We now have 37 programs in clinical development, including approximately 20 in the later stages; the deepest, and most innovative, pipeline in our 30-year history.

We strive to make a meaningful difference in the lives of patients with rare diseases. This is our primary Responsibility. It starts with understanding and responding to the unmet needs of patients and their families and caregivers. We work to break down barriers limiting availability, access, and affordability of treatments. We work in partnership with others to build understanding of the conditions we treat.
Access to medicines

Why it matters
There are more than 7,000 known rare diseases affecting 350 million people worldwide. Currently, treatments only exist for 5 percent of these. We are dedicated to improving the lives of rare disease patients by developing innovative treatments and are committed to improving access to essential treatments for those who need them.

5%
Some 7,000 rare diseases have been identified, yet treatment exists for only 5 percent of them.

We are committed to helping people with rare diseases get the correct diagnoses for their conditions as quickly as possible. Receiving the correct diagnosis for a rare disease can be a significant challenge. A typical rare disease patient may see eight doctors—four primary care doctors and four specialists—and receive two to three misdiagnoses before the correct one is given. For those diagnosing, the challenge is that rare diseases often hide behind the symptoms of more common illnesses, which makes diagnosis extremely difficult, particularly in children. Beyond the issue of correct diagnosis, living with a rare disease can cause social isolation, economic disadvantage, and emotional strain, which make access to treatment more of a challenge.

I am inspired every day by our brave patients and their families, as well as our team that works to ensure patients have access to their therapies.

Sara Becker
Patient Services Marketing Lead

1 Global Genes. Global Genes Factsheet on Rare Diseases Available at: https://globalgenes.org/rare-diseases-facts-statistics/

2 Miyamoto BE, Kakkis ED. The potential investment impact of improved access to accelerated approval on the development of treatments for low prevalence rare diseases. Orphanet J Rare Dis 2011;6:1-13. [page 1]
Improving accessibility

It is important to remove the barriers that prevent patients from accessing the medicines they need. These can include insufficient local healthcare capacity or a lack of suitable transport. With rare diseases, there is also a high chance that healthcare professionals may not have seen a particular condition before. This lack of familiarity and experience can contribute to a long and often frustrating path to diagnosis. Once diagnosed, patients often have to travel long distances to reach specialist centers for the right treatment. The infrastructure for supporting people with rare diseases varies significantly between countries and we work with healthcare providers, patient associations, non-profit organizations, and government bodies around the world to overcome any issues associated with accessibility.

Increasing affordability

We believe that the cost of medical treatments should not be a barrier to patient access. In the U.S., we provide patient assistance programs to help those struggling to afford their treatment. Outside of the U.S., we currently have 10 patient assistance programs in five countries (Argentina, Canada, Chile, China, and Uruguay) in the areas of Hematology, Immunology, Genetic Diseases and Internal Medicine. More broadly, we work to develop a global environment in which treatments can better reach those who need them, through compassionate or early access programs. We aim to partner with rare disease communities to support and inform the stakeholders involved in making decisions about the regulation, funding, and policy for rare diseases.

What we did in 2016

Improving diagnostic pathways for rare disease patients

It can take longer to diagnose rare diseases than many common diseases. On average, rare disease diagnosis takes 7.6 years in the U.S. and 5.6 years in the UK.1 Rare diseases such as the primary immunodeficiency (PI) disorders Gaucher disease, Fabry disease, and Hunter syndrome can be devastating, as they are difficult to detect and equally difficult to treat.

In 2016, we expanded our free diagnostic testing in more than 50 countries to identify Fabry, Gaucher, and Hunter patients. The service provides physicians with a free diagnostic kit, comprised of a Dried Blood Spot (DBS) card, return envelope, and optional patient consent form. This year, 85,356 tests were performed, 139 percent more than in 2015, and the testing identified 1,164 new patients, an increase of 63 percent from 2015.

We also partnered with the U.S.-based Jeffrey Modell Foundation (JMF) in 2016 to develop software to flag patients at high risk of PI disorders in the U.S. This program has increased the average annual number of patients diagnosed by 79 percent. We also worked with JMF, the International Patient Organization for Primary Immunodeficiencies, and other organizations to support newborn screening in a number of countries for SCID (Severe Combined ImmunoDeficiency), one of the most severe forms of PI.

