

Eyes on the Future

Research Strategy and Grant Making Policy

A registered charity in England and Wales (number 1198330)

Adopted by the Charity Trustees on August 9th 2023 and last reviewed on July 26th 2023

Eyes on the Future is an English registered charity (“the Charity”, “we”, “our”) which seeks to promote and support high quality medical research to increase scientific understanding and find treatments for inherited retinal dystrophies (“IRD”) with specific focus on RDH12 related IRD. For further information about us, please see Appendix 1.

1. **About this policy**

- 1.1 The research strategy and grant making policy set out in this document applies to the Charity.
- 1.2 The objects of the Charity are for the public benefit to preserve and promote health and advance education including without limitation in relation to rare diseases, eye diseases and IRD, provided that the Charity shall maintain a focus on understanding and developing treatments for RDH12-Leber Congenital Amaurosis (“Objects”).
- 1.3 The Charity is governed by the charity trustees of the Charity (“Charity Trustees”) who have a duty, acting at all times in the best interests of the Charity, to apply the Charity’s assets to advance the Objects and have ultimate responsibility for all grant-making decisions.
- 1.4 As a member of the Association of Medical Research Charities (“AMRC”), the Charity will also seek to comply with the AMRC’s requirements, and its activities will be informed by the AMRC’s relevant guidance.
- 1.5 The purpose of this policy is to set out the principles and procedures that guide the Charity Trustees when they are considering procuring, commissioning or otherwise funding research to further the Objects.

2. **Our Vision and Values**

- 2.1 We aspire to a world in which people affected by RDH12 IRD will have access to treatments to help them see the world for longer.
- 2.2 In pursuance of this vision, we are committed to the following values:
 - 2.2.1 High quality research
 - 2.2.2 Objectivity and transparency
 - 2.2.3 Open data sharing

2.2.4 Collaboration with other organizations and across institutions

2.2.5 Fair business practices and equality of opportunity.

3. **Research Strategy**

3.1 **Research aims and approach**

Background

3.1.1 The Charity funds cutting edge research into the causes and potential treatments for RDH12 Retinal Dystrophy.

3.1.2 The RDH12 Scientific Landscape, published in 2019 and updated in 2021, outlines the current outlook on RDH12 research (“RDH12 Landscape”) as more fully set out in Appendix 2. This landscape assessment was carried out by an independent scientific advisor and included a review of all published research on LCA IRD as well as inputs from key industry and academic stakeholders. The work has identified specific gaps and opportunities to accelerate research towards a treatment which have informed the Charity’s research aims, approach and strategic priorities.

Aims and Approach

Our overall aim is to enable high quality relevant research to deepen the understanding of the causes of RDH12 retinal dystrophy, identify cures, treatments and preventions and ultimately allow patients to maintain or restore vision.

3.1.3 In pursuance of such aims we will endeavour to:

- (a) Encourage and stimulate the dissemination of research results, in order to avoid duplication of efforts and drive advancement of treatments and diagnosis tools.
- (b) Maintain a robust and accurate assessment process, including relevant scientific recommendation and peer review analysis.
- (c) Encourage and stimulate the collaboration across researchers, research centres and institutions.
- (d) Facilitate effective communication among patients, scientists and clinicians to promote mutual understanding and potential participation in studies, where appropriate.
- (e) Partner internationally with leading charities and institutions.
- (f) Develop collaborations with industry and other patient and public sector organisations.
- (g) Prioritise projects that directly address one or more of the four research priorities areas (see paragraph 3.3 (Research Priorities)) and have the highest potential of accelerating research towards a treatment for RDH12 patients.

- 3.1.4 On **partnerships**, the Charity is keen to build partnerships with a broad range of organisations that share our mission to develop treatments for LCA and more broadly for IRD. We will continue to explore opportunities to maximise funding and work with organisations who share our mission. The Charity is keen to partner with others for any of its funding calls (response mode or targeted/themed calls) to support ambitious research projects on a match funding basis and partnerships will be considered with government, charities, professional bodies and industry.
- 3.1.5 On **dissemination of results**, researchers funded by the Charity are expected to publish their research in open access journals, to present their research at national and international conferences and engage with patients and the media. We work directly with researchers and their institutions to ensure that important advances resulting from our funded research are actively communicated to the public and eye health professionals.
- 3.2 On the **use of animals in research**, the Charity endorses the 3R's principle to "replace" the use of live animals unless absolutely necessary, "reduce" the number of live animals used in research and "refine" procedures to make the use of animals in research as humane as possible.
- 3.2.1 The Charity supports the AMRC principle of using animals in research when it is necessary to advance understanding of health and disease and to develop new treatments.¹ This research only takes place where there is no alternative available.
- 3.2.2 Currently, we think the use of animals is a necessary part of the research process to advance our understanding of disease and aid in the development of new treatments for eye conditions. We actively review this position, mindful that new technologies aim to develop alternatives to reduce and eventually replace animal models.
- 3.2.3 The Charity's grant terms and conditions states that researchers must adopt best practice in the use of animals in research, and as such we support the ARRIVE (Animal Research: Reporting of In Vivo Experiments) guidelines which are intended to improve the reporting of the use of animals in medical research.

