Making scientific discoveries and then translating those discoveries into treatments for food allergies takes money—on the scale of hundreds of millions of dollars. Yet, if we consider that food allergies are currently estimated to cost U.S. families around $25 billion annually, the investment in a cure would, in time, more than pay for this enormous burden.

This figure reflects the dramatic increase in the number of Americans, especially children, who have food allergies, which has occurred within a very short period—about 15 years. Before then, little research was being conducted, and few scientists chose food allergy as a career. As a result, the research community, industry and advocates are now racing to develop the financial and scientific resources that will lead to new treatments and, ultimately, a cure.

Federal funding plays a crucial role—but not the only role—in this equation. The government-funded National Institutes of Health (NIH) has increased its investment in food allergy research, from $4 million in 2004 to some $36 million in 2013. FARE has advocated for federal funding that is commensurate with the magnitude of the problem, and will continue to call for significant increases. However, faced with the uncertainty that comes with federal funding and the need to allocate its nearly $30 billion annual budget among dozens of life-threatening and life-altering diseases, the NIH must work in partnership with other sources to advance research into food allergies, as well as other conditions.

All of us can be powerful advocates for research, but to do this we need an understanding of how research works. I recently asked a question of my cell biology students: “From the following options, rank in order (from most money to least), where you think funding for biomedical research performed in a university setting in the U.S. comes from: 1) the university, 2) the federal government, 3) industry (e.g. pharmaceutical or biotechnology companies), and 4) nonprofit or philanthropic foundations (e.g. FARE).” What would your answer be?

In reality, the answer depends on the type of research conducted. Research broadly falls into a pipeline of three categories, with each stage of the pipeline feeding the next: basic science, translational science and clinical research. Each category has its own challenges.

Basic science
Typically conducted in a university setting, basic science research answers questions key to biological function, such as how the

CONTINUES ON PAGE 3 >
Message from the CEO

Since April 2012, I have had the pleasure and privilege of serving as the CEO of FARE and its legacy organizations, the Food Allergy & Anaphylaxis Network (FAAN) and the Food Allergy Initiative (FAI). This week, I announced that I will be stepping down as CEO of FARE on August 30. Before I go, I want to celebrate the terrific work we have done together.

In the past two years, FARE and the food allergy community have experienced tremendous progress and growth. From the merger, we developed a new brand, launched a new website, built a national field operation, expanded grassroots fundraising opportunities, and exceeded previous fundraising records. In our first full year as a new organization, we raised more than $16.5 million to support important food allergy research, education, advocacy and awareness initiatives—a 25 percent increase over the combined total raised by FARE’s legacy organizations in 2012. This would not have been possible without your generosity and commitment to our cause.

With these funds, we have made important progress in every area of our mission:

- We established a new proactive research program based on the input of the leading scientists in the field and increased our investment in innovative treatments.
- We launched a national program to enhance restaurant safety for diners with food allergies, developed a program to help students with food allergies transition to college, held our first FARE National Food Allergy Conference, and introduced our free monthly webinar series.
- In November 2013, President Obama signed into law the School Access to Emergency Epinephrine Act, a FARE-directed effort to incentivize states to stock epinephrine in schools. We have also been proud to support many successful state stock epinephrine initiatives led by dedicated local advocates.
- We dramatically increased awareness of food allergy through our new award-winning website, media outreach, our social media outlets, and the documentary “An Emerging Epidemic—Food Allergies in America,” narrated by Steve Carell.

This success was made possible because of the dedicated staff, volunteers, donors, supporters and Board members who gave their time and resources. Thank you for everything you have done. I am so proud to have been a part of these accomplishments, and I will keep the individuals and families I have met and worked with at FARE forever in my heart.

I see a bright future ahead for FARE and the food allergy community, and know that a time will come when we will have safe and effective treatments for all individuals with food allergies. Thank you for the opportunity to serve, it has been an honor and a privilege.
immune system functions in health and illness. The pace of discovery is "steady, but measured, with unpredicted and sometimes serendipitous discoveries that have enormous impact," according to the American Society for Biochemistry and Molecular Biology. One example is the discovery of the structure of antibodies in the early 1960s. Not only was this finding pivotal to discovering that allergy results from misdirected IgE antibodies, but it also set off a cascade of breakthroughs well beyond immunology. Across many scientific disciplines, antibodies are used as research tools to identify or target specific proteins of interest.

Challenges: As mentioned earlier, the NIH, the largest funder of basic science research, has recently seen unpredictable yearly budgets due to the difficult economy. If the 2015 federal appropriations bill becomes law, the NIH would receive a modest increase. While this would alleviate the impact of 2013 budget cuts, the agency still would have fewer funds available than it did in 2010. Individual research labs at universities rely on competitive grants from NIH to keep experiments running. Solid, predictable funding of basic science research feeds discoveries that make it downstream in the research pipeline—and that ultimately may reach the patient.

Translational science
Translational science’s goal is to “translate” basic science discovery into clinical use. To follow the earlier example, based on knowledge of the IgE antibody’s role in allergy, many researchers hypothesized that neutralizing IgE antibodies could treat allergic disorders. In the early 1990s, scientists at Genentech published their work in developing anti-IgE therapy—the medication we know today as omalizumab (Xolair)—thus paving the way for clinical trials to treat allergic disorders.

Challenges: Traditionally, this category sees less NIH funding and greater investments from other sources, primarily industry and nonprofit organizations. Promising basic science discoveries may never get picked up by potential funders, either because they do not come to their attention or are deemed too risky.

