

# Chemical Services

*Collaborate Locally. Commercialize Globally.*

Aspira Scientific provides a complete suite of chemical services to meet all your chemistry needs through our pharma division (Aspira Pharma). Aspira Pharma is a science and technology orientated CRDO based on the union of long-term academic investment and pharmaceutical excellence. Our focus lies across all discovery stages, chemical synthesis, custom manufacturing, and transformative commercialization; and enhances product value, while exceeding our clients' "user-driven" Rx requirements. Our global expertise and resources to support various small-molecule therapeutics' advancement is back integrated on two continents. A broad range of capabilities involving distinct types of critical R&D needs are executed upon request and built fit-for-purpose according to your specifications and time lines. Our US site in San Francisco Bay Area and China facilities in the Greater Shanghai and Beijing metropolis regions are situated adjacent to three of the world's largest biotechnology hubs, ensuring that we generate highly innovative solutions and shorten the critical time to clinic.

Aspira Pharma is your development partner of choice for full life cycle chemistry services, covering the spectrum of synthetic and semi-synthetic compounds, peptides, macromolecules, and natural products. Our collaborative chemistry teams identify and engender innovations for pharmaceuticals, nutraceuticals/vitamins, cosmeceuticals, and bulk goods spanning the chemical ecosystem. By leveraging a hybrid model built upon a "Launchpad" kilo-scale facility in US synergized with industrial production sites in China, we can substantially lower the cost of clients' drug development plans.

Aspira Pharma is pleased to provide the below high-quality services in exceptional value to meet all your chemical needs:

## Discovery Services

In-Vitro services including ADME, SAR, HTS, library screening, hit-to-lead optimization, and milligram to gram campaigns

## Chemistry Services

Analog production, lead optimization for preclinical drug candidates, bioorganic chemistry, fermentation, CADD, X-ray analysis, custom synthesis, library design and synthesis, radiochemistry, scaffolds/solid-phase reactions

## Development Services

Broad lead candidates and Rx intermediates scale-up from large glassware to pilot units (50 - 200 L), DOE, calorimetry, tech transfer, POC on killogram scale, pre-formulation, analytical, and IP support

## Manufacturing/Commercial

Pilot transfer to fixed equipment (400 - 10,000 L), PR&D analysis, safety parameters, IPCs, stability studies, impurities ID, COAs, pre-formulation, cryogenic and high pressure reactions, and supply chain support integration

## Analytical Support

NMR, HPLC, SFC, SEC, LC/MS, UV-Vis, Bioassays, X-ray structural determinations, chiral separations, ICP-MS, FTIR, KF, residual solvents and impurities

## Compound Classes

Pharmaceutical intermediates, vitamins, nucleotides, amino acid derivatives, carbohydrates, peptides, alkaloids, prostaglandins, antibiotics, probiotics, Fsp3-fragments, carbocycles, heterocycles, Pd/Rh/Ru catalysts, P ligands, and catalog bulk reagents

## Key Benefits

- > Chemical production from mg to mt+ quantities
- > Discovery site in US for seamless tech transfer, collaboration, and IP protection
- > Development/manufacture sites in China for cost efficiency
- > Services include:
  - FTE
  - MEDCHEM
  - PR&D & Safety Engineering
  - Custom & Toll Manufacture
  - Pre-formulation
  - Analytical Support
- > Products include:
  - Advanced Rx intermediates
  - Nutraceuticals
  - Cosmeceuticals
  - Natural products
  - Chiral compounds
  - Catalysts and ligands