3.3 **Research Priorities**

Based on the RDH12 Landscape, the Charity's four research priorities areas are as follows:

- (a) Gene Therapy: to accelerate human clinical trials for viral and/or non-viral gene delivery system(s) to treat RDH12 Retinal Dystrophy.
- (b) Small Molecules: to discover or repurpose drug therapies with the potential to retain retinal function and structure
- (c) Foundational Disease Understanding & Models: to expand the basic understanding of RDH12 Retinal Dystrophy disease mechanism and pathways and to develop relevant animal and cell models.

¹ <https://www.amrc.org.uk/position-statement-on-the-use-of-animals-in-research>

- (d) Natural History: to expand the understanding of RDH12 disease progression through patient data and enhanced diagnostic technology including, but not limited to, biomarker identification, endpoints for clinical trial, disease progression models, improvements in retinal imaging collection and analysis.

3.4 **Charity Commission guidance and AMRC policy**

3.5 All research activities shall be carried out in accordance with the Objects and the Charity Trustees and those managing research activities shall have due regard to relevant Charity Commission guidance and AMRC guidance (as updated from time to time).

3.6 Charity Commission guidance includes, to the extent that this is relevant, the commission's guidance on "The Advancement of Education for the Public Benefit".² In particular, the Charity shall ensure that:

- 3.6.1 the subject matter of research will be useful subjects to study;
 - 3.6.2 to the extent that it is published, the useful results of research will be conveyed in a manner which is genuinely educational and is aimed at enabling the public to make up their own minds on issues;
 - 3.6.3 efforts are made to make the useful results of the research publicly available; and
 - 3.6.4 the research will be conducted for the benefit of the public and any private benefit will be incidental and necessary to the pursuit of the public benefit.
- 3.7 AMRC has published "Guidance on Implementing the Principles of Peer Review".³ This guidance details the underpinning principles of quality peer-reviewed research. Each principle includes mandatory criteria which the Charity must comply with and optional criteria which the Charity will be guided by.

4. **Grant Process and Administration**

4.1 **Grant Types**

Applications are welcome from a range of sources including educational institutions, professional regulatory or statutory body (or equivalent) individual researchers, a consortium of researchers, and other organisations.

The Charity will operate two types of grants:

4.1.1 ***Targeted/ Themed Open Calls Awards ("Open Call Awards")***

Open Call Awards are grant awards made by the Charity which fund research projects falling within one or more of our 4 research priorities and which meet the eligibility criteria

² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/358536/the-advancement-of-education-for-the-public-benefit.pdf

³ <https://www.amrc.org.uk/guidance-on-implementing-the-principles-of-peer-review>

(see paragraph 4.2 (Eligibility criteria)). Applicants are required to complete an application process in response to an open call published by the Charity. A summary of this process is set out below.

- (a) Applicants are initially required to submit a brief letter of intent in response to the call.
- (b) The Charity will assess the letters of intent and, if appropriate, will invite applicants to submit a full application (in a form that we specify) and budgets.
- (c) The application and budget are reviewed by the Independent Expert Panel (“IEP”). See paragraph 4.3 (Peer review process and Independent Expert Panel) for further details.
- (d) Following the review, the IEP makes a recommendation to the Charity’s CEO (“CEO”) who will review this and, in turn, make a recommendation to the Charity Trustees.
- (e) The Charity Trustees then make the final decision as to whether an applicant is successful.
- (f) The final decision is then communicated to the applicant. The Charity Trustees may, at their discretion, provide feedback to unsuccessful applicants on their application.

4.1.2 **Strategic Awards**

Strategic Awards are made following the consideration and approval of speculative applications from a researcher/ group of researchers which meet the eligibility criteria (see paragraph 4.2 (Eligibility criteria)) and are deemed capable by the Charity Trustees of making a real difference to the Charity’s beneficiaries.

