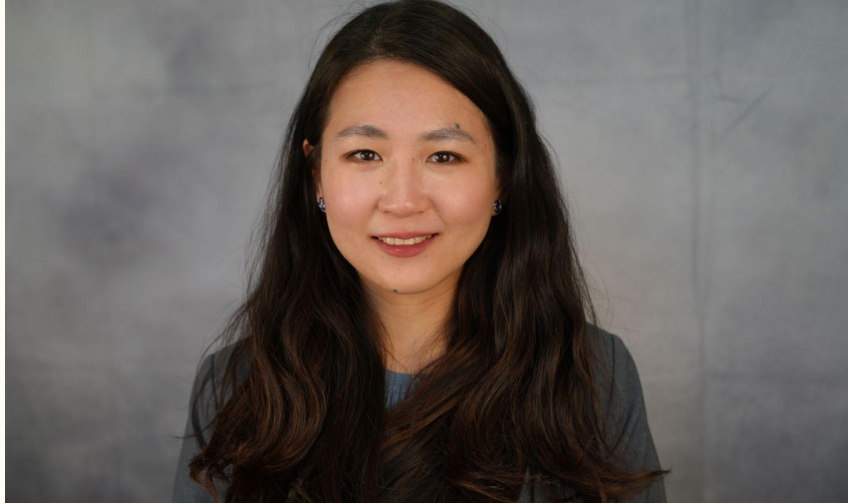




# *A/for Cancer Research *Careers**

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October 27, 2025 Richmond, VA

# Introductions



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# Presentation Overview

- I. Reminders and Considerations
- II. An Introduction to Career Design
- III. Utilizing AI for Career Exploration and Planning
- IV. Utilizing AI for Job Search and Interview Prep
- V. Conclusion and Questions

# Disclaimer

We are only touching the surface of some of these topics. Rather than focus on one specific platform, our goal is to give you a foundation that you can apply to your own circumstances and preferred resources.

Continue to be curious and research what is possible!

# Considerations for Using AI

- Importance of human connections and mentors
- Does not replace knowledge needed to evaluate results
- Environmental impacts



An Introduction to  
Career Design

BILL BURNETT & DAVE EVANS

# DESIGNING YOUR LIFE

HOW TO BUILD A WELL-LIVED,  
JOYFUL LIFE

# Career Design: A Process



## Research

- Self-Exploration
  - Values, Interests
- Career Exploration
  - Career Paths
  - People

## Community

- Networking
  - Connect to Peers, Alums, Employers, Academics, People in Fields of Interest, etc.

## Development

- Skills
- Experiences

## Job Search



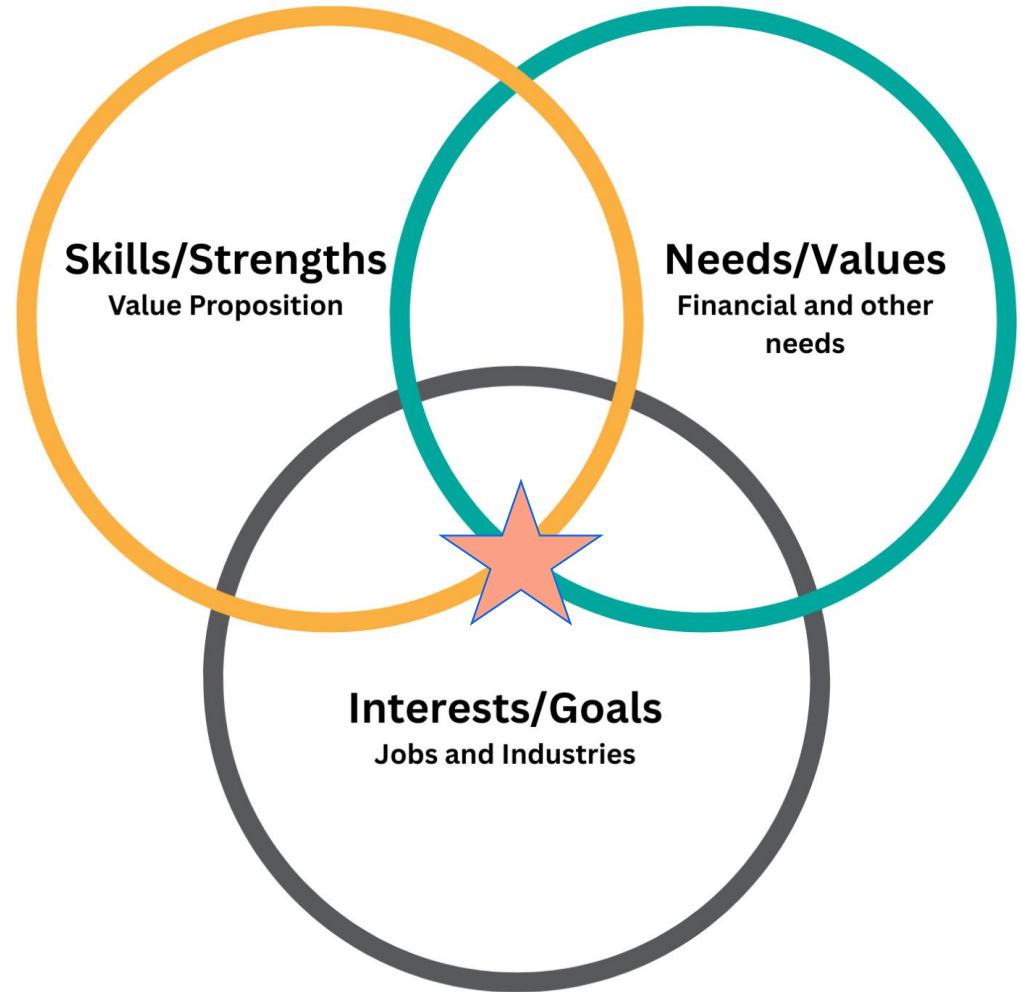
“ A coherent life is one lived in such a way that you can clearly connect the dots between three things: who you are, what you believe, what you are doing.”

