

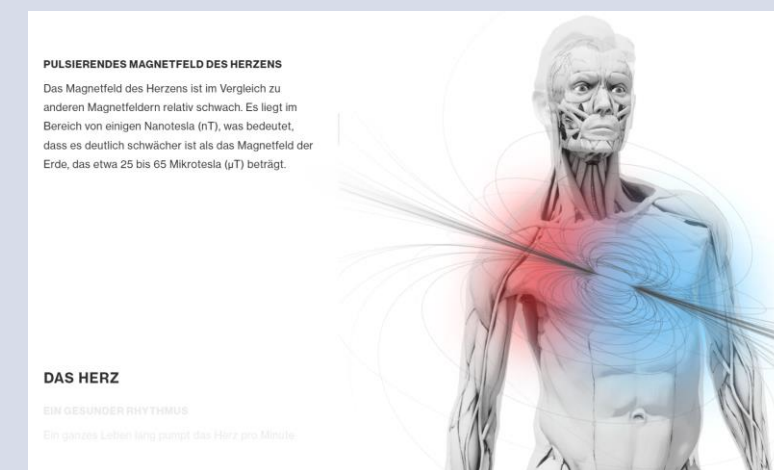
Motivation and Objectives

Facilitating dialogue and understanding between experts and public

Three groups of addressees

1) Public

- Public events with live demos
- Digital communication formats



2) Schools

- Learning modules
- Project days
- Teacher education



3) IRTG

- Evaluations
- Workshops
- Participation in outreach



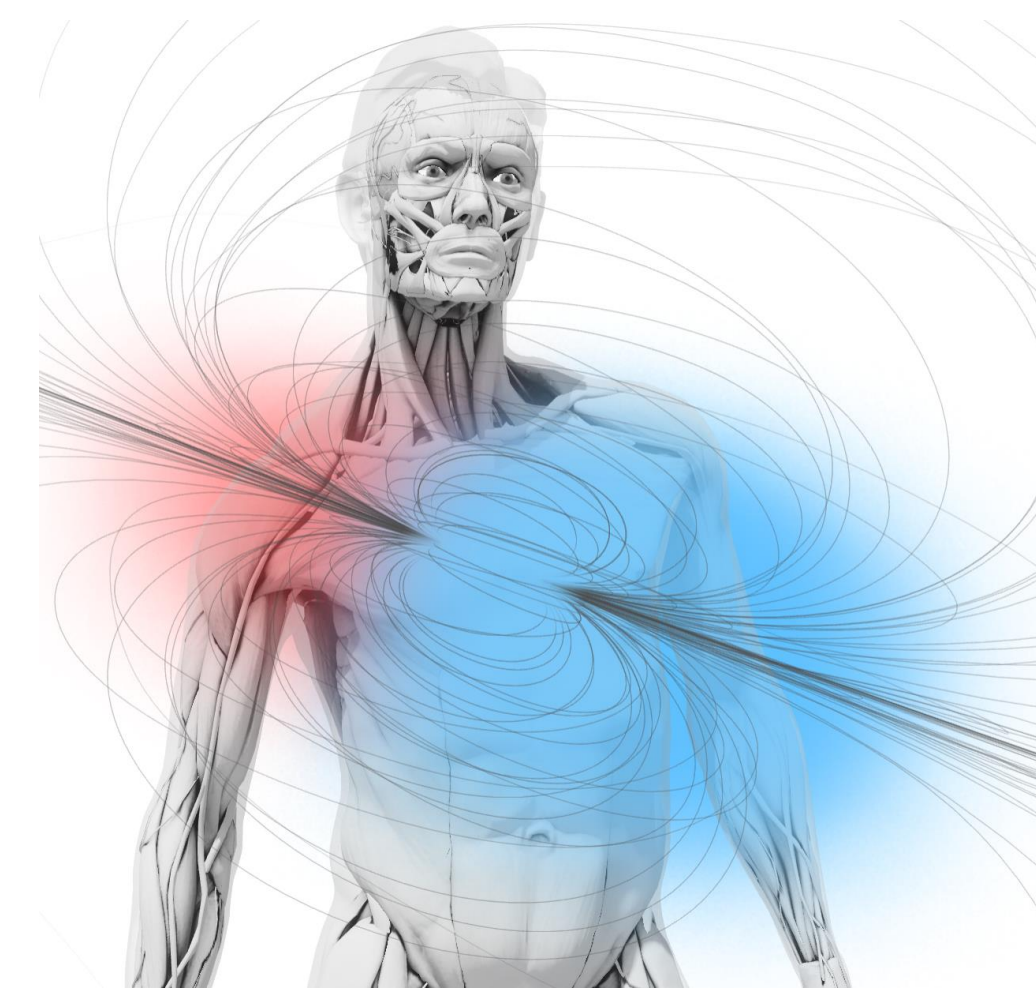
Focus on interactive experiences for everyone:

- Hands-on exhibits and visualizations at events
- Interviews and podcasts *behind-the-science*
- Integration of IRTG researchers into outreach activities

Results of the Second Funding Period

Making CRC research visible (and audible!)

- Appearance on major outreach events, including the *Kieler Woche* and *Highlights der Physik* with up to 40.000 visitors
- Booths at 4 science festivals around S-H
- 14 outreach workshops for students and teachers
- CRC podcast with 18 episodes ~ 40 min each
- Design and development of 2 interactive visualization modules to communicate biomagnetic sensing



Supporting impactful science communication

Three science communication trainings for the IRTG:

- Internal science communication (2021)
- Visual science communication to laypeople (2022)
- Three-day summer school: Science outreach in the *Deutsches Museum* (2023)

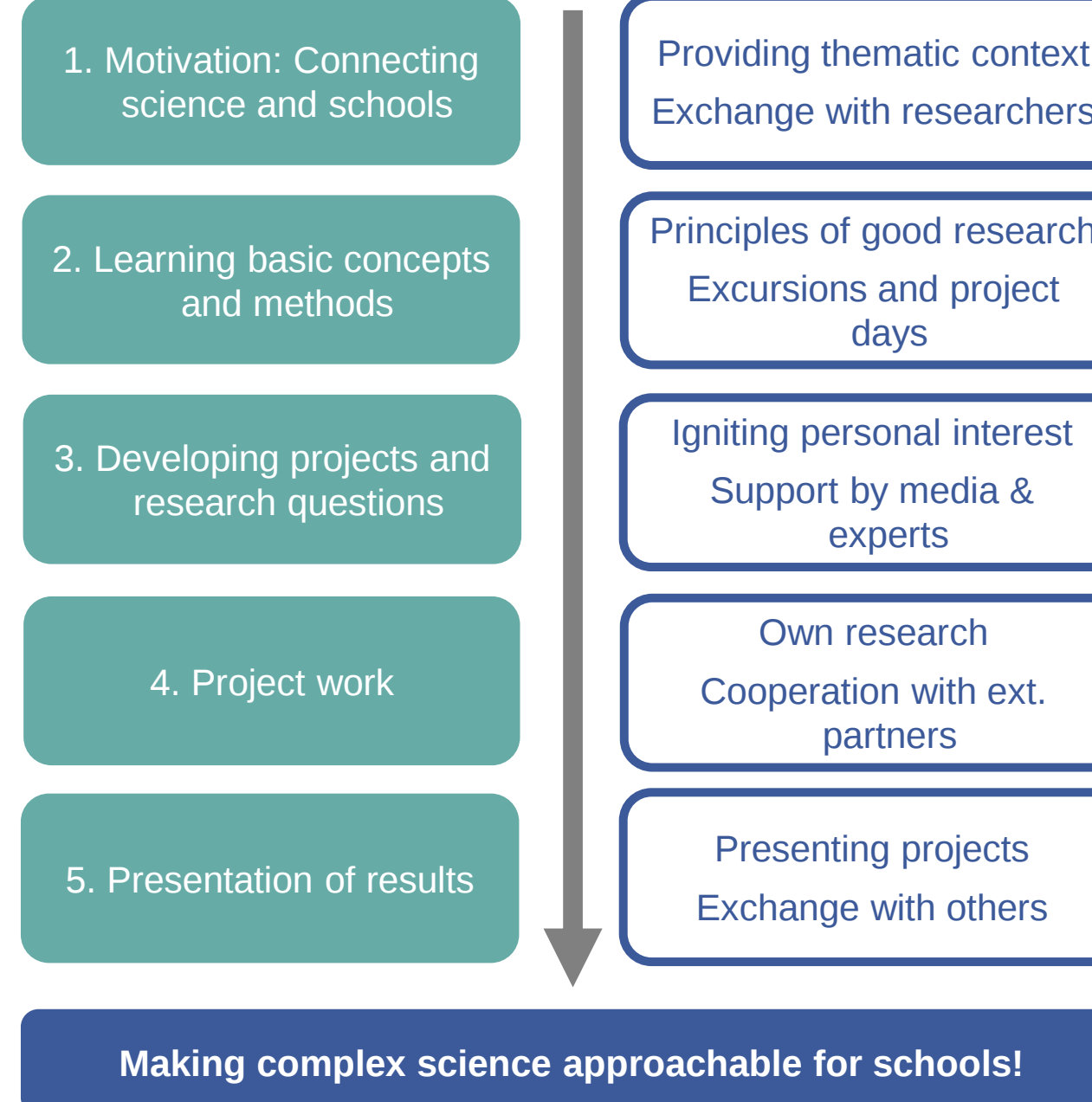


