Medical Research Grant Application Guidelines

Thank you for your interest in medical research grants from The Progeria Research Foundation (PRF). These guidelines provide a brief introduction to the goals and policies of PRF, and list the specific information required when submitting a proposal.

I. Funding Categories and Levels

1. **Innovator Awards**: The aim of the Innovator Award is to allow an investigator to embark on new lines of investigation, and to produce enough preliminary data to be competitive for longer-term funding by NIH and/or other agencies. Funding is for up to 2-years and up to $75,000 per year.

2. **Established Investigator Awards**: These awards are designed for advanced investigations in areas critical to the goals of PRF by senior investigators established either in the field of Progeria or a field that can be directly applied to Progeria. Funding is for up to 3 years and up to $100,000 per year. Renewal for a third year will require that:

    a. The Principal Investigator demonstrate substantial progress and commitment to the field, for example by applying for at least one major grant to continue Progeria work. Examples of major grants include NIH RO1 or Ellison Senior Scholar funding.

    b. The Principal Investigator has submitted a manuscript on the Progeria work accomplished in the first two years.

3. **Specialty Awards:** Specialty awards are for smaller, more technology-driven projects, e.g., sequencing, screening potential drugs, obtaining cell lines (including IPSCs) and preparation of antibodies. Funding amounts will range from $5,000-$50,000 and the length of the project is usually 1 year or less. Funding amount and duration may increase for a project that addresses a very high and immediate need to The Progeria Research Foundation.

The following will apply to all awards:
Collaboration/Presentation: In order to foster interactions among grantees and others interested in Progeria research, all grantees will be required to present their work at each PRF workshop taking place during their funding period, including any approved no cost extension period. PRF workshops are held every other year.

II. Statement of Research Grant Policy and Procedures

The Progeria Research Foundation awards grants to applicants who seek to conduct research to find the cause, treatment, or cure for Hutchinson-Gilford Progeria Syndrome (Progeria, or HGPS).

PRF encourages proposals in the areas listed below. Investigators are not limited to applications that address these priorities, but rather are encouraged to use them to better understand the needs of the field at this time. Proposals addressing other mechanistic and translational questions directly relevant to HGPS are still actively encouraged, but PRF has identified the following areas as immediately critical to development of effective treatments.

PRF is seeking proposals that address the following priorities:

1. **Discovery of biological markers of disease in HGPS that can be assessed in human and/or mouse samples**. Highest priority will be given to those markers that can be assayed in easily obtainable human samples such as blood, urine, and cheek swabs. In addition, proposals that explore biomarker relevance to disease process and /or change in markers with disease treatment are encouraged.
2. **Discovery and/or testing of candidate treatment compounds in both cell-based and mouse models of HGPS.** Of note, only proposals that test compounds in a progerin-producing mouse or cell model will be considered. Comparisons to other mouse models of disease, such as ZMPSTE24 -/- and other non progerin-producing mouse models, are acceptable, but only as a comparison to progerin-producing models.

PRF further encourages the use of its Cell and Tissue Bank for all samples required for research. For more information on the PRF Cell and Tissue Bank, please follow this link: http://www.progeriaresearch.org/cell_tissue_bank/ or email Project Coordinator Susan E. Campbell, MA, at susan_campbell@brown.edu**.**

III. Application Guidelines

The following general guidelines apply to PRF research grants:

1. Principal Investigators must hold post-doctoral positions or beyond. Co-Principal Investigators are acceptable. Post-doctoral applicants must include their mentor as a Co-Principal Investigator.
2. Awards will be granted only to applicants affiliated with institutions with 501(c)(3) tax-exempt status, or the equivalent for foreign institutions.
3. Proposed projects must have specific relevance to HGPS, and show promise for contributing to the scientific or clinical advancement in this field of study.

IV. Funding Guidelines and Limitations

1. In the event that funding is offered at a different level than requested, a revised budget in the amount of awarded funds, will be required with acceptance of the grant award.

