


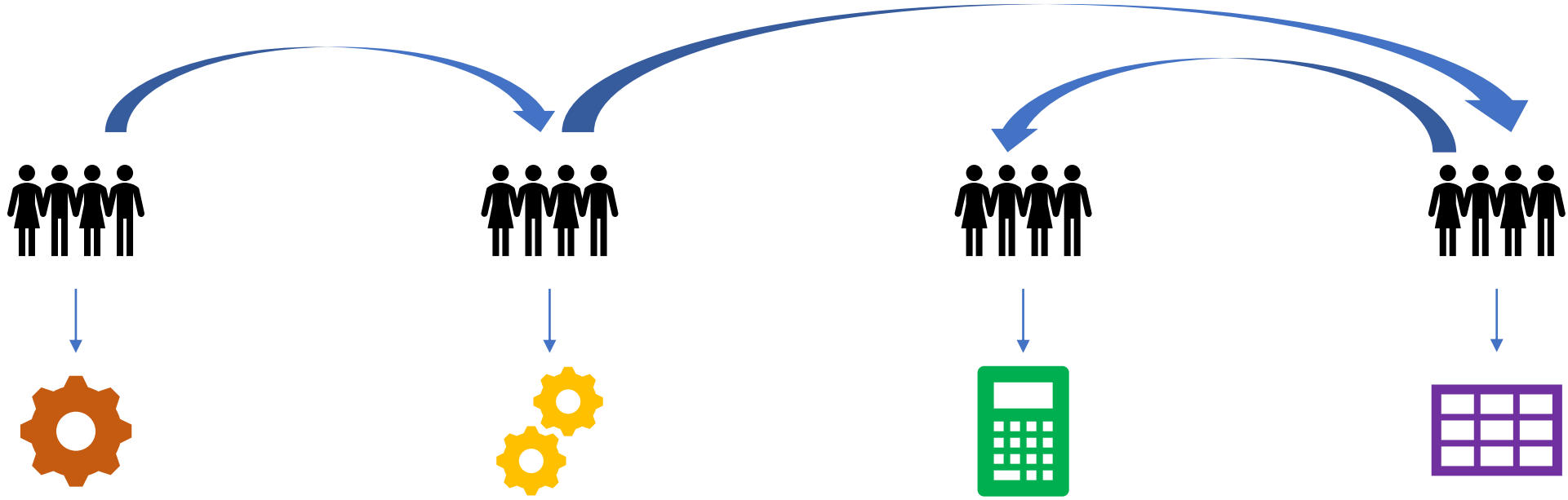
Qi Tissue

Quantitative Imaging Systems

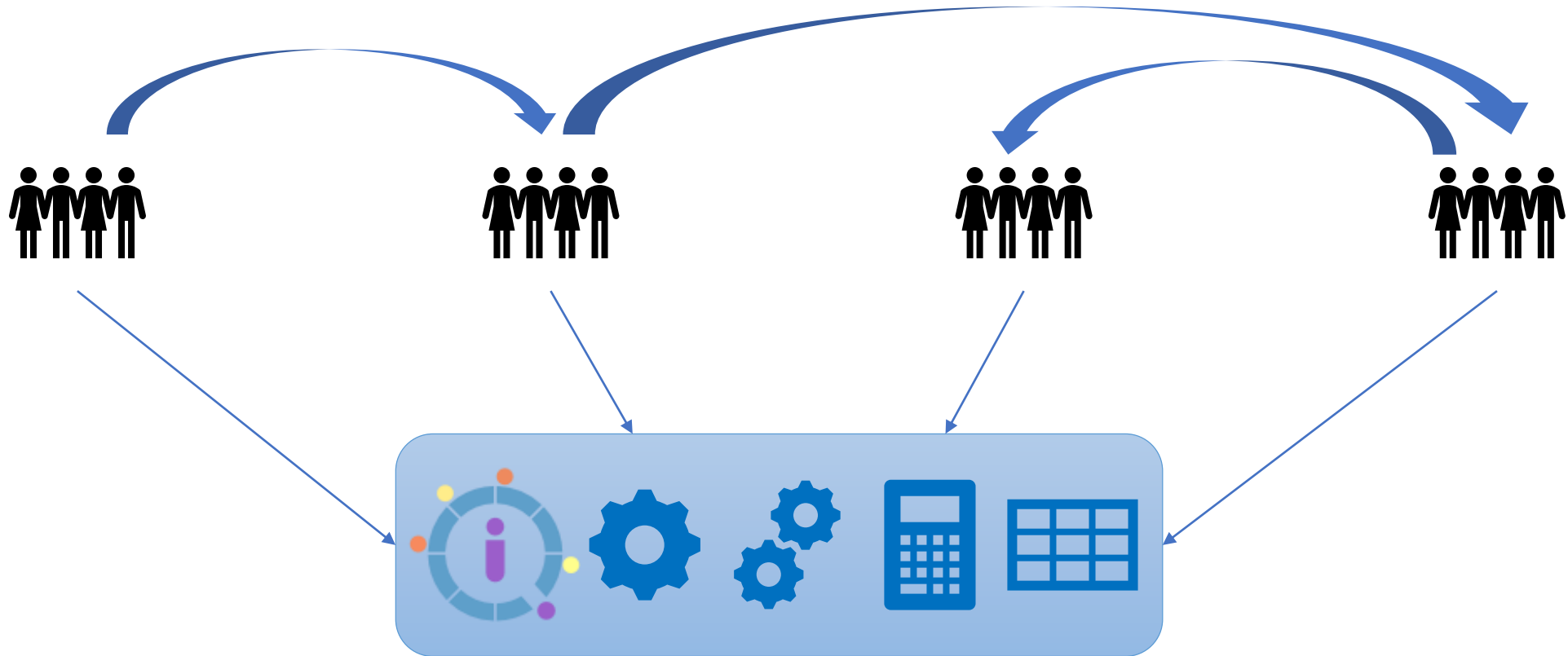


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Curing Cancer: multiple teams



