Ready, Set, **Goal:**

Create an action plan for your career development

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Individual development plans (IDPs)

- Do you enjoy doing your IDP? Why or why not?

- Why does VU have you do an IDP?

Why does VU have you do an IDP?

Set goals and create an action plan aligned with your long-term career goals

Facilitate career development discussions with your research advisor

Tangible benefits of an IDP

From Postdoc Perspective

- Less likely to have conflict with PI
- More satisfied
- More productive

Sigma Xi Postdoc Survey, 2005

From Mentor Perspective

- Facilitating communication (95%)
- Assessing skills and abilities (87%)
- Identifying professional skills needed (90%)

Hobin et. al. (2014) Putting PhDs to Work: Career Planning for Today's Scientists

The IDP process

You complete the IDP

Review IDP with advisor

Implement, revise as needed, continue discussing

VU IDP

A. Signature page
B. Annual research progress report
C. Career development progress report
D. Self-assessment of PhD-level competencies
E. Goals for upcoming year
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Customize me!

NEW

VU IDP

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- Summary of research project
- Goals not/met in past year
- Major research accomplishments
- Level of satisfaction with career development

**Also see year-by-year expectations (end of IDP)

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NEW

- Mentoring/teaching
- Career workshops
- ASPIRE Postdoc Café
- ASPIRE modules
- *PhD Career Connections*
- Career Symposium
- Leadership in organizations
- Externships (job shadowing), company site visits, or internships

