Helmholtz Imaging

Sara Krause-Solberg, Martin Burger, Philipp Heuser, Paul Jäger, Fabian Isensee, Dagmar Kainmüller, Deborah Schmidt
Spokespersons: Christian Schroer (DESY), Klaus Maier-Hein (DKFZ), Thoralf Niendorf (MDC)
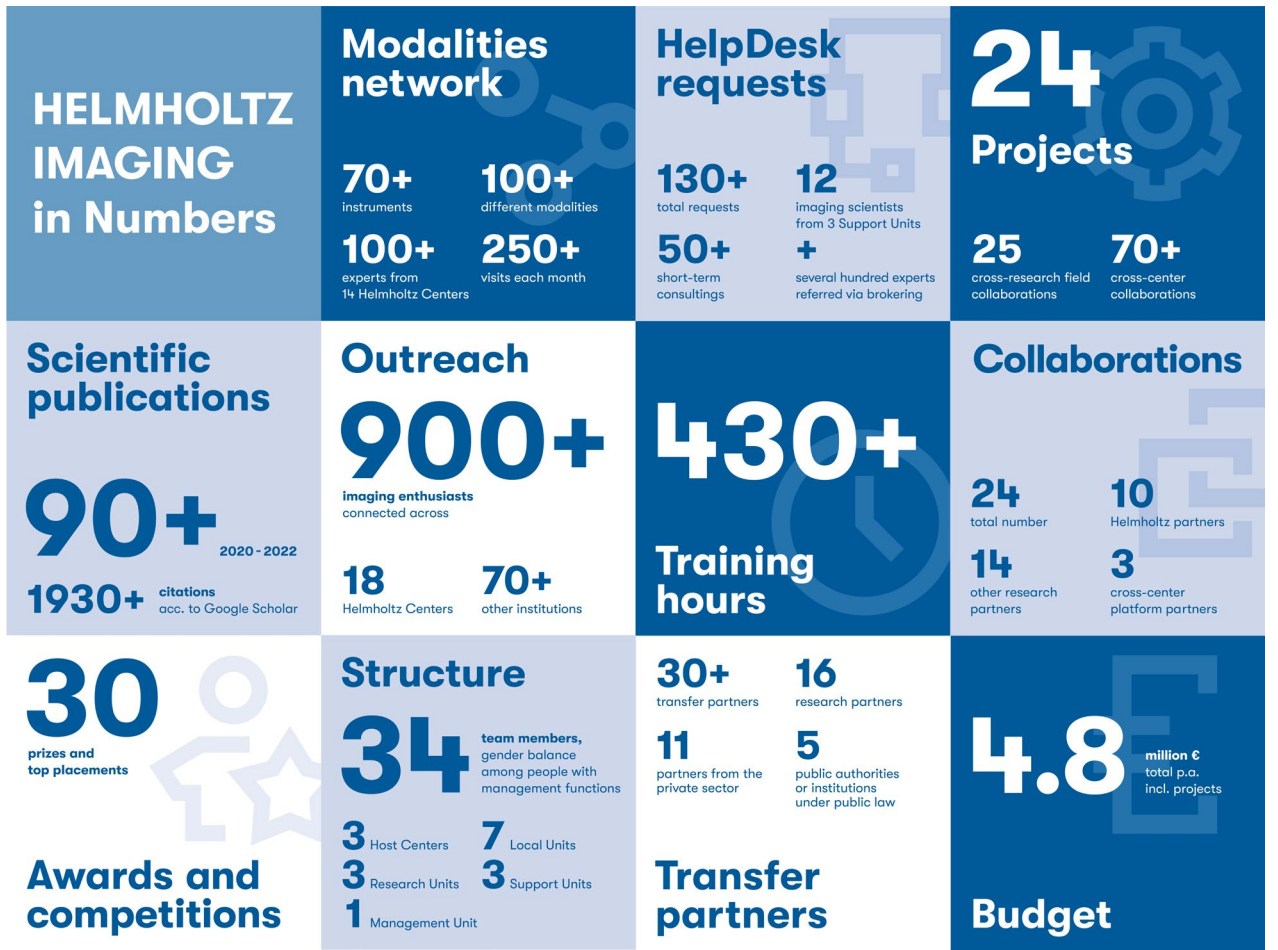
DESY. dkfz. MAX DELBRÜCK CENTER

Our Mission

Helmholtz Imaging's mission is to unlock the potential of imaging in the Helmholtz Association. Helmholtz Imaging is the overarching platform to better leverage and make accessible to everyone the innovative modalities, methodological richness, outstanding expertise and data treasures of the Helmholtz Association. Imaging-based research projects are encouraged to contact us for scientific or technical support, to enter into collaborations with our research groups, or to network with imaging experts from other Helmholtz programs. Helmholtz Imaging is implemented by DESY, DKFZ and MDC on behalf of the General Assembly.