Comprehensive Suite of Modern Software Tools



Qi Tissue

- Image acquisition
- Multiple processing and visualization techniques

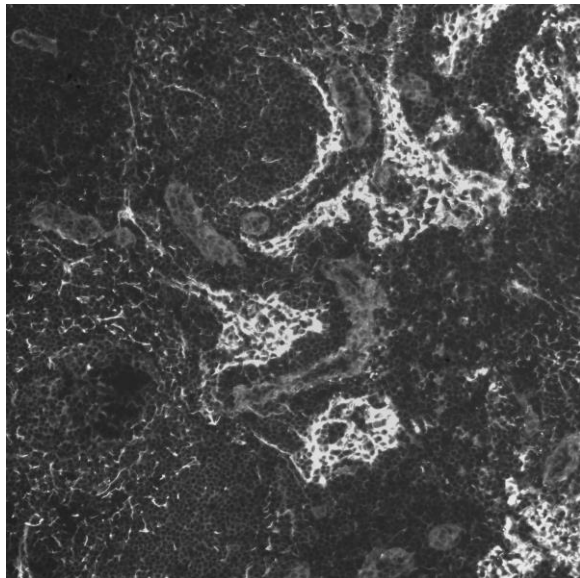
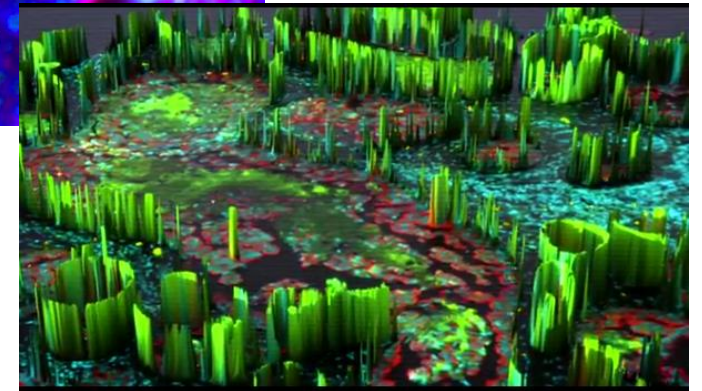
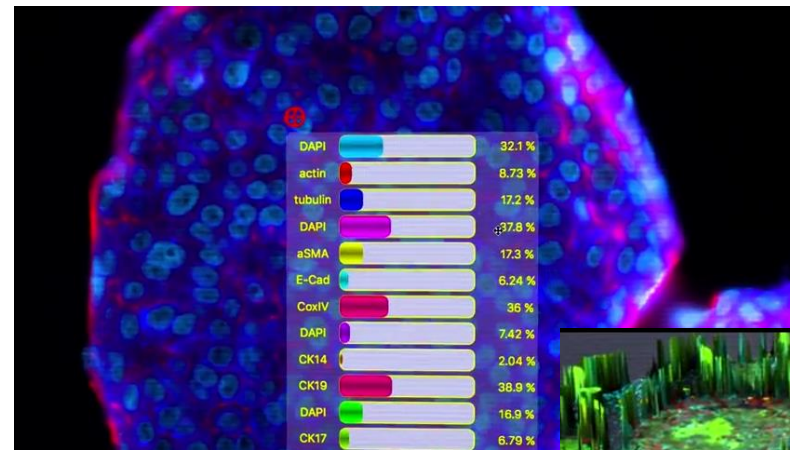


