The Gerber Foundation

"Enhancing the quality of life of infants and young children."

2021 Annual Report

FOUNDATION
ESTABLISHED
1952

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INTRODUCTION

The Gerber Foundation was established in 1952 as the Gerber Baby Foods Fund by Daniel Gerber, Sr. and Gerber Products Company, and provided $14,700 in support to various organizations in that first year. While the Gerber name may imply a strict interest in infant nutrition, our commitment is to a much broader range of activities significantly impacting issues facing infants and young children.

The mission of the Foundation – to enhance the quality of life of infants and young children in nutrition, care, and development – remains the guiding beacon for Foundation giving. Accordingly, priority is given to US research projects whose primary beneficiaries are young children from birth to three years of age. We are particularly interested in research that could provide clinically useful insights and lead to positive changes in the pediatrician's day-to-day practice.

As of the end of 2021, the Foundation has awarded nearly $123 million in grants to individuals and institutions throughout the world. While the Foundation maintains a small grant program that reflects our ongoing commitment to West Michigan communities, the vast majority of the Foundation's grant dollars are distributed on a competitive basis for national research focused on pediatric health and/or nutrition concerns, including the effects of environmental hazards on the well-being of infants and young children. Through our grant-making efforts, we are committed to improving the health and well-being of the youngest members of our society.

THE GERBER FOUNDATION
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"The time will come when diligent research over long periods will bring to light things which now lie hidden. There will come a time when our descendants will be amazed that we did not know things that are so plain to them."
Seneca, Natural Questions

Small Incremental Change

Research, as with most things worth achieving, aims for those small incremental changes that can lead to benefits in the long run. Consider those of us who make resolutions at the dawn of every new year that we hope will change our lives for the better. For most of us, our resolve doesn't stick. Once we begin, if we begin, the goals quickly appear to be too lofty.

Perhaps if aimed a little smaller, took a tinier bite. Researchers, when discussing ways to bring about true change in our behaviors, recommend starting small. Make one measurable change. Cement it in place. Build on that. A daily walk? Start with 5 minutes the first day, build to two miles in 30 minutes. Eat more vegetables by planning one meal each week around a vegetable rather than meat.

This same principle applies to our research into the care and well-being of infants. Incremental change, over time, with each researcher absorbing the work of those who went before and adding to the creation of new knowledge. Each new outcome may help to prevent a side effect or illness, diagnose a problem earlier, be sure we do not do too much, nor too little.

Our aim, with the grants the Board of Trustees approved in 2021 was, as ever, the unending pursuit of bringing new light into the care and nurturing of our youngest children.

Prevention
- Children's Hospital of Philadelphia – A study examining universal mask wearing in the NICU and any resulting decreases in hospital-acquired infections
- University of South Carolina – Researching the benefits of using a blood-warming device during transfusions to preterm infants to prevent hypothermia

Assessment or diagnosis
- Stanford University – Exploring temperature measurements in newborns and other factors to identify predictors for infants who may experience hypothermia
- Memorial Sloan Kettering Cancer Center – Studying a new test to improve diagnosis and prognosis for children with retinoblastoma, a cancer of the eye
- Pennsylvania State University – Investigating the feasibility of continuously monitoring glucose levels in newborns

Treatment
- Cincinnati Children's Hospital – Researching the benefits and/or harm from high-flow nasal cannula use in children with bronchiolitis, with an eye to setting new guidelines
- University of Colorado – A study of two oral antibiotics commonly used in children and their therapeutic levels in infants in the NICU
- Rutgers University – A study of the use of a fortified oral rehydration therapy to reduce the severity and duration of diarrheal episodes in young children
- University of Michigan – A novel test of an anaphylaxis monitoring tool during food allergy testing in young children

Understanding mechanisms
- Virginia Commonwealth University – Exploring the fat content in breastmilk and its effects on the gut microbiome and growth failure in preterm infants
- University of Florida – Examining COVID-19 vaccinations, human milk antibodies, and protection for the breastfeeding infant.