1 Shire. Rare disease impact report: Insights from patients and the medical community, April 2013
Access to medicines continued

Dry Eye Disease
In 2016, the U.S. Food and Drug Administration (FDA) approved XIIDRA®, the first commercial drug approved to treat the signs and symptoms of Dry Eye Disease. We also launched the eyelove™ educational awareness campaign, to raise awareness and understanding of chronic dry eye symptoms, and encourage people to make eye health a priority.

Expanding access to Hemophilia treatment
This year, we improved access to Hemophilia care in Poland, ensuring all Hemophilia patients now have access to preventative treatment. In the U.S., we worked with the National Hemophilia Foundation to ensure that care standards for hundreds of Hemophilia patients would not be affected by a step therapy or “fail first” program proposed by insurers. This means that patients will be able to access the most appropriate and most effective treatment, rather than waiting for other treatments to fail first.

Improving health insurance literacy
If patients struggle to understand how their health insurance works, they may be at risk of missing out on vital treatment. Increasing health insurance literacy, particularly among vulnerable groups, helps rare disease patients build a strong case for optimal care.

MylgSource is one of our programs, which supports patients with PI. This program helps patients understand their insurance and financial support options, puts them in contact with nurse advocates who answer questions about Shire’s Immunoglobulin (Ig) treatments, and provides educational resources and tools to manage PI.

Increasing affordability through dedicated patient assistance programs
We are committed to providing help and support to patients to make sure they get the Shire medicines they may be prescribed. In 2016, our U.S. patient assistance programs reached approximately 60,000 patients.

Shire Cares™ is a U.S. initiative that helps patients with limited financial resources and no prescription insurance. In 2016, Shire Cares helped over 42,000 patients to access medication and treatments for conditions such as ulcerative colitis, Attention Deficit/Hyperactivity Disorder (ADHD), Adult Binge Eating Disorder (BED), Dry Eye Disease, Epilepsy, and end-stage Renal Disease.

OnePath® is another of our U.S. programs supporting access to treatment for patients living with Type 1 Gaucher Disease, Hereditary Angioedema (HAE) and Hunter Syndrome (MPSII), and other conditions such as Short Bowel Syndrome (SBS) and Hypoparathyroidism. Since its inception, OnePath has helped more than 9,000 patients. To help navigate the path to treatment, Patient Support Managers provide streamlined product support, answer insurance and coverage issues, and work with specialty pharmacies to facilitate access to treatment. In 2016, over 250,000 calls were made or received by OnePath on behalf of patients.

250,000
In 2016, 250,000 calls were made or received by OnePath on behalf of patients.
Access to medicines continued

Charitable access program
Our charitable access program improves access to treatment and care for patients with Lysosomal Storage Disorders (LSDs) and Hemophilia in 15 countries in Africa, Latin America, and the Middle East. LSDs and Hemophilia affect people all around the world — not just in countries where treatments are available.

This program brings together the collective expertise and resources of Shire, non-governmental organizations (NGOs), medical experts, and patient advocacy organizations to improve infrastructure and build capability in specific countries. This includes raising disease awareness, providing diagnosis education, and developing treatment expertise. We also launched a LSD training program in partnership with FYMCA Medical. This program aims to build knowledge and capability for physicians and increase disease awareness in developing countries.

Advancing R&D through collaboration
In 2016, we continued to develop our pipeline of new treatments. We focus our research and development (R&D) efforts in our therapeutic areas and we currently have 37 programs in clinical development. About 20 are late-stage programs in Phase 3 of clinical development or later, and most are expected to launch by the end of 2020, subject to regulatory approval. Our commitment to innovation is reflected in our $1.3 billion investment in R&D, representing 11 percent of our 2016 revenue.

Boston Children’s Hospital
Shire and Boston Children’s Hospital have an ongoing partnership to develop treatments for children with rare congenital conditions. Using the skills of both partners, the collaboration offers a blueprint for shortening the bridge from the lab to the clinic and is demonstrated by two ongoing projects to develop therapies for children.

Cincinnati Children’s Hospital Medical Center
In 2016, we continued our collaboration with Cincinnati Children’s Hospital Medical Center to discover and develop novel rare disease therapies. The combination of Cincinnati Children’s research capabilities and Shire’s research, development, and commercial expertise makes for a powerful partnership. The partnership focuses on programs with the potential to explore developmental therapies within an accelerated three-year timeframe.

