

RESOLUTE

From spreadsheets to scalable laboratory workflows

How Resolute Bio implemented Scifeon as the digital laboratory data management foundation for its growing molecular intelligence platform.

Resolute Bio operates at the intersection of biology, artificial intelligence and high-throughput spatial proteomics. Founded in Copenhagen as OmicVision Biosciences in late 2023, the company grew from pioneering work in Deep Visual Proteomics and is now building a high-throughput molecular intelligence platform called ResOne.

Resolute's objective is ambitious: to redefine how we understand and treat human disease. Its technology combines deep-learning-based computational pathology with high-resolution mass spectrometry to generate detailed spatial proteomics data directly from human tissue.

By linking what can be seen in conventional tissue images to molecular information on protein expression, the company aims to reveal biological patterns that DNA- and RNA-based approaches may miss. Resolute is applying this approach to therapeutic areas such as oncology, neurology and chronic diseases,

generating datasets that can support scientific discovery, machine-learning models and future precision-medicine applications.

This work both generates and depends on large volumes of complex experimental data. Samples, metadata, experiments, procedures, and results must remain connected and traceable as they pass through the laboratory. At the same time, the underlying scientific workflows continue to evolve.

For Resolute Bio, laboratory data management therefore could not be treated as an administrative afterthought. It had to become part of the infrastructure supporting the company's scientific platform.



When spreadsheets become infrastructure

Like many young research companies, Resolute initially relied on familiar and accessible tools. Excel was used for inventory and as a source of ground-truth data, while files and other information were managed through shared drives.

This approach made sense during the company's earliest phase. Scientists could begin working immediately without waiting for an extensive software project. However, the limitations became more significant as the number of experiments, samples, and data relationships increased.

A spreadsheet can hold a list of samples or inventory items. A file repository can store results. Neither, on its own, provides a complete representation of how an experiment was performed, which inputs were used, how the data evolved or how one result relates to another.

Resolute needed to establish scalable standard operating procedures while preserving the flexibility required in a startup research environment. The company also needed better support for workflow tracking, experiment documentation, data uploads and incident reporting.

The challenge was not simply to replace spreadsheets. It was to create a connected structure around laboratory work without forcing scientists into rigid processes that would quickly become obsolete.

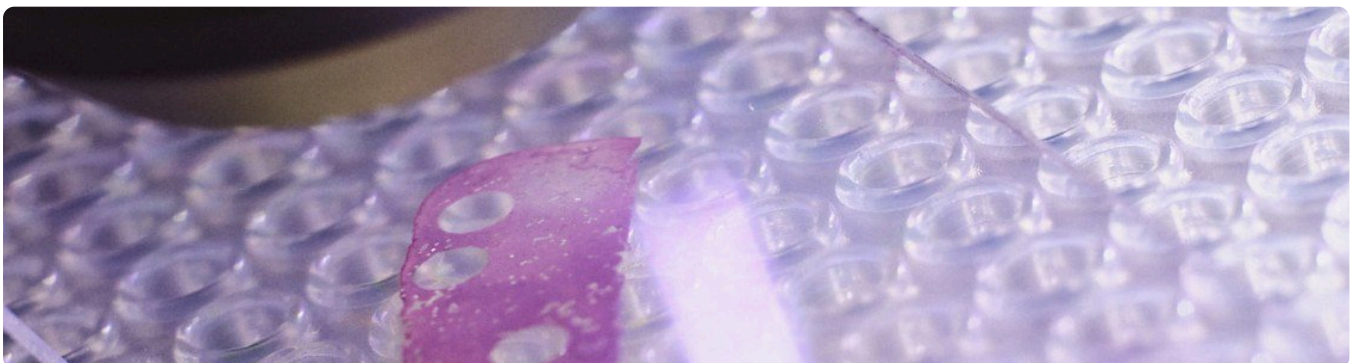
A platform that could evolve with the science

Resolute chose Scifeon, a configurable cloud platform combining electronic laboratory notebook and laboratory information management capabilities.

Configurability was particularly important. Resolute's workflows could not be regarded as finished specifications to be handed to an external IT team and frozen into software. As the company's scientific platform developed, procedures and data requirements would continue to evolve over time.

Scifeon enabled the team to configure forms, fields, and workflows to align with the laboratory's actual processes. This meant that the digital system could evolve alongside the science rather than requiring scientists to adapt their work to a fixed software model.

The ability to start with focused workflows and expand the system over time also aligned with Resolute's needs. The company did not have to design every future use case before receiving value from the platform.



A hands-on implementation

Resolute implemented Scifeon largely on its own, making the project an example of how a technically capable laboratory can take responsibility for its digital setup.

The implementation progressed through several recognisable stages: demonstration, configuration and setup, user acceptance and production use. Administrative and read-only access user roles were considered as the system moved towards production.