2. Payments will be made on a quarterly basis at the beginning of each quarter, with the exception of the year-end and final payments, which will be paid within thirty days after receipt and approval of the reports required at that time, as specified in 'Grant Agreement Form' below. The first quarterly payment for each grant year, from year 2 on, will be withheld pending receipt and approval of all required annual reports for the prior year. Payment will be forfeited if reports are not received within the specified time noted in the 'Grant Agreement Form' below, or unless an extension has been granted by PRF in advance of the due date.

3. Payments made to international institutions will be wired to the grantee's bank of choice. Wiring fees will be deducted from the total grant amount paid each quarter. Upon award, bank/recipient information must be provided on the Grant Agreement signature pages. If FedEx is preferred as the delivery method for grant payments, please inform Grants Administrator upon award, providing the institution's FedEx account information for shipping/billing. If the institution does not have an existing account with FedEx, fees for shipping will be deducted from quarterly grant payments.

4. PRF reserves the right to withhold payment at any time pending resolution of any discrepancies in the use of funds, and/or if the specific aims are not adequately addressed, all as set forth in the grant proposal, and any revisions required thereto by PRF, prior to acceptance and approval.

5. Awards may not be contributed to a unified or pooled fund that will be used to award grants or support other projects.

6. Grants are awarded on the basis of the content of the proposal, as well as the qualifications of the named Principal Investigator (PI) and sponsoring institution. If the PI terminates his/her affiliation with the institution identified in the grant award, and wishes to continue the project at another qualified sponsoring institution, the PI must notify PRF in writing. PRF reserves the right to require resubmission of the grant with the appropriate changes in staff and/or venue, and PRF reserves the right to reject such change.

7. If the PI wishes to discontinue the project prior to completion, he/she must notify PRF in writing within sixty days of termination of work on the project. The original institution identified in the grant award shall have the opportunity to identify another PI within sixty days of notification. PRF reserves the right to require resubmission of the grant with the appropriate changes in staff and PRF reserves the right to reject such a change. If the original institution does not wish to continue the project, the remaining funds from the grant award as of the date of termination of work on the project must be returned to PRF.

8. The following will not be funded:

    a. **Salaries in excess of the NIH salary cap.** PRF operates under the same salary cap restrictions as the NIH. Effective January 2015, the NIH salary cap is $183,300. Please refer to this link for periodic changes to the salary cap. http://grants.nih.gov/grants/policy/salcap_summary.htm

    b. **Overhead or indirect costs**. *Exception*: if an institution has a strict, written policy which does not allow researchers to apply to granting organizations that do not pay indirect costs, and if there have been no exceptions to that policy, PRF will negotiate a minimal rate. The policy must be provided for review.

    c. **Salaries or stipends for students are only allowed in proportion to actual effort towards the specific project**. PRF funds cannot be used for time spent in classes, thesis preparation, etc.

    d. **General institutional expenses**

    e. **General fundraising campaign expenses** such as dinners and mass mailings

    f. **Religious, political, or other research** that does not fall within PRF's areas of interest

    g. **Journal subscriptions, advertisements, tuition fees, professional society dues, meals, receptions, or parking fees**

V. Processing of Grant Applications

Grant applications will usually be accepted and considered two times per year. The PRF Medical Research Committee (MRC) will review each proposal and present its recommendations to the PRF Board of Directors, whose decisions on awards are final. The Board of Directors will usually consider proposals at their second and fourth quarterly meetings of the calendar year, typically held in May/June and November/December. The deadline for applications to be considered at a specific Board meeting is approximately 12 weeks prior to the meeting date. Please email researchgrants@progeriaresearch.org or visit our web site at http://www.progeriaresearch.org/grant_application.html for the most up to date schedule.

Notification of accepted and denied proposals will be made within two weeks of the Board of Directors meeting. For approved awards, the grant period should normally begin within four months thereafter.

