



**WEBINAR**



**ARI SLA** ETS

FONDAZIONE ITALIANA DI RICERCA PER LA SLA  
SCLEROSI LATERALE AMIOTROFICA  
ENTE DEL TERZO SETTORE

***1 MARZO 2023***

***ORE 14.00***

**‘AriSLA Call for research  
projects 2023:  
novità e priorità di  
finanziamento’**

# Agenda

- Fondazione AriSLA
- Analisi dell'investimento AriSLA
- Bando AriSLA 2023
  - Obiettivi
  - Caratteristiche
  - Novità
- Suggerimenti per una scrittura efficace
- Discussione e domande

# Da oltre 10 anni al fianco della ricerca

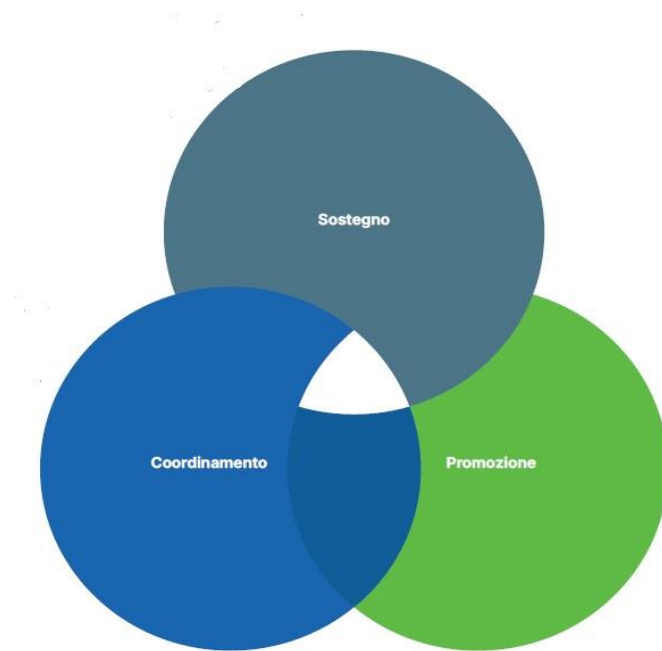
**AriSLA**, Fondazione Italiana di Ricerca per la SLA - Sclerosi Laterale Amiotrofica, da poco divenuto Ente del Terzo Settore, è il principale soggetto italiano che sostiene e promuove la ricerca sulla SLA.

Siamo nati nel 2008 dalla lungimiranza dei nostri 4 soci fondatori, **AISLA Onlus** – Associazione italiana Sclerosi Laterale Amiotrofica, **Fondazione Cariplo**, **Fondazione Telethon ETS**, **Fondazione Viali e Mauro** per la Ricerca e lo Sport Onlus.

Da allora lavoriamo con l'**obiettivo di promuovere ricerca d'eccellenza**, per dare risposte concrete a chi ogni giorno convive con la SLA.



# Una Fondazione al servizio della **ricerca** sulla SLA



## → **SOSTEGNO**

Investire in ricerca di eccellenza, attraverso l'emissione di bandi competitivi e un rigoroso processo di selezione.

## → **COORDINAMENTO**

Monitoraggio dei progetti sia da un punto di vista economico, sia dal punto di vista dei risultati.

## → **PROMOZIONE**

Diffusione dei risultati scientifici ottenuti dai progetti finanziati e dei progressi della ricerca sulla SLA presso la comunità scientifica, i pazienti e le loro famiglie, le associazioni e i donatori che sostengono le attività della Fondazione.

# I nostri numeri raccontano un impegno concreto

## → SOSTENIAMO LA RICERCA

€ 15 milioni

investiti

98

progetti finanziati

143

ricercatori coinvolti

278

borse di studio a giovani ricercatori

## → CONDIVIDIAMO I NOSTRI RISULTATI

33

eventi di divulgazione scientifica organizzati

358

pubblicazioni scientifiche dal 2010 derivate dai progetti finanziati

67%

pubblicazioni AriSLA con un impatto sulla comunità scientifica nell'area di riferimento (indice NIH Relative Citation Ratio > 1)

## → COINVOLGIAMO LE PERSONE

+80

eventi di raccolta fondi promossi anche dai gruppi di volontari presenti sul territorio nazionale

