Title: Research Associate I  
Classification: Exempt, Research Staff  
Reports To: Birgit Knoechel, M.D., Ph.D., Principal Investigator  

OVERALL RESPONSIBILITY

The Dana-Farber Cancer Institute is looking for an exceptional candidate for a unique Research Associate position. This position affords the exciting opportunity to be part of a research effort at Dana-Farber Cancer Institute aiming to delineate epigenomic aberrations in cancer and discover novel therapeutic targets. The candidate will assist in the development of cancer models from primary human tumors and human cell lines that represent different cellular lineages and drug-resistant states. He/she will use modern next generation sequencing techniques to characterize the chromatin state of these tumors and modern functional perturbation techniques including lentiviral knockdown and CRISPR/Cas9 genome editing tools. He/she will test the model systems in immuno-compromised mice for their ability to form tumors and to test for drug responses. He/she will be part of a multi-disciplinary team that evaluates new technologies and approaches to discover and validate novel systemic cancer biology.

The candidate is expected to work largely independently after training, but will be closely mentored by the principal investigators and others.

Dana-Farber Cancer Institute provides a vibrant research environment with close links to top academic institutions across the Boston and Cambridge area and provide the potential for your contributions to be used and recognized worldwide.

CHARACTERISTIC DUTIES

- Learn, execute and further develop next-generation sequencing protocols and explore novel techniques of low input epigenomics.

- Handles cell culture of human cancer cell lines and primary human cells. Uses established protocols for lentiviral knockdown, CRISPR/Cas9 genome editing, overexpression.

- Uses wide assay of cell biology and molecular biology techniques to mechanistically characterize dependencies.

- Learn and execute a variety of in vitro functional bioassays and high dimensional phenotypic readouts.

- May work with mouse models to assess tumor formation, and drug response.
• Operates and maintains laboratory equipment to complete investigations.

• Prepares, orders, and maintains stocks of necessary reagents, solutions and supplies.

• Documents, compiles, and analyzes experimental protocols and data including running computational analysis pipelines on the command line.

• Attends team meetings to share results, plan projects and experiments.

• Other related tasks as required.

SKILLS AND ABILITIES:
• Strong interpersonal, communication, and organizational skills, including the ability to handle a variety of tasks in a fast-paced environment, large complex experiments, and large data sets, all of which demand great attention to detail.

• Proactive in identifying problems and solutions to address them.

• Must be an exceptional team player.

• Must possess a high level of initiative and the ability to work independently.

QUALIFICATIONS
• Bachelor degree in Biology, Computational Biology or related field required. 0-2 yrs of experience working in a scientific research setting a plus.

• Familiarity of basic cell culture and molecular biology laboratory techniques, including recombinant DNA and protein biochemistry, strongly desired.

• Familiarity with fluorescent microscopy or flow cytometry is desirable.

• Familiarity with the command line, linux and R desirable.

If interested, please contact the principal investigator:

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