R&D pipeline programs

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<td>Phase 3</td>
<td>17</td>
</tr>
<tr>
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</table>
**Advancing R&D through collaboration continued**

**BioPhorum — a cross-industry collaboration**

BioPhorum is a cross-industry collaboration of more than 35 biopharmaceutical companies, focusing on strategic development issues that would benefit from a common industry-wide approach. This year, Shire hosted the BioPhorum Development Group’s first face-to-face meeting, bringing together 14 representatives from 10 companies. The meeting shared insights into formulation development, particulates, and in-use compatibility, and had a goal of delivering at least one medical publication on standard approaches to building drug product robustness.

**Developing pathways for Hemophilia treatment**

We are committed to developing products that treat Hemophilia, a disorder that affects the ability of blood to clot. Several of our programs aim to improve the understanding of blood clotting and to provide better prediction tools for thrombotic events. This work has been published in the *Journal of Thrombosis and Haemostasis*, sharing our understanding and findings with the wider medical profession.

**Increasing the understanding of adRP**

The Foundation Fighting Blindness is dedicated to funding innovative research for the prevention, treatments and cures for inherited retinal degenerative diseases that lead to blindness. Working in partnership, we launched a new program to further our research on treatments for autosomal Dominant Retinitis Pigmentosa (adRP), a rare genetic disease that leads to the progressive loss of peripheral vision. The disorder varies significantly from patient to patient, making it very difficult to predict the disease’s progression. We are conducting a natural history study in an untreated population of 90 patients over a four-year period to gain a better understanding of the natural progression of the disease, with the intention of developing an effective treatment for the disorder.

**Additional research partnerships**

Shire’s other ongoing rare disease research partnerships include those with the Telethon Institute of Genetics and Medicine (TIGEM), and Armagen. To learn more, watch Shire’s Innovation Series on YouTube.

**What we will do in 2017**

- Launch an integrated U.S. and international grants and charitable contributions process.
- Give a greater voice to patients and caregivers by engaging with them through the entire R&D process, from trial design to clinical outcomes.
Awareness, advocacy, and responsible product use

Why it matters
Patients are at the heart of all we do at Shire. Understanding the unmet medical needs of our patients and their families is essential if we want to make a difference in their lives.

Making sure that our products are used responsibly maximizes their benefits and reduces the risk of negative impacts. We know that we cannot address these issues on our own, so we are committed to working with patient associations, industry bodies, non-profits, and others to make a meaningful impact.

Shire’s Advocacy team’s passion for the communities we serve drives our responsibility to ensure the voice of each patient is heard.

Rodney Dickson
Lead, U.S. Field Advocacy

Our approach
One of our most important responsibilities is to increase understanding of rare diseases by sharing our knowledge with patients, families, caregivers, physicians, and policymakers. At the same time, we strive to enhance our own understanding of patients’ unique needs. We aim to connect patients with relevant organizations, helping to build networks of individuals in similar circumstances. Our activities are focused on three key areas: awareness, advocacy, and responsible product use.

Raising disease awareness
Many of the conditions we develop treatments for are not widely understood. Low levels of awareness can contribute to misdiagnosis or delayed diagnosis, social stigma, delayed treatments, misuse of treatments, and overall lack of access to treatments — all of which can cause unnecessary stress for patients and their carers. For this reason, we aim to increase understanding and awareness among patients, caregivers, healthcare providers, and the general public.

Fact- and evidence-based information is essential for accurate and timely diagnosis and treatment. We sponsor a variety of research to gather scientific information and build understanding of rare diseases. We then develop balanced, scientifically-rigorous, educational materials and programs in our main areas of expertise — Genetic Diseases, Neuroscience, Hematology, Internal Medicine, Immunology, Oncology, and Ophthalmology.
Awareness, advocacy, and responsible product use continued

Enhancing patient advocacy
We are proud to have a long history of supporting patient advocacy organizations around the world. Collaborating with these groups not only improves our understanding of patient and caregiver experiences, but also helps these important organizations give patients a voice. We adopt an integrated customer journey approach to understand patient experiences better — from pre-diagnosis challenges to managing their condition day-to-day. This helps us identify opportunities to meet patient and customer needs. We strive to understand the frustrations of patients and, in doing so, understand how we can make their lives and experiences better and more fulfilling.