VI. Detailed Application Instructions

Submission of an incomplete application will result in a delay in review or in non-consideration. Only proposals written in the English language will be considered. Submissions must be **received** by 5:00 PM EST of the deadline date and must be in the format detailed below.

We suggest on-line submissions be made no later than 1:00 pm, in the event that technical difficulties occur. A confirmatory email will be sent within 1 hour of submission on the deadline date, and within 1 business day of submission prior thereto, confirming receipt.

1. Format:
    a. All essential elements listed on the Grant Application Checklist, detailed in Sections A-C below, are to be converted to PDF format, then combined into a single PDF, which is to be submitted by any of the options listed in the Submission section. The Grant Application Checklist can be found at: http://progeriaresearch.org/assets/files/pdf/Grant-Application-Checklist-Final-2015-(1).pdf
        i. Proposal PDF file name must start with the last, then first name of the primary applicant/PI.
    b. If applicable, two letters of reference are to be submitted separate from the proposal PDF submitted by the grant applicant. To ensure punctual and confidential receipt by PRF, letters of reference must be submitted electronically to PRF by the sources of reference, using any of the options listed in the Submission section below. The PI is responsible for ensuring letters of reference are submitted to PRF by the deadline date
    c. Maximum length for Section 3B, *Project Description*, is ten pages, single-spaced, using 8.5”x11” (US) or A1 (Europe) size pages, and Arial 11-point or Times New Roman 12-point font. Figures and tables, but not references, are included in this 10-page limit. Section 3A. *Principal Investigator Information* and Section 3C. *Additional Information* are not included in the 10-page limit**.**
    d. Number each page of entire submission consecutively. (This includes all documents submitted within the single PDF)
    e. Include Principal Investigator’s name on each page as a header
    f. Abbreviate only after complete wording has been provided, and provide a list of abbreviations as indicated in section 3C.
    g. Use standard black type that can be photocopied

2. Content:
    The proposal should describe the rationale and potential importance of the project, and should include the specific aims and research design and methodology. Summarize previous relevant work with progress to date. Include sufficient detail in a concise manner to facilitate evaluation of the proposed work. Reviewers will consider brevity and clarity of the proposal to be indicative of a focused approach to a research objective and the ability to achieve the specific aims of the project.

3. The application should include the following items, in order, as a single PDF (excluding letter(s) of reference, if applicable, to be submitted separately by sources of reference):

A. Principal Investigator Information Page

a. **Name of organization**: The name of the affiliated non-profit organization
b. **Title of project**: Choose a title that is descriptive and specific, not general
c. **Principal Investigator (PI)/Co-PI(s)**: Name and relevant title(s)
d. **Contact information**: Mailing address, telephone and fax numbers, e-mail
e. **Type of award applied for**: Innovator Award, Established Investigator Award or Specialty Award.
f. **Specific amount requested**: Indicate the total dollar amount requested from PRF for year one and, if applicable, years two and three of the project.

B. Project Description (Maximum of ten pages/literature cited not included)

a. **Abstract**: Provide a project summary that addresses the following: What problem does the project address? Why is the work important to children with HGPS? What is your hypothesis/ objective? How will the project be accomplished? Signify up to eight key words in bold lettering.
b. **Specific aims**: List the project's objectives and rationale, and describe concisely the specific goals of the research, including any hypotheses to be tested.
c. **Background and significance**: Briefly outline the background of the proposed project. Include a critical evaluation of previous research and existing knowledge, and specifically identify the gaps that the project is intended to fill. State explicitly the importance of the proposed research by relating the project's specific aims to the medical issues of HGPS patients.
d. **Preliminary studies:** Preliminary studies directly related to HGPS are not required, but descriptions of your progress in investigations related to specific aims are highly recommended.
e. **Research design and methods**: Describe the research design and methodology that will be used to accomplish the project's specific aims. Include the means by which data will be collected, analyzed, and interpreted. Describe any new methodology and its advantage over existing techniques. Discuss the potential difficulties and limitations of the proposed procedures and alternative approaches to achieve the project's aims. Provide a timetable for the project.
f. **For Resubmissions Only:** In 1-2 pages, please provide a point-by-point response to the prior MRC critiques. This part f. is not included in the 10 page limit for 3B. a. – e., above.

