tcim
by Adama

Application season Guide

www.thecatalystinme.com

Content

- The **personal** statement
- Understanding your Why
- Interview Preparation
- TCIM Career Examples

The Personal statement

Your personal statement is where you contextualise your skills into a 500 word document trying to convince the person shortlisting you should be interviewed.

What are you studying?

A Life science subject with skills evidenced through coursework

Why are you interested?

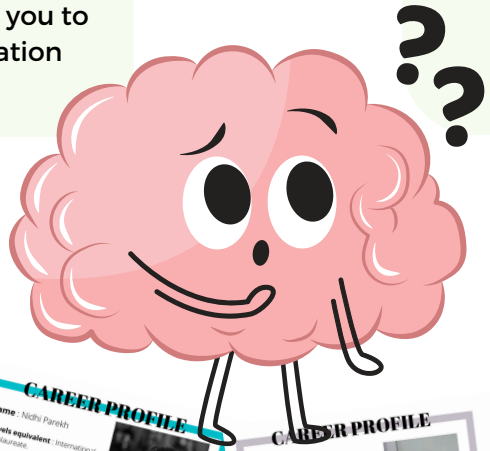
Why THIS specific thing? This can be really hard but TCIM Profiles help bridge that gap and allow you to gain some inspiration

What are they asking for?

It's as simple as reading the job description in detail and aligning skills and your interests with the requirements

How does this fit your career plan?

Why is it important to you? Is it a new field? how have you come to the conclusion that this fits a path for you in the future ?



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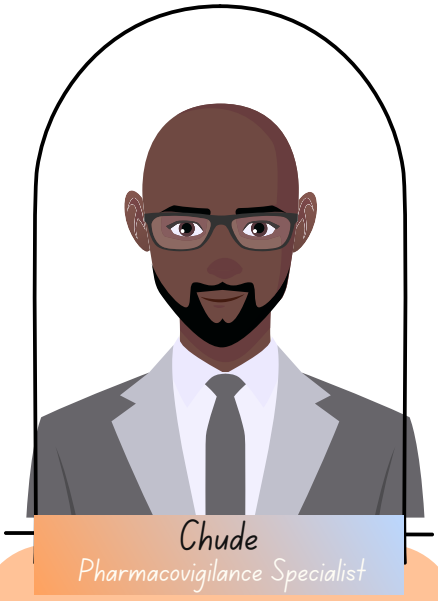
Understanding you WHY ?

Haniah
Marketing Lead

I have always been fascinated by science. It was my favourite subject in school, I wanted to understand how things worked and why they functioned that way. In high school I loved biology, to me it just made sense and continuously made me gasp in amazement. For me it wasn't really an active decision. I just followed the subjects I enjoyed and applied that same thinking to choosing my degree



Chude
Pharmacovigilance Specialist

I want each individual to be able to receive and access the best healthcare possible.In this role I get to see how medicine impacts people and the way in which we can work alongside different healthcare industries to ensure patient safety.

Isaac
Research Technician

My passions have not changed since I started pondering about my career options. Since I lost a family member to cancer, I have always been interested in cancer diagnosis/therapy.

Jade
Senior Policy Officcer

Since I was a kid, I have always been fascinated by animals and why they behave differently. My favourite characters in books and TV shows or toys were always animals, and my world exploded once I discovered nature documentaries. I was driven by a passion to explore the natural environment and was frequently found at my local ecology centre or the natural history museum

Reflections

Take a moment to reflect on what you want out of your career

Technical Skills

What key skills do I need that are commonly found in job descriptions?

Top tips

- **Search LinkedIn people with your degree title**
- **Look at Job descriptions !**
- **Look at TCIM Career Profiles**

The Dream

What industries/ roles seem the most exciting even if my skills don't fully align

Soft Skills

How can I demonstrate my communication, collaboration, problem solving and adaptability ?

Extra Curriculars

What am I passionate about that has been self driven / how can I find more opportunities?