*Designing Your Life*  
Bill Burnett & Dave Evans



# The Holistic YOU

Values + Interests + Skills



# Assessing Yourself

- Academia v. Industry
- Location
- Finances
- Organization's mission/values
- In-person v. hybrid v. fully remote
- Benefits

There are no wrong answers! It is about what is important to you.



## Utilizing AI for Career Exploration & Planning



## BASIC RESEARCH

Seeks to understand the fundamental aspects of nature. It provides the foundation for advances against cancer.



## TRANSLATIONAL RESEARCH

Moves basic research findings into the clinic and clinical research findings into everyday care. In turn, results from clinical and population-based studies can guide basic research.



## CLINICAL RESEARCH

Tests drugs, medical devices, or other interventions in human volunteers to improve all aspects of patient care.



## POPULATION-BASED RESEARCH

Explores the causes of cancer, cancer trends, and factors that affect the delivery and outcomes of cancer care in specific populations.

## What is Out There?

“I am a postdoc in \*cancer research\* focusing on \*\_\_\_\_\_\*,  
and want to explore careers in \*industry\*  
(academic/government).”

“Could you generate some career pathways with  
suggested titles/roles that I can look into?”

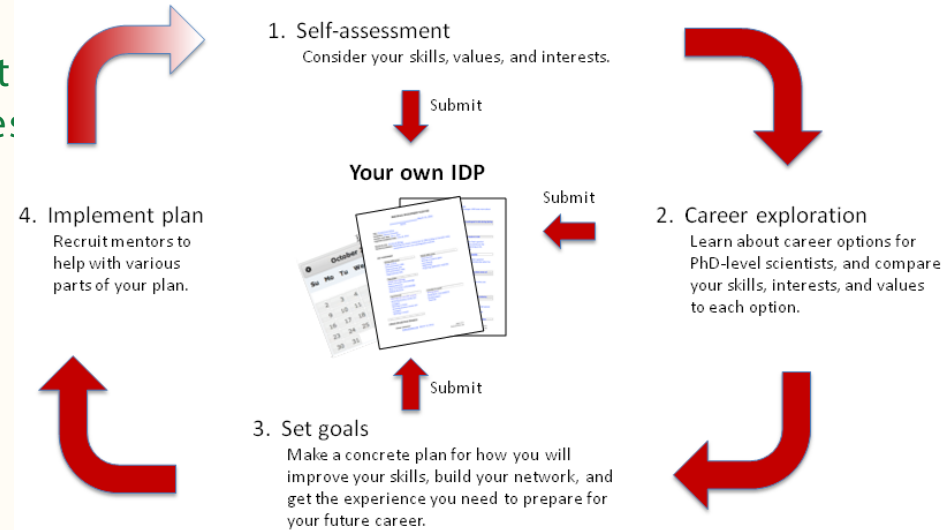
# Conduct Research

“ Research scientist sounds really interesting. Can you tell me more about this role, its main responsibilities, salary range, and what makes a candidate like my background (adding details) attractive to a pharmaceutical company? ”

# Individual Development Plan (IDP)



The Individual Development Plan (IDP) concept is commonly used in industry to help employees define and pursue their career goals. AAAS/Science now has created one for PhD students and postdocs in the sciences.