C. Additional Information – Listed in order

a. **Literature cited:** List the references cited in Section B (not included in the ten pages)
b. **Abbreviations:** List complete wording for all abbreviations used
c. **Facilities:** Describe facilities, laboratory space, and major equipment that are pertinent to the project.
d. **Hazardous materials:** Describe any procedures, materials, or situations that may be hazardous to personnel and the planned precautions to be exercised.
e. **Human subjects**: Regulations require that all affiliated institutions establish and maintain appropriate policies and procedures for the protection of human subjects. If applicable, briefly describe the population of subjects involved in the project, the process for informed consent, and the means by which protection will be

ensured. Provide proof of current or pending project approval by an Institutional Review Board or similar oversight committee.

f. **Animal studies**: All proposals must conform to regulations for the safe and humane treatment of animals. If applicable, briefly describe the animals to be studied, and measures to minimize pain and discomfort. Provide proof of current or pending project approval by the institution's Animal Use and Protection Committee or similar oversight group.
g. **Budget**: Provide an individual detailed budget for year one and, if applicable, for each year of years two and three. See budget form at http://www.progeriaresearch.org/grant_application.html
h. **Budget justification**: In narrative form, provide justification for the following budget items: salary and benefits for the principal investigator and other project personnel; travel, printing/publications, consultant costs, patient care costs; and equipment and supplies. Travel to professional meetings for the purpose of presenting grant-funded work will be limited to Year Two of any proposal. (This does not apply to travel to PRF workshops, which can occur in Year One.)
i. **Project personnel**: Provide the name, title, and role of any individual who will be involved in the project, including the Principal Investigator/Co-PI(s). Indicate the percent effort that each person is expected to devote to the project. Provide the curriculum vitae (CV)/Biosketch of all key project personnel and collaborator(s), preferably a Biosketch in NIH format or similar format that is abbreviated to emphasize experience relevant to the research proposal being submitted.
j. **IRS 501(c)(3) determination letter, or its equivalent for international institutions:** Provide a copy of the official 501(c)(3) letter, or its equivalent, stating that the institution is tax-exempt.
k. **Funding history:** If applicable, indicate the amount and granting organization for any other sources of funding for the proposed or related projects. For the Principal Investigator, provide a list of all current funding support as well as awards completed in the past five years.
l. **Institutional support:** Provide a letter of institutional endorsement of the project, signed by an appropriate official and the institution's business manager or fiscal officer. Include contact information for each.
m. **Letters of reference:** For Principal Investigators who are at the assistant professor level or below, two letters of reference are required to be submitted to PRF.

4. Submission
   a. All submissions must be received by 5:00 PM EST of the deadline date. It is strongly encouraged that online submissions be made by 1:00 pm, in the event of technical difficulties.
   b. A confirmatory email will be sent within 1 hour of submission of any and all documents received on the deadline date, and within 1 business day of submission prior thereto, confirming receipt.
   c. Letters of reference are to be submitted, in PDF format, directly by the sources of reference, using any of the methods in this section (below). PI is responsible for ensuring that letters of reference are submitted by the deadline date. The grant proposal must be submitted as a complete, single PDF, containing all elements of the application except reference letters. The Application Checklist, at

http://progeriaresearch.org/assets/files/pdf/Grant-Application-Checklist-Final-2015-(1).pdf , should be the first page of the document, and all sections should be arranged in the order presented in the Application Checklist. Submission may be made in any of the following ways:

- Email to researchgrants@progeriaresearch.org
- Dropbox, Hightail, or a similar file-sharing option can be used if the file is too large for regular email.
  - In this case, applicant must email researchgrants@progeriaresearch.org to notify Grants Administrator of the submission. In order for the Grants Administrator to access the account and retrieve the submission, login information (username and password) for the account containing the proposal must be included within this notification email.