Clinical research
Clinical research includes many broad goals, such as uncovering mechanisms of human disease and clinical trials for treatments. All, however, involve human subjects or tissues. By the late 1990s, clinical trials began testing the safety and efficacy of omalizumab for allergic asthma. Based on the outcome of multiple trials, the FDA approved omalizumab for this indication. Currently, researchers are combining omalizumab with oral immunotherapy (OIT) as a potential treatment for food allergy. FARE is funding many of these clinical trials.

Challenges: Clinical research studies are usually much more costly than studies earlier in the pipeline. A variety of sources pick up the tab, including government sources. The biggest contributor by far, however, is industry. But money is not the only resource that clinical research lacks—often studies lack participants. As Dr. Scott Sicherer, a prominent food allergy researcher and member of FARE’s Medical Advisory Board, often tells his patients, “we could do more with two things: more funding and more people participating in research studies.”

FARE’s role
A common misconception is that the biggest funding source is the most effective at producing results. According to the latest industry profile from the Pharmaceutical Research and Manufacturers of America, it can take more than $1 billion to bring a new drug to market—but the millions that FARE spends on early-stage clinical trials can mean the difference between developing a promising therapy or allowing it to stagnate. Every dollar spent is highly strategic. In fact, FARE—modeling itself upon pioneering disease nonprofits that have demonstrated success—plays a central role in ensuring that research moves rapidly down the pipeline.

As part of its comprehensive strategic plan, FARE has adopted a “hub and spokes” model where FARE is the hub and organizes the various “spokes”—researchers, key monetary players, and possible study participants—toward common goals. What this means is that FARE is advocating for more government-funded research for basic science and is providing seed money to gifted investigators, enabling them to generate enough data to qualify for large, NIH-funded grants for all levels of research. FARE is funding studies to help bridge the gap in translational research. FARE is actively investing money in clinical trials, and organizing researchers toward common study procedures to expedite treatment approvals, and so much more. Simply put, FARE is the catalyst for progress in food allergy research.

How You Can Help
FARE is a “hub” connecting all of us living with food allergies toward our hope of a cure, and all of us can help.

1. Understand the details of FARE’s research strategy.
2. Invest money in FARE to make the strategy a reality.
3. Lobby Congress to stabilize government-funded research budgets.
4. Consider participating in clinical trials.

Jessica Martin teaches undergraduate courses in general biology, cell biology, and anatomy and physiology at Portland Community College. Jessica educates on the science behind food allergies on her blog, the Food Allergy Sleuth, as well as multiple social media platforms. She is the mother of two young boys, one of whom has multiple life-threatening food allergies.
FARE Funding Accelerates Promising Research

Advancing Oral Immunotherapy
In oral immunotherapy (OIT), patients are fed tiny but steadily increasing doses of an allergen until they become desensitized to it. The allergen is administered as a powder that is mixed into a harmless food. Unfortunately, the formulations for OIT studies—that is, the amount of the protein powder and what it is served in—have varied from study to study. Several years ago, FARE recognized the need to develop standardized, FDA-approved food allergen products for use in OIT. Without these products, it was unlikely that OIT could be made widely available to patients.

To address this issue, FARE provided capital to establish Allergen Research Corporation (ARC), an independent company dedicated to developing pharmaceutical-grade allergens for use in OIT. ARC recently launched a Phase 2b clinical trial that seeks to develop a safe, effective formulation for use in peanut OIT. Phase 2b trials establish the dose range that will be prescribed for a particular therapy. If this trial is successful, ARC will launch a Phase 3 trial, the final study needed for FDA approval to market the product. The current study, which is being conducted at eight sites across the U.S., is fully enrolled. ARC ultimately plans to develop similar products for all of the major food allergens.

Providing Essential Research Tools
Over the past decade, FARE has invested more than $1.3 million in the Food Allergy Resource Initiative (FARI). A vital resource for scientists, FARI is a repository of samples that are available for basic food allergy research and studies of new diagnostic tools and therapeutic strategies. Maintained at the Icahn School of Medicine at Mount Sinai in New York City, FARI stores serum samples and medical records from more than 800 patients. These samples represent allergies to 92 foods. The repository also maintains cDNA samples from 17 allergenic foods. All samples are available, free-of-charge, to qualified researchers around the world.

Why is FARI so important? Human biospecimens, such as the FARI serum samples, are used to study how diseases progress; to learn how specific groups of patients respond to different therapies; and to develop new treatments that target specific cells that play a role in the body’s immune response. Food cDNAs allow scientists to reproduce large quantities of allergenic proteins, which are important for developing diagnostic tests and new therapies, such as vaccines. Researchers around the world are using FARI samples for many kinds of studies.

FARE’s strategic plan for research calls for us to expand the resources that will help researchers gain a deep scientific understanding of food allergies and develop therapies that prevent life-threatening reactions. As we launch a growing number of clinical trials nationwide, we will need many types of biospecimens from large numbers of patients. Plans are underway to create a patient registry and biorepository that will store DNA, RNA, serum samples and detailed medical histories from more than 10,000 patients. This extensive resource would greatly accelerate the discovery of the genetic and environmental triggers of food allergy, in addition to helping achieve the goals discussed earlier.