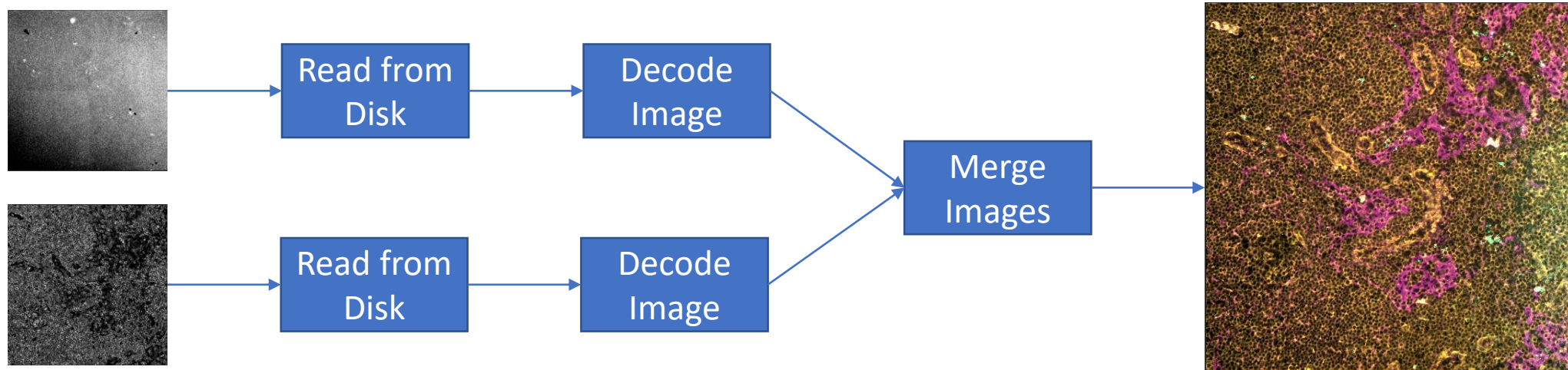
Image from electron microscope



Demo

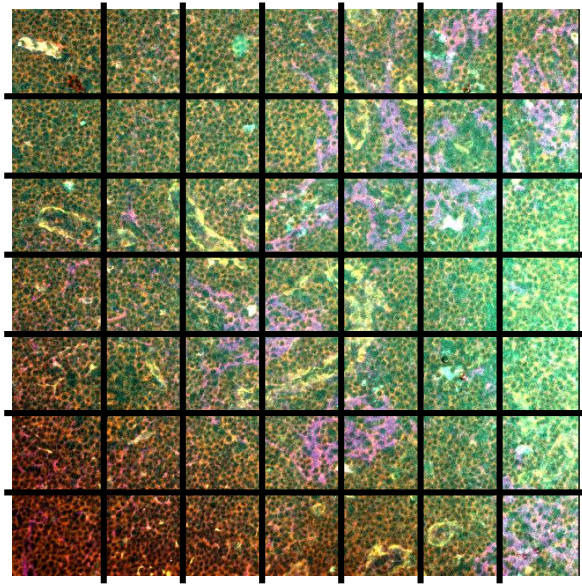
Parallelization

- Based on **QRunnable** / **QThreadPool**
- Advanced features
 - Cancellation, progress
 - Avoid I/O issues

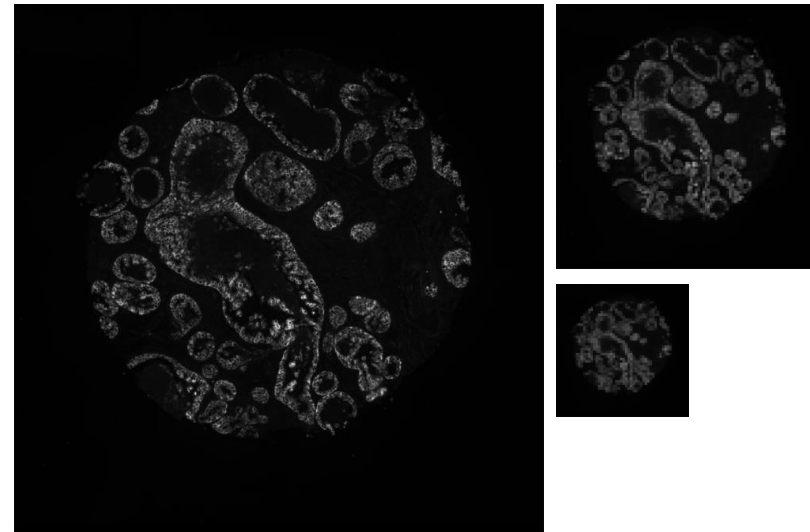