A good IDP is one that you complete, and actually follow through with.

Let's use AI for some help:

"Act as a career coach, and ask me a series of questions to help me decide 3 career paths, assess my fit, and plan my transition to one of these career paths with a timeline."

## Phase 1: Exploration — Discovering What Drives You

Let's start by uncovering your interests, values, and motivations.

### 1. Passions & Interests

- What activities or topics do you naturally gravitate toward, even when no one's watching?
- What subjects or hobbies have consistently held your attention over the years?

### 2. Skills & Strengths

- What are 3–5 skills you're confident in—technical, creative, interpersonal, or otherwise?
- What do others often praise you for or seek your help with?

### 3. Work Style & Environment

- Do you prefer working solo, in teams, or leading others?
- What kind of work environment energizes you—structured corporate, flexible remote, fast-paced startup, mission-driven nonprofit?

### 4. Values & Purpose

- What kind of impact do you want your work to have—on people, society, the planet, or yourself?
- Are there causes or industries you feel strongly about?

### 5. Constraints & Realities

- Are there geographic, financial, or time constraints we should factor in?
- Do you have any certifications, degrees, or work experience we should build on?

## Phase 2: Assessment — Narrowing Down the Fit

Once you answer the above, I'll propose three career paths that align with your profile. Then we'll assess each one based on:

- **Skill match:** How well do your current skills align?
- **Learning curve:** What would you need to learn or train for?
- **Lifestyle fit:** Does it match your desired work-life balance?
- **Market demand:** Are there strong job prospects in your area or remotely?

## Phase 3: Planning — Building Your Transition Timeline

For the career path you choose, I'll help you map out:

- **Short-term goals (0–3 months):** Research, networking, skill-building
- **Mid-term goals (3–6 months):** Certifications, portfolio, applications
- **Long-term goals (6–12 months):** Interviews, job offers, onboarding

Ready to begin? Let's start with Phase 1. You can answer all five sections at once or take them one at a time—whatever feels right.

Act as a career coach, and ask me a series of questions to help me decide 3 career paths, assess my fit, and plan my transition to one of these career paths with a timeline. Ask me one question at a time.

Absolutely, let's dive into this together. I'll guide you step by step so we can uncover three strong career paths, assess your fit for each, and build a transition plan that feels realistic and exciting.

Let's start with the foundation:

**What are the top 3 things you enjoy doing—whether at work, in hobbies, or in everyday life—that make you feel energized or fulfilled?**


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Can you ask about my strengths next?

How can I identify potential career paths from my interests?

What should my transition timeline look like?

Message Copilot

 Quick response ▾

+ 🗨️

“ Act as a career coach, and ask me a series of questions to help me decide 3 career paths, assess my fit, and plan my transition to one of these career paths with a timeline.

\* Ask me one question at a time.\*”

A Gentle Reminder:

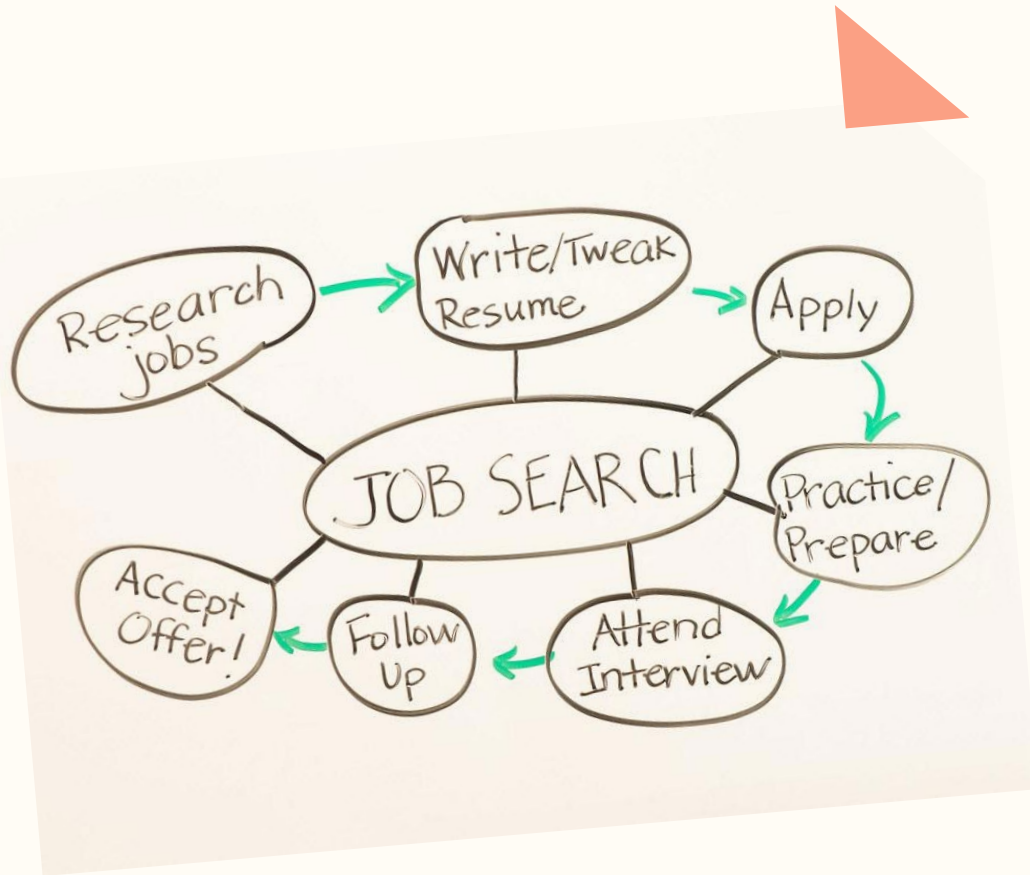
**Your prompt doesn't need to be perfect.**

As you explore the prompts, you can add more specificity to fine-tune what you are asking about. Remember AI makes assumptions about you; the more information you can provide, the more effective AI can be.

Don't be afraid to simply put your questions in the chatbot!



# Utilizing AI for Job Search and Interview Prep



## How can AI help with this process?

From resume optimization to interview preparation, the sky's the limit.

# Common Challenges with Industry Resumes

(and how to avoid them)

## Formatting and Structure

### Issue:

Document is disorganized or hard to skim

### How to Avoid :

Understand the difference between CVs (product oriented) and Resumes (process oriented)

Make the document easy to review

Avoid templates that include images, colors, tables, etc.

## Clarity and Focus

### Issue:

Document includes too much generalized, passive information

### How to Avoid:

Provide specific examples

Use impactful language

Active Voice

Action Verbs

Optimize keywords

Include results, not just duties and responsibilities and neglect **results**

# Resume Bullet Points: Impact and Quantifying Impact

## Project or program metrics

The number of projects managed, project sizes, project completion rates, or success rates.

## People metrics

The number of people managed or hired, retention rates, or team performance improvements.

## Operational metrics

Processes improved, efficiency gains, time saved, production volumes, or any operational improvements you contributed to.

## Marketing metrics

The number of leads generated, conversion rates, increase in website traffic, or growth in social media followers due to your marketing efforts.

## Financial metrics

Revenue generated, costs saved, budgets managed, sales made, or any monetary figures that show your financial impact.

## Performance metrics

Reflect individual or team performance, such as meeting or exceeding targets or Key Performance Indicators (KPIs), achieving high customer satisfaction scores, or ranking within the team or organization.

Maximize the impact of your resume:

“ Rewrite these bullet points [copy from your current bullet points] for an [R&D scientist] resume to showcase more [type of impact]:

[add your bullet point here]”

### Types of Impact to choose from

Project or program metrics

People metrics

Operational metrics

Marketing metrics

Financial metrics

Performance metrics

Rewrite these bullet points for a public health analyst resume to showcase more performance metrics: Conducted qualitative formative analysis on 21 in-depth community interviews  
Collaborated on the creation and presentation of a formative poster at the American Nutrition Society in Baltimore  
Created a presentation to update community partners on preliminary formative work and sociodemographic surveys  
Posted intervention materials daily on Facebook  
Aided in the writing and submission of a Robert Wood Johnson Foundation (RWJF) Healthy Eating Research (HER) small grant



Here's a revised version of your bullet points with a focus on performance metrics:

- Conducted qualitative formative analysis on 21 in-depth community interviews, providing actionable insights to inform program strategies and interventions.
- Collaborated in the development and presentation of a formative research poster at the American Nutrition Society Conference in Baltimore, engaging over 200 attendees.
- Delivered a comprehensive presentation to community partners, summarizing preliminary findings from sociodemographic surveys and formative work, resulting in increased stakeholder engagement and support.
- Managed daily posting of intervention materials on Facebook, leading to a 30% increase in community interaction and program awareness within three months.
- Contributed to the successful writing and submission of a Robert Wood Johnson Foundation (RWJF) Healthy Eating Research (HER) small grant, securing \$XX,XXX in funding for continued program development.

