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January 2017

syngo.via Frontier

Your open platform for translational research

syngo.via clinical platform

Your reading and post-processing imaging software

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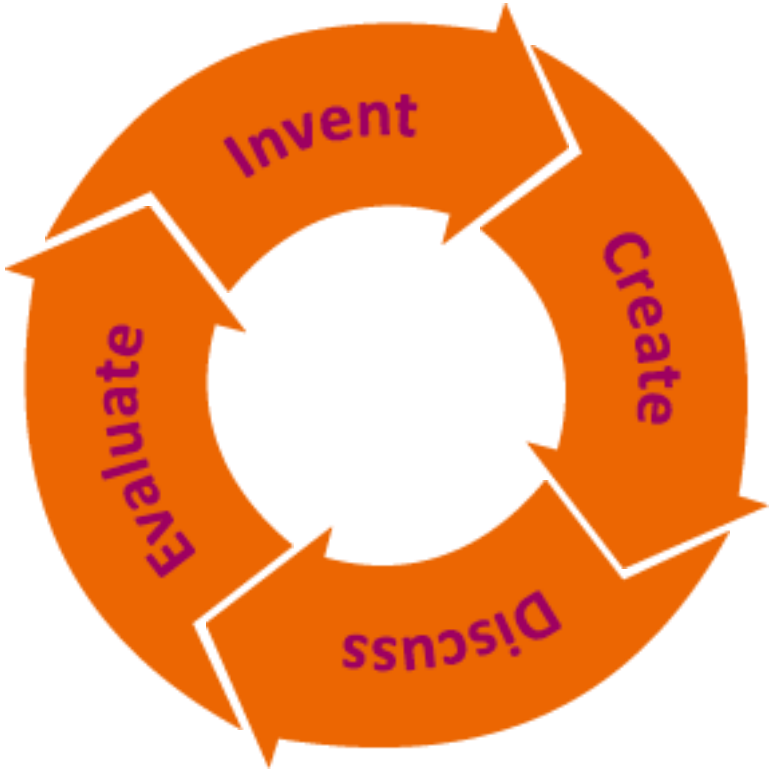
syngo.via new clinical applications
How are they born?



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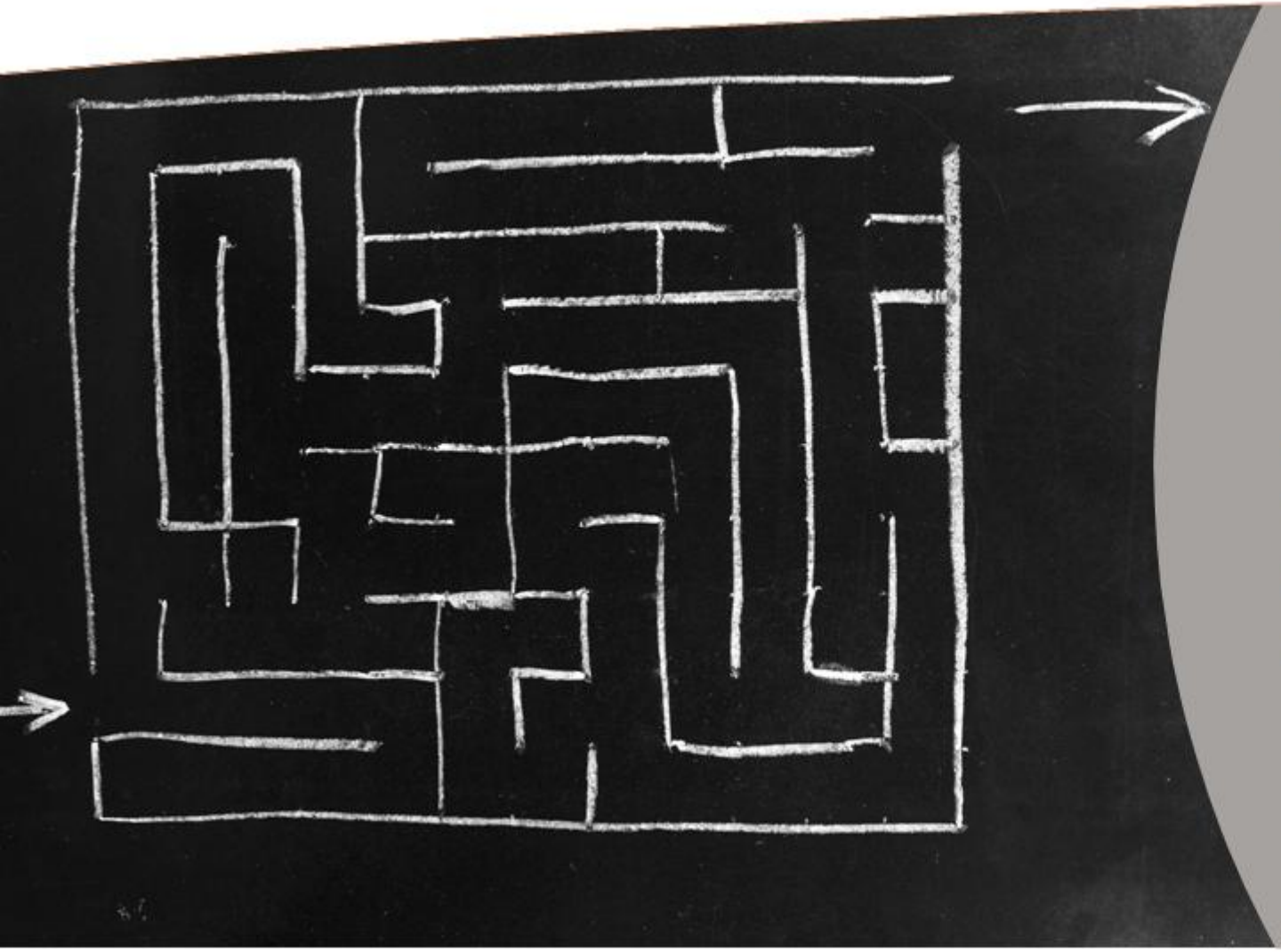
You know the obstacles in translational research