- (a) Following an expression of interest, the applicant is invited to submit a full application (in a form that the Charity specifies) and budget.
- (b) The application and budget are then reviewed by the IEP (see paragraph 4.3 (Peer review process and Independent Expert Panel)). The IEP could either make a recommendation to the CEO or, if the application demonstrates sufficiently viable prospects but requires some additional work, invite the applicant to amend their application and submit it for a second review by the IEP, after which point the IEP will make a recommendation to the CEO.
- (c) Following review of the IEP’s recommendation, the CEO will make a recommendation to the Charity Trustees.
- (d) The Charity Trustees then make the final decision as to whether an applicant is successful.
- (e) The final decision is then communicated to the applicant. The Charity Trustees may, at their discretion, provide feedback to unsuccessful applicants on their application.

4.2 Eligibility criteria

Mandatory criteria

4.2.1 The IEP and Charity Trustees will review any applications based on the criteria noted below.

- (a) The research project advances the Objects, and within this, our aims and research priorities.
- (b) Evidence of the researcher undertaking high quality research projects which involves respected and experienced research leaders.
- (c) The researcher has a good track record in obtaining funding from other sources and evidence of recognition amongst peers for their own research results.
- (d) Where applicants have received previous grants from the Charity, the previously funded project resulted in satisfactory outcomes and such results have been published.
- (e) The applicant accepts and adheres to the Charity's Research Grant Terms & Conditions by the applicant themselves and their institution.
- (f) Evidence that the research project represents value for money.
- (g) The research project is permitted by the law and any subsequent resulting treatment should be approved by the competent authorities.

Expectations and/or desirable factors

4.2.2 There are no geographic location restrictions on applications, although we expect most of the projects funded to be based in the UK, EU and USA.

4.2.3 The Charity is particularly interested in research projects which **stimulates new areas of research** and, linked to paragraph 4.2.2, **fosters international collaboration**.

4.3 Peer review process and Independent Expert Panel (IEP)

4.3.1 Applications are subject to peer review following the key principles of Accountability, Balance, Independence, Rotation, Impartiality. All applications are reviewed by an IEP with relevant research expertise which will make recommendations to the CEO and, in turn, the Charity Trustees for final approval. The IEP role is to provide independent and impartial advisory, and its composition will be determined by reference to expertise in the subject area of the relevant grant and AMRC's guidance. Any grant decision is reserved solely for the Charity Trustees (including those acting under delegated authority from the Charity Trustees).

4.3.2 All members of the IEP are selected by the Charity to review a specific project/ open call ("IEP Members"). The rotating nature of IEP's aims to ensure that applications are being considered by individuals with relevant expertise and that, across the board, there is diversity in the constitution of the IEPs. Trustees cannot act as IEP Members.

- 4.3.3 This review processes differs depending on the size and the type of project and the Charity retains flexibility as to the level of peer review to minimise the time, resource and burden on the research community, while ensuring scientific rigour in awarding these grants.
- 4.3.4 The size of the grant will be judged by reference to the amount the Charity has available to disburse for the relevant financial year. However, as a ballpark indication, awards which are under £50,000 generally fall within the category of small awards.

Large grant awards

- 4.3.5 IEP's reviewing larger awards will include a minimum of three IEP members who shall be selected based on their area of interest, expertise, publication record. Such IEP members are expected to be leading clinicians, and/or scientists involved in genetic, ophthalmology, cell biology research or a closely related discipline in the field of the application under consideration.
- 4.3.6 IEP Members are selected through in-depth research of experts in the particular field in question. A shortlist of experts is compiled using PubMed (or similar) based on role/ number of publications. Interest is posed on co-publication with the applicant to remove/ minimize any conflict of interest. The list is then ranked and reviewers are contacted to check availability to serve as IEP Members.
- 4.3.7 IEP Members may remain in place for the duration of the project/ grant (generally 1-3 years). Therefore, the IEP Members may also assess annual progress reports from funded projects and make recommendations to the CEO (who in turn makes a recommendation to the Charity Trustees) as to continuation of funding.
- 4.3.8 The Charity aims to rotate the IEP Members to bring fresh ideas and new thinking into the review process. While IEP members are allowed to sit on multiple IEP (depending on their area of expertise and the topic of the grant), we expect the IEP members to be active for no longer than 6 years before being inactive for a minimum of 3 years.
- 4.3.9 On receipt, full grant applications are sent to the IEP Members together with any relevant background information for review.
- 4.3.10 The IEP Members may share their written comments with fellow members or convene (usually virtually) to discuss their comments, with discussions being recorded in the minutes for the meeting. The Charity may consider on a case by case basis whether further written reviews of grant applications (in addition to those provided by the IEP) are required in light of the value and materiality of the grant.
- 4.3.11 Applications – both Open Call Awards and Strategic Awards – are assessed according to the extent to which they meet the eligibility criteria (see 4.2), the quality of the project and its relevance to the Charity's research strategy.
- 4.3.12 The IEP meeting minutes, together with any additional comments from IEP Members are sent to the Charity Trustees. A final funding decision on the basis of the peer review, the IEP's discussion, the availability of finance and the further consideration of the eligibility criteria (see 4.2) is recommended by the CEO to the Charity Trustees who make the final decision.