This article gives just two examples of the ways that FARE is moving promising new therapies along the research pipeline. To learn more about current studies and FARE’s strategic plan for research, please visit www.foodallergy.org/research.
Study Examines Severe Anaphylaxis in U.S. Patients

A new study looks at risk factors for severe anaphylaxis in a large group of patients in the United States. Drawing from two databases, researchers examined the records of 11,927 patients with anaphylaxis who visited the emergency department or were hospitalized between 2002 and 2008. The results of the study were published online on June 27 by the Journal of Allergy and Clinical Immunology.

The authors defined severe anaphylaxis as a reaction that required hospital admission, as opposed to outpatient treatment in the emergency department. They found that 2,622 patients (22 percent) were hospitalized. Of this group, 1,182 patients (10 percent) were admitted to the intensive care unit.

Significant risk factors for severe anaphylaxis were: medicine or an unknown trigger; older age; higher score on the Deyo index of comorbid diseases (which measures the impact of having two or more serious conditions at the same time, such as cardiovascular disease and hypertension); use of ACE inhibitors (blood pressure medications, such as enalapril) during the year before the reaction; and requiring an emergency department visit, hospitalization, or laboratory/radiology testing for any reason during the year before the reaction.

On the other hand, preventive care, such as filling a prescription for an epinephrine auto-injector or visiting an allergist/immunologist during the year before the reaction, was associated with a lower risk of a severe reaction. The authors suggest that patients who were being monitored by an allergist and who had access to an auto-injector “may have been better able to recognize their symptoms and use their epinephrine auto-injector before seeking medical care, potentially preventing the reaction from progressing.”

The authors stress that everyone at risk for anaphylaxis should be vigilant and carry emergency medications at all times. “Patient education is important to ensure that all patients, regardless of anaphylaxis trigger, are aware of their allergy and the importance of avoiding possible exposures to offending allergens.”

Impact of Food Allergy on Caregivers’ Quality of Life

As food allergy families know all too well, the disease often has a negative impact on quality-of-life for the affected child, parents and siblings. To learn more about parents’ quality-of-life, researchers at the University of Michigan Food Allergy Center in Ann Arbor asked 305 caregivers of children with food allergies to complete a questionnaire. All of the children had peanut, tree nut, milk or egg allergies, the most common food allergies seen in the practice. Their median age was 6.6 years, and the median age at the child’s most severe reaction was 20 months.

The results of the study were published in the July 2014 issue of the Annals of Allergy, Asthma and Immunology, the journal of the American College of Allergy, Asthma and Immunology (ACAAI). The researchers noted that the overall quality-of-life score was “fairly good.” The caregivers’ greatest concerns were dining out, trusting others, others not appreciating the seriousness of food allergy, and the child’s attendance at school or camp. The areas of lowest concern were nutrition, leaving the home, additional time needed to prepare for mealtime, and ensuring a normal upbringing.

Interestingly, although peanuts and tree nuts are most likely to be associated with severe reactions, parents of children with milk and egg allergies reported greater stress and anxiety. In a press release distributed by ACAAI, the lead author, Laura Howe, MD, noted that “because eggs and milk are everywhere, and used to prepare so many dishes, caregivers with children allergic to those two ingredients feel more worried and anxious.”

Parents who had a clear understanding of the severity of their child’s reaction had better quality-of-life scores. However, only 64 percent accurately perceived severity, while 15 percent over-perceived their child’s reaction and 19 percent under-perceived it. Caregivers were highly concerned about their ability to help if their child had a reaction, as well as the ability of others to understand the seriousness of their child’s food allergy.

In addition to inaccurate perception, factors that contributed to a lower quality-of-life were lower income, having eczema as well as a food allergy, multiple food allergies, older age at the onset of the first reaction, and anaphylaxis.

“Further research is needed to explore what might contribute to poor caregiver quality-of-life,” the authors conclude. By identifying the factors that are most likely to cause stress and anxiety, such studies can help physicians, mental health experts and educators to develop effective tools that enable families to live well with food allergies.”
Approximately 450 attendees from 31 states, the District of Columbia and Canada, managing 70 different food allergies gathered in June for a weekend in Chicago at the inaugural FARE National Food Allergy Conference, presented by Mylan. This was the largest FARE in-person educational event for the food allergy community in history, and it was a weekend to be remembered! We are able to host fantastic events like this one thanks to support from our members, donors and corporate sponsors.

Bestselling author Curtis Sittenfeld gave the keynote address, “Finding Your Food Allergy Voice,” a touching and humorous take on how her life has been affected by food allergies.

One highlight for many of our attendees and teens was the arrival of pro football player and Mylan Specialty spokesperson Adrian Peterson. Adrian answered questions from FARE CEO John Lehr following the keynote address. Adrian then met and took photos with FARE members during our Members Reception. Teens then had a great opportunity to spend time with Adrian in a closed Q&A session where they asked Adrian questions about how he manages his allergies at home and while traveling with his team. (See his interview on page 7.)

During the evening, the first FARE Vision Awards were presented to individuals and entities who support FARE in its mission to find a cure for food allergies and to keep individuals with food allergies safe and included. Congratulations to our 2014 honorees:

- Outstanding Community Citizen, presented to Anne Thompson of Illinois
- Outstanding Corporate Citizen, presented to Mylan Specialty
- Outstanding Fundraising Achievement, presented to Abbey Braverman, Roxanne Palin and Stephanie Winston Wolkoff, co-chairs of the New York Luncheon

Learn more about our honorees on our blog.

The weekend’s world-class educational programming was met with enthusiastic and positive feedback from attendees.