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Core Competencies	No basis to evaluate	Needs development	Appropriate to career stage	Strength
Scientific Knowledge				
Broad based knowledge of science				
Deep knowledge of specific research area				
Critical evaluation of scientific literature				
Research Skills				
Technical skills related to research area				
Experimental design				
Statistical analysis				
Interpretation of data				
Creativity/innovative thinking				
Navigating the peer review process				
Communication				
Basic writing and editing				
Writing scientific publications				
Writing grant proposals				
Writing for nonscientists				
Speaking clearly and effectively				
Formulating and asking sound questions				
Presenting research to scientists				
Presenting to nonscientists				
Teaching in a classroom setting				
Training and mentoring individuals				
Seeking advice from advisors and mentors				
Negotiating difficult conversations				
Professionalism				
Demonstrating workplace etiquette				
Complying with rules and regulations				
Upholding commitments and meeting deadlines				
Maintaining positive relationships with colleagues				
Contributing to discipline (e.g. professional society member)				
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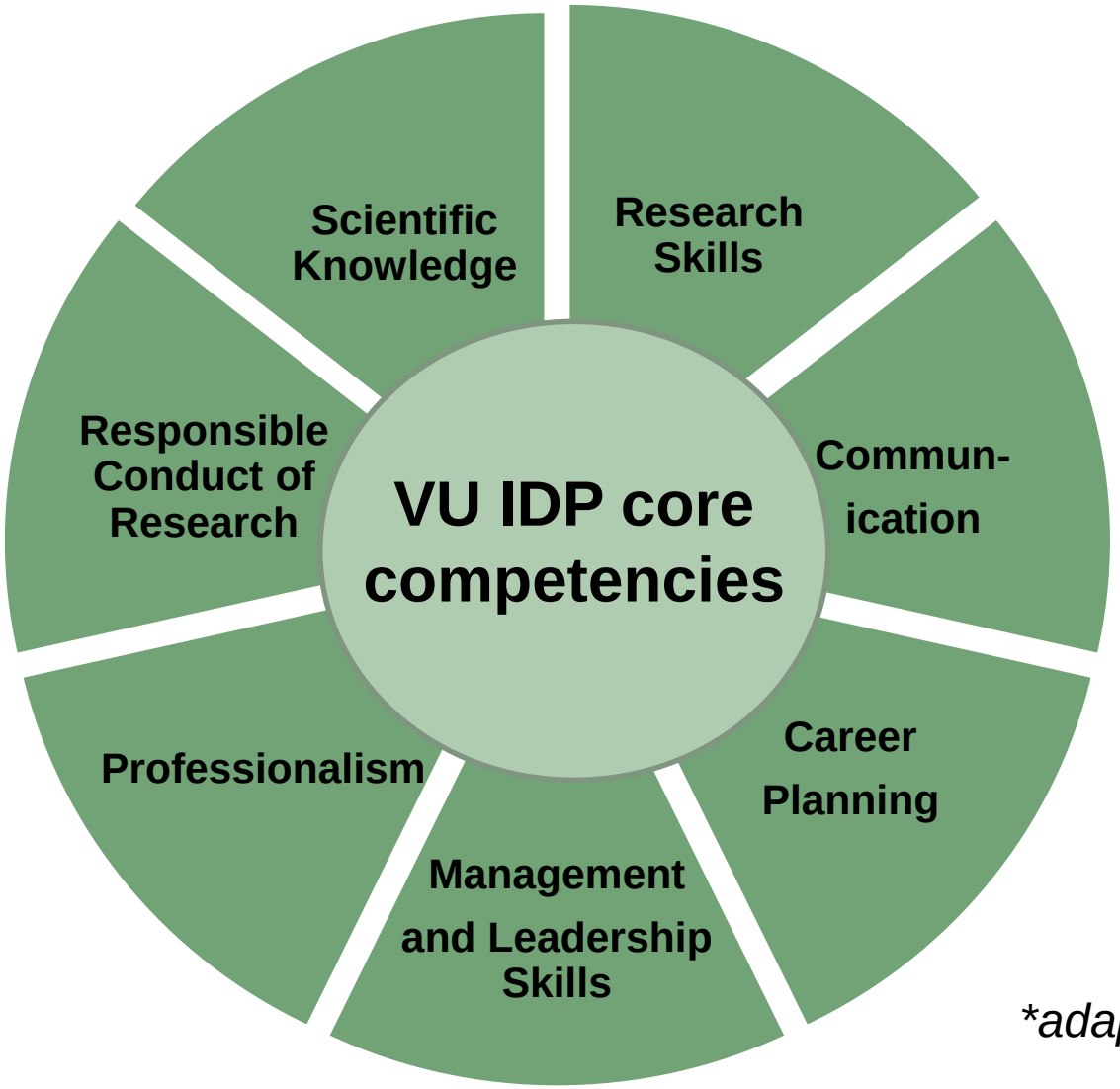
Management and Leadership Skills				
Providing instruction and guidance				
Providing constructive feedback				
Dealing with conflict				
Planning and organizing projects				
Time management				
Managing research resources responsibly				
Leading and motivating others				
Creating vision and goals				
Serving as a role model				
Responsible Conduct of Research				
Careful recordkeeping practices				
Understanding of data ownership/sharing issues				
Demonstrating responsible authorship/publication practices				
Demonstrating responsible conduct in human/animal research				
Able to identify and address research misconduct				
Able to identify and manage conflict of interest				
Career Advancement				
Creating and maintaining a professional network				
Identifying career options				
Tracking professional development and accomplishments (e.g. writing and maintaining a CV or résumé)				
Interviewing				

Adapted from ScienceCareers MyIDP, which is based on the National Postdoctoral Association's Core Competencies for Postdoctoral Scholars

Competencies

- Concept used broadly in HR/organizational development
- Specific knowledge, skills, and qualities someone must have to be successful in a particular job
- Used for
  - Classifying jobs – defining different roles w/in an organization
  - Recruiting new employees (job descriptions, interviews)
  - Helping employees know what's expected of them
  - Framework for evaluation & professional development

Seven core competency areas for scientists*



1. Scientific knowledge
2. Research skills
3. Communication
4. Professionalism
5. Management & leadership skills
6. RCR
7. Career advancement