Barbara J. Ivens
Board President

Catherine A. Obits
Program Director

2021 RESEARCH GRANTS

Children's Hospital Medical Center (Jennifer Treasure, MD) **Cincinnati OH** High-Flow Nasal Cannula Use in Patients Diagnosed with Bronchiolitis	**$20,000**
Children's Hospital of Philadelphia (Sagori Mukhopadhyay, MD) **Philadelphia PA** The Masking Study: Does Universal Masking Decrease Late-onset Infections in the NICU?	**$330,702**
Children's Hospital of Philadelphia (John Weaver, MD) **Philadelphia PA** Copy Number Variants as Biomarkers for Renal Failure in Posterior Urethral Valve Patients	**$20,000**
Cochrane Neonatal (Roger Soll, MD) **Burlington VT** The infant and family experience in the neonatal intensive care unit: evidence synthesis for informed decisions and better health	**$341,573**
Helen DeVos Children's Hospital Foundation (Brooke Geddie, DO) **Grand Rapids MI** The associations between neonatal A1C and retinopathy of prematurity	**$349,640**
Henry Ford Health Sciences Center (Amy Eapen, MD) **Detroit MI** Identifying Methylome Alterations at Birth Indicative of Later Allergic Disorders	**$20,000**
Indiana University (Troy Markel, MD) **Indianapolis, IN** Volatile Organic Compound Profiling to Predict Risk of Necrotizing Enterocolitis	**$348,909**
Lucile Packard Children's Hospital (Rebecca Dang, MD/Alan Schroeder, MD) **Stanford CA** Temperature Values in Newborns and Implications for Clinical Practices Surrounding Hypothermia	**$350,000**
Memorial Sloan Kettering Cancer Center (David Abramson, MD) **New York NY** Non-invasive liquid biopsy for retinoblastoma to improve diagnosis and customize care for children	**$324,951**
Pennsylvania State University (Neha Patel, DO) **Hershey PA** Continuous Glucose Monitoring in At-Risk Newborns	**$306,933**
Rutgers University (Paul Breslin, PhD) **New Brunswick NJ** Reduction of Severity and Duration of Pediatric Gastroenteritis Through Amino Acid-Fortified Oral Rehydration Therapy	**$323,219**
University of Colorado (Andrew Haynes, MD) **Aurora CO** Oral Amoxicillin and Cephalexin Pharmacokinetics/Pharmacodynamics (PK/PD) in the Neonatal Intensive Care Unit	**$20,000**

University of Florida (Vivian Valcarce, MD) **Gainesville FL** Human milk antibody response to COVID-19 vaccination and protection to breastfeeding infants	**$20,000**
University of Miami (Sarah Sonny, MD) **Miami FL** Impact of Microbiota Diversity on Body Composition and Growth in Low Birth Weight Preterm Infants	**$19,557**
University of Miami (April Tan, MD) **Miami FL** Restoring airway symbiosis through the gut	**$19,965**
University of Michigan (Charles Schuler, MD) **Ann Arbor MI** Developing transepidermal water loss as a novel food anaphylaxis monitoring tool	**$342,676**
University of South Carolina (Kayla Everhart, PhD) **Columbia SC** Evaluation of a blood warming device for packed red blood cell transfusions to decrease hypothermia in very perterm infants	**$327,097**
Virginia Commonwealth University (Karen Hendricks-Muñoz, MD) **Richmond VA** The influence of mothers own and donor human milk fat on gut microbiota and postnatal growth failure in the preterm infant	**$350,000**
TOTAL NATIONAL GRANTS AWARDED:	**$3,835,222**

"Enhancing the quality of life of infants and young children."

Researcher: Neha Patel, DO
Pennsylvania State University at Hershey
Research Title: Continuous Glucose Monitoring in At-Risk Newborns: A Feasibility Study

New use of existing technology could improve blood sugar monitoring in at-risk infants

Children, and many adults, flinch at the very idea of having blood drawn for routine lab tests.

Yet many newborns, at-risk for low blood sugar levels, can have their heels pricked with needles several times a day while they are in the hospital.

Low blood sugar, called hypoglycemia, is the most common metabolic disturbance in newborns, and the culprit behind a number of childhood difficulties. It affects approximately 15% of all newborns in the U.S. annually.

Infants born to mothers with diabetes, infants both large and small for their gestational age, and late preterm infants are at greatest risk for neonatal hypoglycemia, said Dr. Neha Patel of the Pennsylvania State University at Hershey.

Her Gerber Foundation-funded study is helping Dr. Patel explore a way to adequately monitor these infants' blood sugar levels without the need for so many painful heel pricks.

"Newborns who have multiple needle sticks have a harder time tolerating routine childhood immunizations and blood draws,' Dr. Patel said. In animals, multiple heel sticks have been shown to change brain development, she added.

She believes it is essential to discover and use new technologies for hypoglycemic and sick newborns that reduce painful stimuli. In her experience, some hypoglycemic infants may have as many as 50 painful needle sticks during their hospitalizations.

Rather than the intermittent process used today, in which blood is drawn for screening every few hours using point-of-care glucometers, Dr. Patel is testing a method called continuous glucose monitoring.

Although approved by the Food and Drug Administration for children older than age 2, and tested with extremely premature infants, continuous glucose monitoring has not been analyzed for the at-risk newborns targeted by the American Academy of Pediatrics for routine glucose screening.

With a goal of enrolling 100 newborns, Dr. Patel says her study will provide data for larger trials to evaluate the effectiveness of continuous glucose monitoring.

"You can imagine that parents can become quite distraught when they see their baby being poked so often to get blood samples," Dr. Patel said. "We use continuous glucose monitors with older children, and wouldn't it be wonderful if these monitors could work with newborns, too?"

The continuous glucose monitoring system that Dr. Patel is evaluating tracks glucose levels throughout the day and night, providing alerts if sugar levels go too high or low.