Conference attendees left with new ideas and connections, as well as bags full of allergy-friendly samples and information from our exhibitors. Thank you again to everyone who attended this year’s FARE National Food Allergy Conference and worked to make the event a success!

You can save the date for next year’s conference, which will be held May 16–17, 2015 in Long Beach, CA. FARE is also providing funding to five regional conferences in Michigan, Massachusetts, New Jersey, Washington and Utah. Details about these conferences can be found on our blog.
Teen attendees of the FARE National Food Allergy Conference were thrilled to have the opportunity to participate in a special Question and Answers session with 2012 MVP Adrian Peterson. We’re sharing their great questions and Adrian’s thoughtful responses below.

Which are you more afraid of…getting tackled by [Detroit Lions defensive tackle] Ndamukong Suh or a tiny shrimp cocktail? ~Matthew F., age 16

Mr. Suh—he can lay a pretty good hit on you, but I would definitely have to say a shrimp cocktail. Fortunately, I am able to get up from Mr. Suh’s big tackle. There’s not much to worry about. But a shrimp cocktail, for me personally, I found out that it could definitely be devastating.

I’m sure that, as a professional athlete, you do all sorts of events and appearances. How do you make sure that there is food for you and that you stay safe in those sort of situations? ~Carlo S., age 21

I consult with my people in advance. It really depends on the event I am going to as to whether I am going to be eating or not. My assistant knows my food allergies and he makes sure the menu is free of shrimp, lobster, scallops—my allergic triggers—making sure I avoid them at all times. It’s difficult at times, but it’s necessary.

What were your views on individuals with food allergies before your diagnosis, and how has your perception changed? ~Melissa E., age 19

You know, I really didn’t know how to view it. To be absolutely honest with you, when I thought about food allergies, I thought maybe you get a little rash or hives or something like that, I didn’t really think it was life-threatening. That’s how I looked at it before. And after my experience, it opened up a totally different view. In that situation, I actually was laying down in bed and I ignored the symptoms and was going to go to sleep. That could have taken me out. I am able to look at it in a different way now, and not only am I able to look at it in different way, I am able to share with my family the importance of being ready to go—avoiding my allergic triggers, knowing the symptoms and signs of anaphylaxis, and knowing how to respond in case it occurs.

How did your teammates handle hearing about your food allergy and what did they do after hearing about it? ~Richie H., age 12

They took it well, actually…they were supportive. We actually took gumbo off the menu until training camp ended. And those guys were asking questions, what were the signs and symptoms—they pretty much supported me through the whole process.

I sometimes feel very different and isolated by my allergies. I can’t hang out with my friends and teammates easily when my outings have to be carefully planned to ensure my safety. Do you ever feel this way? What do you do so you don’t feel so different? How do you keep your mind focused on the game (competition) when people watching you play or practice are eating food around you that you are allergic to? ~Gabe G., age 12

Good question. You shouldn’t feel like you’re being left out because you’re not able to participate in certain things because of your allergies. It’s unfortunate. But then again, it’s fortunate that you have the resources to be able to take the necessary steps in case another reaction happens. That right there is a blessing itself. Now, when I am on the field, to be honest with you, I am really not too bothered. Because in my mind, I know that I am always ready to go. I know that I have an epinephrine auto-injector on the sideline if for whatever reason I was to have an allergic reaction during the game. I find confidence in knowing my allergic triggers, and I make sure that I avoid my allergic triggers and that the people around me know my allergic triggers so they know not to play around with my food or have it around me, so with that I am pretty confident.

CONTINUES ON PAGE 10 >
T he Centers for Disease Control & Prevention (CDC) published “Voluntary Guidelines for Managing Food Allergies in Schools and Early Care Education Programs” last fall. The information in these guidelines helps schools to avoid, recognize, and treat allergic reactions while ensuring that students with food allergies are safely included in all school activities. FARE has created several useful resources based on the CDC guidelines to help increase awareness around food allergy management in schools.

We encourage you to review, download and bring the following documents to your child’s school:

**Keeping Children with Food Allergies Safe at School**

Every student at risk for anaphylaxis should have an individual written accommodation plan. A child’s accommodation plan (Section 504 or other written plan) has two parts: the accommodations or services needed for the child to be safely included in activities, and the emergency care plan (such as FARE’s Food Allergy & Anaphylaxis Emergency Care Plan). Download this one-page handout of important recommendations from the CDC national guidelines.

**Recommended Practices for Reducing the Risk of Exposure to Food Allergens and Responding to Food Allergies in Schools and Early Childhood Education Programs**

On pages 41–43 of the CDC guidelines are recommended practices and accommodations to help ensure that children with food allergies are safely included in school. Download this one-page handout of important recommendations from the CDC national guidelines. Recommendations for the Classroom, Cafeteria, Transportation, School Events, and Physical Education and Recess include practices such as:

- Avoid the use of identified allergens in class projects, parties, holidays and celebrations, arts, crafts, science experiments, cooking, snacks, or rewards;
- Use non-food incentives for prizes, gifts and awards;
- Do not exclude children with food allergies from field trips, events, or extra-curricular activities;
- Encourage hand washing before and after handling or consuming food; and
- Have rapid access to epinephrine auto-injectors and train staff to use them.

**Actions for School Boards and School District Administrators**

Data from CDC’s 2006 School Health Policies and Programs Study indicated that only slightly more than 40 percent of school districts have model food allergy policies. District policies are implemented with the support of board members, the district superintendent, and district-level staff members.

