

INTEGRATED RESEARCH TRAINING GROUP - REQUIREMENTS -

DOCTORAL RESEARCHERS (DRs)

Mandatory:

- Attend **4** out of **6** (Post-)Doctoral Researchers' Seminars annually.
- Participate in **8** out of **16** Harmonization Workshops (theory and methods) within a 4-year period.
- Complete **1** course on "Good Scientific Practice."
- Complete **1** course on "Scientific Writing."
- Participate in **2** additional Soft Skills Courses within 4 years.
- Attend **all** EBM Retreats and EBM Update Meetings.
- Publish **1** scientific manuscript within 4 years.

Expected:

- Attend Virtual Breakfast Clubs and EBM Lunches.
- Attend Virtual Brain Talks.
- Attend EBM Seminar Talks.
- Participate in and/or organize Lab Shadowing.
- Write short contributions for the EBM homepage after organizing EBM-funded activities or travel.

Optional:

- Research secondments are an optional part of the doctoral program.

ASSOCIATED DOCTORAL RESEARCHERS (aDRs)

Mandatory:

- Attend **all** EBM Retreats and EBM Update Meetings.

Expected:

- Attend (Post-)Doctoral Researchers' Seminars.
- Attend Harmonization Workshops (theory and methods).
- Complete **1** course on "Good Scientific Practice."
- Complete **1** course on "Scientific Writing."
- Publish **1** scientific manuscript.
- Attend Virtual Breakfast Clubs and EBM Lunches.
- Attend Virtual Brain Mechanics Talks.
- Attend EBM Seminar Talks.
- Participate in and/or organize Lab Shadowing.
- Write short contributions for the EBM homepage after EBM-funded travel.

ASSOCIATED POSTDOCTORAL RESEARCHERS ((a)PDRs)

Mandatory:

- Attend **all** EBM Retreats and EBM Update Meetings.

Expected:

- Follow a **career development plan** that includes participation in various training activities such as peer-reviewed journal contributions, data management, time management, good scientific practice, scientific writing, leadership, entrepreneurial skills, equal opportunity training, social and communication skills development, event organization within the EBM program, active participation in internal networking and events, and involvement in international activities outside Erlangen.

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Collaborative Research Center
CRC 1540

Exploring Brain Mechanics

iRTG - Integrated Research Training Group

Qualification Program



INTEGRATED RESEARCH TRAINING GROUP - IN A NUTSHELL -

Due to its exceptional interdisciplinary nature, encompassing fields such as experimental analysis, clinical investigations, and bioengineering, all underpinned by advanced modeling and simulation techniques, the integrated Research Training Group (**iRTG**) plays a crucial role within the CRC by fostering collaboration among these diverse disciplines on a unified platform.

EBM's **iRTG** addresses this demanding interdisciplinary challenge by providing a structured, mandatory qualification program and ensuring quality management and control for doctoral and postdoctoral researchers. This approach also nurtures their scientific independence and promotes their career development.

The comprehensive program encompasses a range of activities aimed at enhancing theoretical knowledge, methodological skills, soft skills, and fostering a collaborative research environment.

QUALIFICATION PROGRAM

The qualification program comprises

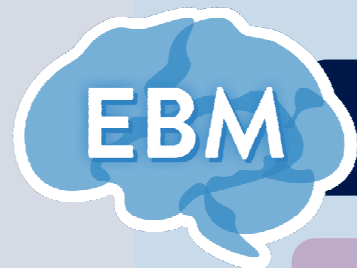
- EBM (Post-)Doctoral Researchers' Seminars
- EBM Harmonization Workshops (theory and methods)
- EBM Soft Skills Courses
- EBM Annual Retreats and EBM Update Meetings

as basic activities. These components are complemented by active participation in international conferences, the publication of at least one paper, participation in and organization of Lab Shadowing, and writing short contributions for the EBM homepage after organizing EBM-funded activities or travel. In addition, (post-)doctoral researchers have the opportunity to complete research stays abroad as part of the program.

Beyond these essential elements, additional activities are available for all EBM members, including

- EBM Virtual Breakfast Clubs and Lunches
- EBM Virtual Brain Talks
- EBM Seminar Talks

MENTORING TEAMS, comprising two principal investigators (PIs) from complementary disciplines and EBM projects, guide and advise the iRTG (associated) doctoral and postdoctoral researchers through annual meetings.



iRTG

QUALIFICATION PROGRAM

CRC 1540 EBM



Science skills

EBM Doctoral Researchers' Seminars:

Bi-monthly two-hour sessions for (P)DRs to present and discuss ongoing research

Promote networks and interdisciplinary collaborations

EBM Retreats:

Annual two-day forum for research progress presentations

Focuses on internal evaluation and expanding collaboration

EBM Update Meetings:

Annual one-day sessions providing comprehensive progress updates on focal research areas and cross-sectional projects

Encompass all projects within the scope of EBM

EBM Virtual Brain Talks:

Quarterly online, open access sessions on mechanics-based strategies in neuroscience

Conducted by EBM members and guest scholars, fostering global scientific discourse

EBM Research Secondments:

Several weeks with international academic hosts for immersive experience

Facilitate networking for iRTG members, aiding future postdoctoral phases

EBM Seminar Talks:

Internationally renowned scientists present in-depth topics

Encourage active engagement with EBM researchers through discussions and Q&A sessions

EBM Scholars' Visits:

Senior scientists contribute expertise via collaborations with EBM projects

Junior scientists experience EBM's dynamic research environment and potentially become candidates for future funding phases

Conferences / Workshops / Summer Schools:

Actively participate in national and international EBM research-related conferences

Publications:

Peer-reviewed scientific manuscripts

Openly accessible to the public



Lab skills

EBM Harmonization Workshops:

Trimestral half-day workshops focused on interdisciplinary EBM topics

Provide a common theory and methods basis for (P)DRs

EBM Lab Shadowing:

Allows EBM DRs short-term stays at other EBM PIs' labs

Provides opportunities for collaborative experiments and learning techniques



Soft skills

Good Scientific Practice

Scientific Writing

Tailored Courses Based on Individual Needs

offered by FAU Graduate Center & by Graduate School Life@FAU

Gender Equality-Related Courses

offered by F³G Network

EBM Virtual Breakfast Clubs:

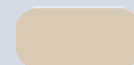
Digital format on Monday mornings via Zoom

Include project updates and discussions on organizational and EBM-related topics

EBM Synergy Luncheon Meetings:

Monthly luncheon meetings for all EBM members

Include updates and discussions on organizational and research-related EBM matters



Other activities

EBM Outreach Activities:

Social Media Club * Website * Additional diverse outreach initiatives