**adapted from myIDP and National Postdoctoral Association*

Research Skills

- Technical skills related to research area
- Experimental design
- Statistical analysis
- Interpretation of data
- Creativity/innovative thinking
- Navigating the peer review process

Communication

- Basic writing and editing
- Writing scientific publications
- Writing grant proposals
- Writing for nonscientists
- Speaking clearly/effectively
- Formulating/asking sound questions
- Presenting research to scientists/nonscientists
- Teaching in a classroom
- Training/mentoring individuals
- Seeking advice from advisors and mentors
- Negotiating difficult conversations

Management and Leadership Skills

- Providing instruction and guidance
- Providing constructive feedback
- Dealing with conflict
- Planning & organizing projects
- Time management
- Managing research resources responsibly
- Leading & motivating others
- Creating vision & goals
- Serving as a role model

Responsible Conduct of Research

- Careful recordkeeping practices
- Understanding of data ownership/sharing
- **Demonstrating responsible authorship & publication practices**
- Demonstrating responsible conduct in human/animal research
- Able to identify and address research misconduct
- Able to identify and manage conflict of interest

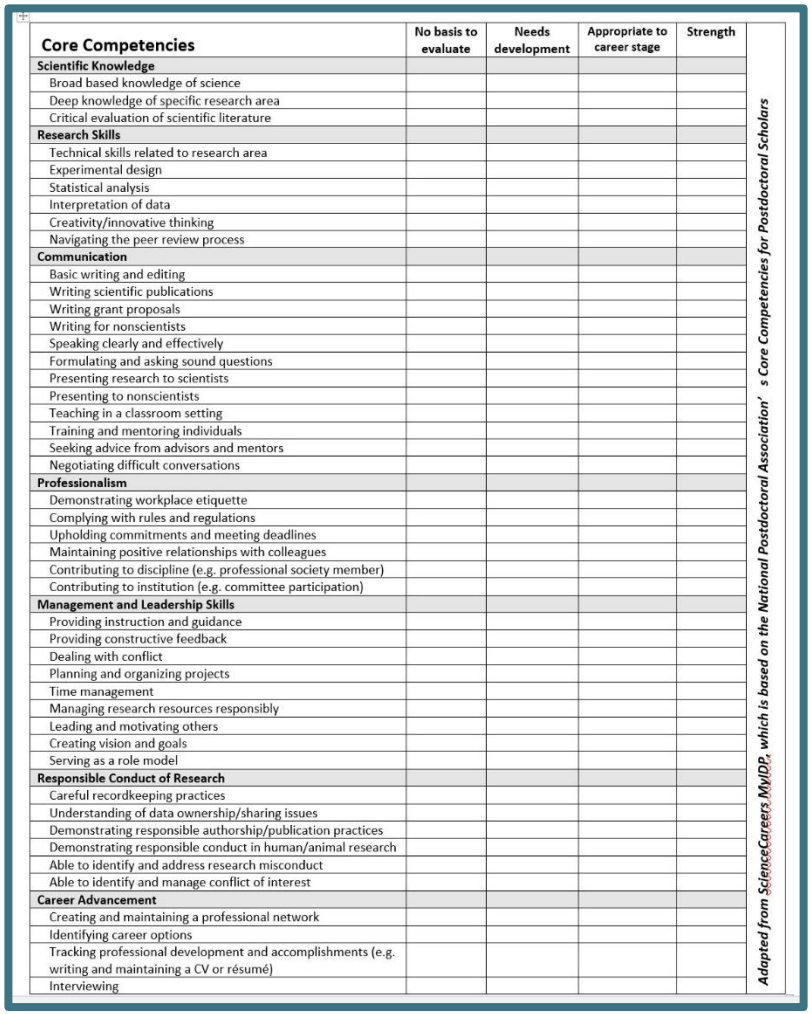
Career Planning

- Creating and maintaining a professional network
- Identifying career options
- Tracking professional development and accomplishments (e.g. writing & maintaining a CV
- Interviewing

After you complete the self-assessment

	No basis to evaluate	Needs development	Appropriate to career stage	Strength
Speaking clearly & effectively		X		
Presenting research to nonscientists	X			
Negotiating difficult conversations				X

Customize your self-assessment



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- What competencies are required for the career(s) that interest you?
- If additional competencies are required, add them to your grid and goal-setting.

