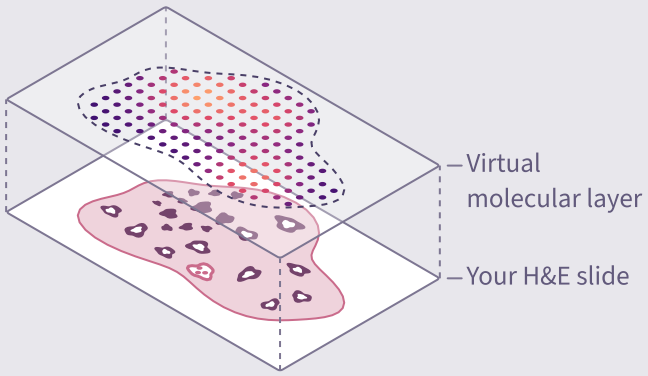
Building the virtual molecular layer for tissue biology.

Aurora predicts spatial gene expression from routine H&E images, helping researchers explore molecular patterns across samples, cohorts and disease.



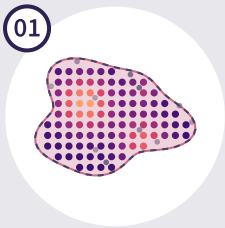
Histology is everywhere. Molecular profiling isn't.

Decades of research have created tissue images at enormous scale. Aurora is building a way to explore them molecularly, without a new molecular experiment for every sample.

One image. Another dimension.

WHAT AURORA MAKES POSSIBLE

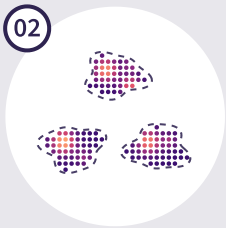
01



One slide

One image can open a virtual molecular view of one sample.

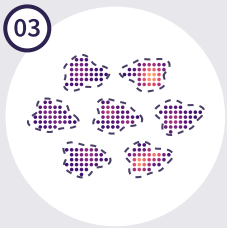
02



Many slides

A cohort can show virtual molecular patterns across many.

03



Entire collections

At scale, histology becomes a new substrate for molecular exploration.

The questions Aurora is built for.

Why does the same disease behave differently across patients?

Which molecular patterns define a meaningful subgroup?

Where should we look for the next biomarker, target or mechanism?

Why do some patients respond while others do not?

Better therapies begin with better biology.

Before a therapy can be developed, the biology has to be understood. The right subgroup has to emerge. A mechanism has to become worth pursuing. A biomarker or target has to survive deeper investigation. Aurora is being built to help researchers find more of those starting points.

The virtual molecular layer starts with scale.

28,000+	295M+	32+	19,338+
tissue slides	predicted spatial spots	cancer types	genes and RNAs

The tissue is already here. A new layer of biology is within reach.

Aurora is opening a richer virtual molecular view of existing tissue, so the samples collected yesterday can help answer the questions that matter tomorrow.

Explore the example slide

auroraomics.org/demo

Submit images for analysis

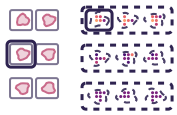
auroraomics.org/upload

Contact

auroraomics.org/contact

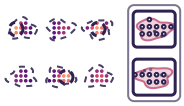
Use cases

Explore all use cases auroraomics.org/use-cases



Pharma & Biotech

Bring a new molecular perspective to your existing cohorts.

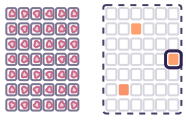


Academia & Research

Ask the question your last study could not.

Sequencing & Core Facilities

Bring computational exploration alongside your experimental expertise.



Biobanks

Give years of carefully preserved tissue a continuing role in discovery.

Turn more tissue into better decisions.

Find patterns at cohort scale

Explore virtual molecular variation across samples and biological groups.

Understand what drives the biology

Investigate heterogeneity, subgroups, biomarkers, mechanisms and therapeutic response.

Prioritise what to pursue

Focus validation and experimental effort on the signals, samples and hypotheses that matter most.

Choose the access that fits your work

Academic and commercial access each come in three tiers, so you can start with a few slides and move up as your projects grow.

- ✓ Upload with **Aurora Direct**
- ✓ **Aurora Intelligence** and shared workspaces
- ✓ Programmatic access through the **Aurora API**

IN EVERY TIER

- ✓ Virtual spatial transcriptomics (19k genes)
- ✓ AnnData (.h5ad) output for downstream analysis
- ✓ Quality-control and analysis reports
- ✓ An interactive spatial map

LEARN ABOUT ACCESS OPTIONS

Academic and non-profit
auroraomics.org/access/academic

Biotech, pharma and industry
auroraomics.org/access/commercial

Built to work where research already lives.

Use Aurora through Swiss-hosted infrastructure, or keep original images within your own environment through our secure API approach.

- ✓ Swiss-based processing
- ✓ Encrypted transfer
- ✓ Local-image options

References

Nonchev K, Dawo S, Silina K, Koelzer VH, Rätsch G. DeepSpot-M: a multimodal foundation model for transcriptome-wide virtual spatial transcriptomics from histology. *medRxiv*. Preprint, 2026. https://doi.org/10.64898/2026.06.19.26356060

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