School Boards can adopt written policies that direct and support clear, consistent, and effective practices for managing the risk of food allergies and responding to food allergy emergencies. A comprehensive and uniform set of district policies can promote consistency of priorities, actions, and options for managing food allergies across the district to avoid confusion and haphazard responses, as well as ensuring that practices are aligned with federal and state laws, including regulations, and policies, as well as other established school policies. Download this handout.

School District Administrators can provide direct assistance to schools to help them meet the needs of students with food allergies, especially when the school does not have key staff, such as a doctor or a full-time registered nurse. Effective management of food allergies in schools requires the participation of many people. Administrators can help ensure that policies and procedures are established in order to identify students with food allergies, and that all school staff understand the school’s responsibilities under the federal laws and regulations that govern food allergies at school including, but not limited to: Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA), the Individuals with Disabilities Education Act (IDEA), and the Family Educational Rights and Privacy Act of 1974 (FERPA). Download this document.

For additional information, please visit: [www.foodallergy.org/cdc](http://www.foodallergy.org/cdc).

Visit the “Managing Food Allergies at School” section of our website for essential Back to School resources.
Tips for a Successful School Year

We recently asked support group leaders and teens from across the country for their best advice for managing food allergies in school so that we could share their tips with you. Here are some of their responses:

Support Group Leaders to Parents:

Work with the school and/or nurse to find out what kind of food allergy education they have planned for all of their staff, and encourage them to watch a video about food allergies and anaphylaxis during back-to-school teacher in-service. Also, give them copies of the new FARE “Common Symptoms of Anaphylaxis” poster for their staff room. You could also meet with the principal/nurse to share the new CDC guidelines.—Connie Green, SF Bay Area Food Allergy Network, California

Ask to store an emergency backpack in your student’s classroom. The pack should include safe, nonperishable food, contact information, and an extra set of clothes. This backpack should leave with your student during any emergency, i.e. fire drill, after lockdown, evacuation etc. This bag is also helpful if a natural disaster hits, and students are not permitted to leave the building.—Kristin Osborne, Food Allergy Association of Virginia Beach, Virginia

Start discussing the idea of food free-celebrations right away! Use the summer to put together lists of ideas for birthdays and holidays. Put together a little bucket full of food-free rewards for your child’s teacher and include the list.—Kelly Morgan, Washington FEAST, Washington

I tell parents to ask about substitute teachers and find out they are trained. The substitutes in our district are not trained on how to prevent or recognize a reaction, nor are they trained on how to use an epinephrine auto-injector.—Julie Sane, No Nuts Moms Group, Georgia

Teen to Teen:

Always keep your epinephrine auto-injector and other medications on you. Adding stress to a reaction by running to your locker is unnecessary.—Mackenzie K.

Don’t be shy about having food allergies. If someone is eating a food you are allergic to in class, tell them you are allergic, and ask them if they can please not eat it. Some people are kinder about it than others, but it’s always good to advocate for yourself.—Nina N., age 17

Speak up if there’s something wrong happening. Raise awareness if your friends are eating something you can’t. Explain to them about the severity of your allergies.—Amreen A.

Even if your school has an epinephrine auto-injector available at the nurse’s office, always carry two in your backpack at all times. Make your friends aware of where they are in your backpack. In an emergency, if you are not close to the office, this may save your life.—Emma A., age 14

I don’t tend to discuss my allergies with my peers unless it’s really necessary, but this year, I decided I was going to try to break out of my food allergy shell, so to speak. Basically, I tried to be better at bringing up

CONTINUES ON PAGE 10 >

Resources from FARE

FARE is proud to provide a wealth of free educational materials to the food allergy community. Below is a quick reference guide to some of our most frequently downloaded materials available on our website for you to read, download, print, and share.

Be a PAL: Protect A Life™ From Food Allergies
This education program can help children learn how to be a good friend to kids with food allergies. Parents, teachers, scout troop leaders, youth group leaders, or coaches can use the resources on our website, such as a poster, handout, bookmarks, and activity sheet, to present the program.

www.foodallergy.org/be-a-pal

“Common Symptoms of Anaphylaxis” Poster
This poster is adapted from our widely-used Food Allergy & Anaphylaxis Emergency Care Plan and shows the symptoms of anaphylaxis and what to do in case of an anaphylactic emergency. It is also available as a magnet for purchase in our online store (store.foodallergy.org).

www.foodallergy.org/anaphylaxis

Awareness Posters
A number of posters are available for you to print and post in schools or community buildings in your area. We have two posters geared toward children, one for restaurant staff, and an eye-catching infographic great for adult or teen audiences.

www.foodallergy.org/downloads

“The Food Allergy Field Guide”
Reading this free educational packet is a great place to start if you or a loved one is newly diagnosed with food allergy, or to provide to a friend. It combines our best resources in an easy-to-use format and will provide you with the information you need to stay safe, avoid reactions, shop smartly and live well with food allergies.

www.foodallergy.org/field-guide

We are committed to providing evidenced-based education and resources, and to increasing awareness of food allergies as a serious public health issue. Please email us at contactfare@foodallergy.org if you have suggestions for new materials or need help finding a specific resource.
Adrian Peterson Interview, cont.
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How have your food allergies, if at all, impacted your football career and your decisions on and off the field? ~Aarush G., age 16

Definitely in a positive way. You definitely can’t take life for granted is something I realized after having my allergic reaction. Ever since, on the field, I was able to go out there and just really enjoy it more. No one would know it, I was able to look at the situation and know that my athletic trainer was ready to go. Just being more appreciative of things both on and off the field, and making sure I am spreading the message to my family members and to my friends about anaphylaxis and being prepared, and recognizing the signs and symptoms of anaphylaxis because I believe that way, you’re able to educate people who might not be dealing with food allergies but might encounter someone having a reaction.