2D View

- Based on **QGraphicsView**
- Improved performances
 - Tiles

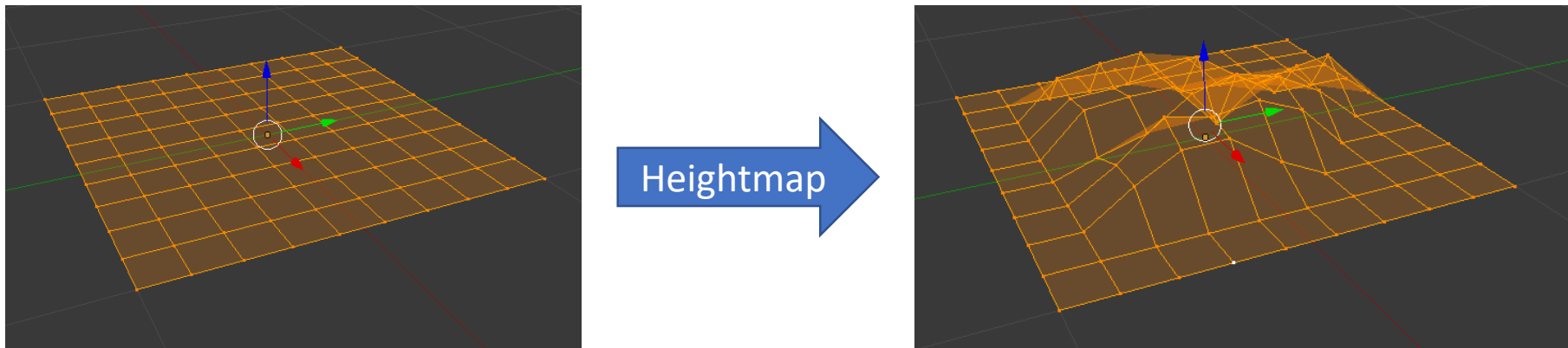


- MIP mapping



3D View

- Based of **Qt3D**
- Qt3D framegraph implemented in QML, using a **QQuickWidget**
- Uses a tessellation evaluation shader