- No access to prototypes
- Research software not integrated
- Tedious transfer of data
- Clinicians cut off from research
- Limited visibility of findings
- No partner for clinical evaluation
- Existing algorithms cannot be reused
- No technology partner
- No platform for prototype sharing

What do we need to overcome this obstacles?

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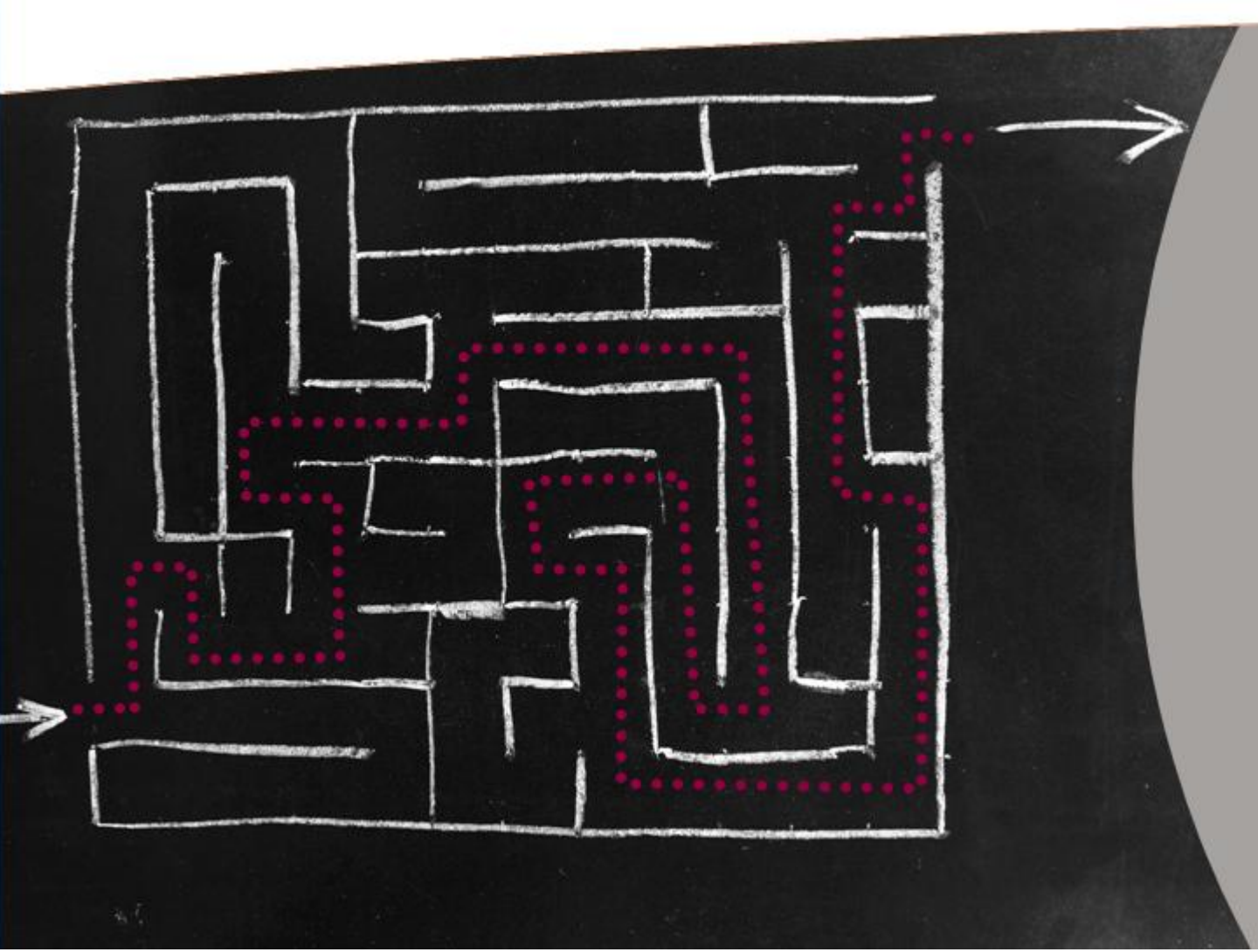