There is only one needle stick, when the sensor is placed just beneath the baby's skin. A transmitter attached to the sensor continuously sends the glucose concentrations to a receiver electronically via Bluetooth technology.

"Our aim is to determine whether the baby can tolerate this sensor, and whether the sensor is accurate for making clinical decisions with no increased risk to babies, such as infection," she said.

One advantage of the continuous monitor is knowing what happens to glucose concentrations between samples. "We do not know how quickly concentrations change with or without treatment, the duration of hypoglycemia, and the lowest concentrations," Dr. Patel said.

With neonatal hypoglycemia affecting some 500,000 newborns in the U.S. every year, "we anticipate our data, and the future prospective trials we conduct, will provide clarity for clinical monitoring and treatment and improve long-term neurodevelopment in this large population," Dr. Patel added.

"I want to thank The Gerber Foundation for helping us pursue this project," she said.

"I very much appreciate the foundation's confidence and their willingness to work with us. I truly believe this work will prove to be a springboard for research on a larger scale."

Researcher: Holly Frost, MD
Denver Health Foundation, University of Colorado
Research Title: *NO TEARS:* Nasopharyngeal organism testing to improve outcomes for children with ear infections

Nose swabs reveal bacteria that cause ear infections, helping to target treatments

- Amoxicillin is the right medication for more than 94 percent of children with ear infections.
- A rapid nasal diagnostic test may reduce unnecessary antibiotic use while individualizing care for ear infections.
- COVID-19 infections can occur at the same time as ear infections.

Dr. Holly Frost often wondered if the antibiotics she prescribed the children she treated for ear infections were effective, or even called for.

Now well into her research that seeks to improve the clinical care of young children with acute otitis media (ear infections), the pediatrician is confident she is zeroing in on the answers.

Her study is revealing that the popular childhood medication amoxicillin does work best for most ear infections, that nasal swabs that can be done in any doctor's office can indicate which of three common bacteria is causing the ear infection, and that the COVID-19 coronavirus can be present at the same time as an ear infection.

All this is helpful because ear infections are the most common childhood infection requiring antibiotics. More than 8.7 million children in the United States get ear infections annually, and more than 60 percent of all children can expect to have the bothersome illness by the time they are 3 years old.

The number of antibiotic prescriptions to treat these infections – more than 10 million annually – is staggering, Dr. Frost said. And nearly a quarter of children will have three or more ear infections by age 3.

Yet today's standard treatment for ear infections has been in place for decades and many children - up to 40% - are receiving broad-spectrum antibiotics that are associated with higher rates of side effects she said.

In her prospective, longitudinal study of 300 children, Dr. Frost is examining how often amoxicillin fails to clear up ear infections in children ages 6-34 months old, and whether nose swabs using rapid diagnostic tests correlate to how children do with treatment. She also wondered whether COVID-19 and ear infections might be present at the same time.

"Three bacteria are behind most ear infections: S. pneumoniae, H. influenzae, and M. catarrhalis. The need for an antibiotic, and the optimal antibiotic, differs by the bacteria," Dr. Frost said. And while 85 percent of ear infections will go away without an antibiotic, 95 percent of children are given a prescription, according to the study. Many times, these are broad-spectrum antibiotics that act against a wide range of disease-causing bacteria.

There are consequences of children receiving too many or the wrong antibiotics, Dr. Frost noted, including later antibiotic resistance, adverse drug events, developing chronic diseases later in life, and diarrhea infections, as well as the costs of the medications.

The preliminary study data suggest that amoxicillin works for nearly 95 percent of children with ear infections, with no need for broader-spectrum antibiotics.

"The failure rate when using amoxicillin and the recurrent rate of infection is very low," Dr. Frost said. "If, for example, we prescribe amoxicillin, but the bacteria is not typical for that treatment, it probably doesn't matter. Amoxicillin will most likely work."

Dr. Frost was pleased to learn that rapid polymerase chain reaction tests, commonly known as PCR tests, using a nasal swab in a doctor's office are effective at teasing out which bacteria is likely causing the ear infection.

"We know, for example, that if the bacteria is not in the nose, it's likely not in the ear," Dr. Frost said. "This demonstrates how we

can potentially individualize care by pairing the type of bacteria to the best treatment, which sometimes means not prescribing an antibiotic and allowing the ear infection to clear up on its own." Parents are still given guidance on relieving pain with Tylenol and ibuprofen.

The bacteria present in a child's nose can also help doctors choose the best antibiotic for that particular patient.

"We know that each type of bacteria has a different chance of getting better without an antibiotic. For example, most kids with S. pneumoniae are likely to benefit from an antibiotic, whereas most kids with M. catarrhalis will get better without one," Dr. Frost said.

"We believe the majority of kids getting antibiotics today to treat ear infections don't need them at all. Which is likely why we see low failure rates and recurrent infections with amoxicillin, because kids didn't need the treatment in the first place," she said.