+20

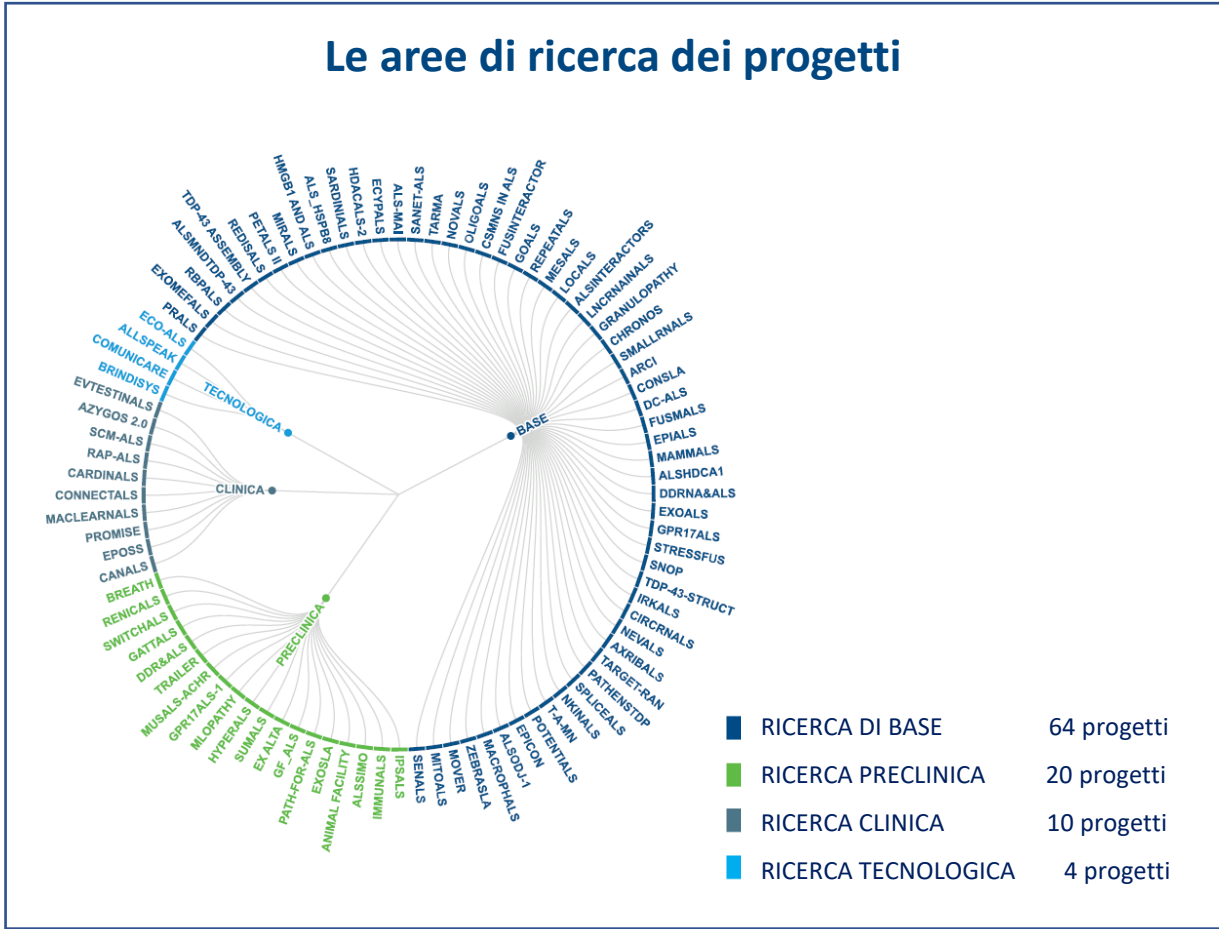
aziende, enti, associazioni, privati hanno adottato i nostri progetti

