The Gerber Foundation

“Enhancing the quality of life of infants and young children.”

2019 Annual Report
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 2019, the Foundation has awarded nearly $120 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.

"Enhancing the quality of life of infants and young children."
THE GERBER FOUNDATION
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"Enhancing the quality of life of infants and young children.”
At The Gerber Foundation (TGF), we know individual researchers and their dedicated research teams create the momentum for improvement in diagnosis and care of infants and young children afflicted with a wide range of illnesses and conditions.

Because of these dedicated researchers, advances in new treatments and therapies have resulted in the survival and improved growth and development of many formerly at-risk children into full adulthood. Yet problems still exist in the care and treatment of so many critically-ill or developmentally challenged infants and young children.

Researchers, like those supported by TGF, provide the necessary momentum with their ideas aimed at resolving the many common, every day clinical issues and problems that exist today. With support from TGF, their research will lead to continued improvements in diagnosis and care of our youngest citizens.

Through our funding of research, TGF endeavors to facilitate momentum for change. While scientists provide the momentum, inspiration and expertise necessary to improve understanding and care of childhood issues, we hope to provide a spark to their efforts.

In 2019, a total of 14 projects were funded. A sampling of those grants include:

Three grants focused on improving care for drug exposed newborns.
- The first will evaluate healthcare utilization of newborns with opioid withdrawal syndrome to identify long term outcomes to 2 years of age.
- The second will evaluate the use of measures of auditory memory processes as markers of neurodevelopment in opioid-exposed infants.
- A third grant will evaluate the relationship between breast milk marijuana metabolites and growth and neurodevelopmental outcomes.

Two grants focused on infections and drug dosages.
- One grant will identify current practices during treatment for children with tracheostomies who have respiratory infections in order to improve how clinicians use established and new diagnostic and treatment methods.
- A second grant will develop a plan for adjusting drug dosages of antibiotics in young critically ill children with sepsis utilizing precision drug dosing techniques based on maintaining optimal drug levels.

Other funded studies were aimed at improving screening tools.
- One study will develop new ranges of the growth curves that best identify specific morbidities or mortality in neonates to improve growth and outcomes, especially for infants classified as small or large-for-gestational age.
- Another will identify normal temperature ranges in healthy infants and children based on age.

Additionally, two grants were focused on treatment methods.
- The first will lead to the development of a standard protocol based on clinical factors to assist with weaning of infants from a ventilator.
- Utilizing historical data, a second study will evaluate whether there is a benefit to providing therapeutic cooling in infants with mild brain injury due to low oxygen levels.

Finally, two additional studies worth noting in this summary include:
- A study of nutrients to evaluate a novel biomarker for zinc nutritional status and associations with growth, brain development, and brain injury.
- Research to assess the benefits of a redesigned method of cleft palate repair on anatomic growth and speech outcomes over the long term.
# NATIONAL GRANTS

