

AO Trauma Clinical Priority Program (AO T CPP)
Guidelines for research grant applications.
Consortium call on the topic: 'Fracture Non-union'

Applications failing to conform to the website application format or ignore or fail to comply with any part of the guidelines will be considered administratively unresponsive to grant guidelines and may be returned to the applicant. They will not be considered unless resubmitted by the deadline.

General information The AO Trauma CPP Consortium call on the topic 'Fracture Non-union' is funded by AO Trauma, a Clinical Division of the AO Foundation, a Swiss non-profit organization dedicated to the world-wide advancement in the surgical treatment of trauma and degenerative disorders of the musculoskeletal system through research, development, and education.

The AO Trauma Research Commission (AO TRC) is pleased to announce a call for consortia in the field of 'Fracture Non-union'. The application is a two-stage process.

Background

This call is to solicit applications to focus on fracture non-union to further improve patient care and identify mechanisms of and solutions for infectious and non-infectious fracture healing problems.

Despite substantial advances in orthopaedic trauma surgery, a subset of patients still suffers from fracture healing complications, resulting in delayed union and non-union. A variety of potential factors may be involved, amongst which mechanical stability, biological environment and infection are the most important. It is now appreciated that delayed healing and non-union may also result from low virulence bacterial infections that are challenging to detect. There is, therefore, a great need to further study the different underlying mechanisms leading to fracture non-union both from infectious and non-infectious origins. A further important program goal is to promote collaboration among basic scientists, clinical scientists, and clinicians. Interdisciplinary teams will be viewed favorably. The aim is not to fund several individual projects with little relevance to one another, but rather to support a program consisting of numerous projects where the whole is greater than the sum of the parts.

Interested clinicians and scientists are invited to submit a pre-proposal outlining the proposed program (stage one). These proposals will be reviewed, and successful applicants will be asked to submit a full and detailed proposal (stage two).

**Research topics
(not limited to)**

Research topics of a successful consortium may include:

- Differential diagnosis of FRI from aseptic non-union
- Underlying biological processes of fracture non-union
- Underlying mechanical factors leading to non-union
- Underlying infectious factors leading to non-union
- Clinical research projects addressing unsolved needs of infectious and non-infectious non-union
- Emerging therapies for non-union that are ready for translational studies
- Translation of research on FRI related non-union towards clinical application

In addition, the consortium should improve educational content that address 'Fracture Non-union'.

Elements of the call Each application should:

- Be part of an international consortium and apply for the entire funding amount
- Be interconnected or interdisciplinary projects, spanning over a period of 5 years
- Include projects covering infection-related fracture non-union
- Include projects covering non-infectious related fracture non-union
- Include basic research and/or translational and/or clinical studies
- Include collaboration with the AO Research Institute (ARI) Davos
- Include collaboration with the AO Innovation Translation Center (ITC), Clinical Evidence
- Include travel expenses to annual AO Trauma CPP meetings

Type of research This open call is suitable for clinical, translational and basic research.

Consortium-based project The aim of the consortium approach is to maximize the output of the AO Trauma research funds, while aligning all AO Trauma projects with the AO Foundations strategic goals. Consortia that emphasize interaction and knowledge exchange will be looked upon favorably. To better align with AO Foundation goals, consortia that include the AO Research Institute Davos (ARI) as well as AO Innovation Translation Center (ITC), Clinical Evidence as a partner are encouraged.

Peer review All applications will be independently peer reviewed. Reviewers will score the consortium summary, plus individual projects based on expertise. consortia will be selected based on the novelty, feasibility, significance of the proposal, attributes of the candidates, evidence of institutional commitment, and the research environment.

Funding

The purpose of these grants is to encourage investigators by providing funding of up to CHF 2.15 million for 5 years (CHF 430K per year). Expenses for ARI and AO ITC projects are not fundable by this grant as they have their own internal AO funding streams (dedicated ear-marked budget to AO Trauma). All applications will be evaluated for their financial aspects as well their scientific merit.

The research is expected to start beginning of 2024

Application form

The application is a two-stage proposal.

