compounds, pathways, physiology or other such fundamentals
- Have an introduction that presents significance and innovation for all levels of understanding
- Write a conclusion section for all levels of understanding

Diversity Statement How To

- A diversity statement does not need to be numerous pages long
- It should share your personal, unique perspective on diversity and be sincere
- Things to consider
  - Your personal experience
    - If you are in a minority and/or person of color (POC), then discuss your experience growing up and things you have witnessed firsthand, as appropriate
    - Consider your parents. If you are first to college or PhD, mention that
    - Socioeconomic status when you were growing up maybe important
    - If appropriate, acknowledge your privilege and the lack of privilege others may have
  - Any bias or other related training you have received
  - Discuss how you plan to incorporate diversity, equity, and inclusion (DEI) in your teaching and research group
    - Look at what is successful in other programs and perhaps identify efforts already existing at the place you are applying. Several universities have post BS Prep programs as well as undergraduate programs to promote underrepresented individuals to do research.
    - The NIH has supplements that can fund underrepresented individuals for undergrad, grad and post doc studies if you have been awarded an NIH grant.
  - Discuss your experience training individuals with diverse experiences and how that has strengthened or changed your perspective

Diversity Statement

- **Even if a program does not require a diversity statement, you can consider adding it to the top of your CV**
- **For example, this is at the top of mine:**

Diversity in the workplace enhances us all in our ability to learn, teach, and communicate. For me, a diverse environment incorporates individuals regardless of race, color, religion, national origin, gender, gender identity, sexual orientation, disability, age, and/or economic background. As a cis female engineer in academia, I have experienced barriers first-hand, but I understand that many individuals have encountered considerably more challenges. As a professor I strive to be a more inclusive leader by mentoring diverse individuals, becoming a LGBTQ+ ally, and seeking out opportunities to overcome and learn about bias. I am aware that academia has an inherent bias that must be challenged and overcome to bring about a more inclusive environment.

Teaching statement

- Typically 2 pages
- Should discuss your past teaching experiences
- Identify, in the program's current curriculum, what courses you could teach
- Identify ~2 courses that you could ad to the undergraduate or graduate curriculum

Concepts currently trending in teaching

- Modern teaching gives pre-class objectives and evaluates outcomes
  - Bloom's taxonomy - classifies educational learning objectives
  - Helps the students to understand what are the take home points (aka what will be on the exam!)
- Flipped-classrooms
  - short videos or activities out of class beforehand teach the core concepts
  - problem-based examples are taught in class with active-learning activities.
- Evidence based learning
  - Teaching approaches, processes, and strategies that produce desired learning outcomes.
  - Requires constant evaluation of teaching approaches
- Active learning
  - Instructional method that engages students in the learning process
  - Examples: Think-pair-share, clicker questions (e.g. Kahoot!)
- UNC ESOP CIPhER is a good resource

LPTs on Skype interview

- **When scheduling the call, ask who will also be on the call.** Look them up and know who they are and what research they do.
- **Speak clearly and at a pace that can be understood.** You can ask if they can hear you clearly and ask them to speak up if you have trouble hearing them, but make sure you do so politely.
- **Do not shadow your accomplishments, but do not be boastful**. If you have a publication in a significant journal or received impressive funding, mention it, but do not repeatedly mention it again and again. Bring up accomplishments that have occurred since your application, which can be done when contacted for the interview via email and/or during the call.
- **Be patient if technical difficulties occur.** Do not be afraid to make idol chit chat if there is a delay where people are just sitting and waiting. How is the weather there?
- **Concisely and succinctly explain your research *past*, *present*, and *future***. Be able to discuss the significance and innovation of your research, what you specifically did, and what were the highlights of your results in 3-5 sentences each (1-2 minute/each). If you have several research projects, try and elaborate on the most appropriate or significant. Avoid a monologue going on for several minutes, people lose interest after a couple minutes and you want to make the call interactive, not one way. If they want to know more about your research, they can always ask.
- **Be able to discuss and/or ask smart questions on the area, university, school/college (e.g. College of Engineering), and department/division**.
  - For the geographical area, if it has resources nearby have some knowledge of that if applicable. Or even in casual chat that might occur know what there is to do nearby or discuss sports if that is a significant aspect of the university.
  - Visit the university's webpage and know what resources (e.g. core facilities, centers) they have that may help you. See if they have a strategic plan or focus areas they are looking to grow (e.g. cluster hires).
  - Know what resources the school/college has that can help. Maybe they also have a strategic plan and areas they want to grow.
  - Study the department/division and know who is in that unit, who does related research, what the common research areas are and especially who you could collaborate with. It is okay to want to collaborate with people outside the department/division, but you should know some in the division that you can work with. Know what classes they teach and where you would fit in that curriculum. Perhaps a course you could teach to add to the curriculum.

LPTs on Skype interview

Show interest and be knowledgeable in the program.

- **Know the ad.** If the ad is specific for a research area, focus on that area of research and not solely on other areas of research. If they request specific things in the ad, let them know you met those criteria.
- **Be able to explain why you are interested in the position** .
- **Be prepared for a behavioral question.**
  - Tell me about a time when you handled a challenging situation?
  - Tell me about a time when you made a mistake and how you handled it.
  - Tell me about a time when you were in direct conflict with a peer and how was it resolved.
- **Know what resources, generally, you would need to succeed.** An itemized list of the number of pipette boxes is not needed, but what big equipment or shared facilities would you need. Also, is there expertise that you would need in a certain area as a collaborator?
- **Be able to answer questions showing the scope of your knowledge in your field.** For an applied field, what similar technology has been commercialized or is in start-ups? Know other individuals (maybe your advisor) who work in this area. How is this work unique from that? Where would you apply for funding?
  - If you are a coming out of your post doc, think about what **project your first student would do** and how you would help them to accomplish that project.
- **Have questions prepared for the interviewers.**
  - When you were looking at resources, was everything you need available? If not, ask about the ones you need. Or if they are there, ask for specifications (not too in depth unless the people on the phone use them).
  - When will they get back to you? What is the schedule for on campus visits?
  - For junior faculty, is there a formal mentoring program?