<table>
<thead>
<tr>
<th>Institution</th>
<th>Principal Investigator</th>
<th>City, State</th>
<th>Grant Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brigham and Women's Hospital</td>
<td>Mandy Belfort, MD, MPH</td>
<td>Boston, MA</td>
<td>$349,998</td>
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<tr>
<td></td>
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<td>Zinc nutritional status in preterm infants: exosomes as a novel, non-invasive biomarker and associations with growth, brain development, and injury</td>
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<tr>
<td>Children's Hospital Los Angeles</td>
<td>Christopher Russell, MD, MS</td>
<td>Los Angeles, CA</td>
<td>$350,000</td>
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<tr>
<td></td>
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<td>Improving diagnosis and management of pediatric tracheostomy-associated respiratory infections</td>
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<td>Children's Hospital Los Angeles</td>
<td>Leah Yieh, MD, MPH</td>
<td>Los Angeles, CA</td>
<td>$18,442</td>
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<tr>
<td></td>
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<td>Effectiveness of therapeutic hypothermia in neonates with mild hypoxic-ischemic encephalopathy</td>
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<tr>
<td>Children’s Hospital Medical Center</td>
<td>Sonya Tang Girdwood, PhD, MD</td>
<td>Cincinnati, OH</td>
<td>$20,000</td>
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<tr>
<td></td>
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<td>Targeting beta-lactam antibiotics in young critically ill children with sepsis-evaluating pharmacokinetic variability and pharmacodymanic target attainment</td>
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<tr>
<td>Helen DeVos Children's Hospital Foundation</td>
<td>Robert Mann, MD</td>
<td>Grand Rapids, MI</td>
<td>$177,407</td>
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<tr>
<td></td>
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<td>Anatomic growth and speech outcomes using the buccal flap approach for cleft palate</td>
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<tr>
<td>Kennesaw State University</td>
<td>M. Louise Lawson, MPH, PhD</td>
<td>Kennesaw, GA</td>
<td>$334,233</td>
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<tr>
<td></td>
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<td>Determining what values in growth curves best classify small and large- for-gestational age in preterm infants to predict morbidity and mortality</td>
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<tr>
<td>Lucille Packard Children's Hospital at Stanford</td>
<td>Rebecca Dang, MD</td>
<td>Stanford, CA</td>
<td>$19,994</td>
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<td></td>
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<td>Normal temperature percentiles in healthy infants and children and an analysis of the practice and impact of temperature measurement at “well-child” visits</td>
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<td>St. Louis University</td>
<td>Joyce Koenig, MD</td>
<td>St. Louis, MO</td>
<td>$349,819</td>
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<td></td>
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<td>Calgranulins and Vitamin D status in preterm infants born after chorioamnionitis</td>
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<tr>
<td>University of California, San Diego</td>
<td>Christina Chambers, MPH, PhD</td>
<td>San Diego, CA</td>
<td>$350,000</td>
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<tr>
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<td>Detection of marijuana metabolites in human milk and relation to child growth and neurodevelopmental outcomes</td>
</tr>
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</table>

"Enhancing the quality of life of infants and young children."
University of Rochester (Perihan Ulema, MBBS, UMDNJ)  
Rochester, NY  
A comparison of mismatch negativity waveform differences in opiod-exposed and non-exposed neonates  

$20,000

UT Southwestern Medical Center (Sherief Mansi, MD)  
Dallas, TX  
Gastrointestinal motility in premature babies  

$20,000

Vanderbilt University Medical Center (Leon Hatch, III, MPH, MD)  
Nashville, TN  
Developing and testing a user-centered ventilator weaning protocol for critically ill neonates  

$317,864

Washington University (Zachary Vesoulis, MD)  
St. Louis, MO  
Adrenal insufficiency and hypotension in preterm infants  

$341,956

Weill Cornell Medical College (Angelica Meinhofer, MA, PhD)  
New York, NY  
Mortality, morbidity, and healthcare utilization of newborns with neonatal opioid withdrawal syndrome from birth through 2 years of age  

$250,000

TOTAL NATIONAL GRANTS AWARDED:  

$2,919,713
Common household products can increase babies’ exposure to flame retardant chemicals

And also affect the developing immune system.

American babies as young as two months old have notably high levels of household flame retardant chemicals in their bodies, according to initial results of a study by a Duke University researcher from the Department of Environmental Sciences.

The chemical levels often are up to three times higher than found in children four years old, and 15 times higher on average as compared to adults, said researcher Dr. Kate Hoffman of Duke University’s Nicholas School of the Environment.

These chemicals – known as organophosphate flame retardants (OPFR) - are found in many common household items and also are found in indoor dust.

Breast milk also is a potential source of exposure, Dr. Hoffman said, but the benefits of breast feeding “probably outweighs the risk.”

“The presence of these chemicals in breast milk is something that parents should be mindful of,” she said, although it is likely that the chemical compounds don’t stay in the mother’s body for very long.

“Mothers may be able to reduce the baby’s exposure by reducing their own exposure but we still have very little data on the levels of these chemicals in breast milk,” she said.

Flame retardants have been applied to many baby products, such as car seats, high chairs and furniture, to reduce their ability to catch fire.

Children are at greater risk of being exposed to these chemicals because “they crawl on floors and put their hands in their mouths,” Dr. Hoffman said.

When she designed her Gerber Foundation-funded study, Dr. Hoffman wondered to what extent flame retardants could cause problems with children’s’ health.

Many studies at the time suggested that most adults have flame retardants in their bodies, however no studies had determined the levels present in young infants’ bodies, she said.

One type of flame retardant, tris(1,3-dichloropropyl) phosphate (TDCIPP) is frequently applied to residential furniture and has been widely detected in car seats.

TDCIPP has been linked to cancer and altered hormone levels. While studies also suggest that the immune system could be sensitive to TDCIPP exposure, Dr. Hoffman noted that the potential impacts have not been investigated.

