

# DREAMPATH

Protecting patients, sample by sample

Digital Archiving user meeting  
Aarhus, May 5<sup>th</sup> 2022

**Axlab**

YOUR CHALLENGES - OUR INSPIRATION



# Our Mission

Dreampath protects patients by looking after their samples, and accelerating and securing safe access to each one of them

The first step in curing cancer or any disease is a rapid and accurate diagnosis. At Dreampath, our ambition lies in transforming healthcare, and we believe it's **urgent to accelerate diagnosis and research**, so patients and their families can have the best chances within their treatment journey.



Protecting patients, sample by sample

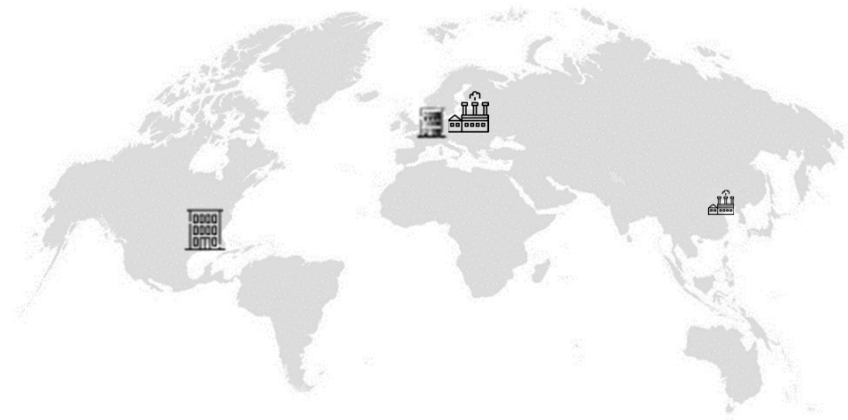


# Who is Dreampath



*We are the leader in the next generation patient sample management and traceability*

- Superior technologies running at hundreds of KOLs World Wide
- More than 100M patient samples safe with us
- Over 75 patents granted globally
- Production sites in France, Switzerland and China
- Global reach and offices in France and the USA
- ISO 9001 certificated
- Carbon Neutral company



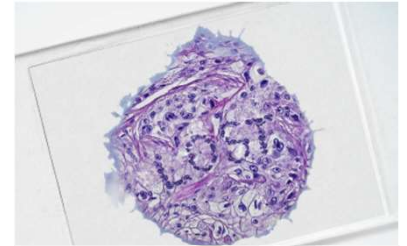
# Why Dreampath

## What's driving the need:

- Cancer incidence and patient's samples volumes continue to increase.
- Large number of diagnostic and therapeutic options result in daily need to access patient's samples (and return them for the next request).
- Samples by law are kept for very long periods (10, 20, 30+ years)
- Personnel availability and increasing complexity of tasks in the lab.

## Situation today (prior to Dreampath):

- Time consuming in sorting, archiving, retrieving and re-archiving the samples
- Patient's sample loss.
- Access to samples makes diagnostics and research more lengthy preventing patients from getting rapid treatment.
- Loss of space, disorganized, stressful and messy.



### Maintaining Clinical Tissue Archives and Supporting Human Research



#### Challenges and Solutions

Caterina Gianni, MD, PhD; Michael M. Oellers, BS; William D. Edwards, MD; Marie Christine Aubry, MD; Maureen M. Muncil, BS; Koshin H. Mohamed, BS; Sara G. Sandleback, BS; John M. Nowak, BA; Andrew Bridgeman, BS; Marie E. Brown, MT(ASCP); John C. Cheville, MD