“business-minded experts”

“deploy disruptive technology”

“drug discovery &development”

“fast paced environment”

“ability to communicate to clients”

“ensure deliverables executed in a timely fashion”

“Startup mindset”
“Business-minded”

Genomics Scientist - VU Medical Center

Seeking business-minded clinical disease/genomics R&D experts to join an exciting Nashville biotech startup as we deploy our disruptive phenomics & genomics technology to transform drug discovery and development.

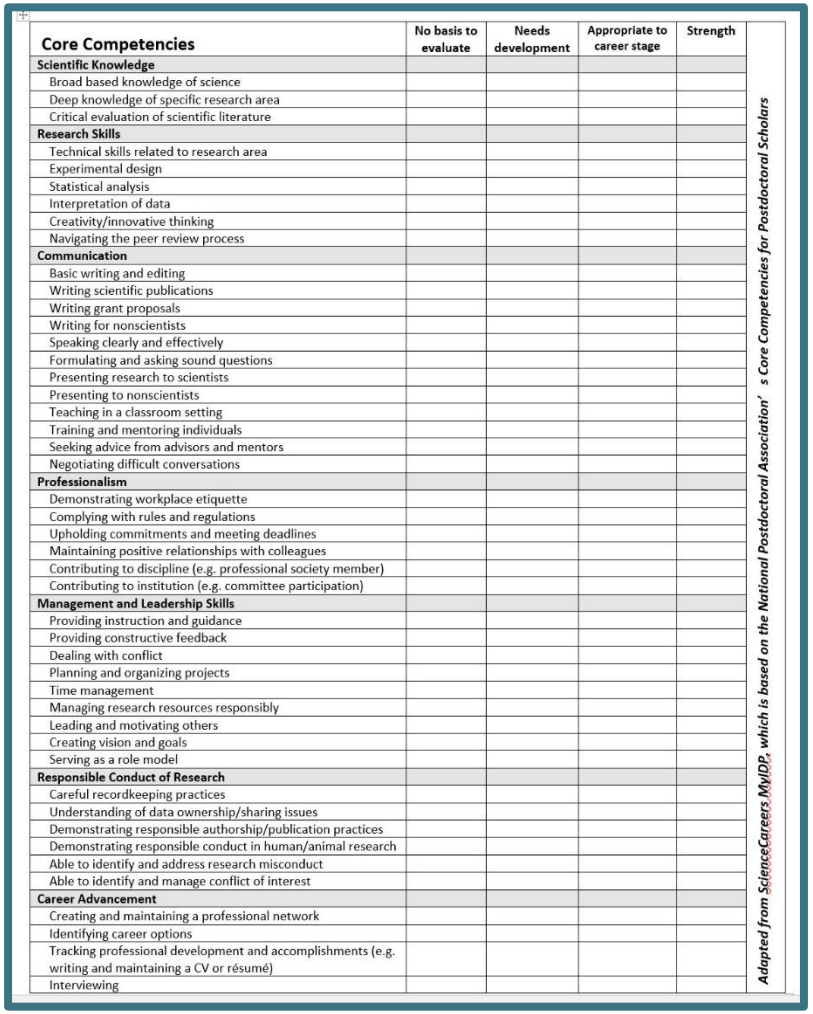
Interested candidates are motivated self-starters who will thrive in the fast paced environment of a startup. You will be responsible for understanding the results generated by our proprietary datasets, and relating them to disease and drug mechanisms through a careful understanding of science and literature. Central to this work will be extensive literature review and the ability to effectively communicate your findings to the team and clients.