Because the COVID-19 pandemic sprang up during her study, Dr. Frost said she wondered if ear infection symptoms and outcomes would be the same between children with and without COVID-19.

The result: COVID-19 can be present at the same time as an ear infection, meaning that providers should not use a diagnosis of an ear infection to rule out COVID-19, she said. Most of the children who tested positive for COVID-19 infections attended daycare.

Detailed analysis of the study data, planned for the summer of 2022, will give more detail on the potential for the long-term health impact of targeted treatments for ear infections and the potential for cost savings, according to Dr. Frost. These savings could come from fewer lost school days for children and work days for parents, and by cutting back on unnecessary antibiotic expenses.

The savings on drug costs, as well as minimizing side effects from medications, should more than compensate for the additional costs of providing the rapid diagnostic tests in doctors' offices, she said.

"The ultimate goal is to individualize care for ear infections so we can assure that every child is receiving the best care and has the best possible outcome."

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Researcher: Hayden Leeds, MD
Oregon Health and Science University
Research Title: *Assessment of Pulmonary Function Tests in Infants with Congenital Heart Disease.*

Study examines potential benefit of pulmonary function tests before cardiac defect surgery for infants.

Nearly 40,000 babies in the United States each year are born with a heart defect.

For about 25 percent of these babies, their heart defect will require surgery or other life-saving procedures in their first year of life.

Yet, says Dr. Hayden Leeds of the Oregon Health and Science University, there is little research to help doctors understand whether infants with abnormal heart development may also have poorly functioning lungs.

Dr. Leeds is especially interested in the lung mechanics of babies born with a single heart ventricle. These babies face at least three staged surgeries in the first few years of their lives. Knowing how well their lungs and heart are working together can be crucial to their ability to tolerate the heart surgeries they need, he said.

He believes his research of pulmonary function tests could be an important tool in preparing for the staged single-ventricle repair, and for helping to predict the surgery's long-term outcome.

His cohort study of infant pulmonary function testing includes 24 patients, some undergoing surgery for a single-ventricle heart defect and others requiring heart surgery within the first year of life for any other defect.

"Basically, we are assessing whether there is a difference in preoperative lung volume/growth, as measured by pulmonary function tests, in infants with congenital heart disease, as compared to healthy, age-matched, historical controls," Dr. Leeds said.

Babies born with certain heart defects that leave them with only one functioning chamber of the heart are much more susceptible to alterations in lung mechanics, he said.

For these babies to successfully undergo the series of surgeries that will provide them with a single working ventricle, called the Fontan procedure, they must have healthy lungs because their circulatory system will be altered.

Rather than blood being pumped to the lungs by one of the heart's two pumping chambers, as in a healthy heart, the Fontan procedure plumbs the body so that blood that has delivered oxygen to the body's tissues bypasses the heart entirely on its passive return to the lungs.

The heart is thus relieved of the stress of pumping blood to both the lungs and body and can utilize the one healthy chamber of the heart to pump blood through the higher-pressure system to the rest of the body's tissues.

The interplay between the cardiovascular system and the pulmonary system, specifically with the alveoli tissue, the lungs' tiny air sacs that allow for rapid gaseous exchange, is key, Dr. Leeds said.

"The lungs require blood flow for the gas exchange to take place. Passive blood flow from the Fontan circulation is enough for the lungs to complete the process of gaseous exchange because the lungs are a lower pressure system, and the blood follows the path of least resistance.

"But any pressure build-up in the lungs – from poor function, infection, or disease – can interrupt this passive flow and back-up the system," Dr. Leeds explained. "We want to keep the pressure in the lungs as low as possible, with the pulmonary vascular resistance less than that of the body."

The Fontan procedure is the last of the typical three operations for babies born with a single heart ventricle. The survival rate for the procedure is about 85% at 15 years, Dr. Leeds said, and most face the prospect of a heart transplant at some point.

Dr. Leeds believes his research can be a useful guidepost to which infants are more likely to do well following surgery, based on their lung function and, possibly, even their body's potential to tolerate exercise and endurance training.

"My hope is that we will find that pulmonary function testing is a useful tool to identify earlier the patients who may, or may not, do well with the Fontan surgery. If indications are that a child may not do well, it may help us pursue other options earlier, such as a heart transplant earlier or better lung interventions down the road."

The ultimate goal is to help get the child to reach an age, closer to adult size, where they can have a successful heart transplant as a curative for their disease.

Despite the lack of data analysis to this point, Dr. Leeds believes the study will have its benefits.

"Really, no one has tried to answer these questions. And even should we learn that there really is no difference in the questions we are raising, that, in itself, would be significant, because we are building on knowledge.

"And if we should find there are appreciable differences in lung capacities, it has the potential to inform the pre- and post-surgery guidance to families and the care team."

Dr. Leeds also expressed gratitude for the Gerber Foundation for backing his work.

"The Gerber Foundation is at the forefront in funding pediatric research. It's really pretty amazing what they are doing. I know, in my case as a novice researcher, that I would not be doing this work without the foundation's confidence and backing," he said.