Will consists of:

Dinner(s), Lunch(s), maybe breakfast(s)
Seminar
Chalk Talk
One-on-one interviews
Perhaps meeting with students

Onsite 1st interview

Avoid coming across like a pre-madonna by asking for flight upgrade without a medical need or asking for additional nights without offering to pay for hotel stay for those nights.

- All travel costs should be covered, but may be reimbursed
- The purpose is for you to impress the program so they want to hire you
  - Will meet mostly with people in the department – convince them that you can collaborate them and/or you will be a good dept citizen (e.g. serve on committees)
- DO NOT rip on your advisor, colleagues, other faculty members etc.
  - Do not say things like you do everything and your advisor did not help you
  - This will poise you as a bad colleague
- Your seminar will be the most important part of the interview
  - Make it perfect and practice in front of people beforehand
- Will likely meet the dean
  - Have some small talk for them (look up their background)
  - Do not discuss any recent controversy unless they bring it up (e.g., NCAA violations)
  - Their purpose is to discuss the tenure process, so ask them if they do not bring it up
  - Can ask them about overhead return as well
- The chair is important as well and can give lots of details
  - Teaching load, committee load, lab space, research expectations, TA positions
- Be careful at dinner.
  - Let them suggest appetizers, dessert, and alcoholic drinks
  - Do not drink too much or on an empty stomach!
  - Often they want to figure out if it's a two-body issue. You do not have to bring up your partner and it is illegal for them to ask (but most STILL will!)
  - Prepare small talk and have questions!
  - Be polite to staff at restaurant and have good manners during the meal

Onsite interview red flags

Be courteous to the admin assistants and staff. They can clue you into issues and often discuss with the committee your interactions with them

- Awkwardly kept away from faculty and/or students
  - Especially if they are individuals that you could relate well to (e.g. if I were kept from females in the department)
- Faculty in-fighting beyond just differences about research topics
- Drunk driving faculty
- Multiple people telling you not to come here, that you are better than this place
  - Watch out for sabotaging to get 'friends' in who are interviewing
- You feel uncomfortable with the faculty and do not 'fit-in'
- Inappropriate comments (often at dinner)
  - "Are you married and have kids?"
  - "Married people live here. Single people live here. Where would you live?"
  - "You can't have a faculty job and raise children. The demand of a mother is more than a father."
  - "That's a nice ring on your finger – where did you get it?" (take off your ring(s) to limit this question!)
    - Learn to say "I" not "we" if you also want to limit it

Chalk talk

- Think of this as a thesis defense or candidacy exam
  - Some programs will grill you as such
- Your seminar should be already given
- Prepare 2-3 slides per an idea and perhaps one introductory slides
  - In a tough crowd, you will not get through it
  - In an uninterested crowd, you will have lots of time left
  - You can prepare extra slides
- Summarize what is in your research statement
  - Indicate people to collaborate with in the department, university and perhaps nearby area

With this and your seminar, do not assume you can use your computer for presentation. Use conserved fonts, a common slide program (i.e., PowerPoint), and use videos & animation sparingly if at all. Consider Mac/PC conversion as one very common issue. **Have a PDF backup of slides in case everything goes wrong**.

Onsite 2nd interview

- All travel costs should be covered, but may be reimbursed
- The purpose is to woo you!
- Provide a list of people outside (perhaps inside) the department you want to meet – potential collaborators
  - May include directors of cores (but your can probably just email them and save that space for others.)
- Ask additional questions that may have come up since the last interview
- Often meet with Real Estate Rep
  - I would suggest if hired, renting for a year to get the lay of the land and then buy a house…

Good to at least think of things like budget ahead of time to make sure what you are proposing is feasible and because some schools want a quick turn around for a budget request (which you should be able to meet, if you have thought about it and your research)

Negotiating your package

With your offer, if its not in writing is not worth anything! GET IT IN WRITING! GET IT IN WRITING! GET IT IN WRITING!

- You should have a list what equipment, disposables, students/post docs, core costs, animals and other supplies with costs to provide to the chair, **perhaps at first interview**!
  - Enough for 5 years of support for your lab
  - Do not balloon costs, too much
- Personnel costs include fringe (insurance, etc.)
  - Grad Student: ~$40K but varies widely (might negotiate down with TA positions, which are not the same!)
  - Post Doc: starting ~$58k/yr total. NIH has a list of stipends per experience
  - Technician: $95k+/yr total. Maybe less for BS level technician which is closer to $15-$25/hr with 30% fringe on top of that.
- Get list of equipment that would be shared with you and **in writing** that you will have free access to them
- If you have a spousal hire, bring it up after the offer is made
  - Do not sign until you are satisfied with your spouse's package
- Ask for more and assume it will be negotiated down!
  - Too high can turn them off, but too low will hurt you from being successful

Just remember sometimes rejection has nothing to do with you…

- A member of the faculty has a previous student or other individual they are gunning for.
- Your research area was not of interest.
- Money from above is cut and no one gets hired in the position.
- The environment was not the best fit for you.
- Someone perceived you rightly or incorrectly as a competitor.
- A multitude of other reasons.

Resources

- https://www.reddit.com/r/AskAcademia/
- https://newpislack.wordpress.com/
- Academic twitter
- Your mentors
- Other faculty around you that you may have something in common with