Responsibilities:
Validate scientific findings from our complex phenomic & genomic data sets
Communicate scientific findings; synthesize results clearly to deliver to clients
Create proposal materials for proactive business development
Manage ongoing projects to ensure deliverables executed in a timely fashion
Work collaboratively with VU experts when specific scientific expertise is needed

Minimum Qualifications:
MD, PhD, or PharmD preferred
1-2 years of project management experience
Strong understanding of basic biology, disease processes, pharmacology
Experienced at navigating literature searches, online databases, scientific articles and interacting with other scientific experts
Strong pattern recognition in complex datasets
Good feel for clinical indications of basic diseases
Familiarity with statistics/biomedical informatics is a plus

Desired Characteristics:
Startup mindset – willing to grow, adapt quickly, take on new roles as company grows
Collaborator – very comfortable working within multi-disciplinary teams
Business-minded – thoughtful of client needs, timely product delivery
Curious – interested in digging deep into disease areas and underlying biology/science

Questions about self-assessment?



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Write down a specific goal you set for yourself in the past that you have achieved.

Why do we set goals?

Goal-setting is tied to higher performance and satisfaction*

- High, specific goals lead to higher performance than easy or vague goals by:
  - Increasing effort.
  - Directing action toward goals and away from activities that don’t contribute to goals.
  - Enhancing persistence through setbacks.

** Goal setting theory, Edwin Locke and Gary Latham (1990, 2002)*

Goal-setting is fantastic, right!??!

Rank your goals
Part D/E/F: Goals for Upcoming Year

1. I am strongly committed to pursuing this goal.
2. I think this is a good goal to shoot for.
3. It wouldn't take much for me to abandon this goal.
4. I frankly don't care whether I achieve this goal or not.
5. It's hard for me to envision completing this goal.

Scale based on Klein et al. (2001) The Assessment of Goal Commitment: A Measurement Model Meta-Analysis

What makes for a

“Bad” goal (ranked 3/4/5)

“Good” goal (ranked 1/2)

Set S.M.A.R.T.* goals

- **S = Specific:** focused and unambiguous
- **M = Measurable**: tangible outcomes
- **A = Action-oriented**: specifies action to achieve the goal
- **R = Realistic**: challenging but attainable
- **T = Time-bound**: has a deadline

S.M.A.R.T. goals push us to break large goals down into manageable pieces with concrete timelines

*mnemonic coined by George Doran (1981) in Management Review

Example

Finish paper.

- Vague
- Final product clear, but how do I know I’m making progress?
- What am I actually doing? If only I could magically “finish” a paper!
- When is it due?
- How will I know I’m done?

Example

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- Vague
- Final product clear, but how do we know we're making progress?
- What am I actually doing? If only I could magically "finish" a paper!
- When is it due?
- How will I know I'm done?

Write two sections of my manuscript each week and give a draft to my advisor by July 15.

- Specific: clear and unambiguous with well-defined goalposts
- Measurable: 2 sections per week
- Action-oriented: write sections, provide draft
- Realistic: not too easy, not too hard
- Time-bound: due July 15

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Set S.M.A.R.T. (a.s.s.) goals

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- **a**nd
- **s = stimulating** or
- **s = salient**

The goal has to matter to us. The outcome must be intrinsically satisfying or relevant.