11

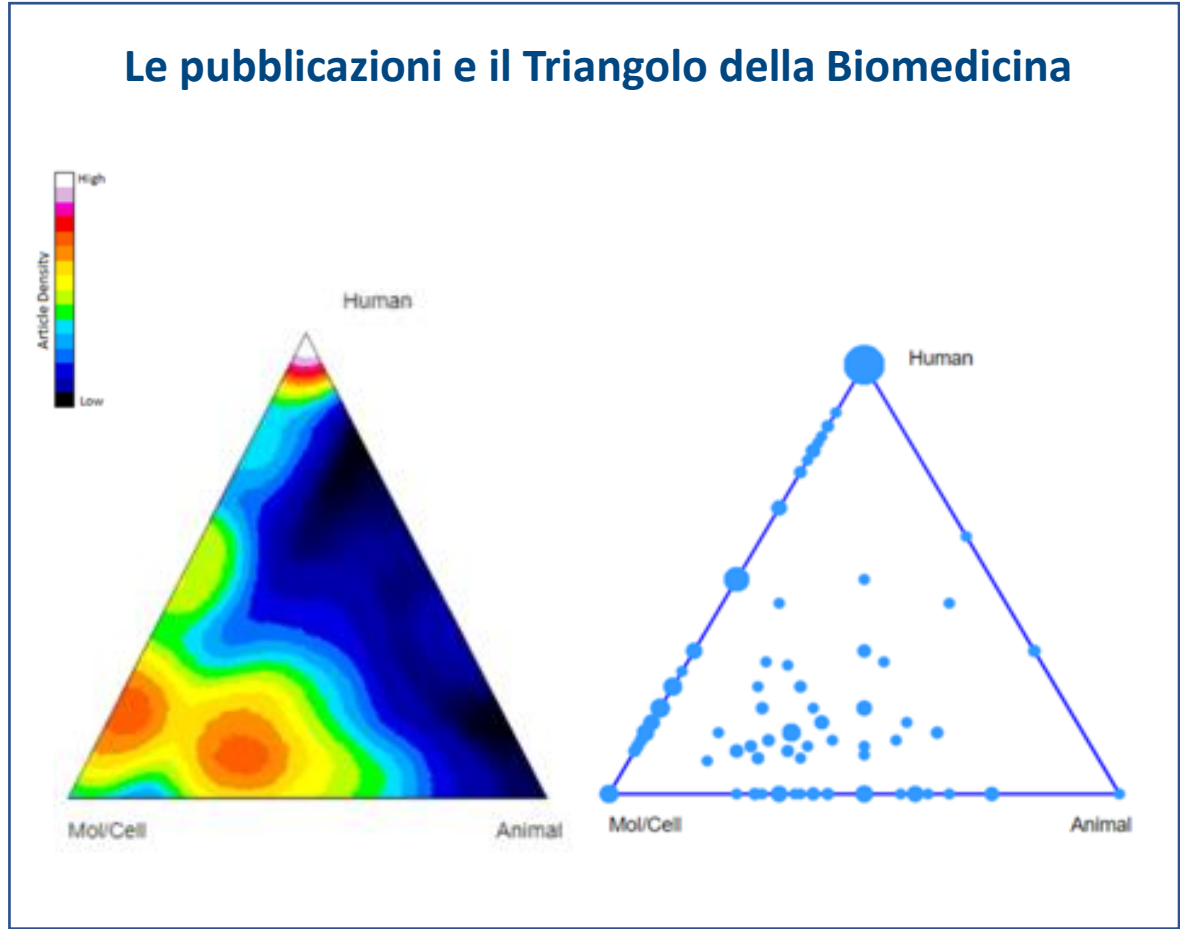
edizioni del *Book AriSLA* in cui raccontiamo gli obiettivi raggiunti e le attività messe in campo ogni anno

# Una fotografia dei progetti finanziati da AriSLA

## Le aree di ricerca dei progetti



## Le pubblicazioni e il Triangolo della Biomedicina



# Spunti dall'analisi dei progetti finanziati da AriSLA

## *Il valore del nostro investimento*

- Contributo allo sviluppo di una forte rete di ricerca di base e preclinica sulla SLA e di alcuni progetti di rete clinica
- Inclusione di nuove competenze nello studio della SLA (39% *new entries*)
- I risultati dei progetti finanziati da AriSLA stanno generando conoscenza utile anche per la ricerca clinica: 42 su 214 *original paper* analizzati da 2010 a 2020 sono stati già citati da articoli di ricerca clinica (piattaforma iCite NIH)

## *Le criticità*

- > La maggior parte del finanziamento è stato dedicato alla ricerca di base e preclinica
- > Le risorse economiche non sono sufficienti per sostenere le sperimentazioni interventistiche
- > I nostri *stakeholder* chiedono una maggiore vicinanza al significato per il paziente anche degli studi di base e un investimento con maggiore potenzialità di ricaduta sui pazienti





# *AriSLA Scientific Conference & Scientific Advisory Board meeting*

*Milan, November 4, 2022*

## **How to feed the pipeline of therapeutic approaches from preclinical to translational research**

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- **Stanley H. Appel**, Johnson Center for Cellular Therapeutics, Stanley H. Appel Department of Neurology, Houston Methodist Neurological Institute, Houston (TX, USA)
- **Lucie Bruijn**, Therapeutic Area Lead, NIBR, Novartis, Basel (CH)
- **Brian Dickie**, Research Director, MND Association, Northampton (UK)
- **Piera Pasinelli**, Weinberg ALS Center, Frances & Joseph Weinberg, Vickie & Jack Farber Institute for Neuroscience, Department of Neuroscience, Thomas Jefferson University, Philadelphia, (PA, USA) and The Robert Packard Center for ALS Research, Baltimore, (MD, USA)
- **David Taylor**, Research Director, ALS Society of Canada, Toronto (CA)





<https://als-strategic-plan.com/>

A working group of the NINDS Advisory Council was convened to explore the landscape of ALS research and **draft recommendations for a Strategic Plan**. This working group is comprised of a Steering Committee and 5 topic-specific working groups. The topics covered include (order does not indicate priority):

- Accelerating research on the biology behind ALS
- Translating fundamental research into potential ALS therapies
- Optimizing ALS clinical research
- Optimizing the Quality of Life of Persons Living with ALS and Caregivers
- Identifying opportunities for collaborations and partnerships