“These data are critically needed, especially for young children,” she said. “Children are more highly exposed, and their developing immune systems are thought to be particularly sensitive” to chemical exposures.

Because children receive childhood immunizations at regular intervals, Dr. Hoffman’s research measured the impact of flame retardant chemicals on children’s immune function from their antibody response to immunizations.

The study had two phases: the first entailed collecting urine samples from the 120 children at ages 2 months and 12 months to measure for the presence of OPFR metabolites. The second phase, at 12 months of age, was to assess serum samples for antibodies to tetanus and diphtheria (a method to assess response to immune therapy).

Based on the initial data, children with higher levels of flame retardant chemicals in their bodies had suppressed immune response and lower antibody levels. Dr. Hoffman said this suggests that exposure may have an impact on the development and function of the immune system “but we don’t know yet what the impact might be. This is definitely something we are following up.”

The outlines of the study came together at an important time in Dr. Hoffman’s life.

"Enhancing the quality of life of infants and young children.”
"All the stars lined up," she said. "We had been researching really young infants' exposure to flame retardant chemicals for some time."

"Then I had a baby, and at the same time I am studying baby products that use flame retardants, and I'm ordering new baby furniture - a car seat, a playpen, a crib and mattress. I'm seeing these items all over my house."

"So all of this is happening, and we don't have a good sense of what happens to kids' health. It seemed reasonable to think that babies have high levels of exposure, and their immune system develops really rapidly at that same time of life."

Over the next two years, Dr. Hoffman's team enrolled babies between one and three months old during their pediatrician visits. Parents completed questionnaires about their babies' health, behavior, diet, and household products, and the babies were vaccinated as appropriate for their age group.

The process was duplicated when the babies reached their first birthday, in addition to a blood test to measure their antibody response to vaccines for tetanus and diphtheria.

The fact that younger babies have higher levels of flame retardant chemicals in their bodies, and that breast milk can be a conduit, is the focus of the study results Dr. Hoffman is now preparing for publication.

The association of flame retardant chemicals and a reduced response to vaccinations likely will lead to a larger investigation in a broader population of children, she said.

The Gerber Foundation-funded study was "a great stepping stone, just the idea of these chemicals potentially affecting a baby's immune system," Dr. Hoffman said.

"The idea was maybe risky in the beginning. Was there enough data to take a chance with initial funding? But thanks to the Gerber Foundation, this funding was a real opportunity to gather the pilot data that it was, in fact, something real to follow up.

"I'm very grateful to the foundation for helping us find this early evidence. I want to stress that value of the confidence the foundation had in us and their willingness to give us a chance. This is a nice springboard to get research going on a larger scale."

Ultimately, she said, it's important to find ways to positively intervene early in a child's life, for the greater impact it can have on overall health throughout their life.
Placental blood can replace early blood draws in very premature infants

When a baby is born early, his body’s systems are immature. He’s exposed to things that he wouldn’t be as a full-term baby, putting him at risk for a number of health issues.

The likelihood and severity of these complications increase the earlier he is born before full term.

One of the complications of a premature birth, ironically, happens in the usual course of treatment, says Dr. Sofia Aliaga, an assistant professor of pediatrics at the University of North Carolina at Chapel Hill.

“Early and frequent blood sampling is common in babies born at less than 30 weeks gestation, and this contributes to the need for blood transfusions,” she said.

Very premature newborns commonly receive multiple blood transfusions for anemia throughout their hospitalization. The first transfusion frequently occurs during the first week after birth.

The critical issue, Dr. Aliaga said, is the blood volume obtained by care providers for laboratory tests shortly after birth, which can be as much as 10 percent of the circulating blood volume for the smallest premature newborns.

Dr. Aliaga believes the blood for the routine laboratory tests typically needed shortly after birth can be taken directly from the placenta; replacing the need for withdrawing blood from the baby.

Her Gerber Foundation-funded research project had three aims: to show that placental blood is comparable to direct patient samples, that placental blood sampling would decrease cases of anemia, and lead to fewer early blood transfusions and antibiotics, and improve blood pressure.

“The concept of minimizing the amount of blood premature babies lose has been an ongoing topic of conversation in medicine because there are so many ramifications to the early blood withdrawal from these infants,” she said.