Our Research

Helmholtz Imaging covers the entire imaging pipeline from sensory data acquisition, data preparation, data management to data analysis, validation and dissemination, enabling the delivery of generalizable imaging solutions. Each part of this imaging process is associated with specific scientific challenges and research software tools. Expertise on all these issues is available in the Helmholtz community. Helmholtz Imaging has three research units that specialize in different areas of the imaging pipeline: model-based inverse design, integrative imaging data science and image analysis & benchmarking.

Our Impact

HELMHOLTZ IMAGING in Numbers

Modalities network
70+ instruments
100+ experts from 14 Helmholtz Centers
100+ different modalities
250+ visits each month

HelpDesk requests
130+ total requests
100+ short-term consultings
12 imaging scientists from 3 Support Units
+ several hundred experts referred via brokering

24 Projects
25 cross-research field collaborations
70+ cross-center collaborations

Scientific publications
90+ 2020 - 2022
1930+ citations acc. to Google Scholar

Outreach
900+ imaging enthusiasts connected across
18 Helmholtz Centers
70+ other institutions

430+ Training hours

Collaborations
24 total number
14 other research partners
10 Helmholtz partners
3 cross-center platform partners

30 Awards and competitions
prizes and top placements

Structure
34 team members, gender balance among people with management functions
3 Host Centers
3 Research Units
1 Management Unit
7 Local Units
3 Core Support Units

Transfer partners
30+ transfer partners
11 partners from the private sector
16 research partners
5 public authorities at institutions under public law

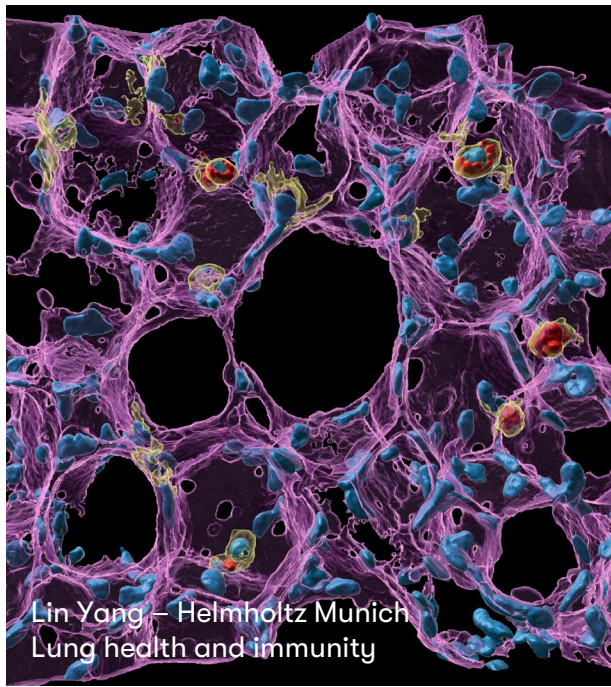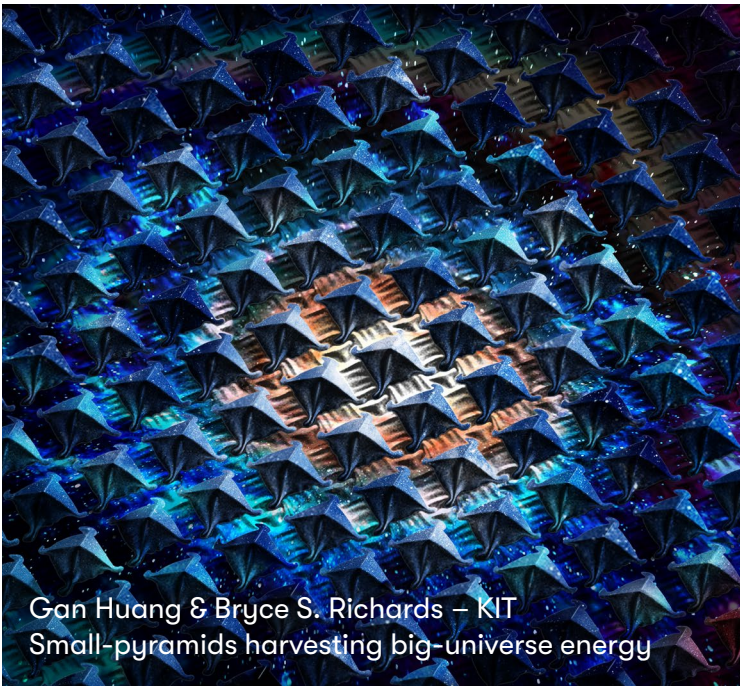**4.8 Budget**
million € total p.a. incl. projects

Our Support & Services to the Imaging Community

HelpDesk & Collaborations

Exploit the expertise of Helmholtz Imaging, it is just one email away. Get in touch with us via our helpdesk — the gateway for all requests be it support for data handling, consultation regarding software or methods, or research issues.

Lets solve imaging challenges together.