Fostering interests and career orientation: The *Profilseminar*

New project-based course spanning one semester for 11th-grade students, topic “Health and sensing”:

Teacher and student evaluation 01/2023:

- Extended, external lab days in the *science factory*
- Inclusion of programming courses
- Direct integration of CRC scientists for advice and project reviews
- Different forms of presentation



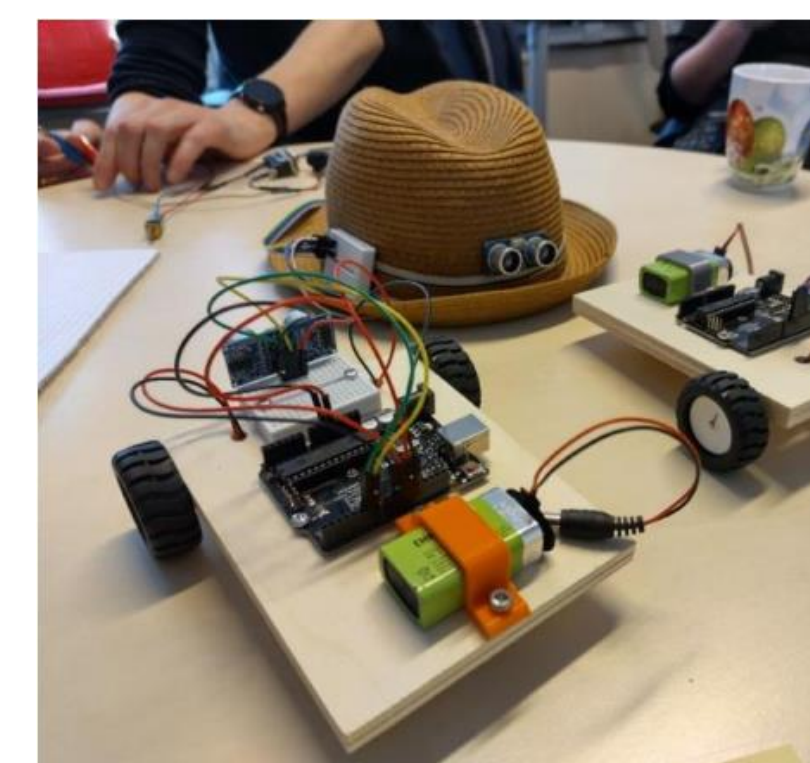
Work Plan for Third Funding Period

WP1 – Content Reconstruction for Education

- Expand collaboration with cardiologic (B10) and movement-related applications (B9) based on feedback from events and students
- Integrate robot-assisted surgery into outreach and develop modules on robotics and sensing (B11)
- Embed CRC outreach formats into STEM academy S-H to increase reach in learning environments (school/extracurricular)