The first part of the study brought good news. Paired blood samples from the same patient, one per current clinical practice and a second from placental blood, indicates that “blood samples from the placenta is the same as blood taken from the baby,” Dr. Aliaga said.

White blood cells, hemoglobin, and platelets from the placenta sample and the direct sample matched up, she said.

Two other parts of the study, which involved 100 very premature babies, are still being investigated.

The first examines the clinical primary outcomes of very premature infants exposed only to placental blood sampling to those who have blood drawn, comparing the lowest hemoglobin levels, and the volume of blood transfusions, during the first three and seven days after birth.

The second involves evaluating any hemorrhaging during the first two weeks after birth, when the first antibiotics are given, and whether any medications are needed for low blood pressure.

“From the beginning, we have felt the chances of benefit are very high,” Dr. Aliaga said. While it is still too soon to call the study complete, Dr. Aliaga noted that other tests conducted since her research began supports the early evidence.

“Some journals have come out since our study began calling for general use of placental blood as a standard of practice,” she said.

Utilizing placental blood samples versus drawing blood directly from the baby will continue to depend on some of the circumstances at birth, she noted. There will be times when the baby is so sick that traditional blood draws will be called for.

“Because of the logistics of managing small babies, a lot of times doctors default to routine blood work in hopes of anticipating or helping to minimize potential problems,” Dr. Aliaga said.
“But I could say that, of the population we looked at, less than 30 weeks gestation, that 100 percent will have some degree of blood sampling, with even more intensive sampling when the baby is less than 27 weeks.

“If we can minimize, even by a little, the blood draws immediately after birth, I believe we can have a positive impact on the baby,” she said.

The logistics to achieving this aim consistently are still challenges. Getting people to change practice is not easy, she said.

“To us it seems like this makes a lot of sense, that it should be simple, but it’s not. You’re recommending changing long-standing practice, and that always presents a challenge. It takes time to become comfortable with change.”

In just the last five years, she noted, researchers have examined delayed cord clamping, giving the baby more placenta blood during the transition at birth. Today the American Academy of Pediatrics recommends delayed cord clamping as a standard of care to help to minimize anemia.

Dr. Aliaga believes that, with persistence, using placental blood for initial lab tests also can receive this approval. At the least, she said, placental blood can become another tool in doctors’ kits to help very premature babies.

Dr. Aliaga said she is most grateful for “the incredibly patient and timely support” the Gerber Foundation has given her research, and “for the foundation’s work to help improve the lives of the very tiny patients” she sees in the neonatal intensive care unit.
Applicant: Katherine Bell, MD, Brigham and Women’s Hospital

Research Title: Body Composition Analysis: a useful tool for assessing nutritional status in premature infants

Can what they eat make babies’ brains bigger and better? Dr. Katherine Bell thinks so.

The question of a baby’s nutrition is even weightier in the hospital unit where she spends much of her time.

As a neonatologist at Brigham and Women’s Hospital in Boston, Dr. Bell’s clinical expertise is caring for premature and other sick infants hospitalized in the neonatal intensive care unit (NICU). As a clinical researcher, she has a long-standing interest in nutrition.

When she approached the Gerber Foundation in 2018, Dr. Bell wanted to take a deeper look into the body composition of premature infants, specifically the relative contributions of fat and lean mass to infant weight.

“Fat and lean mass has been linked to numerous health outcomes, including brain growth, neurodevelopment, and cardio metabolic disease,” Dr. Bell said.

Because premature infants undergo remarkable brain and body growth after birth, adequate nutrition during this period is essential for a baby’s health long-term.

Dr. Bell maintains that proper nutrition is even more critical for the premature baby’s brain development. She believes measuring body composition could help assess a baby’s nutritional status, and ultimately direct interventions to optimize brain growth and development.

Her study’s preliminary findings imply that lean mass – but not fat - is associated with brain size on magnetic resonance imaging (MRI) at a premature baby’s term-equivalent age – the age at which they would have been born had they not been premature.

In fact, she says, lean mass appears to be even more important for the smallest babies, which she believes will hold true when her data analyses are completed later this year.

Making a distinction between adequate lean mass or excess fat is essential, Dr. Bell says. Gains in lean mass are associated with improved cognitive outcomes. Excess fat, however, may increase the long-term risks of obesity and heart disease.

