Senior Optical Engineer

http://www.berkeleylights.com/company/careers/

We are accepting applications for a sharp, motivated, energetic team player who will take on a key individual contributor role of Senior Optical Engineer. You will help solve the immediate challenge of designing and implementing new optical designs for commercial instruments, beyond the concept and prototype phase.

Ideally, you’ll have deep experience with design engineering, operations, and ramping up, as well as accomplishing related patents. In lieu of extensive years in the optics field and/or patents, we’re looking for a bright engineer with proven evolution of relevant engineering roles and contributions.

You’ll get to collaborate with a cross-functional team of engineers, chip designers, and biologists to develop advanced applications and instrumentation in-house.

Your deliverables and responsibilities:

- Design optical systems for a next generation biotech instrument.
- Develop physical optics simulations to guide optical design and chip design to support our single cell manipulation process.
- Evaluate and recommend sensor technologies and formulate overall detection strategy for fluorescence assay experiments.
- Help lead vendor management and evaluation for selection of LED sources, laser sources and comprehensive illumination strategies.
- Help lead product development processes.
- Generate and protect intellectual property.
- May travel infrequently, as needed.

We want to hear from you if you:

- Have a M.S. or Ph.D. degree in Optics, Physics, EE, or related discipline.
- Have at least 5+ years of hands on experience in optical design, illumination system design, and/or detection strategy.
- Are experienced in successful commercial products and design transfer to manufacturing organizations.
- Are fluent with geometrical optics simulation tools.
- Have a fundamental understanding of sensor technologies, image processing technology; familiarity with scientific image sensor technologies and interfaces.
- Have the interpersonal skills to collaborate seamlessly across an interdisciplinary team of scientists and engineers.

Not required, but it would be great if you have:

- Experience bringing commercial optical instruments to market.
- Familiarity with fluorescence microscopy and fluorescence imaging algorithms
- Experience with live cell imaging, photochemistry, molecular biology