Have you ever had to miss an event because of your food allergy? ~Yoni L., age 14

Outside of practice that one day in 2012, that’s the only thing I have missed.

Do you carry your epinephrine auto-injector everywhere you go, and what do you do if you forget it? ~Evan G., age 11

What do I do if I forget it? I avoid my allergic triggers. I carry it everywhere I go. I have a pack in Minnesota, I have some in Houston, I have them in my bag—everywhere I go, so that I won’t forget. If for whatever reason, hypothetically speaking, I did forget my epinephrine auto-injector, I would make sure my mind is focused on avoiding my allergic triggers. I would definitely not play around with it.

How do you carry your epinephrine auto-injectors? ~Colton C., age 13

Depends. Sometimes I carry them in my socks, sometimes in my coat pocket. I also have a bag in my room right now with three epinephrine auto-injectors and one trainer just in case one of my little cousins is interested in knowing how to use the epinephrine auto-injector. I carry them with me all the time in different locations.

Does having food allergies have any effect on how you train during and after the NFL season? ~Brendan C. age 17

Not at all. One of the misperceptions is that food allergies can make you weak and fatigued, and that’s definitely not the case. I had my best season after I had my allergic reaction. So if you all have thought that or believed that, you can erase that thought now.

Any advice for high school and college athletes with managing allergies and sports? ~Hannah S., age 15

Never let an allergy get you down or make you think you’re not capable of performing to this level. When I train, I have my bag and I have my epinephrine auto-injector with me. Just in case, who knows, I am not really eating anything, but you never know—anaphylaxis is unpredictable. I am able to put myself in a position to being prepared. •

School Tips, cont.
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Meet and talk to your teachers ahead of time. Usually, I go to a private meeting and discuss what I’m allergic to, my experiences, and my concerns going into the year. I find this extremely helpful because I can talk to all of my teachers at one time!—Hannah S.

Don’t let your allergies define you. Yes, living with them is crazy, but you can’t let them hold you back from doing what you want to do. You may have to go about it in a different way than others, but you can do anything as long as you take the right measures to ensure your safety.—Caroline B., age 13

Be confident! You know yourself and your food allergies better than anyone else.—Allison D., age 15 •
We invited past attendees of FARE's Teen Summit to write about their experiences at one of FARE's most popular events. Here, they share their stories.

Gaby and Emily

Gaby and Emily met when they served as speakers on a panel at last year's Teen Summit. Gaby, 10th grader at the Academy of Information Technology and Engineering, and Emily, an incoming freshman at Harvard, became fast friends.

Gaby: Going to the FARE Teen Summit has become an annual tradition for me. Last year, I was honored to be a guest speaker. On the panel, I was paired with a very poised young woman named Emily. Little did I know that soon Emily and I would share a bond and become dear friends. Emily and I met the morning of the big event, and my first impression of her has not changed. Emily is strong, inspiring, witty, and wise beyond her years. After learning about the amazing work that she had done, I knew that she was my perfect role model—a real inspiration.

In the months that followed, Gaby and I have stayed in touch. The world needs more people like Gaby, and I am so thrilled that Teen Summit brought us together.

Isabel and Frankie

Isabel and Frankie also met at last year's Teen Summit.

Isabel: Before I went to last year’s Teen Summit, I only knew my friend Katie whom I had met at the 2011 Teen Summit. I had hoped to make new acquaintances at the 2013 Summit, but never in my wildest dreams did I think that I would become close friends with some of the loveliest and most fun people you could ever meet.

Frankie: I was the outspoken one in our group. At first everyone was really shy, but they were all willing to socialize, and after talking for a while, we all bonded pretty quickly. It helped that we were the same age, but what was really the clincher was our food allergies.

Isabel: I can’t even begin to tell you how amazing it is to be able to get to know someone who actually understands your food allergies. Last year, our group went out to eat, and every one of us made sure that the others’ meals were safe for them.

Frankie: We were probably the most protective friend group you could meet, but us becoming so close in a matter of days, only made the rest of the Summit super fun. Those of us staying at the hotel had a super fun time hanging out at the pool, and the dance was by far one of the coolest parts to the Summit. Together, we even made it through those long lectures… ha ha I’m just kidding; we all found the discussions to be super interesting too.

Isabel: We actually learned a ton from the lectures. As a high-school student, I was super interested in what college students had to say about managing their allergies at their respective universities. Several of our new friends had also undergone food allergy clinical trials, which were fascinating and uplifting to hear about. After listening to their positive experiences, I would be very much inclined to try such a trial if I could find one local to me.

Frankie: It was a blast! We all still keep in touch, and we’re becoming even closer.

Isabel: I cannot wait to see everyone at this upcoming Teen Summit! •

Food Allergy News • Page 11
Dr. Ruchi Gupta Elected to FARE’s Medical Advisory Board

FARE is pleased to announce that Ruchi Gupta, MD, MPH, a researcher, pediatrician and professor, has been elected to its Medical Advisory Board. Dr. Gupta has also joined FARE’s Education Working Group.