Rather than treating go-live as the point at which configuration stopped, the team retained the ability to adjust the platform as operational needs became clearer. This flexibility was essential in an organisation where workflows and data structures were still developing.

Resolute Bio also relocated its entire operation during the implementation period. That move delayed the overall process, making the calendar duration a poor measure of the effort required to configure Scifeon itself.

The implementation did not require Resolute to abandon its existing information immediately. Excel continued to provide inventory and ground-truth data while information was prepared for upload. This enabled the organisation to establish a reliable starting point and transition in manageable stages.

The approach reduced the risk associated with replacing familiar tools all at once. Scifeon became the structured layer connecting data and workflows, while Resolute retained control over the pace and sequence of the transition.

“We had looked at many of the standard systems on the market, but none of them met our needs. We were close to launching our own development project when, quite by chance, we met someone in a lift who knew Scifeon. After a brief introduction and a demonstration of the platform, we decided an external platform could work after all.”

Julie Thomsen, Research Associate at Resolute Bio

“After a couple of initial meetings, we moved entirely to email and Scifeon’s support system. Scifeon responds swiftly, so this way of working functioned extremely well. Only a couple of months passed from the start of the configuration work until we were able to put the system into use.”

Ida Lester, Research associate at Resolute Bio

Scifeon in daily laboratory work

Resolute uses Scifeon to structure experimental project workflows and manage the information generated as experiments progress.

Standard operating procedures can be represented in the system, clarifying how information should be recorded and how work should progress from one stage to the next. New inputs and uploaded data can be connected to their experimental context instead of becoming isolated files.

The platform also supports incident reporting and the continuous refinement of production workflows. Because the configuration can be changed as requirements evolve, Resolute can

improve its processes without commissioning a new software development project for each adjustment.

This is especially relevant in research. Unlike a repetitive industrial process, an experimental workflow changes as scientists learn. A system that only supports the procedure imagined at the beginning of a project can quickly become an obstacle. Resolute needed a platform that could provide structure without preventing exploration.

Scifeon's role is therefore broader than storing laboratory records. It provides a common digital context for samples, experiments, procedures, and results.



From individual files to organisational knowledge

The immediate benefits are qualitative but important. Information is captured in a more consistent structure. Experimental data can be associated with the workflow that produced it. Procedures become easier to follow and refine, and the relationships between laboratory activities become more visible.

This reduces dependence on individual spreadsheets, personal file structures and knowledge held by particular employees. It also creates a stronger foundation for collaboration among scientists, engineers, and computational specialists.

For a company building a data-intensive scientific platform, this shared structure matters. Resolute's ability to create molecular intelligence depends not only on its instruments and algorithms, but also on its ability to generate reliable, machine-readable laboratory data.

Scifeon helps establish that foundation while allowing the team to retain ownership of its workflows.

Infrastructure for the next stage

Resolute's scientific ambition requires scale: more samples, more experiments, larger datasets and closer connections between laboratory and computational work.

Processes that rely on informal coordination within a small team can become fragile as an organisation grows. More people create more handovers, more data dependencies and more opportunities for information to lose its context.

By implementing structured workflows early, Resolute is preparing for that growth before fragmented practices become deeply embedded.

The company's experience also highlights an important point about laboratory digitalisation. Implementation need not always begin as a large IT programme. A capable scientific team can start with a focused use case, configure workflows around its own work, and expand the platform as its requirements mature.

For Resolute Bio, Scifeon is becoming the digital laboratory foundation that connects evolving scientific processes with the structured data required for discovery at scale.

“Scifeon minimises the administrative work required, reduces the scope for errors and increases the value of the data we accumulate. That frees up more time for the scientific work.”

Julie Thomsen, Research Associate at Resolute Bio

About Resolute Bio

Resolute Bio is a Copenhagen-based molecular intelligence company. Their aim is to redefine how we understand and treat human disease. The company was founded in late 2023 and has roots in the lab of renowned proteomics researcher Matthias Mann at the University of Copenhagen. Its co-founders co-developed Deep Visual Proteomics (DVP); the underlying technology behind Resolute Bio's platform, ResOne.

DVP is a platform that combines high-resolution microscopy with ultra-sensitive mass spectrometry. The outputs are unbiased proteomic datasets that are mapped back to standard tissue images with micrometer precision.

Since proteins are where genetic potential becomes biological reality, Resolute Bio aims to reveal biological patterns that conventional DNA- and RNA-based approaches may miss. Further understanding the spatial distribution of the human proteome allows Resolute Bio to generate deep molecular profiles that redefine how we investigate disease mechanisms and pave the way for a new dawn: spatial medicine.