## Highest Research Priorities

### Accelerating Research on ALS Biology

- 1 Dissect causes of sporadic ALS to identify therapies across diverse ancestries
- 2 Define molecular basis of heterogeneity in familial and sporadic ALS
- 3 Employ new technologies for ALS research

### From Research to Therapy

- 1 Establish ALS Centers of Excellence to support ALS translational research
- 2 Enhance infrastructure for biosample and data acquisition and storage
- 3 Enable trials and foster industry/academic collaboration

### Optimizing Clinical Research

- 1 Define ALS natural history across clinical spectrum from pre-symptomatic stages through disease
- 2 Develop more powerful assessments of treatment across the disease spectrum (very early to late) within diverse sets of participants
- 3 Define earliest manifestations of ALS

### Optimizing ALS Quality of Life

- 1 Improve understanding of how physical, psychological, cognitive, and behavioral symptoms impact QOL to facilitate the development of pharmacological and non-pharmacological management approaches
- 2 Optimize function
- 3 Identify evidence-based best practices and resources for ALS care

### Improving Collaborative Partnerships

- 1 Establish multi-modal data platform including multidimensional clinical and non-clinical information; define standards for data structure and sharing, enable use of AI to define subgroups of ALS
- 2 Develop platform (repository) of research tools, protocols and resources
- 3 Establish framework for pre-competitive collaboration across academia, government, industry and private sector

## Bandi 2023 - 2025

*Ricerca base e  
preclinica*

*Studi osservazionali  
Biomarcatori*

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# Obiettivi Bando AriSLA 2023

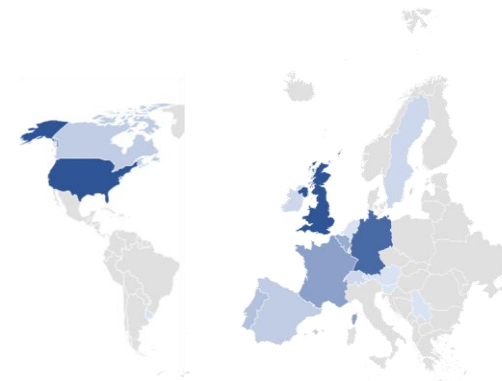
- ❖ Dare priorità a studi che possano avere un impatto concreto sulla conoscenza / diagnosi precoce / trattamento della SLA
- ❖ Promuovere una ricerca di base «clinicamente informata», attraverso la creazione di sinergie e collaborazioni tra gli esperti di ricerca clinica e di base

# Il processo di peer-review



Gli attori del processo di valutazione sono l'**ufficio scientifico** che gestisce l'intero processo di «peer review» e la **Commissione Scientifica Internazionale** che conduce il processo di valutazione e fornisce raccomandazioni di finanziamento sulla base dei criteri del Bando garantendo:

- **Imparzialità di giudizio** (no conflitti di interesse) e confidenzialità
- **Trasparenza e correttezza** della valutazione
- **Eccellenza scientifica** della proposta progettuale
- **Attenzione al ritorno dei risultati sulla qualità di vita dei pazienti**



Con tecnologia Bing  
© GeoNames, Microsoft, TomTom

# The International Scientific Committee (ISC)

Participation is on **rotation** basis, and it is regulated by a **contract with AriSLA**

**Confidentiality** is preserved for a further period of **5 years** after the end of the contract

**Composition may vary** according to the type of applications being reviewed

Composition is **publicly available**. The identity of reviewers involved in each application is not disclosed to the applicant

- In order to minimize conflicts of interest (financial or otherwise), reviewers should not:
  - have published together with the applicants at least in the past 3 years
  - be engaged in active collaborations with the applicants
  - be professional associates of the applicants
- During the Consensus Meeting, reviewers with a conflict of interest with any application will leave the room during the discussion



# Eligibility Criteria

## *Eligible Host Institutions and applicants*

- **Italian non-profit Universities and Research Institutes**, either public or private, performing research activities consistent with the statutory purposes of the Foundation.
- Applicants must demonstrate proven **scientific competence, independence, and capability** to self-manage the proposed project and **must operate in the Host Institution for the entire duration of the Grant**.
- Investigators are allowed to apply for a **maximum of 2 Grants**, and can be **Principal Investigator (PI) of 1 Application only**.



## *Actual grantees*

Applicants of ongoing AriSLA projects that are not expected to end by December 31, 2023, the following rules apply:

- a PI is not eligible to submit a new Application as PI, but can apply as Partner in one Multi-centre Application;
- a Partner of one ongoing project can apply for one new Grant, either as PI or Partner;
- a Partner of two ongoing projects is not eligible for the current Call.