Our Patient Advocacy team works with patient advocacy groups around the world on the shared objective of improving the lives of patients with life-altering conditions. The initiatives and campaigns we run are focused on all aspects of improving the patient experience and include: disease education; raising awareness of clinical trials; decreasing time to diagnosis and treatment; engaging in dialogue with advocates; and championing the patient experience at Shire. The team also recognizes disease awareness days and supports patient advocacy organizations by hosting and participating in internal and external events.

The Patient Advocacy team ensures that the patient perspective is always front of mind within Shire. The more our employees understand the personal burden of disease, the better they will be able to appreciate the emotional, financial and day-to-day challenges that patients, caregivers, and families go through. The team also ensures the patient perspective is represented across Shire engagements. This includes in clinical trial recruitment, internal and external presentations, advisory boards, research projects, educational campaigns, and broad-scale public service announcements.

Our Project Voice initiative aims to connect all Shire employees to the patient experience by identifying patients who are willing to talk about their experiences at internal Shire events. Their stories often focus on the patient journey or give a ‘day in the life’ perspective, and inform, inspire, and motivate our employees.

Ensuring our products are used responsibly
Shire is committed to making sure that our products are used correctly and responsibly. We oppose the misuse, abuse, and diversion of all prescription medicines approved for treatment of disorders, and in particular Attention Deficit/Hyperactivity Disorder (ADHD).

To combat non-medical use of our products, we work in partnership with a variety of external stakeholders. We have invested in educational tools and support systems for patients, parents, and healthcare professionals on the appropriate diagnosis of ADHD, treatment options, and proper use of our medicines.

Read more online
Our Patient Advocacy team
Our position on Public Policy Engagement
Raising awareness through education
We support patient advocacy organizations in recognizing disease awareness days and months by hosting and participating in internal and external events and awareness campaigns.

Our Fabry Family Tree short film series
Fabry disease is a rare genetic disorder causing a wide range of symptoms, including heart and kidney disease. As part of our work to improve diagnosis of Fabry disease, we worked with Fabry International Network (FIN) to create a compelling story, highlighting Fabry’s hereditary impact and how it can be identified in families.

In 2016, we launched a series of short films — Our Fabry Family Tree — that follows a family’s journey living with Fabry disease. The trailer for the series launched during Fabry Awareness Month (April) and the three-episode series was subsequently launched on Shire’s YouTube channel and the fabrydisease.info website.

Spotlight on Gaucher Awareness Campaign
For International Gaucher Day on October 1, 2016, we launched our “Spotlight on Gaucher” initiative on social media. The campaign was endorsed by the European Gaucher Alliance (EGA) and the National Gaucher Foundation (NGF) in the U.S. and reached over 500,000 people. The campaign resulted in a 319 percent increase in traffic to the Spotlight on Gaucher website, and 333 new members registered for Shire’s Rare2Aware community, a gateway to information, news, support and connections for rare disease patients.

More information is available on the Spotlight on Gaucher YouTube channel.

What we did in 2016
Events supported include:

<table>
<thead>
<tr>
<th>Month</th>
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<tbody>
<tr>
<td>January</td>
<td>Thyroid Awareness Month</td>
</tr>
<tr>
<td>February</td>
<td>MPS Day, National Eating Disorder Awareness Week, Rare Disease Day</td>
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<tr>
<td>March</td>
<td>Bleeding Disorders Awareness Month, Hemophilia Awareness Month</td>
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<td>April</td>
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<tr>
<td>May</td>
<td>HAE Awareness Day, Mental Illness Awareness Week, National Mental Health Month</td>
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<tr>
<td>June</td>
<td>Eating Disorders Awareness Day, World Hypoparathyroidism Day</td>
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<tr>
<td>July</td>
<td>Dry Eye Awareness Month</td>
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<tr>
<td>September</td>
<td>Blood Cancer Awareness Month, Pediatric Cancer Awareness Month, Thyroid Cancer Awareness Month</td>
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<tr>
<td>October</td>
<td>ADHD Awareness Month, Gaucher Disease Awareness Month, National Gaucher Day</td>
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<tr>
<td>November</td>
<td>World Pancreatic Cancer Awareness Month and Day, World Prematurity Day</td>
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<tr>
<td>December</td>
<td>Crohn’s and Colitis Week</td>
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We support patient advocacy organizations throughout the year by hosting and participating in internal and external events and awareness campaigns.
Awareness, advocacy, and responsible product use continued