... gives you access to the latest applications

... provides tools that easily translate your ideas into prototypes

... supports your exchange with other experts around the world

syngo.via Frontier – The gateway to the Siemens research environment

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Create Prototypes

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Create prototypes
Welcome to the *syngo*.via Frontier Development Kit.

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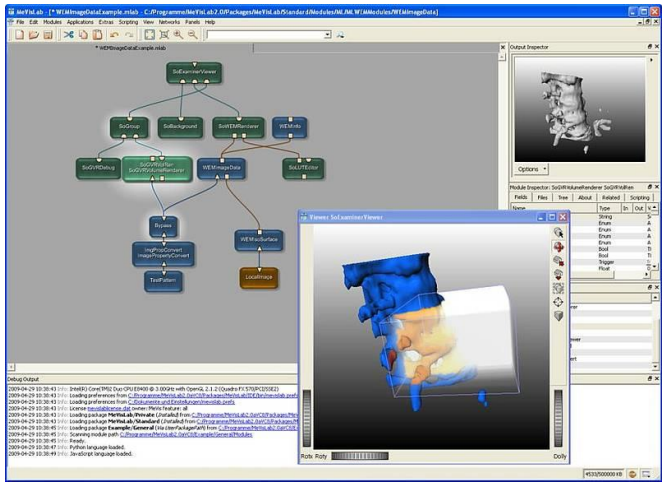
Development Environment exclusive for syngo.via Frontier

- Advance your research closer to evaluation by clinicians and reduce costs by using a shared platform.
- Use predefined modules and clinical libraries to facilitate and speed up prototype development.
- Go as deep as you want, from the network level to MeVis MDL, Python and C++
- Easily interface with your existing algorithms by using a compiled .dll and the prototype Starter Kit
- Speed up algorithm iterations for smoother and potentially faster clinical validation.



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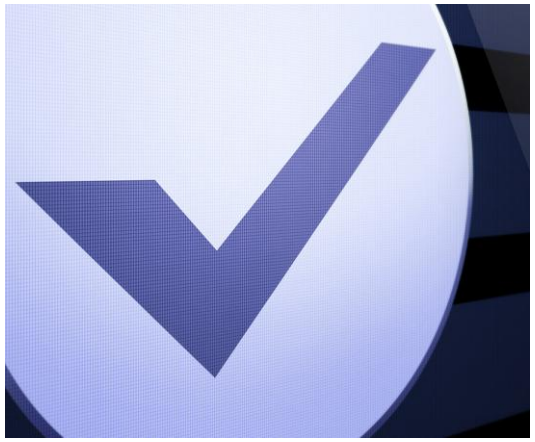

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MeVisLab - Fast Prototyping Tools for Medical Image

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Fraunhofer MEVIS

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Rapid Prototyping

With the MeVisLab software we have one of the most advanced rapid prototyping environments at our disposal. The R&D platform, developed together with MeVis Medical Solutions, is our main platform for research, prototyping and development of image processing and visualization methods.

