



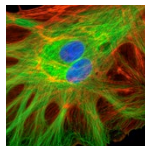
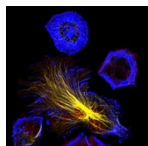
How can biotech companies optimize data access while going virtual?

Produced by Europa Science in conjunction with:

**SCIENTIFIC
COMPUTING
WORLD**



CDD.VAULT®
Complexity Simplified

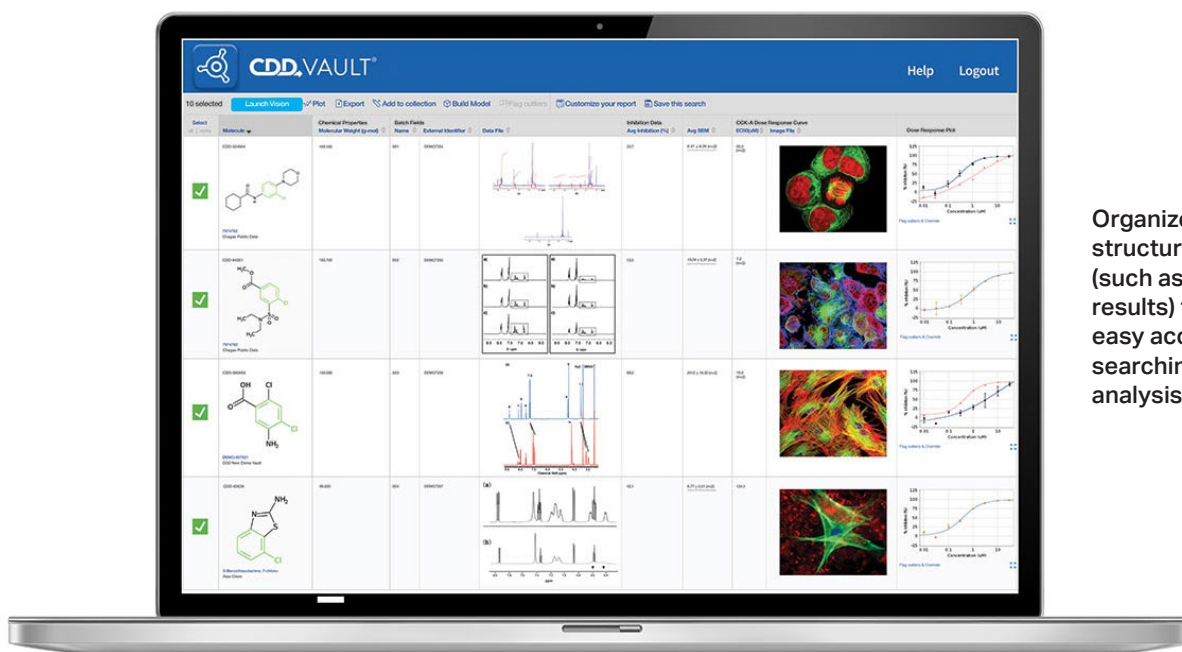


There is mounting pressure for companies to ensure that non-essential personnel work from home. The challenge, of course, is to operate in a virtual capacity without sacrificing productivity – in particular for biotech companies engaging in drug discovery where timely access to data can make or break an organization.

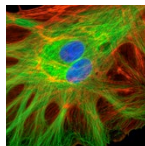
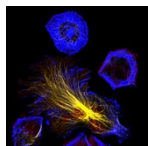
There are three main data challenges that must be overcome: 1) remote access, 2) real-time collaboration and sharing, and 3) secure, remote access control. Fortunately, a modern software platform such as CDD Vault is built to address these pain points.

Whether engaged in collaboration with CROs or other external or internal collaboration partners, scientists around the world rely on CDD Vault to access, manage, analyze and present data through a standard web browser. This can be hugely beneficial to scientific organizations that are trying to increase their productivity while providing a reliable environment for remote working and collaboration with external partners.