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NATIONAL RESEARCH GRANT GUIDELINES

FOUNDATION GOALS
The Foundation's mission focuses on infants and young children. Accordingly, priority is given to projects that improve the nutrition, care and development of infants and young children from the first year before birth to three years of age.

The Foundation is particularly interested in fresh approaches to solving common, everyday problems or emerging issues within our defined program areas. Projects should be focused on issues faced by care providers that, when implemented, will improve the health, nutrition and/or developmental outcomes for infants and young children. Projects may include research on etiologic mechanisms, diagnostic procedures, reduction of side effects or symptoms, therapies or treatment, dosing (under or over) for drugs, nutrients or other therapeutics, or preventative measures. Projects may be focused on small incremental changes with defined outcome parameters.

The Foundation gives priority to projects of national or regional impact. Foundation support is not typically ongoing. Project outcomes should be of sufficient impact, if successful, to generate long-term support from other sources.

PRIMARY INTERESTS
The Foundation has three primary categories of interest in its national grant-making program:

Pediatric Nutrition. These projects respond to a long-time interest of the Foundation in assuring adequate nutrition for infants and young children. Projects include applied research that evaluates the provision of specific nutrients and their related outcomes in infants and young children.

Pediatric Health. Projects in this category respond to the Foundation's interest in promoting health and preventing disease. We are especially interested in applied research focused on preventing serious neonatal and early childhood illnesses, and on preventing the development of serious, chronic illnesses later in life. We also welcome research that evaluates or improves cognitive functioning in infants and young children, or the social and emotional aspects of development.

Environmental Hazards. Finally, we are interested in research that evaluates the effects of environmental hazards on infants and young children and, ultimately, promotes children's health and well-being. Projects might include applied research that documents the impact of, or ameliorates the effect of, environmental hazards on the development of infants and young children.

WHAT WE DO NOT FUND
While we endeavor to maintain a high degree of flexibility in our programming, we do observe several practical limitations. We do not make grants or loans to individuals. Outside the West Michigan area, we do not support capital campaigns, operating support, event sponsorship, exclusive food or baby products giveaway programs, national child welfare programs, international based programs, or product testing for commercialization purposes.

WHO CAN APPLY
Organizations recognized as tax-exempt under Internal Revenue Code 501(c)(3) or a federal, state or municipal unit exempt from federal, state and local taxes are eligible to apply for Foundation grants. Organizations must also be determined not to be private foundations under Internal Revenue Code 509. No grants are made to individuals.

With few exceptions, only organizations with principal operations in the United States and its territories are eligible for funding. Within the United States, there is no geographic limitation to the Foundation's grant-making.

FUNDING LIMITATIONS

Projects requiring small grants (generally under $50,000) are typically local in scope and impact, and therefore may not be within the scope of national funding initiatives, with the exception of Novice grants made to young investigators. Novice research grants are limited to $30,000 and all other research grants are limited to $350,000 over a maximum 3-year period. The researcher should clearly describe the impact Foundation dollars will have on the course of the project.

In some cases, projects are best funded by multiple funders to provide evidence of broad acceptance of the project concept or potential outcome. At other times, the role of single project donor is appropriate. In either instance, you should make the case for your funding plan.

HOW TO APPLY

Step One: Review Foundation interests and limitations above.
In all of our grant-making, the Foundation is particularly interested in fresh approaches to solving common, everyday problems in our defined program areas, approaches that, if proven successful, can generate long-term support from other sources, research and interventions that promote the health and well-being of infants and toddlers up to the age of three, and approaches and activities that lead to systemic change. We welcome and encourage contact from researchers at any time.

Step Two: Review general application guidelines and procedures.
General application guidelines and procedures can be found under the "Pediatric Research" tab on our website (www.gerberfoundation.org).

Step Three: Submit a letter of inquiry/concept paper.
The concept paper should outline the hypotheses to be examined, the methods to be used, and the type of result to be anticipated. A cover letter should provide information on the researcher and the organization. Submission is through our online system at https://gerberfoundation.smartsimple.com. The letter enables the Foundation staff and Trustees to determine the relevance of the proposed project to the Foundation's interests. Concept papers are due May and November 15th of each year.

Step Four: Submit full proposal.
If the concept paper is accepted, the full proposal will be submitted online. Proposal deadlines are February and August 15 of each year.

REVIEW PROCESS

Organizations seeking grants should begin the application process at least six months before the start of the proposed grant period. Concept papers are initially reviewed by program staff and select Trustees. If recommended for a full proposal, the full proposal is subject to review and approval under guidelines established by the Foundation's Board of Trustees. Grant awards are approved within 6 months, by the end of November or May.