The fast generation of fully functional GUIs allows customers and users to provide early feedback, enabling fast update cycles and resulting in tailored software products.

© Photo Junko Kimura/Fraunhofer

Flexible Deployment

Depending on the preference of the customer, MEVIS software can be deployed in a variety of different forms, including:

- C++ libraries
- Standalone GUI applications
- Ultra-thin-client web applications
- Remote processing & rendering servers (including tailored client apps or plugins)

Reusable Functionality

In more than 20 years, we have accumulated functionality comprising thousands of reusable modules. MeVisLab's graphical programming interface allows combining these elementary building blocks into complex algorithms. This is the basis...

Quality Assurance

In addition to the fast creation of research prototypes and demonstrators, MEVIS is experienced in performing fully quality-assured development of software components for

- Clinical trials

...

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Use Prototypes

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Use prototypes
Research Prototypes* Siemens

CT

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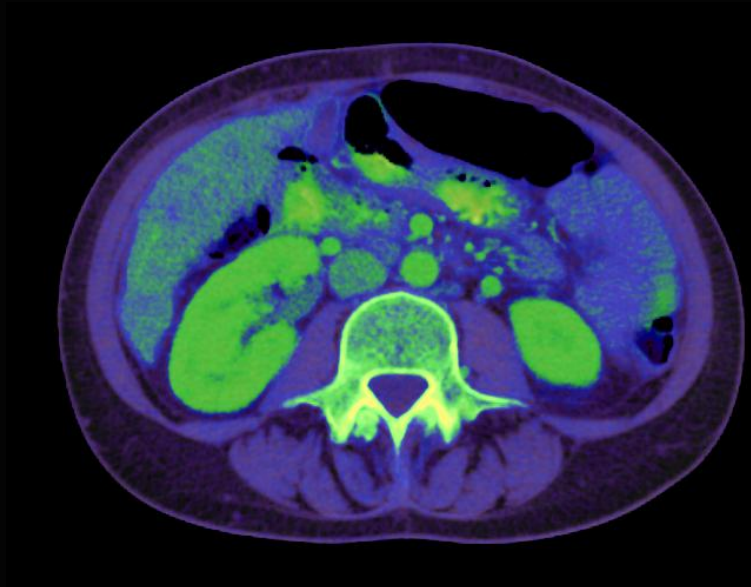
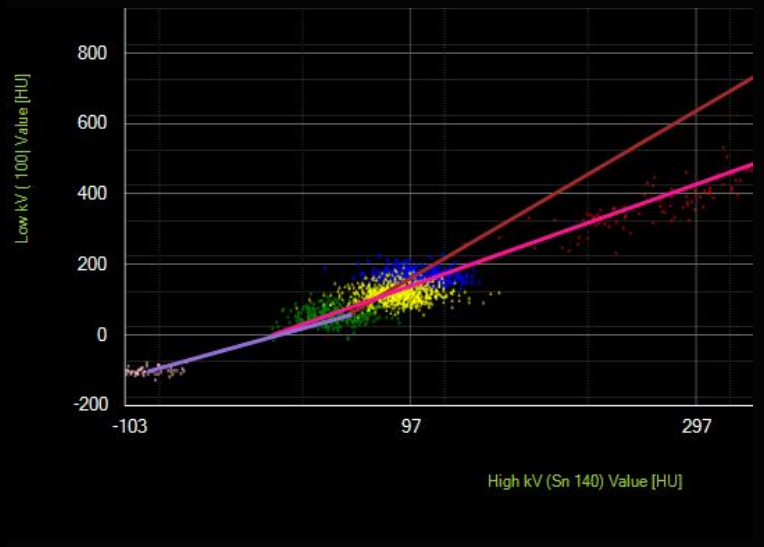
DE Rho/Z Maps*