Top tips

- **Do a Course even if its just beginners**
- **Can you teach yourself ?**
- **Can you demonstrate the skills yourself**
- **Volunteer for different opportunities**

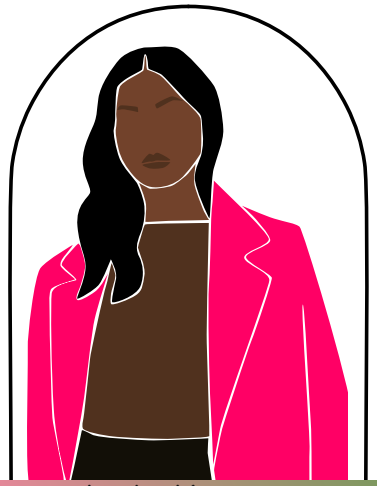
5 Year Plan

Benjamin
Clinical Data Manager

I see myself in a higher level role developing data management/science skills in order to become financially independent. I hope to either be working as a contractor (especially if I've further developed programming skills) or part time, whilst balancing other business ventures.

Iyesha
Trainee Cardiac Scientist

In five years, I see myself further advancing in the field of echocardiography. Additionally, I aspire to be actively engaged in public health research and program development, striving to make meaningful contributions to global health specifically in Africa.



Jonta Kamara
Junior Professional Consultant

In 5 years I see myself working in public health but more on the African continent. I also see my personal brand growing, so I hope to do more speaking engagements and possible consultancies, but we will see where life takes me.

Common Interview Questions

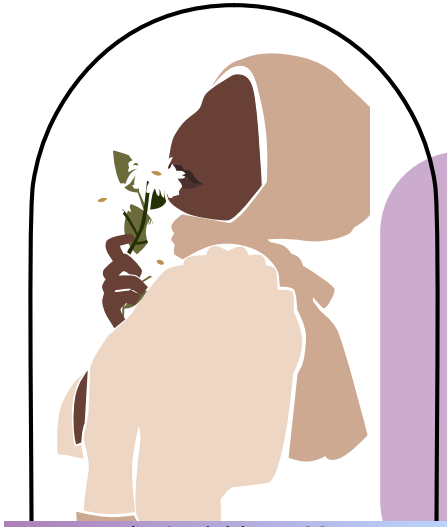
Top tip: Practice these questions OUT LOUD and describe your experience to someone unfamiliar with your work !

Why are you interested in working for the company and in this role?	reflect on and write about a time in which you showed determination to reach a desired goal
what experience/achievements would you like to gain from completing a placement/internship there?	What your main extracurricular activities and interests?
What benefits have you gained from your university course and/or work experience? Why?	from your extra curriculars: what have you contributed and what have you got out of them? Mention any posts of responsibility.
What have you enjoyed most about your uni course/work experiences? Why?	Give an example of a time when you had to deal with conflict. How did you handle it?
reflect on and describe some of your strengths and some of your weaknesses.	reflect on and describe a time when you've successfully used effective communication skills.

Reflections

What do I like? • Taught content (Modules) • Articles and topics • People and things What type of work do you like?What type of person are you and what do you like to do?What are the things you won't do and why?	**What am I willing to learn more of** • What more do I want to learn and • Which avenues are completely essential for my career journey? • Do you want to learn passively or actively • ?Do you want to change your learning style? • Career where progression based on qualifications vs experience?	**Location** Am I flexible to move and what do I need to do most to be marketable in other locations ? Do I have a list of international organisations and understanding of visa requirements needed ? I don't want to move. Does that limit my options? Do you want more flexibility later?	**Community** Who do I know or currently have that can support the goals I find myself having Online In person Subject related/ non subject
My experience What experiences do you currently have and what can you draw from each? Your likes and dislikes are equal. Where would you like to gain more experience and what do you want to understand from those experiences	**Time** How much time do I have How much time are you willing to spend and at what cost ?	**Responsibilities** What are my current responsibilities and how do they affect my future goals ?	**Bottom three** What are my top three things I've enjoyed in my journey so far
My Qualifications What tangible qualifications do I have and which fields are they unique and most relevant to.? Are there qualifications I want to have and how long will it take	**Financial security** What are my financial goals and realities and how does that align with the career I want?	**What do I want for myself in 5 years** / Life style This is not just career wise but all the little things that you want and how your job can help you achieve that.	**Top three** What are my top three things I've hated about my journey so far