- Flash drive:

  By US Express mail to:
  The Progeria Research Foundation Grants Division
  PO Box 3453
  Peabody, MA 01961-3453

  By Fed Ex or other courier delivery service to:
  The Progeria Research Foundation
  200 Lake Street, Suite 102
  Peabody MA 01960
  (In case of lost or delayed deliveries, please make note of tracking number provided when mailing the submission, both for tracking purposes and for proof of scheduled delivery date.)

Application materials and further information on research can be obtained from:

The Progeria Research Foundation at the above address
via the website www.progeriaresearch.org/medical_research.html
or by contacting PRF at:

Phone: 978-535-2594
Fax: 978-535-5849
Email: researchgrants@progeriaresearch.org

5. Acknowledgement of Receipt
   PRF will review applications for completeness and acknowledge receipt of proposals. Applicants submitting incomplete proposals must provide the missing parts within 48 hours of notification. Applications will be immediately forwarded to the Medical Research Committee as received, and may be rejected if not complete within the required time.

Responsibility of Recipient

Upon notice of award, the grant recipient and institution are expected to agree in writing to the terms of the Grant Agreement and the PRF Intellectual Property Policy, below.

Grant Agreement Form

(To be signed along with the PRF Patent, Intellectual Property and Technology Transfer Policy <u>after</u> a grant is awarded)

1. In accepting a Grant from The Progeria Research Foundation, Inc. (PRF), the Principal Investigator ("PI") and the grantee institution ("Institution") assume an obligation to expend grant funds for the research purposes set forth in the application, and to affirm that there is no duplicate funding for these purposes. The PI and Institution will promptly notify PRF of activation or funding of any application for support to which PRF support is alternative.

2. <u>Grant Period:</u> The start date of the grant period is the earliest that funds may be obligated or expended. The termination date of the award will be the date indicated in the original notification letter or the date provided by an authorized extension. The termination date is the latest that funds may be expended except to liquidate authorized obligations.

3. The Institution is obligated to administer the grant in accordance with the regulations and policies governing the grant programs of PRF or, where not specified, consistent with the policies and practices of the Institution.

4. PRF requires a detailed accounting of all funds expended to be submitted every 12 months, or more frequently at the discretion of PRF (with thirty days' notice), and a final accounting and progress report within 60 days of the end of the project. The fiscal officer of the Institution will provide such Expenditures/Financial Reports, co-signed by the PI. Financial Reports should include detailed, budget-to-actual expense amounts. See Budget to Actual form at http://www.progeriaresearch.org/grant_application.html. The fiscal officer of the Institution will agree to make available to representatives of PRF, following due notice, accounting records of disbursements made from PRF's grant funds.

5. Any funds not used in the manner specified in the application must be returned to PRF, and any budget change that is greater than 10% of the total budget amount must be submitted in writing for approval by the PRF Medical Research Committee (MRC), such approval not to be unreasonably denied. Principal Investigators may apply for an extension of time to use remaining funds at the end of the grant period. For two-year and three-year grant awards, funds not used in the first year or second year will be available for use in the following year if written approval is obtained from PRF.

6. Along with the Financial Reports listed above, every twelve months during the grant period, or more frequently at the discretion of PRF (with thirty days' notice), the PI shall

also submit an one to two page Progress Report/Annual report of his/her technical accomplishments. The progress/annual report (interim and final) should address each aim, annual milestones, any problems or pitfalls, and include all relevant data, etc. The milestones should be defined in bullet-point format, and then stated in order to address each aim. For interim progress reports, plans for the coming year should also be noted.

