



Position	Principal Scientist, Medicinal Chemistry
Supervisor	VP, Chemistry
Department	Chemistry
Prerequisites	PhD in chemistry or related scientific field with 6+ years of relevant experience

Position Summary:

The principal responsibility for the scientist who assumes this position will be to deliver development candidates for Arrakis' drug discovery programs. This will require the design, synthesis, isolation, and characterization of novel molecules that bind to folded RNAs and impact their biological function.

Of particular importance is that the candidate bring to the role (1) insight into the synthesis and elaboration of new scaffolds, (2) recognition of the challenges of drugging RNA with a view toward creating and implementing solutions, and (3) an ability interpret and integrate a wide range of heterogeneous datastreams to advance the program. Accordingly, the candidate should have a strong working knowledge of the fields of organic synthesis, molecular recognition, and medicinal chemistry, accompanied by broad familiarity with molecular modeling, bioinformatics, biochemistry, molecular and cell biology, pharmacology, toxicology, and translational medicine.

Day-to-day research will involve multi-step organic synthesis on milligram to gram scale, and will employ various purification and analytical techniques to enable structural determinations and purity assessments. In addition, the candidate will analyze the biochemical and cellular behavior of the new molecules to test the design hypotheses that informed their synthesis.

Responsibilities:

The responsibilities of this position include but are not limited to the following

1. Timely identification and delivery of promising clinical development candidates.
2. Design, synthesize, and characterize novel molecules targeting RNA.
3. Articulate the design rationale that led to each synthetic campaign.
4. Understand and use information relating to kinetic vs. thermodynamic considerations for design of new ligands.
5. Design key experiments where novel tools or molecules can expose underlying molecular mechanisms and guide the program.
6. Survey the chemistry literature to identify salient new concepts and techniques.
7. Act as an internal consultant for colleagues across all departments at Arrakis.
8. Identify external collaborators, both academic and industrial, that could provide cutting edge methods and insight to advance the program and Arrakis' broader mission.
9. Routine use of MPLC, HPLC and LC/MS systems, various spectrometers, and high-field NMR.
10. Routine use of an electronic laboratory notebook.
11. Presentations of ideas and results, including issues & possible solutions, at project team or departmental meetings.

12. Work with Arrakis colleagues and leadership to ensure that project goals are met.

Skills/Knowledge Required:

1. Broad knowledge of synthetic organic chemistry.
2. Expertise in the design and synthesis of bioactive molecules across a wide range of chemotypes.
3. Broad understanding of the drug discovery and development process.
4. Fluency in working with biologists to devise experiments that illuminate critical problems.
5. Familiarity with laboratory instrumentation including, but not limited to, high-field NMR, HPLC, LC/MS.
6. Ability to interact and communicate effectively with laboratory colleagues, chemistry management, and project team leaders.
7. Ability to effectively manage time and priorities over multiple lines of work.
8. Strong problem solving and trouble shooting skills.
9. Excellent oral communication and writing skills.
10. Ability to work in a dynamic & changeable environment.

Other Characteristics & Traits:

1. Demonstrates independent, scientifically directed, and innovative thinking.
2. Anticipates the need for contingencies and develops alternative strategies.
3. Recognized as Subject Matter Expert within function.
4. Role model for scientific excellence.