Tissue differentiation based on electron density and effective atomic number



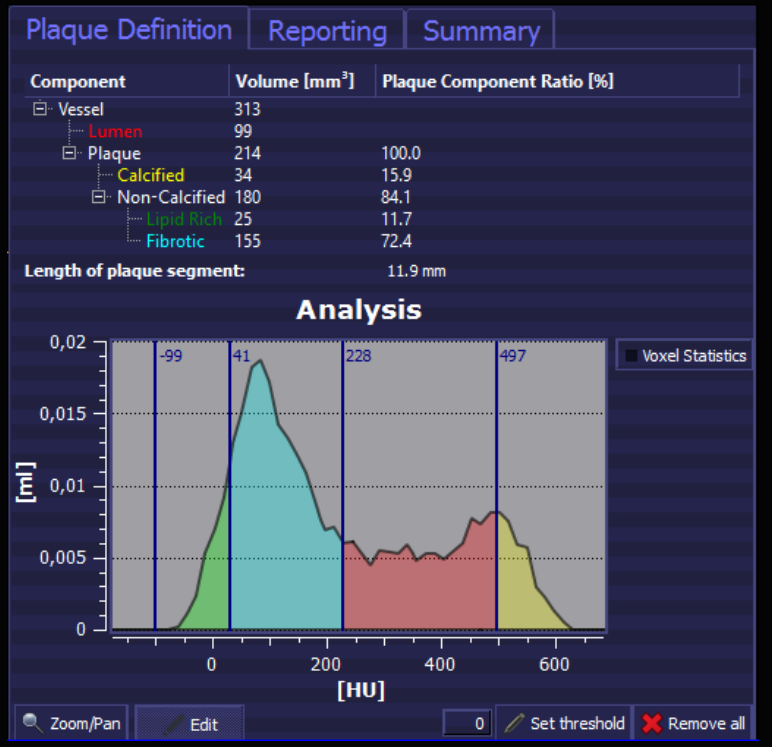
DE Scatter Plots*

Visualization of energy dependencies for analysis of material homogeneity



Coronary Plaque Analysis*

Volumetric quantification and differentiation of lipid, fibrous, and calcified plaques



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Use prototypes
Research Prototypes* Siemens