Stage one:

A stage one application form (one document per consortium application) signed by all parties should be submitted detailing consortium goal(s), partners, aim, title and abstract of each partner project, collaborative aspects and budget. Application form must be submitted in English using the provided form: *AO T CPP Fx Non-Union APPLICATION consortium pre-proposal.docx*.

The stage one application form will be evaluated by the AO Trauma research commission to assess scientific rigor and collaborative elements. Successful applicants will be invited to submit full proposals, and instructions will be provided.

The application form (stage one) must be **e-mailed** as an **unprotected Word document (.docx) as well as a pdf document (.pdf)** to **ao.npr@aofoundation.org**. Please do not edit any fonts and do not use full text capital letters.

Applications which are incomplete or do not comply with our guidelines will be considered administratively unresponsive and returned.

Notification: The applicants will receive a confirmation e-mail from AO Trauma within a week regarding receipt of the application.

Stage two:

After the stage one review, applicants whose proposals have positive reviews will be invited to submit a full application.

The final proposals (stage two) will undergo a peer-review scientific evaluation by invited external international experts, again with consideration of the collaborative nature of the consortium. Based on these reviews, the AO Trauma Research Commission will select the successful application. The decisions of the Commission are final and binding. The peer-review critiques will be provided for consideration to the awardees of full proposal (all proposals reviewed by AO RRC). No critiques will be provided for other applicants.

Time Line

The call for stage one applications is open between February 16 – April 23, 2023 (deadline: end of day, CET).

Applicants with positive reviews will be invited in mid-June to submit a full proposal (stage two). The submission deadline for the complete proposals will be in August 2023 (exact date will be defined by AO TRC in June).

The full proposals will be peer-reviewed by the AO RRC until end of 2023.

Final decision of the AO TRC expected: February 2024

Funding policy

Duration

Up to 5 years provided successful progress/milestones are reached

Salaries

Salaries for the principal applicant and co-applicants will not normally be approved.

If the project is only possible with some funding for the applicants, it must be clearly shown that the funding requested is essential, project specific and well documented, and that the individual has no other source of grant or income.

Written and signed confirmation is required with the application from the PI and the head of his/her institution, indicating that no alternative source of income (including salary, stipend or grant) is available. This confirmation must indicate how this/those individual/s are currently employed and paid. Applications which fail to provide this information will be returned to the applicant.

Overhead / indirect costs

This grant will not cover any overhead contributions or indirect costs

Consortium meetings

Successful consortia will meet in person once a year to disseminate results and consolidate future plans. In addition, consortium partners are expected to meet online at least once a month.

Participation in these meetings is mandatory. All travel-related expenses associated with attending the annual in person meeting must be covered by this grant award.

Travel expenses

Only project specific travel expenses will be covered by this grant. A maximum amount of CHF 3,000 per year will be covered. This amount includes the annual expenses for the consortium in person meeting and conferences. Expenses over CHF 3,000 should be covered separately.

Additional funding

Additional funding from any other source must be disclosed in detail. If other funding is available, it must be made clear how this

will affect the overall budget of the project if the AO grant application is successful.

⇒ Use the Excel budget template to calculate your budget and transfer all numbers into the application form.

Conditions of Contract

Prior to applying for stage two of this grant, please ensure with your legal department that the provided contract is acceptable to your institution. The contract template will be available for those who are invited to submit a full proposal (stage two).

ARI and AO ITC

Applications that involve the AO Research Institute Davos (ARI) or AO ITC, Clinical Evidence are highly encouraged. Where collaboration is foreseen, **ARI and AO ITC must be contacted at least 4 weeks prior to the stage one submission.**

For ARI: ao.npr@aofoundation.org

For AO ITC: clinicalresearch@aofoundation.org

Medical Devices

The current CPP (Clinical Priority Program) call is not focused on medical device development. The AO Innovation Translation Center (AO ITC), Technology Transfer and Technical Commission is the product development resource for these types of requests. For further information please visit: www.aofoundation.org/what-we-do/innovation-translation/ao-technical-commission#tab=ao_tceb