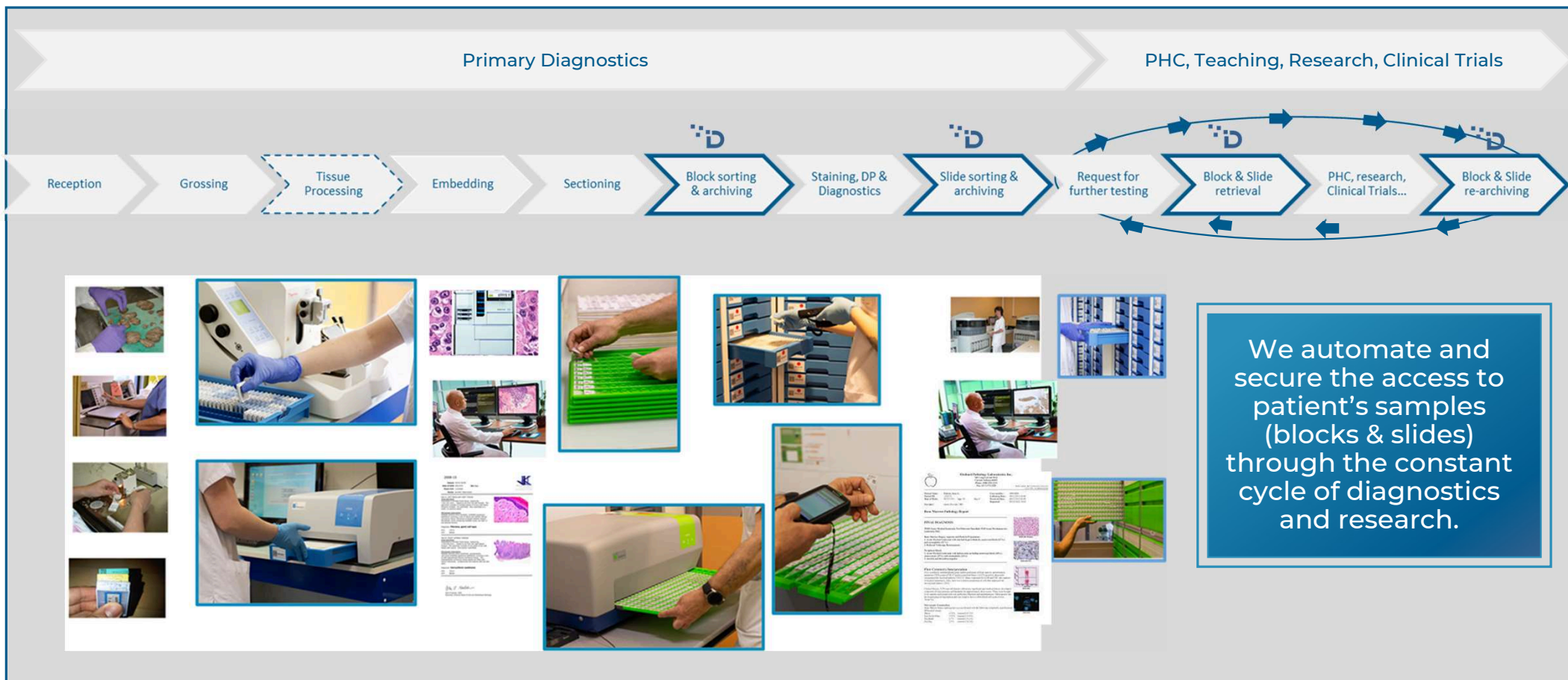


*We ensure that patient's samples don't get lost and get accessed quickly and accurately, forever, for a rapid diagnostics.*





# Where do we fit in the pathology lab & workflow?



We automate and secure the access to patient's samples (blocks & slides) through the constant cycle of diagnostics and research.

# Tissue Sample Management Solutions

Crystal

*Slide management system*

Fina

*Block management system*



Full Control

Patient  
Safety

Traceability

Minimizing  
TAT

Optimizing  
Workflow



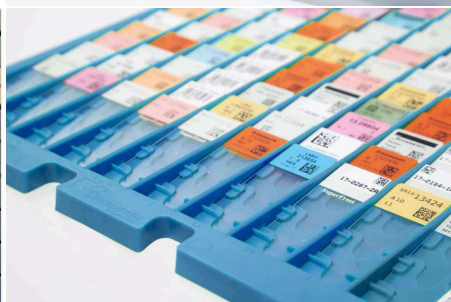
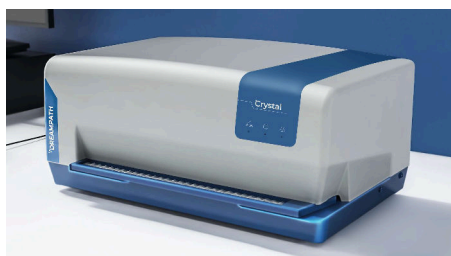
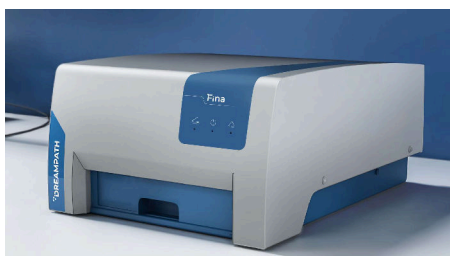