One more thing...

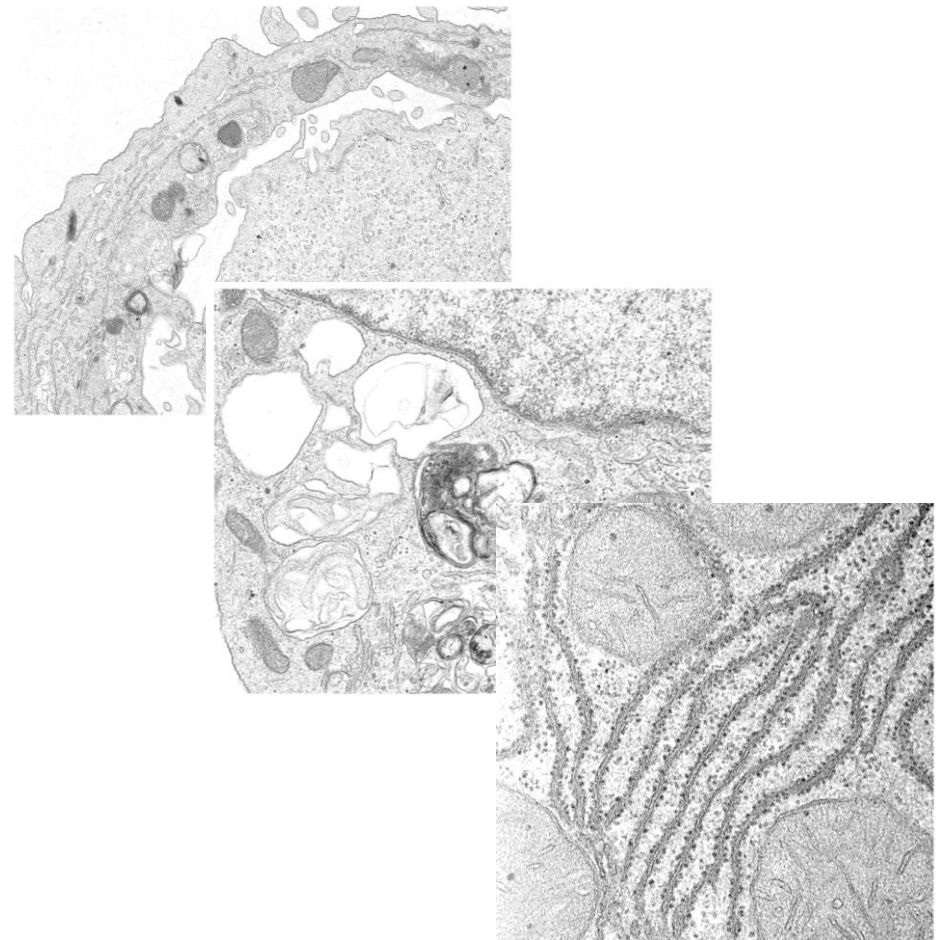
Nanoquill – The coloring book of life

