

Position: Production Systems Engineer

Location: Burnaby, BC

About the Company: Coastal Genomics operates in the life science instrumentation industry and provides technical and engineering solutions for bottlenecks in laboratory bench work. Our proprietary platform, Ranger® Technology, automates the purification and analysis of DNA samples.

Coastal Genomics was recently acquired by [Yourgene Health](#) and is now entering an exciting period of company growth. Ambitious engineering and business targets have been set for the coming months and years and we are now looking to add key members to our team to help us achieve these goals.

Coastal Genomics is seeking only the best talent. This position will be rewarded with a competitive compensation package.

About Us: We are results driven and passionate about our work. As we tackle difficult problems together, we rely on each other to be bold and respectful in sharing ideas. New team members will be expected to embrace this culture and to contribute to the company's success in significant ways. You'll be a great fit if you have the following characteristics:

- **Honest:** You are forthright and transparent, even when this includes mistakes you have made
- **Self-motivated:** You stay late to meet deadlines without prompting. You think of ways to improve the products or the company in your spare time
- **Philosophical:** You are keen to be part of open-minded discussions on any topic
- **Good teammate:** You are willing to jump up and help another person overcome a technical or physical challenge as soon as they need it
- **Personal:** You are comfortable and eager to get on the phone with a vendor or customer to work through any issue
- **Precise:** You don't create or accept ambiguity in any written or spoken communication
- **Ambitious:** You are able to think big-picture and see all barriers as negotiable
- **Competent:** You can be relied on to do simple things. You learn how to use new tools easily and you know how to independently seek out effective solutions to issues
- **Accountable:** You take personal responsibility for the success or failure of your team

Position Description: Coastal Genomics is seeking a talented systems engineer to improve production processes through new automation equipment design, radical process changes, and maintenance of existing product lines. This individual will report to the production manager and be exposed to multiple important projects requiring abilities in mechanical, electrical, and software design. A multidisciplinary person who can thrive while tackling diverse challenges ranging from electromech design to thermofluids experimentation is desired.

The successful candidate will work closely with the production manager and others on the team and will be expected to deliver on the following key objectives:

- Resolve known design, assembly, and QC issues with instrument offerings
- Scale up manufacturing capabilities for consumable offerings

In connection with these objectives, key deliverables and metrics for the production systems engineer within the first year will include:

Objective	Deliverable	Metric
Resolve known design, assembly, and QC issues with instrument offerings	Quarterly ECOs to address identified issues	Average build time for trailing 10 LightBench units and % parts failing Incoming QC, assessed every 3 months
	Low rate of instruments requiring service or RMA	# instrument-related service or RMA requests on # instruments shipped over the trailing 6 months
	Complete design changes for any EOL replacements	Subjective assessment on quality of solution and documentation by production manager on each EOL replacement
Scale up manufacturing capabilities for consumable offerings	Significantly decrease labour time for specific manufacturing processes	Per-unit labour cost in \$ on most recent 100 units
	Increase cassette manufacturing throughput	# of cassettes that can be manufactured in one 8-hour timeframe
	Reduce wastage in cassette manufacturing process	Cost of wasted parts (not including QC cassettes) / Total cost of manufactured parts, aggregated based on most recent 10 manufacturing sessions

The individual in this role will work closely with other team members, including engineers, scientists, purchasers, logistics personnel, and production personnel. They will also be part of a larger community within Yourgene Health and will receive many opportunities for mentorship, advancement, and growth. The production manager will prioritize and delegate tasks to this role.

The successful candidate will satisfy the following technical competencies:

- Mechanical design and DFA
- Electronics design
- Proficiency with Solidworks
- Proficiency with Eagle or other PCB layout software
- Knowledge of manufacturing technologies including: machining, additive manufacturing, injection molding
- Experience in a production environment
- Vendor management experience
- Basic experience with software and/or firmware development
- Solid foundation in physics (mechanics, thermodynamics, fluid mechanics)
- Solid foundation in math (basic calculus, statistics, data analysis)

The successful candidate will meet the following prerequisites:

- A Bachelor's degree in Mechatronics Engineering, Engineering Physics, or another multi-disciplinary major
- 2-10 years experience in an environment requiring hardware, electronics, and software design
- Can work out of our physical office in Burnaby, BC

Prior experience in life sciences is not required, however, the successful candidate will be keenly interested in Coastal Genomics' technology and the challenges that we address.

This position is full time and starts as soon as possible.

Coastal Genomics performs a rigorous, multi-step hiring process in order to ensure we bring on only the highest talent. Please be aware that the final step of the selection process will include you arranging for phone calls with former supervisors and anyone else of our choosing.

All interested candidates may send a cover letter and resume to Info.coastal@yourgene-health.com. Please include the phrase "APPLICATION - PRODUCTION SYSTEMS ENGINEER" in the subject line.