# Portfolio

Scanners, consumables and connectivity suite



## Scanners and consumables



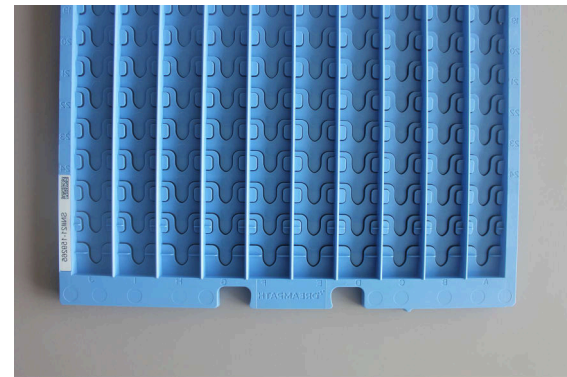
## Software and sample management



## Connectivity suite



# Trays and Cabinets for Slides





# Reports

The screenshot displays the Fina software interface. On the left is a dark blue sidebar with icons for SCAN, SEARCH, REPORT, MANAGE, and a User profile. The main area is titled 'Report' and shows a dropdown menu with 'Samples out of the system' selected. Below this is a window titled 'Samples out of the system' with a timestamp 'Monday, February 14, 2022 11:41:57 AM'. It contains a table with the following data:

Sample number	Requestor	Reason	Information	Operator	Output date
1-00002-C5	Slide File Room	Clinical Histopathology	--	Manager secondaire	2/14/2022
1-00002-C6	Slide File Room	Clinical Histopathology	--	Manager secondaire	2/14/2022
1-00002-D2	Slide File Room	Clinical Histopathology	--	Manager secondaire	2/14/2022
16-0416	Chebib, Ivan MD	Intrdepartmental-Clinical	--	Manager secondaire	2/14/2022

At the bottom right of the window are icons for 'Export Report' (with an 'X' icon) and 'Print Report' (with a printer icon).

All of the discrete fields built up until now drive the reporting function within the software

# Reports



- Missing Blocks/Slides (not back in time) – generates a list of all materials out of the system that are overdue based on the return date driven by the Reason
- Blocks/Slides Out of the System – All materials out of the system, ordered by sample name
- Number of blocks/slides by Requestor/Reason – generates a list of all materials removed by Requestor and Reason
- Number of new blocks/slides – Number of blocks/slides entered into the database for that day
- Block/Slide History – Audit trail for each block/slide. Should be ran from the Search function.
- Manually entered blocks/slides – All materials entered manually with image. **Most important report.**
- Unexpected output historic – Historic audit of all materials removed without the PDA
- Current unexpected output – Current materials that are missing from the system that were not removed properly with the PDA.
- Empty space in trays – Number of spaces open in any given tray. Used for backfilling empty space.

*Note: Most of these reports are ran within a defined date range.*



## Examples current archiving process

Risk of  
Lost

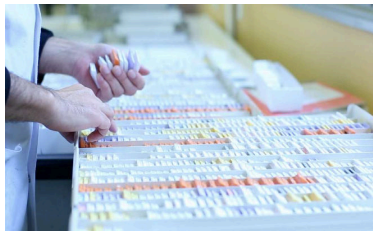
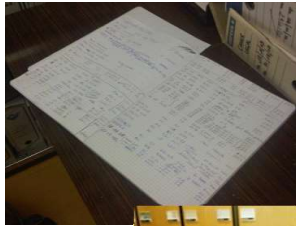
Manual  
Process