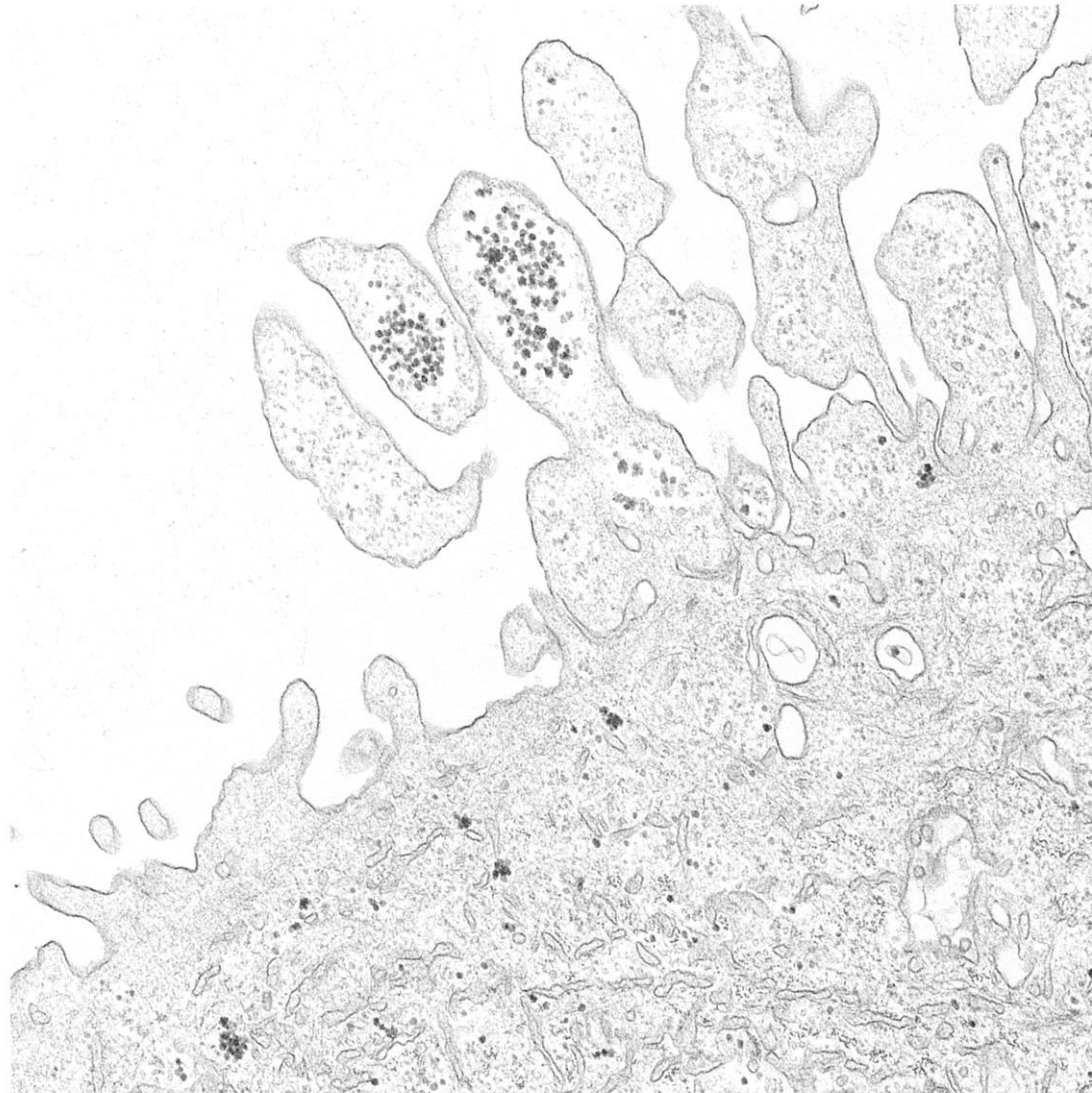


The Qt
Company



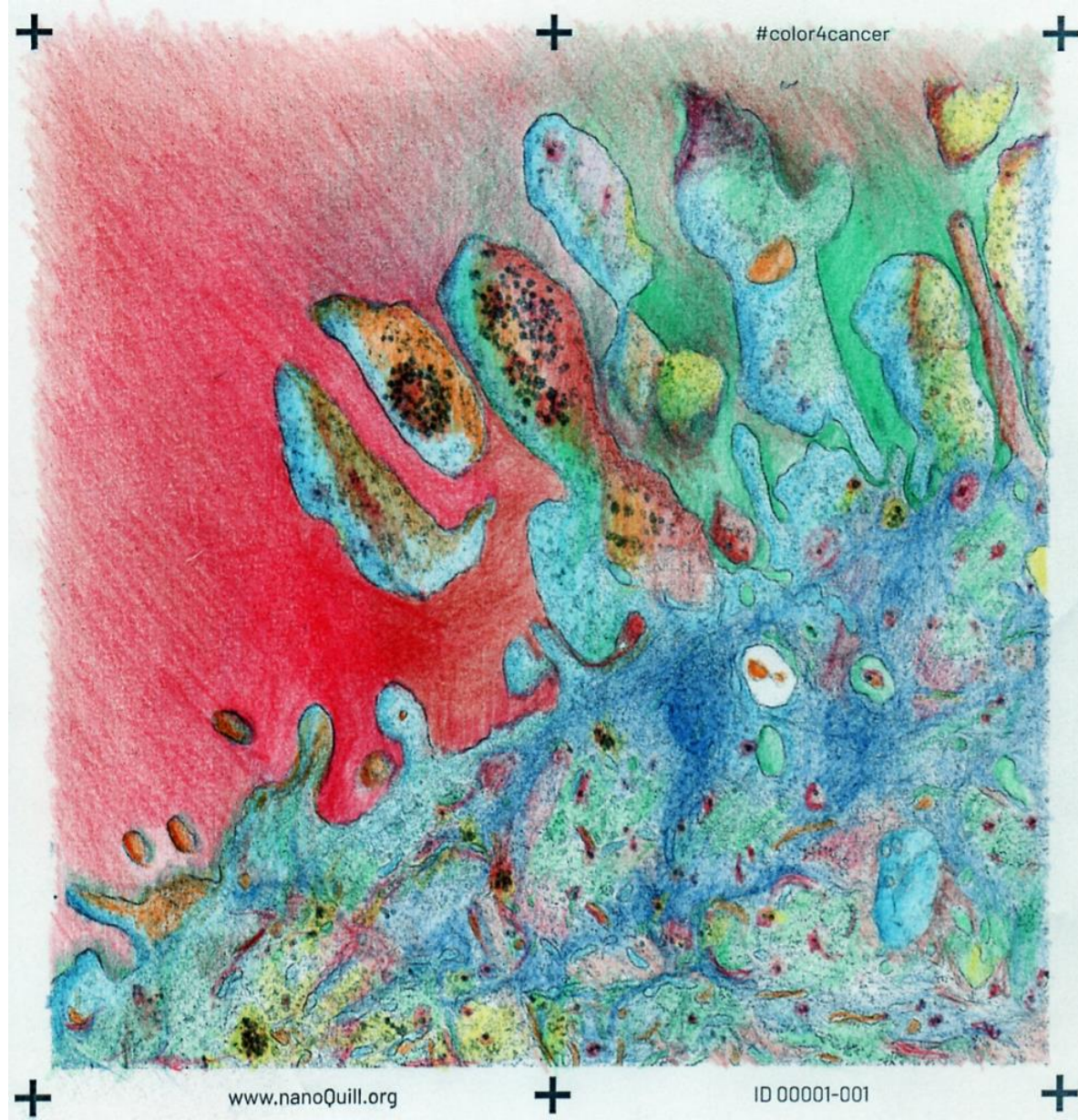
- Images generated by electron microscope are Black and White
- Algorithms have troubles extracting shapes
- Human eyes are very good at that