7. Should there be a change in direction from the original aims and milestones to the grant proposal the PRF Medical Research Committee must be notified and approval from the committee will be required.

8. In the final year or at the earliest date possible thereafter, the PI shall submit a list of articles published or accepted for publication, and a summary of the research results.

9. In order to foster interactions among grantees and others interested in Progeria research, the PI will be required to present his/her work at each PRF workshop taking place during his/her funding period, including any approved no cost extension period. PRF workshops are held every other year. The next workshop will be in 2018 in Boston, MA.

10. The first quarterly payment for each grant year, from grant year 2 on, will be withheld pending receipt and approval of all required annual reports for the year prior. The final grant payment will be made upon receipt and approval of all required reports.

    Annual reports (interim and final) shall be 1-2 pages in length, and include the following elements:
    a. Address each aim, annual milestones and include all relevant data, etc.
       Define original aims and corresponding timelines in bullet-point format, then include progress for each.
    b. Problems/pitfalls
    c. Change in direction, if any (must be approved in writing by MRC)
    d. Plans for the coming year (for interim reports only)

    Grant payments will be forfeited if interim progress and/or financial reports are received later than two weeks after the specified deadline, or if the progress is deemed inadequate by The Progeria Research Foundation. If both the final financial and technical reports are not received within the 60 day deadline, the final grant payment will be forfeited unless special extension has been granted by PRF in advance of the due date.

11. Results of research will be made freely available to the public through appropriate scientific channels and all publications will bear the statement: "THIS WORK WAS SUPPORTED BY A GRANT FROM THE PROGERIA RESEARCH FOUNDATION". The PI and Institution will not permit release of any publicity regarding the award or the research without advance clearance from PRF.

12. If the research results are to be published, the PI shall provide PRF with advance written notice, no later than one week before publication, a PDF of the article and any press releases related thereto. PRF shall not disclose such information to the public until the article is published and embargo released, if required. PRF has discretion to permit shorter notice if circumstances warrant.

13. Permission for a change in PI or Institution must be authorized by PRF in advance or the grant will terminate on the date the PI leaves or ceases to work at the Institution at which the grant was awarded.

14. With regard to any and all research tools that are created in the course of a grant funded, in whole or in part, by PRF, including but not limited to constructs, antibodies and animal models for Progeria, such tools must be made freely available to PRF and any and all researchers who reasonably request it for the purposes of academic, non-commercial research. The creation of a mouse model, for example, shall be deposited by PI and Institution in a repository, such as The Jackson Laboratory (www.jax.org) that will make the model available to the general research community.

    The information regarding the availability of said tools shall be available through PRF's website and any other means PRF deems reasonable and appropriate. These tools must be made available within 6 months of publication of results, or 6 months after the grant has ended, whichever comes first. The PI and Institution shall promptly provide to PRF the name and contact information of those requesting and receiving said research tools.

    If the PI and Institution fail to make such research tools freely available as provided above, PI and the Institution shall return all research grant monies provided by PRF for the project for which this grant is given.

15. Discoveries or inventions resulting from the Principal Investigator's research, or to which the investigator is a party, and carried out during the tenure of the PRF Grant, will be subject to the current Patent, Intellectual Property and Technology Transfer Policy of PRF attached. Such policy may be amended from time to time. Amendments are timely posted on PRF's web site.

16. PRF endorses the principles of the Association of American Medical Colleges (AAMC) report, "The Maintenance of High Ethical Standards In The Conduct of Research."