# Eligibility Criteria

## Definition

- **Principal Investigator (PI)** is the scientific coordinator of the project, either in case of a Single-centre or a Multi-centre project.
- Project **Partners** are researchers directly involved in the project that will synergistically undertake part of the scientific work; they can ask for a budget to cover their expenses.
- **Collaborators** are researchers whose specific support is needed for the completion of minor parts of the project, for example providing specific cell cultures, animal models or tools not available in the PI/Partner's laboratory, or any kind of support to the project. Collaborators must sign a collaboration letter to be uploaded in the **COLLABORATORS** field in which their contribution and support are detailed. **Economic coverage for collaborators is not provided by AriSLA.**

## Declaration

- The Host Institution declares that the Applicant is authorised to submit the Application on its behalf, by signing the *General Information* page (which must be attached to the Application by the PI, also on behalf of Partners, if any).
- The Legal Representative of the Host Institution has to declare that the Host Institution will provide the necessary facilities and personnel to carry out the submitted research project. **If the Applicant is not holder of a permanent position, her/his salary needs to be provided through other means.**





# Features of the Call

The Call is dedicated to both Pilot and Full Grant Applications focusing on **basic, pre-clinical research areas** or **clinical observational studies**.

→ **PILOT GRANTS (PG)**, research projects with **highly innovative and original hypotheses**, where preliminary data are either not available or to be consolidated. They are intended to collect or strengthen preliminary data for subsequent larger scale funding.

- **Only Single-centre** Applications are admitted
- Maximum duration is **1 year**
- Maximum request of **60.000 euro**

→ **FULL GRANTS (FG)**, research projects with a **solid background and consistent preliminary data**.

- Applications can either be **Single-centre or Multi-centre**. In case of a Multi-centre project, the synergy derived from Partners' contribution to the achievement of the project objectives should be evident.
- Duration can range **from 1 to 3 year**
- Maximum request of **80,000 €/year**

[**AMOUNT REQUESTED**: if your project do not fit into the PG program, you can ask for a 2-year FG]

# What's new in the 2023 AriSLA Call?

1. Basic research is expected to be **clinically informed**, integrating clinical characteristics to the interpretation of mechanistic studies.
2. AriSLA set **priority topics** (e.g., biomarkers, aspects of the natural history of ALS on the state of risk/pre-symptomatic disease at the first manifestations of the disease, development of models for the sporadic form and integration between multiple disease models, study of heterogeneity)

Applications not respondent to the priority topics may proceed to the full evaluation only if evaluated in the excellent /outstanding ranges

→ **Interaction between basic research scientists and clinicians is highly encouraged.**

In case of a Multi-centre project the PI may be a basic researcher or a clinician depending on whether the main objective of the proposal is basic or clinical.

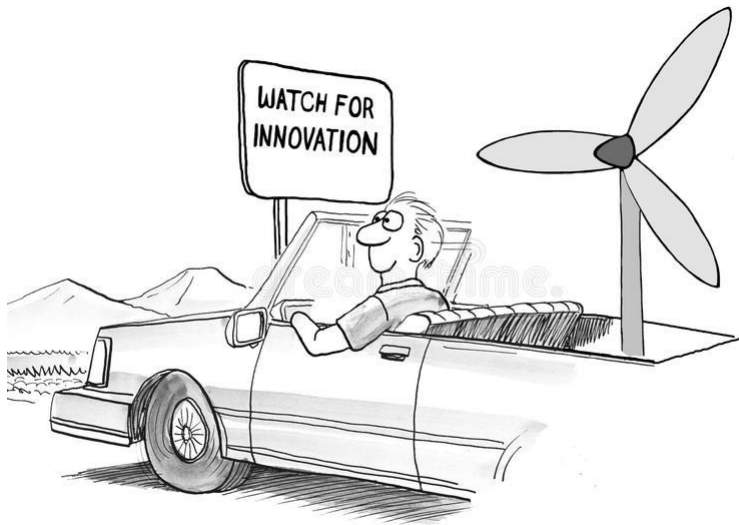
# Priority topics

- **Development of effective clinical measures for ALS**, including both diagnostic and theragnostic biomarkers that will improve diagnosis and facilitate developing tailored therapies for the disease;
- **Definition of the natural history of ALS from the at risk, pre-symptomatic, and disease state** to improve the knowledge of how the disease initiates and progresses over time and facilitate the recognition of earliest manifestations of the disease;
- **Setting and characterization of model systems for sporadic ALS predictive of human**. Studies integrating multiple models across species are encouraged;
- **Unravel the molecular pathophysiological mechanisms of clinical heterogeneity in ALS** with the aim of classifying ALS into subgroups and define different forms of sporadic ALS based on distinct molecular mechanisms leading to neurodegeneration.