Data were immediately visible across sites, allowing rapid communication and decision making
Julia Adam, PhD, head of medicinal chemistry, Mironid



Organize your structured data (such as assay results) to allow easy access, searching and analysis.



CDD Vault is designed to provide a secure platform that provides a single source of truth for laboratory data. Today the platform is trusted by a wide variety of scientists and researchers users in biotech, pharmaceutical, chemical, personal care and agribusiness laboratories working on-premise, or engaged in collaboration with remote partners from industry or academia.

Remote access

Spreadsheets were never ideal for handling scientific data, and the problem is only exacerbated by a distributed workforce. Imagine a chemist who emails a list of molecules in a spreadsheet to a biologist, who adds assay data and emails it to a data scientist, who adds statistical calculations and... very soon there will be 15 versions of the spreadsheet buried in dozens of emails.

The solution? A purpose-built scientific data management system like CDD Vault that provides a centralized data repository accessible by anyone on the project team.

CDD easily allows us to securely collaborate, while keeping some data private, all in one system

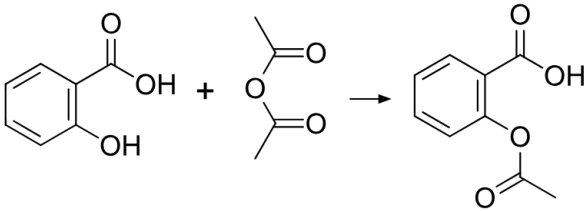
Ellen Berg, PhD, chief scientific officer, translational biology, at Eurofins DiscoverX

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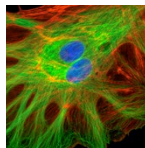
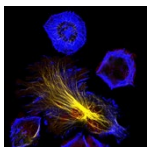
Synthesis of Aspirin

The synthesis of aspirin is classified as an esterification reaction. Salicylic acid is treated with acetic anhydride, an acid derivative, causing a chemical reaction that turns salicylic acid's hydroxyl group into an ester group ($R-OH \rightarrow R-OCOCH_3$). This process yields aspirin and acetic acid, which is considered a byproduct of this reaction. Small amounts of sulfuric acid (and occasionally phosphoric acid) are almost always used as a catalyst.



Name	Properties	Amounts	Calculation
Salicylic acid $C_7H_6O_3$	Molar mass: 138.121 g/mol	Mass: 2.00 g	Limiting reagent Equivalent: 1 Mole: 14.5 mmol
Acetic anhydride $C_4H_6O_3$	Molar mass: 102.09 g/mol Density: 1.08 g/cm ³	Mass: 5.40 g Volume: 5.00 mL	Equivalent: 3.65 Mole: 52.9 mmol Effective mole: 14.5 mmol
Aspirine $C_9H_8O_4$	Molar mass: 180.157 g/mol	Mass: 2.00 g Purity: 98 %	Equivalent: 1 Mole: 10.9 mmol Expected mass: 2.61 g Yield: 75.13 %

Unstructured data can be better captured using an Electronic Laboratory Notebook




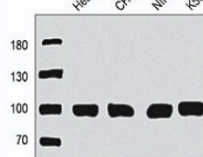
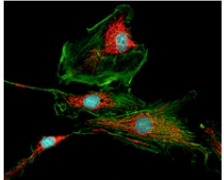
CDD Vault is a software platform designed for research with ELN functionality, data storage for chemical registration, assay data management, and SAR analysis in addition to inventory management and visualization tools. The carefully integrated software components enable users to seamlessly move between database and ELN functionality without multiple tabs or software programs.

The easy-to-use web portal provides the central point of contact for all users and collaborators. This improves access to data for both remote workers and external partners, allowing them to upload, comment and share data in real time. This not only provides access to laboratory data and useful information relating to your research but also tools to facilitate collaboration, analysis and reporting. CDD Vault is a hosted solution that not only reduces costs but also increases the potential for scalability. Maintenance and support are provided, which reduces internal IT costs and provides stable and secure access to data anywhere in the world.