Figuring out your Path

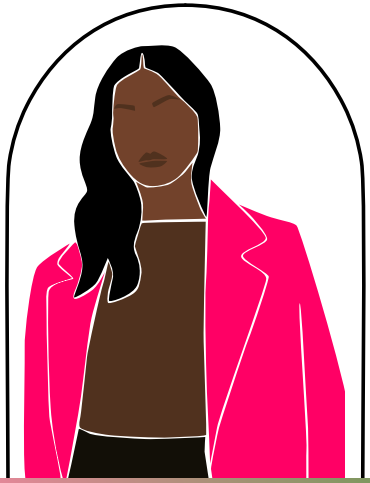


Aishat Yusuff
Trainee Software Developer

I don't regret doing my MSc in clinical Biochemistry, because as I've mentioned earlier, I learnt a lot from the process. But I believe if I'd found the desire to "try something new" earlier, or I'd come across a brilliant initiative like Code First Girls earlier, I might have opted for a conversion masters in Computer engineering or software development

I explored roles in public health. I worked as a volunteer researcher for a public health charity, I worked in administration and was a teaching assistant briefly. I definitely enjoyed my role as a researcher but I didn't particularly like the other roles because it was not science or health related. Also I wanted to work more with people and I don't believe I suit a desk job.

During undergrad, I made sure to try a variety of opportunities. This enabled me to have a good sense of the kind of work that I enjoy and what I would like to do in the future. I realized that I was not very interested in wet labs and preferred roles that involved event planning and desk research



Jonta Kamara
Junior Professional Consultant

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LLM Prompt: which skills are specific to different life science research fields. Think of the top emerging areas of disease research

Field	Focus	Key Wet Lab & Computational Skills
Neurodegeneration	Alzheimer's, Parkinson's, ALS	- IHC, confocal microscopy- Brain organoids- RNA extraction, RNA-seq- Behavioral models (rodents)
Cancer Research	Tumor biology, therapy resistance	- Tumor cell culture- Flow cytometry- Xenograft models- Mutation analysis, scRNA-seq
Disease Modeling	Rare disease, developmental biology	- CRISPR editing- Organoid models- Transgenic mice/zebrafish- Whole genome sequencing
Aging Research	Senescence, telomere biology	- SA-β-gal assay- ROS detection- qPCR for telomeres- Longitudinal omics
Infectious Disease	Pathogen biology, AMR	- ELISA, plaque assays- BSL-2/3 pathogen culture- qPCR diagnostics- Phylogenetics, outbreak modeling
Gene Therapy & CRISPR	Genetic engineering, delivery	- Viral vector prep (AAV, lenti)- CRISPR guide design- Transfection- Cas9 off-target analysis
Immuno-oncology	CAR-T, checkpoint inhibitors	- PBMC isolation- Cytokine assays- Immune profiling (flow/CyTOF)- TCR/BCR repertoire analysis
Regenerative Medicine	Stem cells, tissue repair	- ESC/iPSC culture- 3D scaffolds- Lineage tracing- Transcriptomic tracking of differentiation
Metabolic Disorders	Diabetes, obesity, mitochondria	- Glucose/lipid assays- Seahorse metabolism- Mitochondrial imaging- Metabolomics (LC-MS)
Cardiovascular Disease	Atherosclerosis, cardiomyopathy	- Myocyte isolation- Langendorff perfusion- Echocardiography- Image/data analysis
Epigenetics	Methylation, histone modification	- ChIP-seq, bisulfite seq- Methylation-specific PCR- ATAC-seq- Bioinformatic pipelines
Microbiome Research	Gut-brain axis, dysbiosis	- 16S/ITS sequencing- Germ-free models- Anaerobic culture- Microbiome bioinformatics
Genetics	Human genetics, population genomics	- DNA extraction- Sanger/NGS sequencing- Genotyping arrays- GWAS, PRS, PLINK, imputation
Bioinformatics	Genomics, transcriptomics, proteomics	- Sequence alignment (BWA, STAR)- RNA-seq/WGS analysis- R/Bioconductor, Python- Workflow tools (Snakemake, Nextflow)
Data Science (Life Sciences)	AI/ML for biological data	- Data wrangling (Pandas, dplyr)- ML models (scikit-learn, caret)- Statistics (ANOVA, regressions)- Visualization (Seaborn, ggplot2)
Plant Sciences	Crop genetics, stress biology	- Plant transformation (Agrobacterium)- Tissue culture- Chlorophyll & phenotyping assays- Genotyping & QTL mapping
Marine Sciences	Coral health, marine microbiomes	- Salinity/temperature control- Sampling (plankton, sediment)- DNA/RNA extraction from marine samples- eDNA & metagenomics