CONTACTING THE FOUNDATION

For questions, contact the Program Manager, Catherine Obits in writing at 4747 West 48th Street, Suite 153, Fremont, Michigan 49412-8119. You may phone us at (231) 924-3175. Our fax number is (231) 924-7906, and our email address is tgf@gerberfoundation.org

APPLICATION PROCEDURES

Full Proposal Format

The Full Proposal provides an in depth description of the project, enabling the Foundation to assess the scientific merit and quality of the research. Both lay and medical professionals will review the proposal. Medical jargon should be limited, where feasible. (Please use lay terminology).

The proposal includes the following information: Each heading here refers to a tab in the application system.

PROJECT INFORMATION

1. Covering letter, signed by a senior administrative official of the applying organization, briefly describing the applicant organization and endorsing the project. Note: this carries over from the concept paper but you have the option to delete it and upload a new one if you wish
2. Synopsis/abstract of the proposal, including hypotheses, methods, and expected outcomes
3. Planned target enrollment by year and by group
4. Study design (randomized, observational, proof of concept, etc)
4. Hypothesis(es) and objective(s)
5. Uploaded proposal narrative (Limit 15 pages, double spaced in pdf format). This is the main source of proposal information and should include:
   - Goals, objectives, and methods to be used
   - Size of the population to be studied in terms of age, gender, ethnicity, the source of subjects, and the recruitment process
   - Description of evaluation measures in place or planned to assess project results and outcomes
   - Expected impact of the project nationally or regionally, potential for project replication or ways in which the project responds to the Foundation's preference for broad impact projects
6. Uploaded schedule/timeline of events (in pdf format). Include time periods for achieving enrollment targets of 25%, 50%, 75% and 100%
7. Outcomes/measures to be used
8. Plan for acknowledging Foundation support

TEAM INFORMATION

1. List of team members and contact information
2. Uploaded biosketches of principal investigator and significant support staff
3. Novice researchers should include their mentor in the team list and provide a biosketch for the mentor

BUDGET

1. Uploaded line item project budget, by year. If a multi-year project, travel to a conference is not allowed in year 1. Indirect costs are limited to 10%. Salaries: Percentage of time applied to grant for PI and Co-PI's will not exceed 30% per person. Base salaries for PI and Co-PI's will not exceed the base salary imposed for NIH grants.
2. Plan for project funding, including a description of any current or requested funding from other major donors
3. Budget narrative summary including description of duties of investigator and staff

ORGANIZATION INFORMATION

1. Pre-award contact information (Development officer)
2. Uploaded brief description of applying organization, its current programs, services, and population(s) served
3. Uploaded board roster, indicating names and affiliations of the organization's governing board
4. Uploaded most recent Independent Audited Financial Statement. This must include the balance sheet, statement of revenues, and cash flow statement from an independent auditor (not internal or governmental audit).
5. Uploaded IRS documentation indicating that the applying organization is tax exempt and is not a private foundation (for non-government agencies)

OTHER DOCUMENTS

1. Uploaded statement of collaborations with other institutions (sub-contracts, etc.)
2. Uploaded Informed Consent documentation for human subject studies. Please provide a draft if not approved yet.
3. Uploaded Scientific references
4. Optional items (uploaded)
   - Letters of support from organizations with key input or interest in the project
   - Relevant news articles
   - Organization's annual report
   - Organization newsletters

Due dates are February 15 and August 15 of each year.
Applications are submitted through https://gerberfoundation.smartsimple.com
Individuals seeking assistance with their proposal may contact the Foundation at any time.

"I would so much like young people to have a sense of the gift that they are."
- John Denver

WEST MICHIGAN YOUTH GRANTS

The support of youth programming in the West Michigan area has one goal in mind – to help children 'grow through life' and not just 'go through life'. As Oliver Wendell Holmes once said, "A person's mind, stretched to a new idea, never goes back to its original dimension."

Of the six focus areas for grantmaking in the West Michigan area, STEAM (Science, Technology, Engineering, Arts, and Math) is the primary recipient of funding. Grants were provided to a wide range of programs and multiple recipients, including robotics programs; FFA and 4-H programs that provided take home kits of activities as well as access to national conferences; and science and entrepreneur programs from national organizations (the SAE Foundation and National Inventors Hall of Fame).

Other local agencies also received support to expand their STEAM programs, including the Grant Christian School, Muskegon Christian School, TrueNorth Community Services for afterschool programming, Muskegon Area Intermediate School District, and the Newaygo County Museum and Heritage Center. Programming support for the arts was provided to the West Michigan Symphony for their Tune-Up and Link-Up programs.

Grants in support of early childhood literacy were provided to Trinity Lutheran Church in New Era, the Dolly Parton Imagination Library program run by the United Way of the Lakeshore, and the Newaygo and White Cloud libraries.

Summer camps provide a wealth of learning opportunities for young people. A wide range of local summer camps were provided support to offer scholarships for local children who might not be able to attend otherwise. Camps included Camp Newaygo, Camp Henry, Tall Turf Ministries, Michigan State University (OsteoChamps summer camp), Rose Lake Youth Camp, Camp Pendalouan, American Diabetes Association, and the Croton Township summer recreation program. Two special camps offered by Hospice of Michigan and Harbor Hospice provided special camping opportunities for children who had experienced the loss of a loved one.

