# Effects of Advanced Trauma Life Support® Training Compared to Standard Care on Adult Trauma Patient Outcomes: Initiating A Cluster Randomised Trial

Karolinska Institutet

# **Application form**

# **Eligibility**

#### What we fund

• I acknowledge the selection criteria and confirm that the application respects these guidelines

#### What we do not fund

• I acknowledge the rejection criteria and confirm that the application respects these guidelines

# **Applicant**

First Name	Last Name	
Martin	Gerdin Wärnberg	

#### **Email Address**

martin.gerdin@ki.se

#### **Position**

Principal Researcher

Please upload your CV in PDF format (max 30Mb).

• cv-and-brief-bibliography.pdf

Please upload a reference letter or a recommendation in PDF format (max 30Mb).

• recommendation-letter-signed.pdf

#### **Investigators**

## **Principle Investigator**

	First Name	Last Name
I	Martin	Gerdin Wärnberg

#### Do you have any co-workers?

Yes

#### Co-worker(s)

First Name	Last Name
Shamita	Chatterjee
Rajdeep	Singh
Anurag	Mishra
Girish	Bakhshi
Vivekand	Jha
Karla	Hemming
Justine	Davies
Agnieszka	Ignatowicz
Monty	Khajanchi
Nobhojit	Roy
Lovisa	Strömmer
Li	Felländer-Tsai

# Organisation/Institution

## Institution/Organisation Name

Karolinska Institutet

#### **Department**

Global Public Health

## **Street and Number**

Karolinska Institutet

Postal Code	City
171 77	Stockholm

## Country

Sweden

# **Project**

# **Application Category**

**Project Application** 

## **Project Title**

Effects of Advanced Trauma Life Support® Training Compared to Standard Care on Adult Trauma Patient Outcomes: Initiating A Cluster Randomised Trial

## **Country of the Project**

India

## **Objectives**

With the support of the Laerdal Foundation and the Swedish Research Council we conducted a pilot and feasibility study in India comparing the

effects of the two most widely used trauma life support training programmes on patient outcomes. We have now planned a full scale trial to assess the effect of Advanced Trauma Life Support ® training on patient outcomes, and here we apply for funding for 18 months with the objectives to:

- 1. finalise local adaptation, implementation and data collection methods; and
- 2. initiate the full scale trial in two hospitals.

#### **Hypothesis**

Implementation of Advanced Trauma Life Support® training significantly improves adult trauma patient outcomes.

#### **Project Description Summary**

Trauma is a global health issue. Many training programmes have been developed to help physicians in the early care of trauma patients, but high quality evidence on the effects of implementing these programmes on patient outcomes is missing. We conducted a pilot and feasibility study in India comparing the effects of the two most widely used trauma life support training programmes, the Advanced Trauma Life Support® (ATLS®) and the Primary Trauma Care (PTC) programmes, on patient outcomes. This pilot showed that a full scale trial is feasible, but that the full scale trial should focus on ATLS® using a stepped wedge design and include a careful local adaption of how ATLS® is implemented. We have now planned this full scale trial and here we apply for funding for 18 months with the objectives to:

- 1. finalise local adaptation, implementation and data collection methods; and
- 2. initiate the full scale trial in two hospitals.

Our pilot study enrolled 375 patients from seven hospitals across India and shows that it is feasible to conduct the proposed trial with a high recruitment rate (78%), low loss to follo- up rate (1%), and low missingness in key variables (mean 1%). We conducted 19 semi-structured interviews with trauma patients, caregivers, and community representatives to involve patients in the planning of this trial and to understand which outcomes they perceive as important. We have planned a full scale batched stepped wedge cluster randomised trial in 30 hospitals in India, enrolling 4,320 patients. All hospitals will transition through a standard care phase during which we will collect baseline data and locally adapt the implementation of ATLS®, a transition phase during which the ATLS® training will be delivered, and an intervention phase when the effect is measured. In this project we want to initiate the full scale trial in two hospitals, enrolling 312 out of the total 4,320 patients.

#### **Project Description**

• project-description.pdf

#### Budget

Are you applying for funding from other sources/foundations?

Yes

Please provide the name of these foundations/organisations.

Swedish Research Council

Select your budget currency:

SEK

Heading	Amount Budgeted	Amount Raised	Amount Requested
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	NOK 80 000 (80 000 SEK,	NOK 60 000 (60 000 SEK,	NOK 20 000 (20 000 SEK,
Regulatory approval	using exchange rate of	using exchange rate of	using exchange rate of
	28/06/2023)	28/06/2023)	28/06/2023)
Ethical approvals and	NOK 36 000 (36 000 SEK,	NOK 0 (0 SEK, using	NOK 36 000 (36 000 SEK,
translations of study	using exchange rate of	exchange rate of	using exchange rate of
documents	28/06/2023)	28/06/2023)	28/06/2023)
	NOK 325 000 (325 000 SEK,	NOK 0 (0 SEK, using	NOK 325 000 (325 000 SEK,
Data collection	using exchange rate of	exchange rate of	using exchange rate of
	28/06/2023)	28/06/2023)	28/06/2023)
	NOK 26 000 (26 000 SEK,	NOK 0 (0 SEK, using	NOK 26 000 (26 000 SEK,
Monitoring	using exchange rate of	exchange rate of	using exchange rate of
	28/06/2023)	28/06/2023)	28/06/2023)
	NOK 44 000 (44 000 SEK,	NOK 0 (0 SEK, using	NOK 44 000 (44 000 SEK,
Study insurance	using exchange rate of	exchange rate of	using exchange rate of
	28/06/2023)	28/06/2023)	28/06/2023)
	NOK 210 000 (210 000 SEK,	NOK 0 (0 SEK, using	NOK 210 000 (210 000 SEK,
ATLS training	using exchange rate of	exchange rate of	using exchange rate of
	28/06/2023)	28/06/2023)	28/06/2023)
	NOK 100 000 (100 000 SEK,	NOK 50 000 (50 000 SEK,	NOK 50 000 (50 000 SEK,
Data analysis	using exchange rate of	using exchange rate of	using exchange rate of
	28/06/2023)	28/06/2023)	28/06/2023)

	Total Budgeted	Total Raised	Total Requested
NOK 821 000 (821 000 SEK,	NOK 110 000 (110 000 SEK,	NOK 711 000 (711 000 SEK,	
using exchange rate of	using exchange rate of	using exchange rate of	
28/06/2023)	28/06/2023)	28/06/2023)	

# **Application History**

Have you or your research group previously received funding from our foundation?

Yes

## **Previous Applications**

Month/Year	Applicant Name
10/2021	Martin Gerdin Wärnberg

Has a report been submitted for previously supported projects?

Yes, previously