WP2 – Measures for Career Orientation of School Students

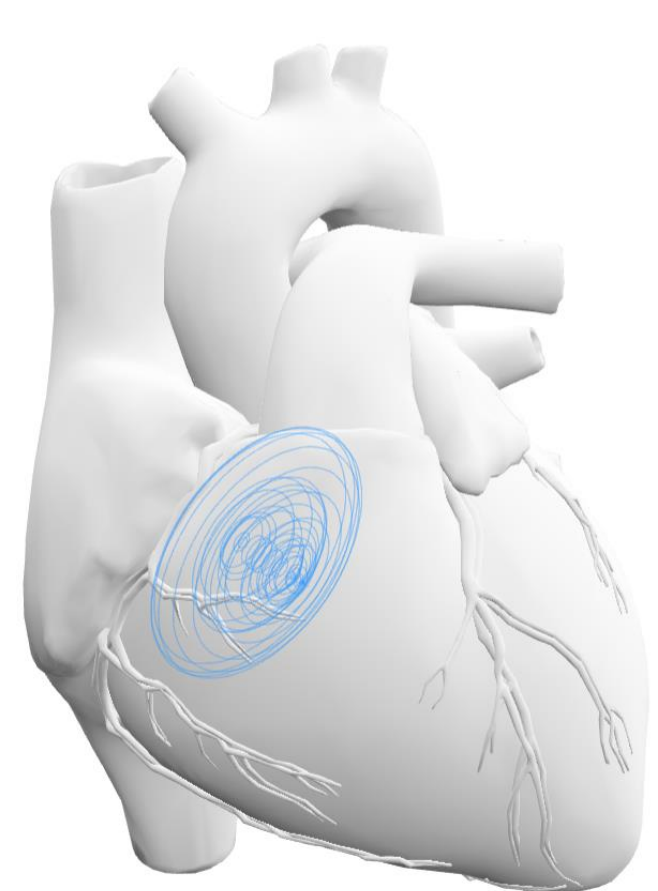
- Develop activities and tools to analyse career orientation and identity development
- Continue and develop the *Profilseminar* based on evaluation in 1/2024:
 - Introduce module on project management
 - Offer second out-of-school workshop focused on prototyping
 - Lower communication barriers between students and scientists through (hands-on) lab visits



WP3 – Visualizations to Engage Audiences and Researchers

Develop a visual toolkit to make complex research accessible to the community, planned in phases:

- Identify key findings and concepts to visualize
- Collaborate with design experts to translate and convey these findings into an appealing medium
- Integrate the visualizations into outreach and scientific events (fairs, conferences, hospitals)



WP4 – Public Outreach Events

- Continue presence on major outreach events
- Increase visibility of CRC projects with high potential for live demonstrations, i.e. B9
- Integrate school project results into public events and foster acknowledgement for their creators



WP5 – Communication and Dissemination

- Provide updates and content for CRC website
- Collaborate with the university office for press to enhance visibility on the CAU social media channels
- Invite early-career researchers to provide own ideas and formats for outreach and social media



		2024		2025				2026				2027				2028	
		3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2
WP 1	Content reconstruction																
WP 2	Visualizations																
WP 3	Career orientation																
WP 4	Outreach activities																
WP 5	Communication																

Collaborations

IRTG: Design of interactive visualizations, training, outreach participation

A: Incorporation of materials science aspects into outreach activities

B9: Build on improved project visibility achieved at outreach events

B10: Enhance and improve integration of topics into school outreach

B11: Develop educative modules on robotics and sensing

Z2: Collaboration in the functional characterization

Funds Requested

1 Doctoral researcher (75%), global funds: 150.0 k€

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