

Research Scientist

Location: Vancouver, BC

Team: R&D – Single-Molecule Imaging & Analytics

Company: ScopeSys Inc.

About ScopeSys

ScopeSys builds next-generation single-molecule analytics to accelerate the design, development, and manufacturing control of genetic medicines. Our CLiC (Convex Lens-induced Confinement) platform measures size, payload, structure, and interactions at the single-particle level—linking biophysics to drug performance. We're translating this technology into benchtop instruments, consumables, and analytical services for pharma and biotech teams.

The Role

You will develop, validate, and scale assays and consumables that power CLiC single-particle analytics—working at the intersection of flow cell design, surface chemistry, nanoparticle/oligo biology, and quantitative microscopy. You'll collaborate closely with microscopy, software, and instrument engineering to convert scientific methods into robust, product-grade applications and workflows.

What You'll Do

- Design & build applications and assays for single-molecule, single-particle, multi-parametric analytics (e.g., size, loading, structure, fusion/interaction kinetics) for the design and development of genetic medicines.
- Prototype and qualify novel applications and consumables (flow-cells, reagents, reference standards) for use with ScopeSys instruments and prepare for commercialization.
- Run experiments end-to-end with sample prep → imaging/CLiC runs → analysis → interpretation to lead and support pharmaceutical projects. automated pipelines with the software team.
- Document rigorously: write SOPs, work instructions, and technical reports; support manuscripts, posters, and application notes.
- Lead and support pharma/biotech reach outs, discussions and implementation of research projects with pharma partners applying our technology and products.
- Cross-functional collaboration: partner with hardware, software, optics, and applications to iterate designs and hit readiness milestones (alpha → beta → release).

What You Bring

1. Required

- PhD (or MSc with strong industry experience) in Chemistry, Biochemistry, Biophysics, Biomedical Engineering, Physics, or related fields.
- Proficiency with quantitative microscopy (widefield/confocal/TIRF or related); comfort with ImageJ/Fiji and basic Python or MATLAB analysis.
- Experience with surface chemistry/biointerfaces and nanoparticle or biomolecular assays (e.g., LNPs, EVs, nucleic acids, oligos, proteins).
- Proven ability to own experiments from design to data-driven conclusions; strong documentation and reproducibility mindset.
- Thrive in a fast-paced, build-test-learn startup environment; clear communication across disciplines.

2. Nice to Have

- Experience interacting with pharma customers and working on research service projects with biopharma and biotech companies.
- Industry experience with assay development and validation towards product commercialization.
- Familiarity with LNP analytics (e.g., DLS/NTA, fluorescence labeling, SPR/BLI, FRET) and single-molecule/single-particle methods.
- Basic statistics/DoE; comfort defining QC metrics and acceptance criteria for productization.

Why ScopeSys

- Build a first-of-its-kind analytics platform that closes a critical gap for genetic medicines.
- Work shoulder-to-shoulder with experts in microscopy, surface chemistry, analytics, and product engineering.
- Competitive compensation, equity, benefits, and meaningful ownership of projects with real-world impact.

How to Apply

Send your CV and a brief cover note (highlighting two relevant projects and your role) to careers@scopesys.ca with the subject "Research Scientist". Include links to publications if available.