Going into the study, Dr. Bell wondered whether premature babies need lean or fat mass for optimal brain development. “I thought lean mass could be important based on studies showing associations with later neurodevelopment, but fat could be important because brain tissue is two-thirds fat,” she said.

While the initial data suggest lean mass is best in terms of optimizing brain growth, Dr. Bell hopes to learn more about the role that protein, fat, and energy in breast milk play in determining whether an infant gains lean or fat mass.

Since breast milk forms the bulk of most premature infants’ diets, and can vary substantially from day to day in its nutrient content, Dr. Bell collected small amounts of the breast milk fed to these infants throughout their hospital stays and analyzed the breast milk for its protein and carbohydrate content using the Miris Human Milk Analyzer.

“Breast milk volume and content can vary greatly between women, and from hour to hour” Dr. Bell said. Critical factors to content are how long the mother has been producing breast milk, the time of day, frequency of pumping, and infant feeding behaviors.

“Content has less to do with what mom eats than these factors,” she said. “Babies being fed the same volume of breast milk can be getting very different amounts of protein, fat and energy.”

Another consideration is that breast milk is not fully developed when babies are born prematurely, “exactly when the baby needs more calories, fat and protein,” she noted.

The 103 babies in the study ranged from 23 weeks gestation – 4.5 months early – to 28 weeks gestation. Their weight ranged from 500 grams to 1,500 grams.

Babies this small survive on respirators and ventilators. They cannot eat by mouth, so they are fed intravenously first, followed by feeding tubes as they grow. They are fed about every 3 hours.

To determine whether the amounts of protein and calories in mother’s milk had any association to the preterm baby’s body composition, infant body composition was measured twice, at 33 to 36 weeks corrected age and again at term-equivalent age using a PEA POD device. The PEA POD is an air displacement device used to determine fat and fat-free mass.

“Enhancing the quality of life of infants and young children.”
Dr. Bell’s analyses assessing the relationship between nutrition and lean mass should be done within the year. She also plans more detailed analysis of the brain MRIs, examining the size and development of key regions and characteristics of the brain, “even the microstructural development within the brain,” she said.

She hopes this data will then lead to further detailed studies of the interplay between nutritional intake, body composition, and brain growth among premature infants in the NICU.

“Our ultimate goal is to identify ways for babies to get better brain growth while in the hospital,” she said. “We have reached the point over the past 30 years that we are past just trying to help these babies survive. We are doing that.

“Now we want to focus on improving their long-term outcomes, with one of the primary outcomes being improved brain growth, which can lead to fewer cognitive and functional difficulties later in life.”

That means identifying the nutrition factors that promote lean mass growth and improving monitoring strategies while babies are in the hospital, she said.

“Thanks to the Gerber Foundation, and the confidence and faith they showed in me, I believe we have taken important steps in determining the best way to get optimal weight gain for improved brain function and our babies’ long-term development,” Dr. Bell said.

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

"Enhancing the quality of life of infants and young children."
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 $20,000 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

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

"Enhancing the quality of life of infants and young children."
WEST MICHIGAN YOUTH GRANTS
Helping Children Grow and Develop

Our future as a species and the future of the world, depends upon the youth of today. The problems and issues they face will be different from today. Their ability to deal with those new challenges depends largely on their development and ability to create new solutions for an ever-changing world.

Formal education is extremely important in developing the skills and knowledge future generations will need to master. However, a wide range of experiences and opportunities is also essential. Combined with a solid sense of security and self, young people will be better prepared to venture outside of their comfort zone and challenge themselves to create the innovative and unique solutions necessary.

The Gerber Foundation has maintained a long-standing tradition of investing in local youth to improve education, provide a wide range of opportunities, and support programs that will enhance self-esteem and improve their sense of security. And we consistently seek new opportunities and methods to provide those opportunities.

Several agencies proposed new projects for funding this year that provided unique learning opportunities for local youth.

Relating to education and specifically STEAM (Science, Technology, Engineering, Arts, and Math) education:

- Trout Unlimited, in partnership with the Girls Scouts, developed a STREAM Girls program to engage young girls in field-based science experiences while fly fishing as a meaningful way to close the gender gap in STEM related careers.
- The National Inventors Hall of Fame will be offering a week long Camp Invention focused on developing creativity, inventive thinking, and problem-solving skills.
- The Muskegon Conservation District has developed a Bee the Beekeeper program to teach K-12 students about the habitats and importance of bees while educating students on beekeeping skills.
- MSU Extension in Lake County will offer a 4-H Forestry Spin Club while the Newaygo County 4-H Council will host a Marine Biology Spin Club. These short, 6-8 week programs, provide a variety of unique opportunities.