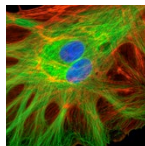
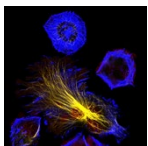
This helps biotech companies with no physical laboratory, or organizations that specialize in working with CROs, to meet their project goals without the burden of additional IT systems.

I have evaluated different systems during my 25 years in the biotech industry. For us, the main factor in choosing CDD Vault was the ease of implementation – how intuitive and easy the system is to use. Sometimes you get systems that are very powerful, but only one person who is trained can use it. Most of us like systems where it's so easy to use that it doesn't require a big learning process to get value from it

Julio Medina, PhD, CEO,
R2M Pharma

Sequence		Immunoblot Validation				Microscopy
Plasmid Map	Fasta	Western Blot	MW (kD)	Primary Antibody		Fluorescence Image
	seq_R14A.fa		100	ab17348		

Biologicals (plasmids, antibodies etc) as well as small molecules can be registered for the whole team to view



Real-time collaboration

Modern approaches to data management and digitized laboratory practices can help scientists deal with the challenges presented by modern drug discovery workflows and the increasing need to collaborate quickly.

It is well known that modern drug discovery presents several challenges in ensuring efficacy and safety in humans. Getting a drug to market requires considerable time and resources, which could potentially be wasted if a drug fails to pass trials.

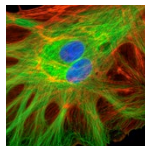
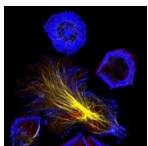
CDD Vault helps users to effectively manage ongoing projects in real time. This enables project managers to query and report on multiple projects with different collaboration partners. By defining what data can be accessed by specific projects and users, CDD Vault provides careful control of data access and availability.

Using CDD Vault, users can make use of real-time data monitoring and reporting. This provides a platform which promotes agile decision making as organizations can communicate fast and effectively. This is a key concept to maintaining agility when working remotely or with external collaborators. In a laboratory setting this means being able to see data in real time so that decisions can be made swiftly. This helps project managers to react quickly to mistakes or immediately change the course of workflows or projects to better suit the organization.

The quick set-up and training also help to benefit collaboration as teams may work with several different CROs or other partners. Using CDD Vault means that time is not wasted on training, setup and configuration. Just switch on your computer and you are ready to work. Organizations can get set up with the software in one day and require only 90 minutes of training for new users.

We had Excel sheets all over the place and data from different projects that were just separated in different folders and after a while, it got to the point that it was just hard to manage. We chose CDD, and we're really happy with the service and the cost and the way the database is evolving

Ruo Steensma,
PhD, director of
chemistry, Orphagen
Pharmaceuticals



Whether collaborating with partners or working remotely from your own laboratory, CDD Vault can help to accelerate the process of discovery and selection of new candidate drugs. By streamlining response times and providing real-time access to data, the system provides a true platform for collaboration.

Access control

In this new age of increasing collaboration ensuring data access is carefully managed is imperative to success. Organizations must safeguard their intellectual properties and minimize data exposure to those collaborators without the need to know.

Using CDD Vault, project managers can easily and effectively control who has access to specific data, safeguarding sensitive information or IP that should not be shared with external partners. Data can be stratified using partitions by creating separate projects and assigning user roles with varying levels of read and write access. The system also provides two-factor authentication to ensure that people only access data that has been assigned to their project. This helps to safeguard a host organization's IP from outside collaborators without reducing the time to reach scientific results.

CDD Vault provides an intuitive platform that has been designed by scientists for scientists with the benefits of a fully integrated enterprise system without the administrative burden or expense of running an in-house solution. In a world of increasingly complex drug development and increasing need for remote access to laboratory data, CDD Vault provides a platform that can be used to underpin the approaches to remote working.

To get your personalized demo or a free trial of CDD Vault, contact info@collaborativedrug.com