Start a Helmholtz Imaging Collaboration with us. Benefit from our broad knowledge on the rich pool of methods that enable state-of-the-art solutions tailored to your problems.

helpdesk@helmholtz-imaging.de

Gan Huang & Bryce S. Richards – KIT
Small-pyramids harvesting big-universe energy

Lin Yang – Helmholtz Munich
Lung health and immunity

Solutions

Help us share easy-to-use open-source imaging Solutions. We curate a catalog of Helmholtz Imaging Solutions developed within our community.

We offer a framework for reproducibly distributing solutions to specific scientific problems.

https://album.solutions

Storage

Share large imaging datasets with your collaborators, using Helmholtz Imaging Storage. Get your folder:

helpdesk@helmholtz-imaging.de

Engage centers.
Leverage synergies.

Modalities & Network

Find imaging expertise and project partners at Helmholtz Imaging Modalities.
Gain an overview of the broad spectrum of novel imaging modalities and find the experts you are looking for.

https://modalities.helmholtz-imaging.de

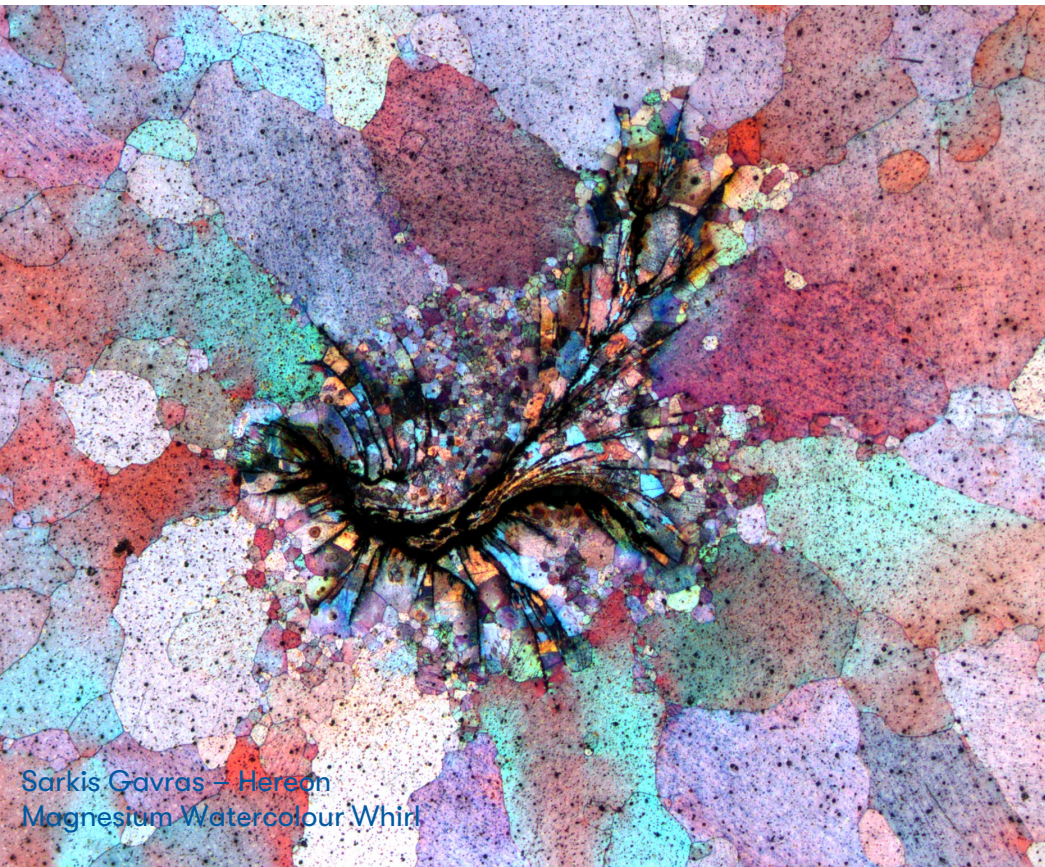Be Helmholtz Imaging!
Create your profile today!

Community Events

We offer workshops, lecture series, and hackathons on a regular basis. Don't miss out - subscribe to our newsletter!

Helmholtz Imaging Conference
We organize an annual conference to bring together imaging enthusiasts. More information to come soon

Best Scientific Image Contest
Every year, we look for the best image within the Helmholtz Association. The 2024 call will be announced soon.

Sign up for our newsletter:
https://helmholtz-imaging.de/newsletter

Sarkis Gavras – Hereon
Magnesium Watercolour Whirl

Projects

Get funding for your inter-disciplinary research on imaging.
Apply for our annual Helmholtz Imaging Projects calls.

Helmholtz Imaging Projects are granted to interdisciplinary research teams that systematically find and exploit synergies across modalities and research questions, highlighting common challenges and generalizing solutions across the Helmholtz community.

Stay tuned for the HI Projects 2024 call!

Helmholtz Imaging Conference 2023
Group photo

HELMHOLTZ IMAGING

Capturing the world of science.

www.helmholtz-imaging.de