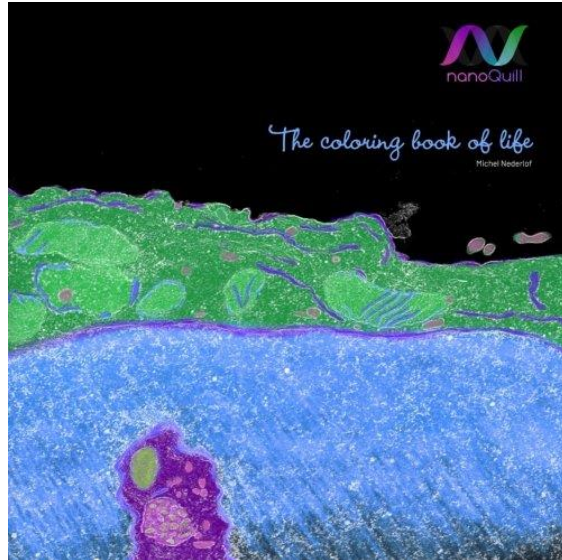


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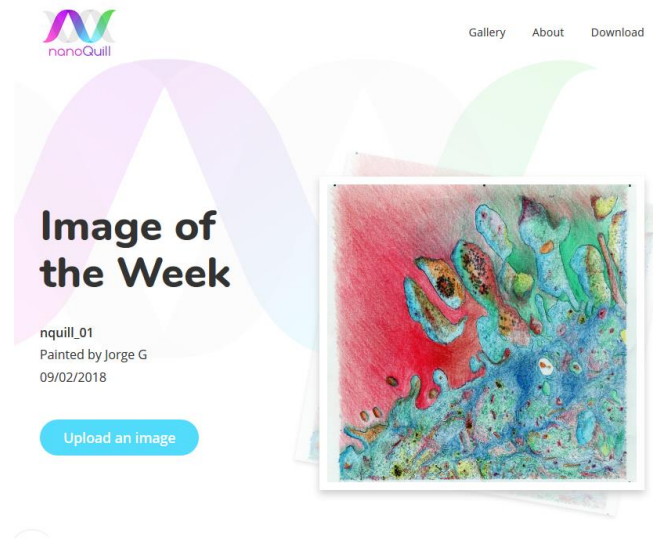




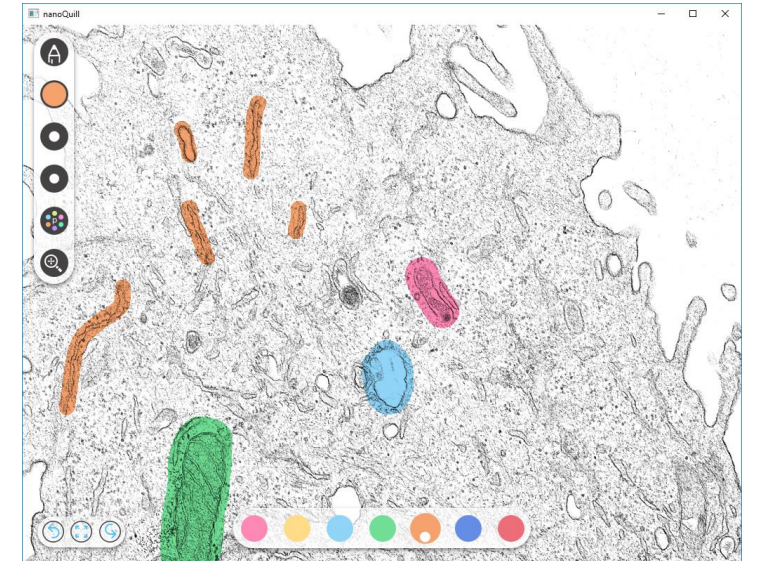
Nanoquill



A book



A website
www.nanoquill.org



An application
iOS & Android

“Qt provides a large ecosystem with a number of things that have saved us an enormous amount of time so that we can focus better on solving cancer rather than solving software problems.”

Michel Nederlof, CTO, Quantitative Imaging Systems

Merci !