# Evaluation criteria: Pilot Grants

## Triage evaluation

1. **Innovation and originality** of the proposed project with regards to the current knowledge.
2. **Quality and feasibility** of the scientific approach.
3. **Adherence to the priority topics of the Call.**



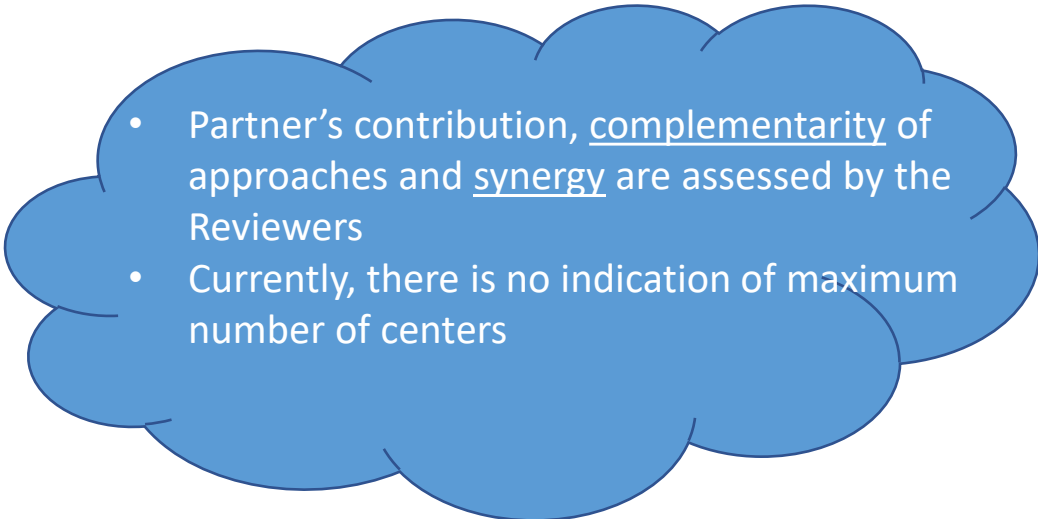
## Full proposal evaluation

1. **Innovation** of the proposed project with regards to the current knowledge.
2. **Expected impact** of the results on the disease knowledge and treatment or any other influence on clinical management of patients; proximity to therapeutic development or to any other potential impact on patients of the proposed study; potential admissibility of results for intellectual property protection.
3. **Objectives and methodologies:** clarity of the objectives and appropriateness of design and methods proposed to achieve them.
4. **Capability to successfully carry out the project:** ability of the Applicant to finalize the proposed research program according to the project duration and budget.
5. **Potential** for the expected results to attract large-scale funding.
6. **Adherence to the priority topics of the Call.**

# Evaluation criteria: Full Grants

## Triage evaluation


1. **Innovation and originality** of the proposed project with regards to the current knowledge.
2. **Quality and feasibility** of the scientific approach and experience of the Applicants in the field.
3. **Adherence to the priority topics of the Call**

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- Partner's contribution, complementarity of approaches and synergy are assessed by the Reviewers
  - Currently, there is no indication of maximum number of centers