Dr. Gupta, an associate professor of pediatrics and director of the Center for Maternal and Child Health at Northwestern University Feinberg School of Medicine, speaks nationally and internationally on the topic of food allergy. Dr. Gupta is also a founding member of the Northwestern Food Allergy Research Consortium. Her research and clinical interests include childhood food allergy and childhood asthma. Dr. Gupta has authored over 50 peer-reviewed publications and has obtained grant support through the National Institutes of Health (NIH), FARE, the National Children’s Study and the Robert Wood Johnson (RWJ) Physician Faculty Scholars award. Of particular note, Dr. Gupta was the lead author of the FARE-funded 2011 landmark study published by the journal Pediatrics on childhood food allergy prevalence in the U.S. More recently, she and her team published an economic impact study published in JAMA Pediatrics and funded by FARE, which concluded that caring for children with food allergies costs U.S. families $24.8 billion annually.

Dr. Gupta is the pediatric attending at the Ann & Robert H. Lurie Children’s Hospital of Chicago and is the mother of a child with food allergies. She is also the author of the book, “The Food Allergy Experience.”

Advocacy Update

The DoD and Food Allergy Research

IIt may come as a surprise to many that the Department of Defense (DoD) funds medical research, including food allergy research. But, in fact, the Pentagon has a robust and unique medical research program that has funded grants to food allergy research projects.

The origins of the DoD medical research program dates back to the early 1990s when Congress anticipated a budget windfall following the disintegration of the Soviet Union. Congress decided to use some of the “peace dividend” for medical research. Furthermore, members of Congress specifically told DoD what disease research to fund, hence the name, “The Congressionally Directed Medical Research Program.” The program has had a number of specific line items for different kinds of cancer research as well Alzheimer’s disease, Parkinson’s disease and others. Over the years, however, demand from disease advocates became so great that Congress also created a subset program called the “Peer-reviewed Medical Research Program” that has a pot of funding to conduct research among a menu of diseases and conditions. Last year that funding stood at $200 million with more than 25 diseases eligible for research. Among them were food allergies.

How do they decide what research to fund? The decisions are based on the submissions by medical researchers. When grant applications are submitted in any of the disease types they are scored on the quality and structure of the proposal. In essence, the best applications win.

In contrast to research funded at the National Institutes of Health, the DoD medical research program has some unique features. First of all, because they are working with limited pools of money, the DoD program will fund bold experiments, or ‘high-risk, high-reward’ research projects rather than a more incremental approach favored by NIH. Consequently, the military program also does not necessarily need the preliminary data required by NIH. Another unique feature of the DoD program—that also differs from NIH—is the inclusion of consumer reviewers in their research panels. Individuals with the disease under study are asked to be part of the review panel that will evaluate the grant applications.

FARE has been active in leveraging this program to expand the resources available for food allergy research. On the front end, FARE has worked with Congressional supporters to ensure that food allergy research is an eligible disease under the Peer Reviewed Medical Research Program. After the program is funded, FARE was asked by the DoD to recommend candidates to be consumer advisors on the review panels. And finally, FARE rallies the food allergy research community to submit applications and increase the odds that more food allergy projects will have funding support.

PAGE 12 • FOOD ALLERGY NEWS
**Allergy-Friendly Recipes**

**Keeley McGuire’s Allergy-Friendly Fun Lunch Boxes**

With the first day of school rapidly approaching for most families, we thought we would feature some allergy-friendly school lunch ideas from blogger Keeley McGuire. Thank you for sharing your recipes, Keeley!

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**Romaine Sandwich Wraps**

Top 8 Free: Milk-free, Egg-free, Tree nut-free, Peanut-free, Wheat-free, Soy-free, Fish-free, Shellfish-free

1. Romaine lettuce
2. Lunch meat of choice
3. Honey mustard or other condiments
4. Carrots
5. Fruit

Cut romaine lettuce into bread-sized pieces, and fill with lunch meat and condiments of your choice.

“Romaine wraps are one of my favorite gluten & grain free ways to eat “sandwiches” now. Here I made them with turkey, salami, honey mustard, and carrot for a little added crunch!”

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**“Build Your Own Nachos”**

Top 8 Free: Milk-free, Egg-free, Tree nut-free, Peanut-free, Wheat-free, Soy-free, Fish-free, Shellfish-free

1. Leftover taco meat
2. Corn tortilla chips
3. Milk and soy-free cheese substitute, or regular cheese if not milk- or soy-allergic
4. Salad mix and dressing
5. Fruit

Put leftover taco meat in a thermos or silicone cup to be microwaved at lunchtime (or eat cold). Kids can top their chips with meat and cheese or cheese substitute.

“Simple, quick, and delicious.”

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**Pasta Salad**

Top 8 Free: Milk-free, Egg-free, Tree nut-free, Peanut-free, Wheat-free, Soy-free, Fish-free, Shellfish-free

1. Wheat-free pasta (such as corn or rice pasta), cooked and drained
2. Vegetables of choice (zucchini, tomatoes, sweet peppers), chopped
3. Salami, cut into pieces
4. Italian dressing
5. Fruit

Make pasta salad the night before, and have the leftovers for lunch. Cook and drain pasta, then toss in cut vegetables and meat. Coat in Italian dressing and refrigerate until ready to pack.