The health of children remains a keen interest of the Foundation. To support the needs of growing children, grants were provided to Baldwin Family Health Care to purchase a new panorex X-ray machine, Life Resources of Northern Michigan in support of safe sleep activities, Girls on the Run, The Mary Free Bed Rehabilitation Youth Wheelchair and Adaptive Sports program, Joyful Strides for the Hippotherapy program, the National Kidney Foundation of Michigan Regie's Rainbow Adventure program which teaches health eating to young children, and the Hope Squad at Whitehall Schools to support mental health. Grants were also provided to Kids Food Basket and Hand2hand to support food distribution to children for evening and weekend meals.

The Open Arms Child Advocacy Center received a grant to support forensic interviews for children in Lake and Newaygo County. In addition, their joint effort to open a Center for Hope and Healing with the Newaygo County Prevention of Child Abuse received a capital grant to assist with renovations of the new center.

Finally several smaller grants were provided to Junior Achievement for a financial literacy program, to SuitUp Incorporated to provide a business competition for youth in Muskegon County and Operating Warm to provide winter coats for children in need.

"What we do may only seem like a drop in the ocean, but the ocean wouldn't be the same without it." Mother Theresa

WEST MICHIGAN GRANTS

American Diabetes Association *ADA Imagine Camp*	**$2,000**
Baldwin Family Health Care *Digital Panorex X-ray*	**$10,000**
Camp Henry *Camp Scholarships*	**$4,000**
Camp Newaygo	
Hands on STEAM, G3 Get Outside! Get Environmental! Go Green!	**$7,500**
Speak UP! 2.0	**$8,720**
Camp Scholarships	**$6,000**
Camp Pendalouan *Camp Scholarships*	**$4,000**
Catholic Charities West MI *Muskegon Teen Parent Program*	**$5,000**
City of Fremont *Newaygo County Shop with a Cop*	**$500**
Community enCompass *Youth Empowerment Project (YEP) Program Support*	**$5,000**
Croton Township *Croton Township Summer Recreation Program*	**$2,000**
Fremont Public Schools FFA *Washington Leadership Conference*	**$1,800**
Gerald R. Ford Council, Boy Scouts of America *Scoutreach Muskegon County*	**$2,000**
Girl Scouts of Michigan Shore to Shore (GSMISTS) *Girl Scout Leadership Experience: STEM, Outdoors, Life Skills, and Entrepreneurship Education*	**$10,000**
Girls on the Run, Muskegon *Pilot program in Grant*	**$2,000**
Grand Rapids Children's Museum *Play@Home Kits*	**$10,000**
Grant Christian Schools *STEAM Fueled Outdoor Education Program*	**$10,000**
Hand2Hand *Weekend Food Backpack program*	**$2,000**
Harbor Hospice *Camp Courage*	**$2,000**
Holton United Methodist Church *School Backpack program*	**$500**

Hospice of Michigan *Camp Good Grief Program*	**$3,154**
Joyful Strides Foundation *Scholarships for Equine Therapy*	**$13,000**
Junior Achievement of the Michigan Great Lakes *Inspiring Bright Tomorrows for the Youth of Newaygo County*	**$7,500**
Kids Food Basket *Healthy Children Healthy Futures*	**$5,000**
Life Resources of Northern Michigan *Crib Program: To provide a safe sleeping environment for every infant and proper safety education for every parent*	**$150**
Mary Free Bed Hospital & Rehabilitation Center *Youth Wheelchair and Adaptive Sports program scholarships*	**$4,000**
Michigan 4-H Foundation *4-H Activities*	**$8,000**
Michigan State University *OsteoChamps program*	**$1,500**
Muskegon Area Intermediate School District *Engaging Students in STEM through Place-based Stewardship Education Projects*	**$9,554**
Muskegon Area Robotics Students *Robotics Team support*	**$2,000**
Muskegon Christian School *Nature Based Learning initiative*	**$10,000**
National Inventors Hall of Fame *Camp Invention*	**$7,350**
National Kidney Foundation of Michigan *Regie's Rainbow Adventure nutrition program*	**$10,000**
Newaygo Area District Library *STEAM Educational Resources*	**$2,000**
Newaygo County 4-H Council *Volunteer and Teen training*	**$3,488**
Newaygo County Agricultural Fair Association *4-H Fair Auction*	**$3,000**
Newaygo County Museum and Heritage Center *Newaygo County Museum Field Trip Financial Support*	**$5,235**
Newaygo County Council Prevention of Child Abuse *Building campaign for the Center for Hope and Healing*	**$50,000**
Newaygo County RESA	
FFA Washington Leadership Conference	**$1,800**
FIRST Robotics	**$7,500**