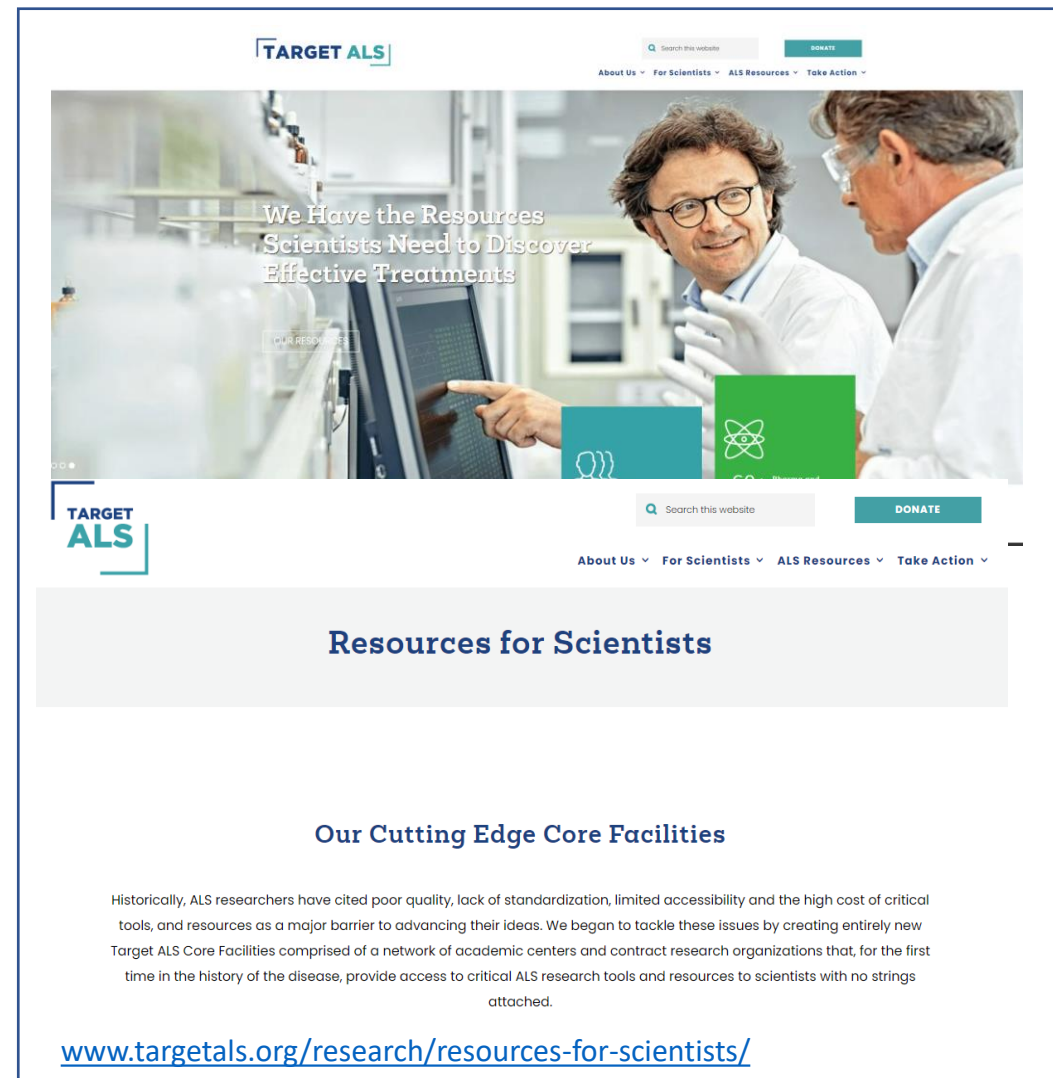
## Full proposal evaluation

1. Strength of the **background** and **rationale**.
2. **Availability of solid preliminary data** to support the research program and relevance of the project for ALS.
3. **Objectives and methodologies:** clarity of the objectives and appropriateness of design and methods proposed to achieve them.
4. **Expected impact** of the results **on the disease** knowledge and treatment or any other influence on clinical management of patients; proximity to therapeutic development or to any other potential impact on patients of the proposed study; potential admissibility of results for intellectual property protection.
5. **Investigator experience and synergy with Partners (if any):** competence and scientific independence of the Applicants; complementarity and synergy among PI and Partners of Multi-centre studies.
6. Sound and effective exploitation of the **results derived from previously funded AriSLA Pilot/Full Grant** (if applicable).
7. **Adherence to the priority topics of the Call.**

# International database e facilities



The screenshot shows the Answer ALS website. The top navigation bar includes links for ABOUT US, UNDERSTANDING ALS, RESEARCH APPROACH, RESEARCH PROGRESS, NEWS, CONTACT US, and DONATE. A prominent banner features the text "THE DATA IS HERE. DEFY ALS." with a "THE DATA IS HERE" button. Below this, another banner states "DISCOVER DATA FROM OVER 1000 PARTICIPANTS" with a "LEARN MORE" button. A green footer bar mentions that a new set of Answer ALS project data is now available through the Answer ALS Data Portal, with a "READ MORE" button. The website URL [www.answerals.org/](http://www.answerals.org/) is displayed at the bottom.



The screenshot shows the Target ALS website. The top navigation bar includes links for About Us, For Scientists, ALS Resources, and Take Action. A banner features the text "We Have the Resources Scientists Need to Discover Effective Treatments" with a "OUR RESOURCES" button. Below this, a section titled "Resources for Scientists" is highlighted. Further down, a section titled "Our Cutting Edge Core Facilities" is shown, followed by a paragraph explaining the historical challenges in ALS research and the creation of Target ALS Core Facilities. The website URL [www.targetals.org/research/resources-for-scientists/](http://www.targetals.org/research/resources-for-scientists/) is displayed at the bottom.



# Scientific contents – Scientific strategy

- **Layout:** Setting the stage; Objectives of the proposed research; Design and methods; Significance
- **Make your case well. You MUST:**
  - Generate interest in your scientific question
  - Demonstrate the importance of your study
  - Describe concise and convincing aims
  - Indicate that you know what the expected results are
- **Background, rationale and objectives**
  - Do not waste time in detailing ALS in general (AriSLA funds only ALS related projects) but the clearly and concisely introduce the disease characteristics you are proposing to investigate in the proposal
  - Put the attention on what is still missing: capture the reviewers' attention by making an argument for why you should be funded. Tell the reviewers why testing your hypothesis is worth funding, why you are the person to do it!
  - In the rationale put all the steps necessary to understand what you want to achieve
  - For 3ys grant, define maximum 3 Aims (use sub-aims). Do not propose too much
  - Your hypothesis should be provable and aims doable with the resources you are requesting