“One of my other favorites for lunch is cold pasta salads! Mmm...Here I packed up gluten free & allergy friendly noodles with zucchini, tomatoes, sweet peppers, salami, and mixed with Italian dressing.”

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Recipes provided with permission from Keeley McGuire’s Allergy Friendly Fun Lunch Boxes blog, www.keeleymcguire.com.
In Case You Missed It…

FARE Webinar, “Food Allergy, Anaphylaxis & the 911 Lottery”

On Wednesday, June 4, 2014, FARE was joined by registered nurse, Emergency Medical Technician (EMT) and Emergency Medical Services (EMS) educator Judi Miller to discuss issues of epinephrine availability and administration by EMS providers. There are many variables at play when 911 is called to respond to a food allergy reaction or anaphylactic emergency. Will the arriving ambulance have epinephrine on board? Will it be staffed by personnel who are trained and legally allowed to administer epinephrine? The answers to these questions depend on where you live when you make the call and the local protocols that are in place. Differences in population density, funding, and local protocols produce wide variance in emergency services.

While all states allow for epinephrine to be stocked on ambulances, just 31 states require its availability. In most states, there are two types of ambulances: Advanced Life Support (ALS) and Basic Life Support (BLS). ALS vehicles are generally staffed by paramedics and equipped with epinephrine. Whether or not BLS vehicles are equipped with epinephrine is often left to the discretion of local medical directors and/or local EMS entities. This underscores the importance of individual patients to always have their auto-injectors with them at all times.

During the webinar, the results from a recent survey of almost 1,000 pre-hospital caregivers were presented. Results indicated gaps in knowledge regarding symptoms and treatment of anaphylaxis, including gaps in knowledge and training in how to administer epinephrine. More education is needed to ensure that pre-hospital caregivers are equipped with the knowledge they need to identify the symptoms of and correctly treat anaphylaxis.

Recommendations from the webinar include:

- Call or visit your local ambulance provider and learn about the EMT epinephrine policies in your area. Questions to ask include:
  - “What type of EMS will respond to a severe allergy/anaphylaxis call?”
  - “Are all ambulances equipped with epinephrine?”
  - “What type of EMTs can administer epinephrine, and in what form?”
  - “What is the average response time?”
- Do not rely on EMS to provide epinephrine in an emergency. Always carry your auto-injectors.
- Give epinephrine before calling 911.
- When calling 911, request an ALS ambulance.

One of FARE’s ongoing initiatives is to help ensure that all ambulances are equipped with epinephrine and that all levels of EMTs and emergency responders are fully authorized to administer the medication during an anaphylactic emergency. FARE is convening a summit on emergency treatment of anaphylaxis by emergency medical providers in Chicago on Sept. 5-6, 2014, which will gather leading researchers, industry representatives and advocates for a day and a half of programming. The goal of this summit is to improve the process of identifying and treating anaphylaxis on the continuum of emergency care, from the time a 911 call is placed until the time a patient is discharged from the Emergency Room. FARE will provide an update on the outcomes of the summit in the fall edition of Food Allergy News.

Read more about FARE’s initiative in CEO John Lehr’s column in the fall issue of Allergic Living •
Send Education and Awareness Posters to Your Local School

Back to School season is a great opportunity to take action and work with your local schools to educate the school community about the serious nature of food allergies. This year, with your $25 donation to FARE’s poster drive, we will send three posters to the school or community building of your choice to help educate and raise awareness about food allergies. This is a simple way you can provide your school with resources and make a difference!

Each of the posters informs kids and adults about food allergies. The “Food Allergy Awareness” poster describes the prevalence of food allergies in kid-friendly terms. The “Common Symptoms of Anaphylaxis” poster shows the signs and symptoms of anaphylaxis and lists steps for what to do in an anaphylaxis emergency. And the “Be a PAL” poster gives simple ways that kids can be good friends to their classmates with food allergies.

We will also include a note in the package informing the school that a member of their school community donated the posters, as well as an informational flyer with links to some of FARE’s resources for schools, such as guidelines for food allergy management from the Centers for Disease Control & Prevention (CDC), recommended practices for reducing exposure to allergens, tips for addressing food allergy bullying, and our “Be a PAL” educational program. The letter and resources listed on the sheet emphasize the importance of safety and inclusion for children with food allergies during the school year.

Help us bring FARE resources to schools across the country, starting with your own! Click here to make your donation.

FARE Membership: Join Us

Stand with us to make the world safer and more inclusive for individuals with food allergies! Being a member of FARE entitles you to some great member benefits, such as registration discounts to Teen Summit and our National Food Allergy Conference, and a fantastic discount on a subscription to Allergic Living. But membership is about so much more than benefits.

Debbie Jacobs, of Potomac, Md., expressed this sentiment perfectly:

“Since she was a baby and my husband first found FAAN online and called to double-check what turned out to be erroneous advice from our pediatrician, FAAN and now FARE, has been there for our family. I can’t think of a single organization (or company) that has had such a direct and positive impact on our family than FAAN/FARE. We have been members for 16 years and even if my daughter outgrew all of her allergies, we would continue as members just to show our support for an organization that has done so much for families with food allergies. The advocacy on food labeling laws alone would justify all of our annual dues! Now, that my daughter will be going away to college, it is great to see that FARE has taken such an active role in making colleges safe for students with food allergies. It seems that FARE is growing right along with our daughter, and it is my hope that as an adult she will continue to look to FARE for advice and support.”

Visit www.foodallergy.org/membership and join FARE today!