Several agencies offering general life experiences, primarily as summer camps were supported this year, including:
- North Star Reach – a camp specifically for children with serious health challenges.
- Camp Quality – a camp designed for children with cancer.
- FFA chapter students will once again be able to attend the Washington Leadership Conference
- The National Kidney Foundation of Michigan will be offering a nutritional education program to preschool-age children called Reggie’s Rainbow.

To ensure that students feel supported and secure:
- Hand2Hand provides weekend backpacks filled with food for children
- Operation Warm provides brand new winter coats for children in need
- Bethany Christian Services will provide a Trauma informed parenting program to help families in crisis
- HopeCam provides computer connections for children with cancer or other serious illnesses so that they can remain connected with their school classroom.
- Baby pantries will be offered at Muskegon Covenant Academy and Trinity Lutheran Church

This is merely a summary of the 63 grants provided aimed to build the confidence, talents and competence among the students of West Michigan. We are extremely grateful for each and every one of the grantees and the work that they are doing to improve the lives and education of the area’s youth. Their creativity and dedication to these students will help to ensure a bright future for students prepared with the skills needed to face the challenges of the world.

"Enhancing the quality of life of infants and young children."
<table>
<thead>
<tr>
<th>Organization</th>
<th>Project/Program</th>
<th>Grant Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Youth Foundation</td>
<td>Oceana County School &amp; Youth Programming</td>
<td>7,500</td>
</tr>
<tr>
<td>3R Education</td>
<td>Earth Day Every Day Program</td>
<td>2,000</td>
</tr>
<tr>
<td>Bellwether Harbor</td>
<td>Dog Bite Prevention Early Intervention for a Lifetime of Safety</td>
<td>3,000</td>
</tr>
<tr>
<td>Bethany Christian Services</td>
<td>Trauma Informed Parenting</td>
<td>5,000</td>
</tr>
<tr>
<td>Blue Lake Fine Arts Camp</td>
<td>Camp Scholarships</td>
<td>4,000</td>
</tr>
<tr>
<td>Boys and Girls Club of the Muskegon Lakeshore</td>
<td>Project LEARN</td>
<td>10,000</td>
</tr>
<tr>
<td>Camp Casey</td>
<td>Cowboy Camp Outs</td>
<td>3,000</td>
</tr>
<tr>
<td>Camp Henry</td>
<td>Camp Scholarships</td>
<td>4,000</td>
</tr>
<tr>
<td>Camp Newaygo</td>
<td>Hands of Science G3 Get Outside! Get Environmental! Go Green!</td>
<td>10,000</td>
</tr>
<tr>
<td></td>
<td>Speak UP! 2.0 8th grade leadership and philanthropy workshop</td>
<td>3,000</td>
</tr>
<tr>
<td></td>
<td>Camp Scholarships</td>
<td>6,000</td>
</tr>
<tr>
<td>Camp Quality Michigan</td>
<td>Camp Scholarships for children with cancer</td>
<td>2,000</td>
</tr>
<tr>
<td>Catholic Charities West MI</td>
<td>Muskegon &amp; Oceana Healthy Families America &amp; Muskegon Teen Parent Program</td>
<td>9,000</td>
</tr>
<tr>
<td>City of Fremont</td>
<td>Newaygo County Shop with a Cop</td>
<td>500</td>
</tr>
<tr>
<td>Family Enrichment Center- Region 3 Resource Team</td>
<td>CPR &amp; First Aid for foster/adoptive/kinship families</td>
<td>1,000</td>
</tr>
<tr>
<td>Fremont Public Schools</td>
<td>Literacy for Success/Tier 3 program</td>
<td>10,000</td>
</tr>
<tr>
<td>FFA Chapters in local area</td>
<td>Washington Leadership Conference</td>
<td>7,200</td>
</tr>
<tr>
<td>Gerald R. Ford Council, Boy Scouts of America</td>
<td>Muskegon and Newaygo County Scouting</td>
<td>2,000</td>
</tr>
<tr>
<td>Girls on the Run/Muskegon</td>
<td>Muskegon County Program Scholarships</td>
<td>1,500</td>
</tr>
<tr>
<td>Grant Christian School</td>
<td>Full STEAM Ahead: An academic improvement project</td>
<td>10,000</td>
</tr>
<tr>
<td>Hand2Hand</td>
<td>Weekend Food Backpack program</td>
<td>1,000</td>
</tr>
<tr>
<td>Harbor Hospice</td>
<td>Camp Courage Scholarships</td>
<td>3,000</td>
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<tr>
<td>Health West</td>
<td>BOOM Youth Leadership team capacity building project</td>
<td>8,000</td>
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</tbody>
</table>