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Project goals	Career advancement goals	Skill development goals
What's needed to move projects forward e.g. • optimize assay • analyze data • write paper	What's needed to move career forward e.g. • build network • conduct informational interview • write resume	What's needed to improve skills or knowledge for career goals e.g. • conduct internship • take ASPIRE module • start a blog

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Project goals	Career advancement goals	Skill development goals
• optimize assay	• build network	• ~~conduct internship~~
• analyze data	• conduct informational interviews	• take ASPIRE module
• ~~write paper~~	• ~~write resume~~	• ~~start a blog~~

January 2016

W	S	M	T	W	T	F	S
53						1	2
1	3	4	5	6	7	8	9
2	10	11	12	13	14	15	16
3	17	18	19	20	21	22	23
4	24	25	26	27	28	29	30
5	31						

February 2016

W	S	M	T	W	T	F	S
5		1	2	3	4	5	6
6	7	8	9	10	11	12	13
7	14	15	16	17	18	19	20
8	21	22	23	24	25	26	27
9	28	29					

March 2016

W	S	M	T	W	T	F	S
9			1	2	3	4	5
10	6	7	8	9	10	11	12
11	13	14	15	16	17	18	19
12	20	21	22	23	24	25	26
13	27	28	29	30	31		

April 2016

W	S	M	T	W	T	F	S
13						1	2
14	3	4	5	6	7	8	9
15	10	11	12	13	14	15	16
16	17	18	19	20	21	22	23
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<u>Two parts</u>

1. Career goals
2. How your PI can help you achieve your goals

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<u>Two parts</u>

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Making the most of your IDP review

- Schedule a time to meet individually.
- Meet away from the lab to eliminate distractions.
- Use competencies/skills list to guide conversation about expectations
- Be clear about what you want before you meet.
- Be ready to negotiate – how can you get what you need while the research gets done?

In reality, be ready to “mentor up”

- Take responsibility for telling your research advisor what you need.
- You may need to educate your advisor about the career you’re interested in.
- You may need to educate your advisor about workforce statistics.
- Some research advisors are not great career mentors.
- Even if your advisor is a great career mentor, you need other advice, too = seek input from multiple people.

Look at VU IDP with fresh eyes

- Celebrate your past accomplishments.
- Take a competency-based approach to your professional development.
- Revise your IDP using SMART(ass) goals; set specific goals for 1) project advancement, 2) career advancement, 3) skill development.
- Prioritize your goals and map them to a calendar.
- Act and learn!

Make the IDP process work for you.

How employers use competencies

- To classify jobs
- To write job descriptions
- To screen job applicants
- To guide interview questions & candidate selection
- Example:
  - Competency for a project manager = ability to manage multiple priorities
  - *Tell me about a time when you were required to complete multiple assignments in the same time period. How did you handle the situation?*

How you can use competencies

- Which careers are a good fit for your strengths?.
- Track your experience with these competencies on your master CV or resume.
    - Track them even if you remove them on a resume you use to apply for a job.
    - Assemble stories that demonstrate those competencies.

Why do we avoid setting goals, or fail to achieve some goals?

Discussion questions

- Do you enjoy doing your IDP? Why or why not?
- Why does Vanderbilt have you do an IDP?
- What strategies do you use to have an effective conversation with your research advisor about your IDP?
- Why do people set goals?
- Why do people avoid setting goals?
- Name a goal that has you feeling overwhelmed. Why is it overwhelming?
- Name a goal that has you feeling motivated. Why does it motivate you?

What's your comfort level?

Fill in the blank:

I am _____ discussing my career goals with my faculty advisor.

Answer choices
Comfortable
Somewhat comfortable
Uncomfortable

Types of professional relationships*

Answers	Advice	Assistance	Advocacy	Alliance
• Supply information • Give answers to specific questions • Provide insights	• Give guidance to help you act more effectively • Suggest an individual strategy for you	• Watch out for useful opportunities on your behalf • Notify you of relevant new developments • Coach you to improve performance	• Suggest you as a suitable candidate • Provide a reference for you • Speak in your favor to influence others	• Take a long-term interest in your career development • Act as a mentor • See the relationship as mutually beneficial

Acquaintance → **Mentor**

**courtesy of Mistie Germek, BRET Psychologist*

Agenda (from aspire to plan)

- Overview of IDPs
- *ScienceCareers* myIDP
  - Competency-based self-assessment
  - Goal setting
  - Tools to track your progress
- Making the most of your IDP