



PEDIATRIC ICHTHYOSIS CHALLENGE GRANT 2025 Request for Applications

Overview

Ichthyosis is a family of genetic skin disorders characterized by dry, scaling skin that may be thickened or very thin. Each year, more than 16,000 babies are born with some form of ichthyosis with evidence to suggest that approximately 300 babies are born each year with a moderate to severe form of ichthyosis. Aside from the common scaling condition of the skin, ichthyosis is disfiguring for most affected individuals and individuals can experience dehydration, infections, chronic blistering, overheating, and rapid-calorie loss. People with ichthyosis are subjected to psychological issues; concerns of isolation, low self-esteem, and depression are common because patients are often ostracized due to the appearance of their visible, chronically shedding skin. To date, there is no cure for ichthyosis, but dedicated researchers and physicians have and continue to develop effective ways to help manage the disorder.

To address this need, the Foundation for Ichthyosis and Related Skin Types (FIRST) and the Pediatric Dermatology Research Alliance (PeDRA) are collaborating to support research investigations focused on pediatric ichthyosis and related skin types with the **Pediatric Ichthyosis Challenge Grant**. Through this grant, FIRST and PeDRA intend to advance a high-impact research endeavor relevant to pediatric patients and families facing the burden of ichthyosis and related conditions.

Focus

Research may include focused basic science projects addressing keratinocyte biology and differentiation, genetics, biology of skin inflammation, itch or other ichthyosis-related areas. Clinical research is also encouraged and may address improving diagnosis and/or quality of life, defining quality of life measures, expanding knowledge about topical or systemic treatments, or specific aspects of the disease. Investigators are encouraged to utilize the National Registry for Ichthyosis and Related Skin Disorders when appropriate.

Priority consideration will be given to projects led by early-to-mid-career principal investigators who are part of multidisciplinary teams including researchers, clinicians, and patient stakeholders. Applications that support FIRST's and PeDRA's commitment to advancing equity, diversity, and inclusion across all facets of their organizations and research are encouraged.

Number of Awards

One (1) Challenge Grant is available for the 2025 funding cycle. This is a one-year non-renewable grant, with the earliest possible start date of July 1, 2025.

Eligibility

Applicants need not be trained in pediatric dermatology but must hold the degree of MD and/or PhD (or equivalent) and be eligible to apply for grants under the guidelines of their host institution. Principal Investigators need not be United States citizens and the research need not be conducted in the United States. Evidence of IRB or IACUC (or equivalent) approval is required for all studies when relevant. Recipients of past or current FIRST and/or PeDRA grants are eligible to apply.

Application

Applications must be submitted by email to research@pedraresearch.org as a single pdf that includes the following:

1. Application form (fillable pdf available here: <https://pedraresearch.org/pediatric-ichthyosis-challenge-grant/>)
2. Cover Letter (2-page maximum)
3. Abstract (250 word maximum)
4. Layperson's Summary (150 word maximum)

5. Project Proposal (*5-page maximum, not including references*) must include:
 - a. Specific Aims (*one page*)
 - b. Background and Rationale
 - c. Project Description
 - i. Methods and study/experimental design
 - ii. Primary and secondary outcome measures (*if applicable*)
 - iii. Statistical analysis
 - d. Potential pitfalls
6. Budget (*2-page maximum*) – Provide a detailed budget and brief justification that includes an explanation of any actual or anticipated overlapping funds and plans for support beyond the award period (if applicable)
7. Biosketches (*5-page maximum per biosketch*) – Provide NIH-style biosketches for the Principal Investigator and any Co-Investigators.
8. Letter(s) of support – (*Optional*) While not required, letters of support are recommended from Co-Investigators, key collaborators, and the chairperson of the Principal Investigator’s department.

Applications must be written in 11pt Arial font or larger with at least one-half inch margins. Total file size for the combined pdf may not exceed 20MB.

Review

Applications will be reviewed by a team of peer reviewers based on the following:

1. Significance
2. Innovation and Impact
3. Clarity of proposal
4. Strength of approach and feasibility (including statistical analysis)
5. Strength of investigator(s) and research environment (including strength of mentorship, if applicable)
6. Strength of budget

Award

Applicants may request up to **\$25,000 (direct costs only)**. Applicants may request salary support as part of their budget and are encouraged to use budget to compensate support staff necessary for the efficient completion of the proposed research. Refer to [PeDRA’s Grant Guidelines](#) for more information on requesting salary support.

Important Dates

Application deadline:	11:59 PM PT, January 24, 2025
Awards made:	no later than May 1, 2025
Earliest start date:	July 1, 2025

Questions

Email research@pedraresearch.org or cwassel@firstskinfoundation.org for additional information or with any questions on the Challenge Grant, application, or review process.