17. PRF does not fund scientific research that involves the use of human fetal tissue. With respect to human and animal experimentation, the Executive Officer of the sponsoring institution and the principal investigator affirm that:

    a. The investigations which might involve human subjects have been endorsed by a committee on clinical investigation, or other clearly designated appropriate body, of the sponsoring institution.
    b. Any research involving human subjects will conform ethically with the guidelines prescribed by the National Institutes of Health (NIH), including the provision of suitable explanation to human subjects or their guardians concerning the experimental design and all significant hazards, so that they may be in a position to provide appropriate informed consent prior to the investigations.
    c. Research involving animals will conform with the current "Guide for the Care and Use of Laboratory Animals," NIH publication, DHHS/USPHS, and with federal laws and regulations, and has been approved by the Institutional Animal Care and Use Committee; and

d. Wherever applicable, the research protocol will be reviewed and approved by the institution's biohazards committee, as well as conform to NIH guidelines.

18. The nature of this arrangement is a funding agreement, and no employment or agency relationship is created.

19. The Progeria Research Foundation is not responsible for any claim, judgment, award, damages, settlement, negligence or malpractice arising from the research or investigation related to this award. The institution acknowledges responsibility for the conduct of research or investigations related to this award, and releases The Progeria Research Foundation from all claims or liability that may arise from the conduct of research or investigations related to this award resulting from any act or omission on the part of the institution, its employees, agents, or representatives.

20. PRF reserves the right to modify the terms or conditions of this contract with six months written notice to the Principal Investigator and the sponsoring institution.

SIGNATURES APPEAR ON THE NEXT PAGE

Signature of Principal Investigator Print Name Date

Address

City, State, Zip Code

Telephone and FAX Numbers

E-Mail Address

Award Period From / To Date: _____

Name of Fiscal Officer preparing Expenditures Report

Title

Address

City, State, Zip Code

Telephone and FAX Numbers

E-Mail Address for Fiscal Officer

International grant applicants only, please complete next page

Bank Information – For wiring funds (Required by international applicants only)

If FedEx is preferred for sending grant payments, please disregard this section and notify Grants Administrator, providing the institution's FedEx account information for shipping/billing. If the institution does not have an existing account with FedEx, fees for shipping will be deducted from quarterly grant payments.

Bank Name	Account Number
Bank Code	Swift Code
IBAN#	Beneficiary Name
Address (No PO Boxes)	City/Country

Patent, Intellectual Property, and Technology Transfer Policy

(To be signed along with the PRF Grant Agreement Form after a grant is awarded)

1. The primary purpose of PRF in funding medical research through its research grantees is to support its mission to find the cause, treatment, and cure for Hutchinson-Gilford Progeria Syndrome. PRF recognizes that such research may result in discoveries and inventions that have public health, scientific, business, or commercial value. PRF is interested in supporting and promoting science in the public interest and in making any such valuable discoveries and inventions available for public use as early as reasonably possible. Accordingly, this Patent, Intellectual Property, and Technology Transfer Policy, and any subsequent amendments hereto, are guidelines that shall apply to all discoveries or inventions created through the performance of research supported in whole or in part by a PRF Grant.

2. All inventions or discoveries made in the performance of research supported in whole or in part by a PRF Grant shall be reported in writing to PRF at the earliest practical time, but in no event later than when the invention or discovery is disclosed to the grantee institution where the research was performed ("Institution").

3. The Principal Investigator of the grant ("PI") shall promptly notify PRF in writing of any decision to file a patent application or seek an application for any other type of legal protection for intellectual property rights in connection with any discoveries or inventions developed under a PRF Grant. PRF shall keep information regarding such applications confidential, except to the extent that such information is otherwise made public through operation of law or by someone other than PRF, or to the extent that it is necessary for PRF to obtain legal advice regarding such an application. The PI shall notify PRF promptly and in writing of any patent subsequently issued.

