

# OpenBlue Life Sciences

Powering efficient  
laboratory missions



Analyze real-time lab data to deliver unprecedented operational insights

## Mission-critical laboratory environments require the best, most efficient facilities available.

When scientists are able to work comfortably and productively, they produce life-changing health solutions. As with any mission critical environment, labs are expensive to build, equip, maintain and secure. In fact, they are the second most expensive commercial space to manage, not including the cost of equipment, which typically exceeds millions of dollars per lab.

As more organizations move toward the development of 'smart labs' with a shared-space model, there's even greater potential for over-utilization of equipment or inefficient allocation of space. Every second that a scientist waits for equipment is time that can be devoted to science. Every penny saved on infrastructure is a penny that can be redirected to life-saving research.



## Introducing Intelligent Laboratories

Intelligent Laboratories is part of the OpenBlue Life Sciences suite of connected solutions. It collects, stores and manages real-time data from various sources around a lab, such as badges, asset trackers, environmental monitors, intelligent power monitors and occupancy sensors, as well as log files taken directly from equipment.

The solution's analytics capability delivers an unprecedented level of insight about the movement of user groups, utilization and run-time of equipment, and the microenvironmental conditions in the laboratory.

Intelligent Laboratories is agnostic to infrastructure or service provider, which means it can make use of sensors that may already be in place and provide insights that were not previously possible.

Mission-critical environments need data-driven decision-making that makes more time for science.

Mission-critical environments need Intelligent Laboratories.

## Unprecedented laboratory insights

### Make lab configuration decisions in real-time

Intelligent Laboratories provides real-time feedback on space reconfiguration so you don't waste time waiting for results. Is there enough space? Too much? The application's data-driven analytics will pinpoint inefficiencies.

### Optimize equipment inventory

Lack of equipment slows scientific progress and too much equipment is an unnecessary expense. With Intelligent Laboratories, you will have the data to understand which equipment is most and least used so you can stock tools and utilities effectively.

### Detect micro-climates

Intelligent Laboratories gives labs the ability to detect out-of-range temperatures that impact experiments and create ideal workplaces to keep employees comfortable and more productive. These data sources also allow the application to provide insights that minimize energy consumption and integrate additional data sources, such as refrigerator and freezer thermostats and OEM utilization APIs, to monitor temperatures within the lab.

### Quickly find critical items

Eliminate time spent walking around to find carts, pipettes and other commonly used items with a real-time view of these mobile assets.

## Improve Outcomes



### Maximize research time

Is there a lack of available space or equipment at certain times of the day that forces scientists to suspend or delay their work? The data analysis delivered by the Intelligent Laboratories solution will help you to manage the lab's calendar more efficiently, so no scientist has to wait for bench time. With this data in hand, you can make informed decisions to add capacity for over-utilized equipment, reposition or even remove under-utilized equipment. The API integration capability facilitates equipment utilization data and real time availability used by your equipment booking system.



### Improve workflows

Do you know if your equipment is positioned in an ideal order for optimized workflow or if scientists are traveling long distances to complete scientific processes? Ensuring the right equipment is in the right location with appropriate space allocated can dramatically improve workflow and outcomes in your lab.



### Increase collaboration

Do you need to know if collaboration is happening between groups? Do you know if your collaboration improvement programs are effective? Our solution can measure collaboration through statistics on 'proximity events' and include metadata to understand what kind of collaboration is taking place – whether it's scientist-to-scientist or scientist-to-engineer, etc.



### Boost security

The software goes beyond who badges in and who badges out of the lab. It detects unauthorized persons who might have entered, prevents unauthorized dwelling in highly sensitive areas and can track whether a high-value asset is moved outside a defined area by an unauthorized person. Its security features also improve health and safety within your facility by detecting lone workers operating outside of normal working hours and providing an option for help or emergency assistance.

Intelligent Laboratories was developed using Privacy by Design and supports Privacy by Default. All the features of Intelligent Laboratories are available without directly identifying individuals, so the system is configured to focus on the what, not the who.





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### About OpenBlue

OpenBlue is a complete suite of connected solutions that serves industries from workplaces to schools, hospitals to campuses, and beyond. This platform includes tailored, AI-infused service solutions such as remote diagnostics, predictive maintenance, compliance monitoring, advanced risk assessments, and more. A dynamic new space from Johnson Controls, OpenBlue is how buildings come alive.

### About Johnson Controls

At Johnson Controls, we transform the environments where people live, work, learn and play. From optimizing building performance to improving safety and enhancing comfort, we drive the outcomes that matter most. We deliver our promise in industries such as healthcare, education, data centers, and manufacturing. With a global team of over 100,000 experts in more than 150 countries and over 130 years of innovation experience, we are the power behind our customers' mission. Our leading portfolio of building technology and solutions includes some of the most trusted names in the industry, such as Tyco®, YORK®, Metasys®, Ruskin®, Titus®, Frick®, PENN®, Sabroe®, Simplex® and Grinnell®.

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