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<table>
<thead>
<tr>
<th>Organization Name</th>
<th>Program Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hopecam Inc</td>
<td>Give Hope, Get Connected- WMI</td>
<td>2,500</td>
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<tr>
<td>Hospice of Michigan</td>
<td>Camp Good Grief Program</td>
<td>3,095</td>
</tr>
<tr>
<td>Joyful Strides Foundation</td>
<td>Hippotherapy Summer Camp</td>
<td>5,000</td>
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<tr>
<td>Junior Achievement of the Michigan Great Lakes</td>
<td>Get Started Saving: A Financial Education program for Kindergarten Students</td>
<td>4,000</td>
</tr>
<tr>
<td>Kids Food Basket</td>
<td>Healthy Children Healthy Futures</td>
<td>3,000</td>
</tr>
<tr>
<td>Michigan State University</td>
<td>OsteoChamps Scholarships</td>
<td>3,000</td>
</tr>
<tr>
<td>MSU Extension in Lake County</td>
<td>4-H Forestry Camp</td>
<td>1,700</td>
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<tr>
<td>Muskegon Conservation District</td>
<td>Bee a Beekeeper</td>
<td>6,559</td>
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<tr>
<td>Muskegon Covenant Academy</td>
<td>Food and Baby Pantry supplies for single parents</td>
<td>5,000</td>
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<tr>
<td>Muskegon Family YMCA dba Camp Pendalouan</td>
<td>Camp Scholarships</td>
<td>4,000</td>
</tr>
<tr>
<td>Muskegon Rescue Mission</td>
<td>Lighthouse Program</td>
<td>2,000</td>
</tr>
<tr>
<td>National Inventors Hall of Fame, Inc</td>
<td>Camp Invention STEM Program</td>
<td>2,500</td>
</tr>
<tr>
<td>National Kidney Foundation of Michigan</td>
<td>Regie's Rainbow Adventure</td>
<td>4,146</td>
</tr>
<tr>
<td>Newaygo Area District Library</td>
<td>Educational Library collection of STEM resources</td>
<td>2,000</td>
</tr>
<tr>
<td>Newaygo County 4-H Council</td>
<td>Marine Biology 4H SPIN Club/Shark Research ship trip</td>
<td>2,000</td>
</tr>
<tr>
<td></td>
<td>Teen &amp; Leader Trainings</td>
<td>1,500</td>
</tr>
<tr>
<td></td>
<td>Ag Adventures</td>
<td>900</td>
</tr>
<tr>
<td></td>
<td>Busing for 4-H Exploration Days</td>
<td>2,000</td>
</tr>
<tr>
<td>Newaygo County Agricultural Fair Association</td>
<td>4-H Fair Auction</td>
<td>3,000</td>
</tr>
<tr>
<td>Newaygo County Area Promise Zone</td>
<td>Promise Zone Support</td>
<td>10,000</td>
</tr>
<tr>
<td>Newaygo County Council for the Arts (Artsplace)</td>
<td>Grand Rapids Ballet experience</td>
<td>1,500</td>
</tr>
<tr>
<td>Newaygo County Museum and Heritage Center</td>
<td>Interactive exhibits and school field trip support</td>
<td>11,000</td>
</tr>
<tr>
<td>Newaygo County RESA</td>
<td>4H SPIN Club- Animal Science</td>
<td>3,000</td>
</tr>
<tr>
<td></td>
<td>FIRST Robotics</td>
<td>7,500</td>
</tr>
<tr>
<td></td>
<td>Promise Zone Posse Groups</td>
<td>4,000</td>
</tr>
<tr>
<td>North Star Reach</td>
<td>Camp Scholarships</td>
<td>2,000</td>
</tr>
</tbody>
</table>