4. PRF recognizes that the PI may be subject to certain obligations owed to the Institution or others with respect to research conducted on the Institution's premises. Notwithstanding such obligations, and, except as provided below, PRF shall abide by the PI's decision, and/or the Institution's decision, if applicable, concerning whether to seek a patent or any other legal protection in connection with discoveries or inventions developed under the PRF Grant. However, to the extent that the PI (and/or the Institution, if appropriate) decides not to file a patent application or otherwise seek legal protection for intellectually property rights in connection with discoveries or inventions developed under a PRF Grant, including the decision to abandon any such application, the PI shall notify PRF in writing as soon as possible of such decision, but in any event within such reasonable time frame as would be necessary to preserve all intellectual property rights in any such discoveries or inventions. PRF, at its sole option and at its sole expense, may then decide to file a patent application or seek an application for any other type of legal protection for intellectual property in the U.S. or abroad. In the event that PRF

makes such a determination, the PI (and/or Institution, if appropriate) shall assign to PRF, to the extent permitted by law, all right, title, and interest in and to any such discovery or invention and provide all reasonable cooperation and assistance necessary to assign and transfer such rights to PRF. The PI (and/or Institution, if appropriate) shall further provide all reasonable cooperation and assistance to PRF in seeking to obtain and enforcing a patent or other legal protection for intellectual property in the U.S. or abroad.

5. PRF shall share in any monies received from an invention or discovery developed under a PRF Grant. The PI (and/or Institution, if appropriate) shall not enter into any agreement that will derogate PRF's right to share in such monies and shall notify PRF promptly and in writing of or any license, lease, sale, or other agreement concerning a discovery or invention developed under a PRF Grant that is intended to generate revenue. PRF's right to share in monies shall include the sharing of licensing fees, royalties, or any other income derived from such invention. PRF's participation shall be on a pro rata basis, based on PRF's portion of funding support for the research which led to the discovery or invention. The parties shall work together to develop the details of a reasonable formula. All reasonable administrative and overhead expenses of the Institution, as determined in accordance with the Funding Guidelines and Limitations of the Grant programs of PRF, shall be factored into the calculation of indirect support.

6. In the event that the PI (and/or Institution, if appropriate) grants a license to another party to commercialize an invention developed under a PRF Grant, such license shall include provisions that obligate the licensee to commercialize the invention in a commercially reasonable diligent manner, pursuant to, for example, appropriate diligence requirements and milestones, and the licensor shall monitor performance by the licensee. Unless otherwise agreed with PRF, the PI (and/or Institution, if appropriate) agrees that if it, its designee or licensee has not taken effective steps to arrange for practical or commercial application (*e.g.*, through a license agreement or other reasonable terms) of the invention within three years from the date of issuance of a patent, or another clear determination of commercial value, or such other term that is commercially reasonable under the circumstances, and the Institution or other titleholder cannot show commercially reasonable cause acceptable to PRF why it should retain rights in and title to the invention for any further period of time, then PRF shall have the right to require: (1) assignment of the patent or other intellectual property rights to PRF; (2) cancel any outstanding exclusive license agreement; (3) grant a license under such patent or intellectual property right on terms that are reasonable in the circumstances; and/or (4) any other reasonable disposition of rights in the invention.

7. If the PI (and/or Institution, if appropriate) fails to commercialize any invention or discovery developed under a PRF Grant within a commercially reasonable time, including licensing such invention or discovery to another, and PRF identifies a suitable candidate interested in commercializing such an invention or discovery, the PI (and/or Institution, if appropriate) shall consider such a candidate as a potential licensee and shall license the invention or discovery to such a candidate, provided that the terms of such license are reasonably acceptable to the PI (and/or Institution, if appropriate).

SIGNATURES APPEAR ON THE NEXT PAGE

Signature of Principal Investigator | Print Name | Date

Address

City, State, Zip Code

Telephone and FAX Numbers

E-Mail Address | Award Period From / To Date

Signature of Authorized Representative of Grantee Institution | Print Name | Date

Title

Address

City, State, Zip Code

Telephone and FAX Numbers

E-Mail Address

Grant Approved by The Progeria Research Foundation

Name: Meryl Fink

Title: Executive Director

Signature: _____ Date: _____