Open Arms Child Advocacy Center *Forensic interviews for children (Health Care Fund)*	**$9,860**
Operation Warm *Winter coat program for children*	**$5,000**
Reeths Puffer Education Inc *Starting the Cartoonversation™ for Diversity, Equity, and Inclusion*	**$5,000**
Ronald McDonald House of Western Michigan *Family Support Program*	**$3,000**
Rose Lake Youth Camp *Camp Scholarships and equipment*	**$4,485**
SAE Foundation *Providing West Michigan Students with Hands-On STEM Programming*	**$5,000**
SuitUp Incorporated *SuitUp Business Competitions*	**$4,000**
Tall Turf Ministries *Summer camp scholarships*	**$8,000**
Trinity Lutheran Church New Era *Baby Pantry and Food Pantry*	**$2,000**
TrueNorth Community Services *Out-of-School Time Programs* *2022 Youth Programs*	 **$4,000** **$29,000**
United Way of the Lakeshore *Dolly Parton Imagination Library*	**$10,000**
West Michigan Symphony *Link Up and Tune-up Programs*	**$15,000**
White Cloud Library *Reaching Out And Bringing Them In*	**$1,375**
Whitehall School District *School Hope Squad*	**$1,950**
YMCA of Greater Grand Rapids *Farm to School program*	**$5,000**
TOTAL WEST MICHIGAN GRANTS AWARDED:	**$361,921**

Scholarships

While formal recognition of students was again interrupted due to the pandemic, scholarships continued to be supported. The application process was complete the end of February and selections of recipients were made within normal time frames. Students were notified via email and mail of their selection due to COVID attendance restrictions at high school ceremonies.

Continuing the Gerber Foundation's 68-year tradition of providing scholarships for local students, scholarships were awarded to 79 students in 2021. The overall total for scholarships awarded came to just over $365,000. These scholarships are provided to graduating seniors from designated high schools in Newaygo, Muskegon, and Oceana Counties in Michigan. An additional 138 students continue to receive support from prior year selections.

Twenty-four students received the Daniel Gerber Sr. Medallion Scholarship, available to Newaygo County students. This scholarship is worth $10,600 each.

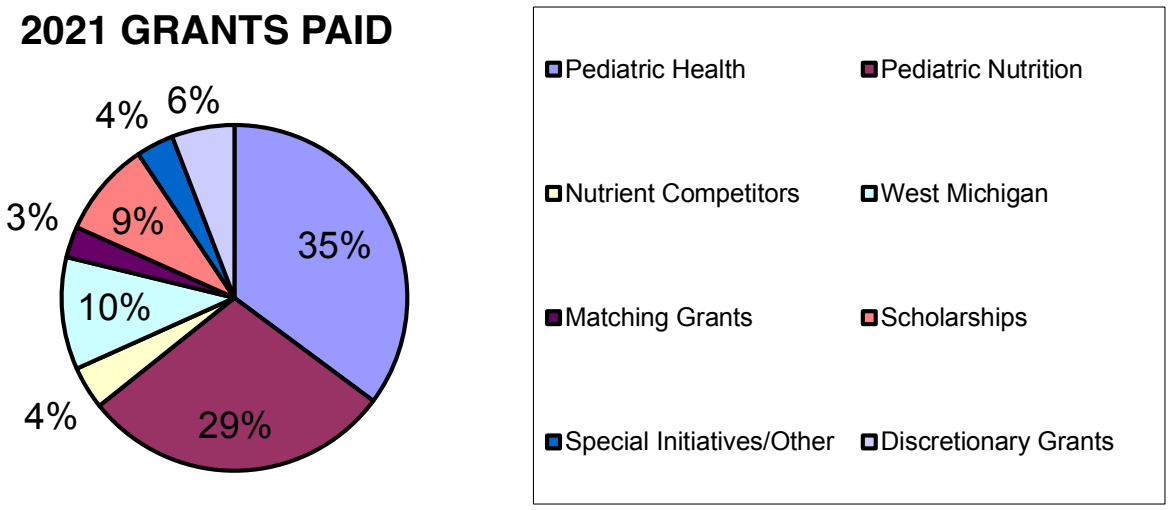
The Gerber Foundation Merit Scholarship is awarded to students in all three counties. The scholarship provides $2,600 to each student. Thirty-six students received this scholarship.

The Newaygo County Career-Tech Center scholarships are awarded based on the program that the student graduates from at the Center. Scholarships are provided to two students selected from each of the 14 programs offered. Scholarship amounts vary by program and range from $150 to $2,660. Scholarships can be used to purchase tools or equipment required for further study in their field, as well as certification exams or tuition. In 2021, 19 students received scholarships for a total of $17,185.

2021 Grants Paid

(Current and Prior Year Commitments)

Pediatric Health	$	1,001,035	35%
Pediatric Nutrition	$	828,812	29%
Nutrient Competitors	$	114,373	4%
West Michigan	$	299,204	11%
Matching Grants	$	82,743	3%
Scholarships	$	254,014	9%
Special Initiatives/Other	$	100,000	4%
Discretionary Grants	$	167,000	6%
	$	2,847,181	100%



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