**Don't take anything  
for granted!**



# Scientific contents – general considerations

- If you are starting from zero, ask for a PG for one year. Not having preliminary data is, in general, considered highly risky.
  - **Explain always the rationale:** even if preliminary data are not required for PG proposals, preliminary evidence which gives meaning to the rationale is needed to make the Reviewer understand what you want to achieve
  - If your proposal is highly innovative, you'll need to make a very strong case for why you are challenging the existing paradigm and have data to support your innovative approach
  - Follow the same order presented in the background/rationale and preliminary results (**it makes the review easier**), but don't be redundant with the content
  - Whenever possible suggest experiments that give rise to quantitative results, define the **statistic analysis and power for significance**
  - **Avoid/limit experiments too dependent on success** of an initial proposed experiment: be sure that aim2 and aim3 would not only depend on having results in aim1
- You have to convince reviewers that your proposal will work. If this is a completely new approach, no matter how exciting it might be, **the grant panel will require some evidence for its credibility**

# Most common reasons cited by reviewers for an application's failure



- Problem not important enough or not specific for ALS
- No **hypotheses** or poorly articulated ones / Lacking solid scientific basis
- Proposal lacking enough **preliminary data** or preliminary data do not support project's feasibility / **Rationale** for experiments not provided (why important, or how relevant to the hypothesis)
- Incremental research, not a step change / Study not likely to produce useful information
- Lack of original or new ideas
- Problem more complex than investigator appears to realize / Investigator too inexperienced with the proposed technique

- **Methods** unsuited to the objective
- Too little detail in the research plan - no recognition of potential problems and pitfalls
- Proposed model system not appropriate to address the proposed questions / Relevant controls not included in the study design
- **Over-ambitious research plan** with an unrealistically large amount of work
- Experiments too dependent on success of an initial proposed experiment/ Lack of alternative methods
- Insufficient consideration of **statistical needs**. Sample sizes not justified with power calculations

# Applicant section – Relevant research experience and description of the Host Institution

## Knowledge and skills

- The Reviewers use this part to see whether the PI is a leader in the field and has experience with the techniques
  - Important to have good records in the topic, or at least in the methods you propose to use
  - List any experience in foreign laboratories

## Independence

- The CV should allow to determine also the independence of young investigators
  - How many papers with the first name (or corresponding author)
  - Any other/previous grants?
  - How large is your group?
  - Will you have the authorship of the proposed study?



A vibrant imagination is an excellent quality for the job...But not the CV.

→ **Be honest and convincing** especially if you want to make the case that this grant may offer you the possibility to become really independent!

# Suggested Reviewers

- They should not currently work in Italian Institutions
- Avoid friends (not associated with your work)
- Highly qualified Scientists, with specific interest in the argument of your grant proposal (if the topic is not within their specific interest, they may refuse to participate in the review process)
- Reviewers are knowledgeable, experienced scientists, but they can't know everything. Chose those with real expertise in your field
- It is better if AriSLA can rely on your suggestions, you are the one that knows better if a Reviewer may have a conflict of interest with your work
- You can also indicate reviewers you prefer don't see your application for a given conflict.



# If you are not funded....

- **Don't get discouraged.** You are not the only one!
- **Listen to your Reviewers**
  - Read the Review feedback carefully. It is meant to provide you with suggestions to improve your grant application
  - Perhaps if reviewers did not understand your work is because you did not make it clear and proved to be feasible
  - You should learn from comments to re-write a more appealing grant the next year
  - Try to understand and solve all the pitfalls
  - Maybe you need collaborators with specific expertise, especially if your application is rejected more than one time

This **research** is really going to help move our field forward.



This **evaluation** is really going to help our program become more effective.



[freshspectrum.com](http://freshspectrum.com)

# SUGGESTIONS FOR READINGS

- ✓ *AriSLA Call for Application for research projects 2023 - Guidelines for preparing and submitting the Application online*

PLEASE READ THEM CAREFULLY AND CONTACT US IF YOU NEED SUPPORT

Bandi@arisl.org

- ✓ *Guidebook for New Principal Investigators (Institute of Genetics, CIHR. By R. McInnes, B. Andrews & R. Rachubinski)* [https://cihr-irsc.gc.ca/e/documents/ig\\_guide\\_for\\_new\\_pis\\_e.pdf](https://cihr-irsc.gc.ca/e/documents/ig_guide_for_new_pis_e.pdf)
- ✓ *Hossein Ardehali. How to write a successful grant application and research paper. Circ Res. 2014 Apr 11;114(8):1231-4.* <https://www.ahajournals.org/doi/epdf/10.1161/CIRCRESAHA.114.303695>
- ✓ *Masud Husain. How to write a successful grant or fellowship application. Pract Neurol. 2015 Dec;15(6):474-8.* <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4680180/pdf/practneurol-2015-001206.pdf>
- ✓ *Grant Writing for Dummies*

**BUON LAVORO!**



**Grazie!**