- 4.3.13 The IEP Members may be Charity grant holders for a project different to the one they have been asked to review. All IEP Members are expected to declare any perceived or potential conflict of interest, as described by the Conflict of Interest Policy (a copy of which the Charity will share with IEP Members) and adhere to confidentiality protocols.

Small grant awards

- 4.3.14 The Charity expects that the majority of its grants will be large awards, i.e., £50,000 and over. However, where smaller awards are made, the Charity will assess the applications by reference to the eligibility criteria (see paragraph 4.2) and undertake an appropriate review which seeks to reflect the AMRC principles and is commensurate to the level of award being granted.

4.4 Restrictions on Funding

- 4.4.1 The Charity Trustees maintain full discretion as to the research projects, or any elements of this that will be funded.

- 4.4.2 Typically, the Charity will fund:

- (a) Researchers' salaries
- (b) Consumables
- (c) Project-related expenses only
- (d) Animal subjects and related costs
- (e) Renting of premises

- 4.4.3 There are certain aspects of projects which the Charity will not fund. These include but are not limited to:

- (a) Capital purchases (e.g., permanent laboratory equipment or materials). Exceptions may be made on a case-by-case basis
- (b) Non-project related expenses (i.e. overheads)
- (c) Utility costs
- (d) Annual, maternity or sick leave payments
- (e) Publishing costs
- (f) Parking or travel allowances at general place of work
- (g) Administrative support