Today, Resolute Bio has merged its scientific foundations into ResOne, an AI-based molecular intelligence platform. The platform is designed to give researchers and health-care professionals a unique tool to quicker and better understand human disease; ultimately improving both diagnosis and treatment potentials for a multitude of diseases. Resolute Bio is currently generating large-scale datasets across oncology, neurology and chronic disease, using them to discover new biological insights, train machine-learning models and support the development of spatial medicine through next-generation precision medicine applications.

Resolute Bio brings together expert scientists, bioinformaticians, engineers and technology specialists at the intersection of human biology, AI and advanced proteomics. As its research platform and data volumes scale, efficient and flexible digital laboratory infrastructure is essential for keeping samples, experiments, and workflows structured, traceable and accessible across the organisation. This provides the foundation needed to turn complex laboratory work into reliable data for scientific discovery at scale.

“It is at this stage difficult to quantify the benefits of Scifeon precisely. But simply finding the system allowed us to cancel a development project that would have taken a full calendar year and required us to hire a developer. Scifeon will enable us to increase our activities without a proportional increase in headcount. For us, however, the improved compliance, reduced risk of errors and greater value of our data are what make us smile more during the day and sleep better at night”

Julie Thomsen, Research Associate at Resolute Bio

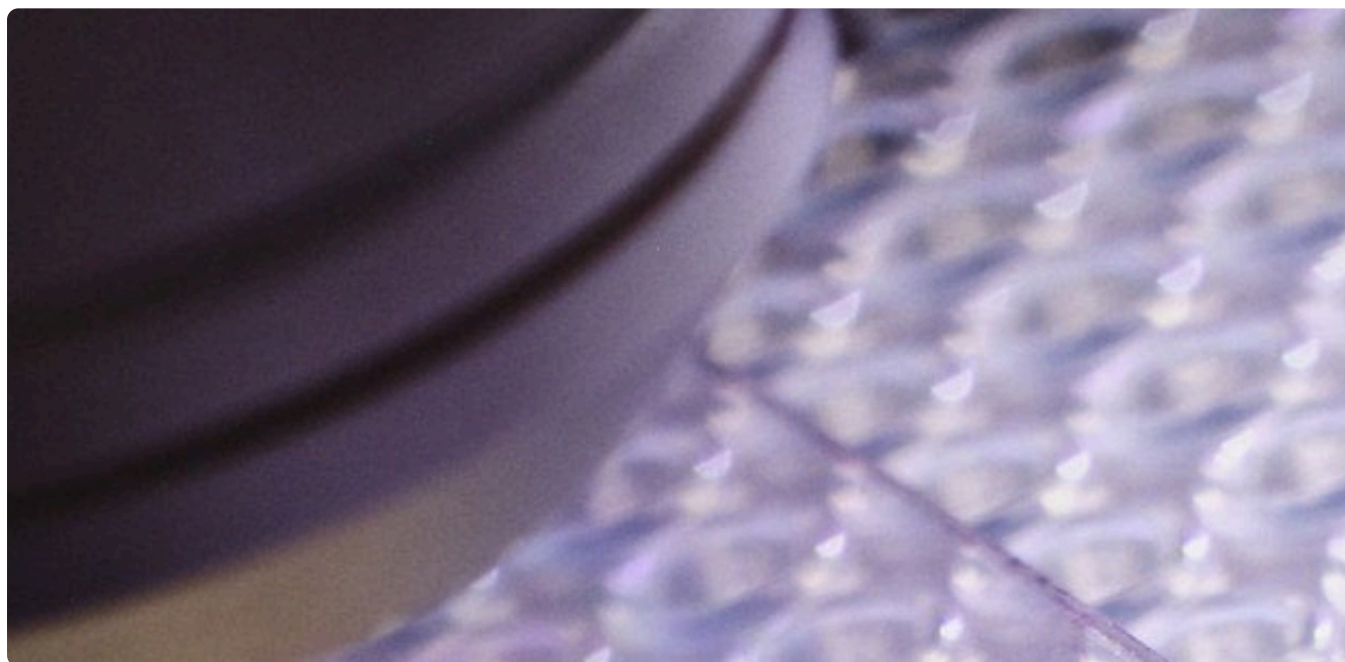
About Scifeon

Scifeon is a Danish software company providing a unified, cloud-native Electronic Laboratory Notebook (ELN) and Laboratory Information Management System (LIMS). Founded by biochemist Thomas P. Boesen, the company develops digital infrastructure for biotechnology, pharmaceutical, academic, and other research laboratories.

The platform brings together experiments, samples, protocols, inventory, instrument data, and results in a single environment. Its modular and configurable design allows laboratories to

model their existing scientific workflows instead of adapting their work to rigid software templates. Scifeon supports workflow automation, sample traceability, version control, audit trails, reporting, and integration with instruments and other systems through APIs and file imports.

Delivered through Microsoft Azure, Scifeon is designed for both research and regulated environments. The company combines its software with an agile implementation approach intended to reduce project risk and bring customised solutions into operation within weeks.



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