MR

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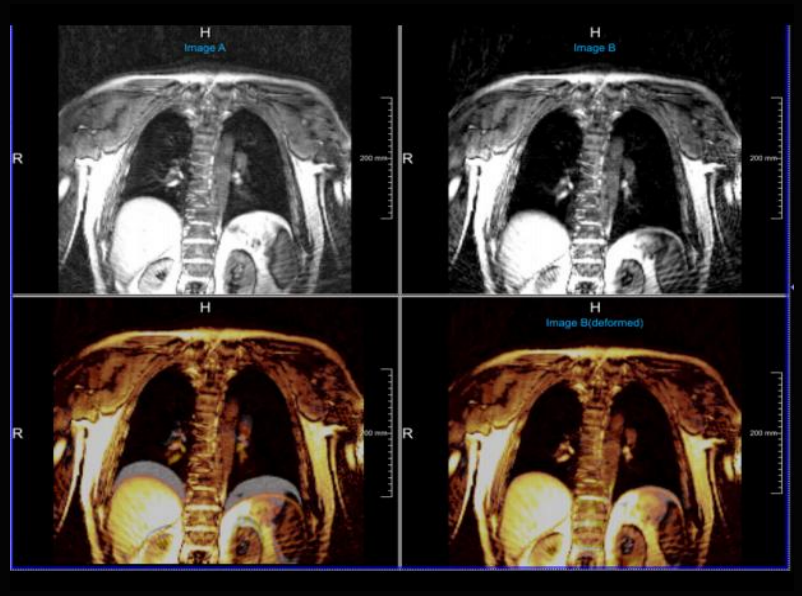
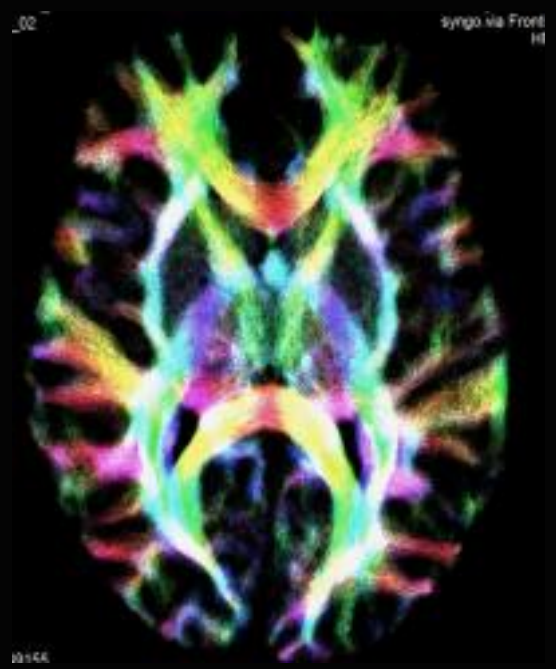
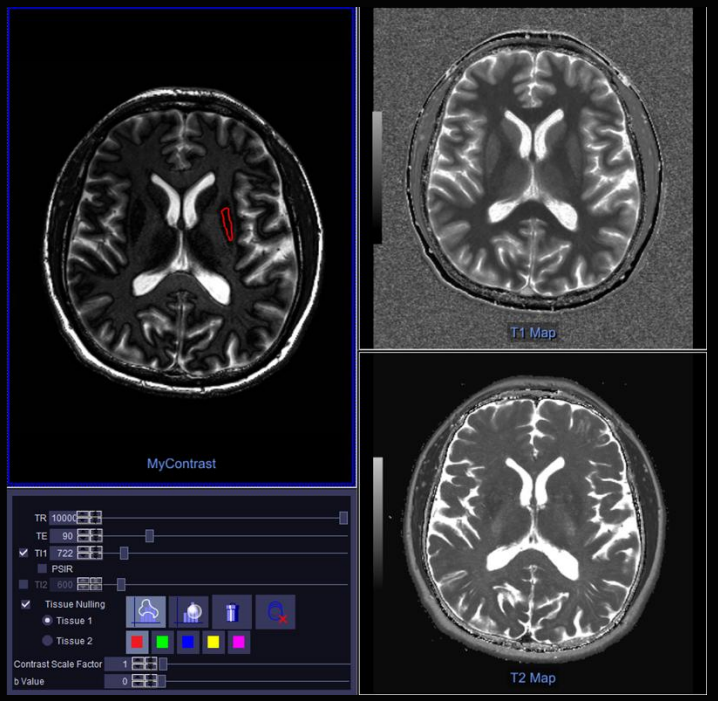
MR Elastic Registration *
This prototype enables deformable registration of two 3D datasets1 for improved accuracy in soft-tissue reading.



TDI supports the visualization of brain structures, such as the different thalamic nuclei.



Designed to generate multiple MR contrasts using quantitative T1 and T21 maps, M01 data, and optional ADC map.



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Cinematic Rendering VRT

CT/MR

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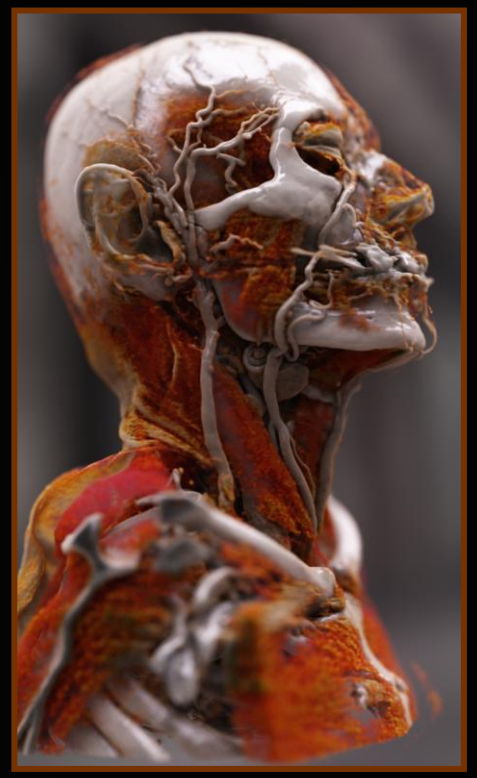


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Engineering success. Pioneering healthcare.