"Enhancing the quality of life of infants and young children."
<table>
<thead>
<tr>
<th><strong>Organization</strong></th>
<th><strong>Grant Amount</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operation Warm</strong></td>
<td>5,500</td>
</tr>
<tr>
<td>A warm welcome to the library</td>
<td></td>
</tr>
<tr>
<td><strong>Ronald McDonald House of Western Michigan</strong></td>
<td>2,000</td>
</tr>
<tr>
<td>Family Support Program</td>
<td></td>
</tr>
<tr>
<td><strong>Rose Lake Youth Camp</strong></td>
<td>2,960</td>
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<tr>
<td>Camp Scholarships</td>
<td></td>
</tr>
<tr>
<td><strong>Special Olympics Michigan</strong></td>
<td>5,000</td>
</tr>
<tr>
<td>Young Athletes Program Expansion</td>
<td></td>
</tr>
<tr>
<td><strong>The Mental Health Foundation of West Michigan</strong></td>
<td>10,000</td>
</tr>
<tr>
<td>BE NICE: implementing the life saving action plan in Baldwin schools</td>
<td></td>
</tr>
<tr>
<td><strong>Trinity Lutheran Church</strong></td>
<td>1,000</td>
</tr>
<tr>
<td>TLC Baby Pantry and Reading Room</td>
<td></td>
</tr>
<tr>
<td><strong>Trout Unlimited</strong></td>
<td>2,000</td>
</tr>
<tr>
<td>STREAM Girls Program</td>
<td></td>
</tr>
<tr>
<td><strong>TrueNorth Community Services</strong></td>
<td>26,000</td>
</tr>
<tr>
<td>2020 Youth Programs</td>
<td></td>
</tr>
<tr>
<td><strong>United Way of the Lakeshore</strong></td>
<td>10,000</td>
</tr>
<tr>
<td>Dolly Parton Imagination Library</td>
<td></td>
</tr>
<tr>
<td><strong>West Michigan Symphony</strong></td>
<td>7,000</td>
</tr>
<tr>
<td>Link Up Program 2019-20</td>
<td></td>
</tr>
<tr>
<td><strong>WUVS 103.7 aka West Michigan Community Help Network</strong></td>
<td>3,000</td>
</tr>
<tr>
<td>Imara Entertainment Youth Mentorship Program</td>
<td></td>
</tr>
<tr>
<td><strong>YMCA of Metropolitan Chicago</strong></td>
<td>4,000</td>
</tr>
<tr>
<td>Camp Pinewood camp scholarships</td>
<td></td>
</tr>
<tr>
<td>TOTAL WEST MICHIGAN GRANTS AWARDED:</td>
<td>280,560</td>
</tr>
</tbody>
</table>
Scholarships

For 2019, 85 students in West Michigan were awarded scholarships totaling $361,706. These scholarships are provided to graduating seniors from designated high schools in Newaygo, Muskegon, or Oceana Counties in Michigan. An additional 117 students continue to receive support from prior year selections.

The Daniel Gerber Sr. Medallion Scholarship is awarded in Newaygo County only. Twenty-one students received this award worth $10,600 for post-secondary education. Total scholarship awards for 2019 were $222,600.

The Gerber Foundation Merit Scholarship is awarded to students in all 3 counties. The scholarship provides $2,600 towards post-secondary education. Across the three counties, 45 students received this scholarship worth $117,000.

The Newaygo County Career-Tech Center scholarships are awarded based on the program that the students are graduating 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 2019, 19 students received scholarships for a total of $22,106.
## Summary of 2019 Grants Paid

(Current and Prior Year Commitments)

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pediatric Health</td>
<td>$1,438,676</td>
<td>38%</td>
</tr>
<tr>
<td>Pediatric Nutrition</td>
<td>$1,437,928</td>
<td>38%</td>
</tr>
<tr>
<td>Nutrient Competitors</td>
<td>$0</td>
<td>0%</td>
</tr>
<tr>
<td>West Michigan</td>
<td>$316,460</td>
<td>8%</td>
</tr>
<tr>
<td>Matching Grants</td>
<td>$104,813</td>
<td>3%</td>
</tr>
<tr>
<td>Scholarships</td>
<td>$326,176</td>
<td>9%</td>
</tr>
<tr>
<td>Special Initiatives/Other</td>
<td>$500</td>
<td>0%</td>
</tr>
<tr>
<td>Discretionary Grants</td>
<td>$168,000</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$3,792,553</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

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