ADHD Awareness Month
Every October, we join with many patient organizations around the world to take part in ADHD Awareness Month. The Month aims to educate and raise awareness of this severely misunderstood disorder, and provides a key opportunity to recognize the true impact of ADHD on the lives of those affected. The theme in 2016 was “knowing is better” and was reflected through a series of activities:

- In My Shoes used virtual reality to allow people to step into the world of a child, adolescent or adult living with ADHD, through multiple real-life 360-degree videos.
- We launched a spoken word video to explain the challenges many adults with ADHD face in seeking accurate diagnosis and appropriate support. The video, entitled “The Truth”, is available to view on Shire’s YouTube channel.

Coinciding with ADHD Awareness Month, our annual Excellence in ADHD Patient Group Awards celebrate outstanding projects led by patient advocacy organizations outside the U.S. An international panel of judges awards grants of €10,000, and in 2016 the following groups were recognized for the impact of their innovative work:

- Early Therapy Group, an innovative project for the treatment of pre-school age children with ADHD — Fundación ADANA (Spain).
- ADHD and School — HyperSupers TDAH France (France).
- A foundation for children, teenagers and adults diagnosed with ADHD — TDAH Irapuato (Mexico).

The Coalition to Prevent ADHD Medication Misuse (CPAMM)
In the fall of 2016, continuing our involvement with CPAMM — a coalition working to prevent misuse, abuse, and diversion of ADHD prescription stimulant medication — we helped to launch an educational campaign encouraging parents, caregivers, physicians, college administrators, athletic coaches, and trainers to take action and speak with students about the dangers and consequences of the non-medical use of ADHD medication. To date, this online campaign has received around 15,000 interactions with members of the public. Learn more at cpamm.org.

Our Excellence in ADHD Patient Group Awards
Our Excellence in ADHD Patient Group Awards were made to three organizations in Spain, France and Mexico.

Hematology: Alongside the European Haemophilia Consortium, we launched the European Inhibitor Network to improve standards of care for patients with Hemophilia inhibitors. Hemophilia inhibitors reduce the efficacy of Hemophilia treatment, making it difficult for these patients to receive appropriate care. In February of 2016, the Network hosted a policy roundtable to raise awareness of the disparities in Hemophilia care across Europe.

Immunology: In October, we hosted events with the Jeffrey Modell Foundation, the Immune Deficiency Foundation, and patients with PI to gather insight into the needs of these patients. The events allowed these groups to share their vision and strategic objectives for 2017 and beyond. Discussions covered issues such as quality control and the process of creating immunoglobulin therapies.

Oncology: In November, we hosted our first-ever Oncology Advocacy Roundtable, bringing together 12 diverse patient advocacy groups. The aim was to listen to these leading non-profits on unmet needs and determine opportunities for collaboration across the entire R&D pathway.

Gastroenterology: During 2016, we held global and local workshops with patient advocacy organizations to better understand the needs of patients with SBS, a rare and potentially fatal gastrointestinal disorder. We also supported the development of a global coalition for SBS, designed to provide support and education to SBS patients across the world.
Shaping the industry and regulatory landscape for rare diseases

Shire is a member of over 40 pharmaceutical and biotechnology industry groups worldwide including IFPMA, BIO, EFPIA, EuropaBIO, ABPI, Medicines Australia, and Biotec Canada. Through these groups and individually as Shire, we are committed to ensuring that legislation allows patients with rare diseases to receive much needed diagnoses and treatment.

Improving legislation to screen newborns in California

We have been actively involved in helping to pass legislation improving rare disease screening for newborn babies in California. We chaired a working group of patient organizations and industry advocates to support a change in legislation to eliminate delays in newborn screening. The Recommended Uniform Screening Panel (RUSP) is a list of conditions that every baby should be screened for, however, once a condition was added to the RUSP, it could have taken up to eight years for a state to conduct a screening. In September 2016, legislation was passed allowing those in California to screen for diseases as soon as they are added to the list. This bill will help newborns with rare diseases receive much earlier diagnosis and treatment.