Prone to  
Errors

Little  
Traceability

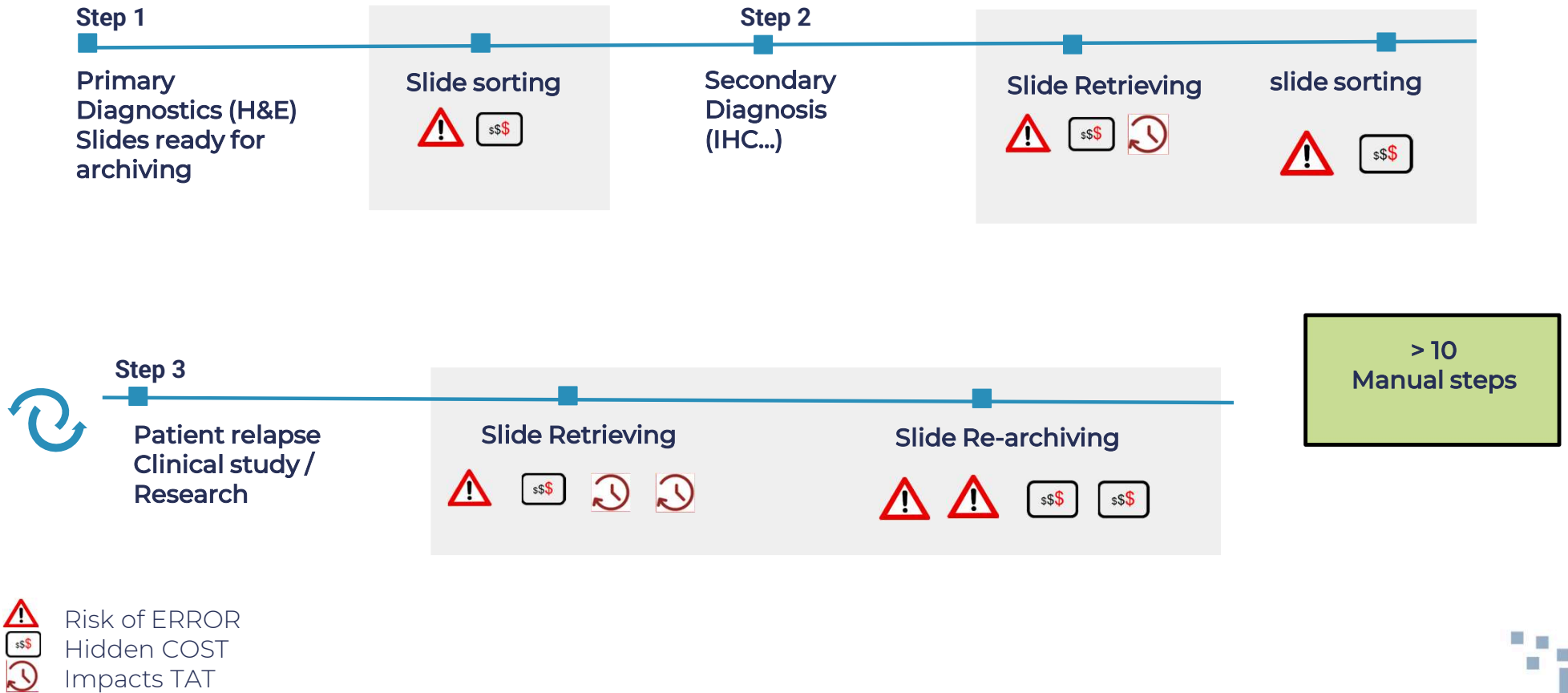
Wrong  
place

Spaces &  
Gaps





# Current workflow map



# Crystal workflow – the impact for your slides

Helps faster adoption of digital pathology



## TODAY IN THE LAB



Labor intensive  
Many retrievals = risk



Labor intensive (piles of slides to sort)  
Space (for sorting)



Disorganized

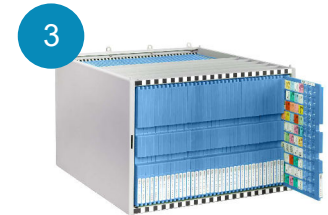


Space, Time

- Sample loss
- Inefficient
- Labor intensive
- Disorganized
- Space loss
- Stressful



## Automated sorting and archiving of slides



## Secure sample retrieval and re-archiving of slides



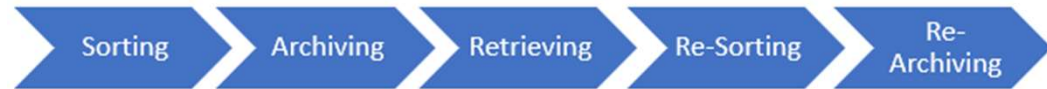
Simple

Safe

Automated

Connected

# Crystal workflow map



## Step 1

Primary Diagnostics (H&E)  
Slides ready for archiving

Slide sorting



## Step 2

Secondary  
Diagnosis  
(IHC/PCR...)

Slide Retrieving



Slide-rearchiving



Slide transfer long-term



## Step 3

Patient relapse  
Clinical study /  
Research



Slide Retrieving



Slide Re-archiving



*Minimize steps in the workflow – Safety patient material- Efficient*





# CRYSTAL & Digital Scanning



- Cost of Digital Pathology suite is about 2 M euro + 500 K euro annually (based on 50.000 slides per annum) Crystal is a minor investment to keep slides safe for ever.
- Due cost of storage it is very difficult to keep all slides digitally, therefor there is a need to access the original slide in case of re-scan
- Cytology need special Z-stack scanners, making storage of digital images even more difficult
- Un-stained slides need to be archived and accessible
- The tissue on the slide may be valuable for further testing, thinking of IHC stain or DNA/RNA .  
When block is exhausted or lost
- Often the Pathologist need the actual slide to check correct diagnose
- In case of recut, the slide and block are retrieved together to check the correct slide and block is retrieved
- When the slide need to be re-scanned





# VIDEO

<https://youtu.be/Thy2-3MN11Y>



## Executive summary

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1. Improved patient diagnosis
2. Improved operational efficiency
3. Expanded workflow capacity
4. Complete traceability







# DREAMPATH

Protecting patients, sample by sample