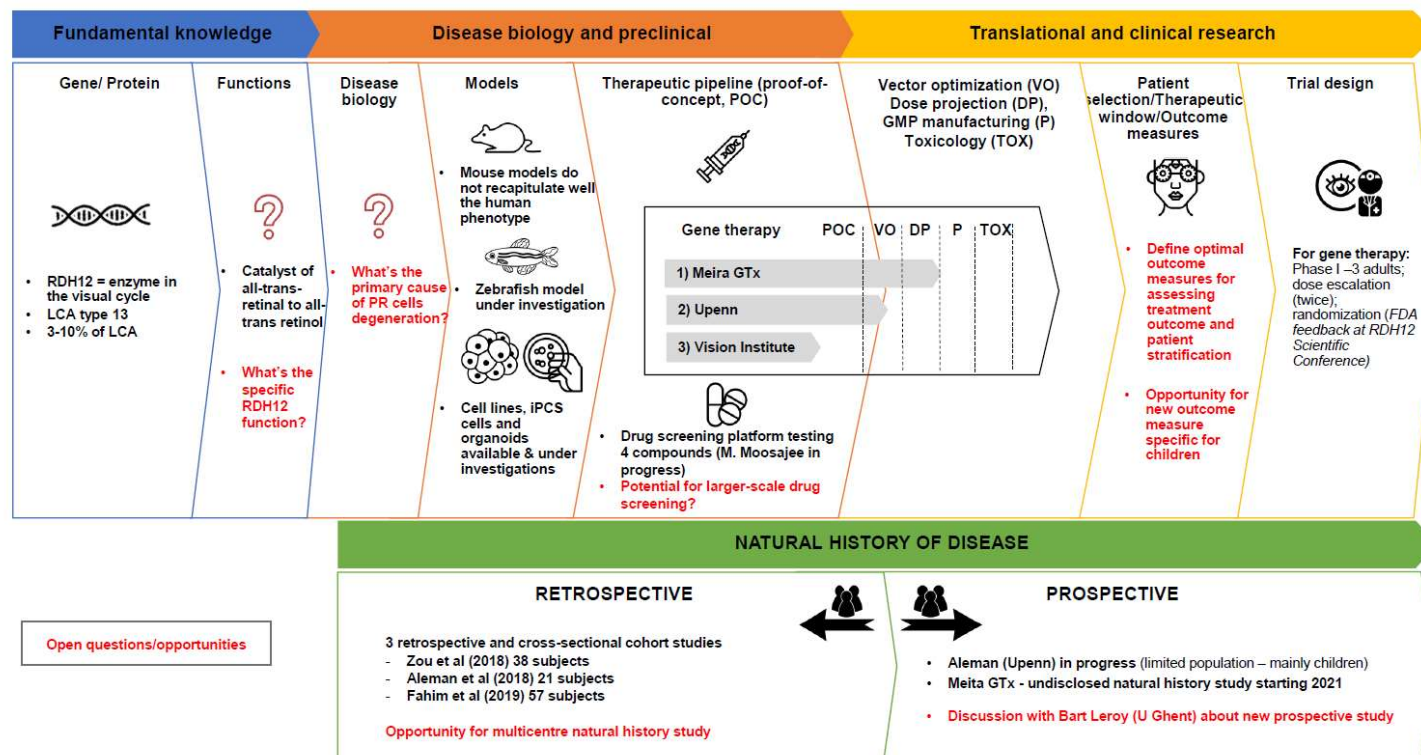
Appendix 1 About Eyes on the Future

1. Our charitable work commenced in 2017. Prior to registering as an independent charity in 2022, we funded research to accelerate treatment for those affected by RDH12 IRD in partnership with existing charities such as Retina UK and Moorfields Eye Charity.
2. Research funding awarded to date includes:
 - 2.1 A 3-year research grant (2018-2021) to Professor Mariya Moosajee, UCL/ Moorfields Eye Hospital to develop in vitro and animal disease model and test potential drug compounds to slow down the sight loss.
 - 2.2 A 1-year research grant extension (2022) to Professor Mariya Moosajee, UCL/ Moorfields Eye Hospital to further study the RDH12 disease mechanism.
 - 2.3 2 editions of the RDH12 Research Landscape: first edition published in 2019 and second edition in 2021.
3. Research facilitated by the Charity's funding has led to the publication of several peer-reviewed articles and directly enabled other research worldwide.
4. Alongside the grant funding activities, the Charity has also been driving a number of educational and awareness raising initiatives including:
 5. The first ever Scientific Workshop on RDH12 IRD in November 2019 in partnership with the Foundation Fighting Blindness.
 6. The first ever RDH12 Patient Day in September 2018 in partnership with Retina UK.
 7. The Charity is also supporting a global patient group of families affected by RDH12 IRD providing ongoing connection and education.

Appendix 2 – RDH12 Landscape

RDH12 Landscape Summary

RDH12 Landscape 2021 summary



Appendix 3 RDH12 Full Landscape



RDH12_Landscape
Full 2021.pdf

Appendix 4: List of IEP Reviewers for Eyes on the Future grants till date

Project 1/2023 (in partnership with LifeArc)

1)Title: Data-driven solutions for RDH12-associated Retinopathy Trial Support

PI: Adam Dubis, UCL/ Moorfields Eye Hospital

Outcome: Not successful

Reviewers:

- Prof Maximilian Pfau, Institute of Molecular and Clinical Ophthalmology Basel, Switzerland
- Assistant Professor Yifan Jian, Casey Eye Institute, Oregon USA
- Dr Kerry Goetz, NEI Office of Data Science and Health Informatics
- Dr Ash Jayagopal, CSO Opus Therapeutics
- Dr Karmen Trzupek, Senior Director, Rare X- Global Genes

Project 2/2023 & 3/2023

2)Identifying New Potential Small Molecules Therapies for RDH12 Inherited Retinal Dystrophy

PI: Mariya Moosajee, UCL/ Francis Crick/ Moorfields Eye Hospital

Outcome : Successful

3)Towards developing small molecules to stop/slow down disease progression

PI: Prof Rams Subramanian Purdue Univ, Indiana, USA

Outcome : Not Successful

Reviewers:

- Dr Terance Hart Independent Consultant in Drug Discovery & Development Cambridge, UK (expertise Medicinal chemist - pharmaceutical industry)
- Prof Aled Edwards Chief Executive of the Structural Genomics Consortium Univ Toronto, Canada (expertise: Medical geneticist/ biophysicist -academic)
- Prof Wen Hwa Lee CEO and Chief Scientist at Action Against AMD (Age-Related Macular Degeneration), London, UK (expertise: Molecular and structural biologist -academic)