These revisions highlight your impact and the outcomes of your work. Let me know if you'd like to adjust anything!



# Creating Bullet Points to Brainstorm Examples

“Create bullet points on a resume to showcase I have experience doing: [insert a job responsibility/job title/transferable skills]”

Communication  
Project management  
Problem-solving  
Flexibility  
Time management

Create potential bullet points on a resume to showcase I have experience doing: project management



Memory updated

Here are some potential bullet points for showcasing your project management experience on a resume:

- Led cross-functional teams to deliver [specific project type] within [timeframe], achieving [specific result or key performance indicator].
- Managed project lifecycle from initiation to closure, including scoping, scheduling, budgeting, and risk mitigation.
- Coordinated project tasks, timelines, and deliverables, ensuring alignment with business goals and stakeholder expectations.
- Facilitated communication between stakeholders, team members, and clients, ensuring transparency and timely updates.
- Developed and maintained project documentation, including project plans, risk assessments, and progress reports.
- Applied Agile/Scrum methodologies to enhance project efficiency and adapt to changing requirements.
- Monitored project performance and implemented corrective actions to ensure milestones were met within scope and budget.
- Managed vendor relationships, ensuring timely delivery of services and products within contract terms.
- Led project post-mortem reviews, identifying lessons learned and opportunities for process improvement.



# Preparing for Interviews

1. Ask AI to summarize the work a company does as a starting point for your company research.
2. Prepare for specific questions the company may ask you about their organization.
3. Prepare for specific questions based on a job description.
4. You may want to have AI help you prepare for common interview questions by typing out your potential answers to questions, such as

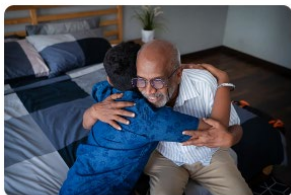
Why do you want to work at this company?

Which of our values resonates with you the most?

# Preparing for Interviews

## Our purpose

Reimagine medicine to improve and extend people's lives.



## Our vision

Become the most valued and trusted medicines company in the world.



## Our strategy

Deliver high value medicines that alleviate society's greatest disease burdens through technology leadership in R&D and novel access approaches.



Based on Novartis's mission to "reimagine medicine to improve and extend people's lives"

## Technical Interview Questions for Cancer Research at Novartis

1. **"How do you approach the integration of multi-omics data (e.g., genomics, transcriptomics, proteomics) to identify novel cancer targets or biomarkers?"**  
*Novartis emphasizes data-driven discovery and precision medicine—this tests your ability to synthesize complex datasets for translational impact.*
2. **"Describe your experience with CRISPR or other gene-editing technologies in cancer models. What challenges did you face in validating target specificity?"**  
*They invest heavily in advanced platforms for target validation and functional genomics.*
3. **"How have you applied machine learning or AI tools in analyzing tumor heterogeneity or predicting treatment response?"**  
*Novartis is increasingly leveraging computational biology and AI to accelerate drug development and patient stratification.*
4. **"What strategies do you use to overcome resistance mechanisms in targeted cancer therapies, and how do you validate them preclinically?"**  
*Resistance is a major hurdle in oncology—this question probes your mechanistic insight and translational thinking.*
5. **"Can you walk us through your process for designing and interpreting in vivo efficacy studies in oncology drug development?"**  
*They value strong preclinical models and translational rigor—this assesses your experimental design and data interpretation skills.*

Would you like help preparing answers or tailoring your resume to highlight these competencies?

# Using Chatbots for Application Materials

Using AI tools can be a good starting point, but your application definitely cannot go in without edits.

A great way for **confidence -boosting language**, but may be a tad too much without quality control.

It can help you **elevate your materials**, yet the bottom line is that you need to feel **comfortable and confident** in the interview.

Chatbots **cannot yet fully replace your own voice**, especially with your cover letter that demonstrates your personality and writing style.

**Don't trust any data or citations** without double checking the validity of the sources.

# Questions?

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## How Can AI Help with Career Exploration?

**Ask the Expert** | by Mallory Neil and Yi Hao  
Monday, February 3, 2025

[Article Link](#)