

# Scott Summers

Email Address ❖ Phone no. ❖ City, Country (Relocating to ...)

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A self-motivated, collaborative, and adaptable researcher with a Master's degree and over 3 years of lab experience dedicated to research. Possesses comprehensive knowledge and extensive experience in various techniques, including but not limited to: (q)PCR, western blotting, and tissue culture. Willing to relocate to ...

## HIGHLIGHTS OF QUALIFICATIONS

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- Completed a research project, which had been dormant for 3 years, by troubleshooting and optimization
- Handled more than 10 different cell lines -3 of which were primary cells- in tissue culture
- Independently planned, performed, analyzed, and troubleshoot experiments during Master's thesis work
- Proposed, researched, and executed own study in human primary macrophages after inspired by an article
- Developed effective scientific communication skills through preparation of oral presentations for institute seminars and group meetings as well as preparation of Master's thesis
- Documented and compiled experimental data in an accurate well-kept lab notebook, analyzed the results, and presented them to the supervisor weekly

## SELECTED LABORATORY EXPERIENCE

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### A University

Oct. 2017 – Apr. 2019

Graduate Researcher with [Prof. name]

City, Country

“Title of my Master's thesis which is long and it looks like another bullet point instead of a project name”

- Discovered the genomic and epigenomic effects of [a drug] and [a protein] acetylation by using qPCR
- Illustrated the deacetylation of [name of the same protein] by [protein group] with western blotting
- Isolated human PBMCs from blood and differentiated them into primary macrophages to evaluate the function of [the same protein] acetylation in immune cells while working on the Master's thesis project
- Optimized the western blotting protocol of the lab and established new protocols

### Bee University

Summer 2014

Intern with [Prof. name]

City, State

“Project B”

- Evaluated the effect of novel growth factors on the growth of kidney epithelial cells with transient transfection, western blotting, and by developing a new co-immunoprecipitation study for the lab
- Observed a morphological change in primary renal proximal tubule cells after using a novel oncometabolite
- Attended the “[...] Human Embryonic Stem Cells (hESCs) Culture Training” course

### Sea University

Summer 2013

Intern with [Prof. name]

City, Country

“Project C; the name is so long that it occupies two lines”

- Isolated RNAs of 6 human KMTs, used PCR and plasmids to clone them, and demonstrated their activity with western blotting and *in vitro* methylation assays

### The D University

Aug. 2012 – Sep. 2015

Intern with [Prof. name]

City, Country

“Boron Toxicity Mechanisms for *S. cerevisiae*”

- Contributed to the identification of boron efflux proteins in *S. cerevisiae* by performing RNA isolation, PCR, RT-qPCR, and cloning experiments
- Grew daily *S. cerevisiae* cultures, prepared buffers, solutions, and agarose gels

## EDUCATION

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A University

2016-2019

M.Sc. Mutant Life Sciences

The D University

2011-2015

B.Sc. Mutant Genetics

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## PERFORMED TECHNIQUES

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- **Genetic Engineering**
  - Transient transfection and retroviral transduction of mammalian cells
  - Aseptic technique
  - Transformation of *E. coli* via electroporation
  - Transformation of *S. cerevisiae* and *E. coli* via kits
  - Blue-white screening
- **Extracted proteins and analyzed with**
  - SDS-PAGE and Western blotting
  - Native PAGE and *in vitro* methylation assay with tritium
  - Affinity chromatography
  - Size-exclusion chromatography
  - Enzyme kinetics
  - *In vitro* translation
- **Isolated RNAs and analyzed with**
  - RT-qPCR
  - Northern Blot
- **Investigated the interactions of molecules with**
  - Co-immunoprecipitation (Co-IP)
  - Electrophoretic Mobility Shift Assay (EMSA)
- **Human embryonic stem cell (hESC) culture**
  - “Positive” and “negative” colony picking and splitting
  - Thawing and freezing
  - Embryoid body formation
- **Visualized proteins with**
  - Immunofluorescence
  - Immunohistochemistry
- **DNA**
  - Genomic DNA isolation
  - Plasmid preparation and mini-, midi-, and maxi-prep plasmid isolation
  - PCR and agarose gel electrophoresis
  - Colony PCR
  - Primer designing
- **Bioinformatics tools**
  - **Databases:** NCBI, UniProt, Ensembl
  - **Sequence similarity:** Various kinds of BLAST searches including Primer-BLAST
  - **Sequence Alignment:** Clustal, MUSCLE, T-COFFEE
  - **Language:** Python
  - **Evolutionary trees:** Phylogeny Reconstruction with Neighbor-Joining Method, Ancestral Character State Reconstruction
- **Data analysis**
  - Used Student’s t-test and ANOVA for statistical analysis
  - Visualized data with ImageJ, Microsoft Excel, and GraphPad Prism

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## SKILLS & INTERESTS

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- **Soft Skills:** Self-motivated, Reliable, Creative, Collaborator, Adaptable, and Independent thinker
- **Interests:** Baking, Chess, Playing a musical instrument