Helping to shape the 21st Century Cures Act

During the year, we played a fundamental role in shaping U.S. healthcare legislation through the 21st Century Cures Act, which passed in December 2016. We were involved in two key aspects of the Act:

- Giving Medicare patients access to self-infusion medication at home
- Extension of the Rare Pediatric Disease Priority Review Voucher

What we will do in 2017

- Support selected smaller rare disease advocacy groups to grow and expand through mentoring programs.
- Develop coalitions in cancer care to address areas that have significant unmet needs.
- Develop and launch a Rare Disease Registry in India.
- Continue to work with patient groups on legislation to advance the start date of the new Medicare Home Infusion Act and expand it to include intravenous administration.
- Work to replicate the success of the newborn screening legislation in California in other targeted states.

In 2016, we played a fundamental role in shaping U.S. healthcare legislation through the 21st Century Cures Act.
Supporting patient and local communities

Why it matters
Companies do not operate in isolation and at Shire we are no exception. Our impacts — both positive and negative — extend into the local communities where we live and work. Our responsibilities also extend to the therapeutic communities we serve. This includes patients and their families, and the advocacy and support groups that represent them. We strive to ensure that our impact is a positive one, wherever we operate.

Our approach
Our goal is to help our communities thrive and be healthy in the long term. To ensure the greatest benefit from our activities, we partner with expert organizations and provide support in areas that are closely linked to our business activities and core skills.

We have a particular focus on improving the wellbeing of children and young people that are most in need. We also provide support for communities struck by one-off disasters. To achieve maximum impact, our programs run globally and locally.

"Coming to work and knowing that we can positively affect those around us each and every day… now that’s inspiration."

Alex Schuman
Responsibility Manager
Across the U.S., there is a significant shortage of medical geneticists. With only one geneticist for every 600,000 individuals, the U.S. has less than half of the genetic workforce it needs. As an issue directly related to our business, we announced a $1.65 million grant to the ACMG Foundation for Genetic and Genomic Medicine. The ACMG Foundation is a non-profit organization that works to attract and fund training for the next generation of medical geneticists and genetic counselors. The Foundation also sponsors important research, and promotes information about medical genetics.

Our partnership aims to advance and improve expertise in medical genetics in the U.S. Over the next three years, the grant will fund 10 one-to-two year fellowship training awards for medical geneticists in three categories: clinical laboratory fellowships, clinical genetics residencies, and medical biochemical genetics subspecialty fellowships. The partnership between Shire and the ACMG Foundation for Genetic and Genomic Medicine will help develop a future generation of geneticists around the world who will be crucial in the diagnosis and care of patients with rare diseases.

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**Partnering with SeriousFun Children’s Network**

In February of 2016, we committed $3 million over three years to SeriousFun Children’s Network, a global non-profit organization comprised of 30 camps and programs serving children with serious illnesses and their families, always free of charge. SeriousFun Children’s Network aims to foster independence, resilience and personal growth and help children to see beyond the limits of their medical conditions.

Our support will enable nearly 1,000 children, many with rare diseases, to attend SeriousFun’s transformative camps and Family Weekend programs. In the summer of 2016, 15 Shire employees from around the world had the unique chance to volunteer as counselors at SeriousFun camps, volunteering over 1,500 hours with campers. In total, our employees donated approximately 5,000 hours of volunteering with SeriousFun through on- and off-site programming throughout the year.

For more information see our video on the first year of our relationship on Shire’s YouTube channel.

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"Working as a counselor at SeriousFun showed how important it is for us to discover and manufacture treatments for rare diseases. It was an exciting experience; I loved meeting new campers and helping them have fun."

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Jon Chin
Process Engineer II

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**$1.65m**

We committed $1.65m to the ACMG Foundation for Genetic and Genomic Medicine to fund 10 fellowship training awards for medical geneticists.
Financial support for those in need

We continue to invest in local projects designed to make a difference to disadvantaged young people and their families. Our support ranges from projects providing career inspiration for students with special needs, to helping schools to buy equipment for students with disabilities.

In 2016, we continued our support for Cotting School — a special education school for students aged three to 22 with learning, communication, and physical disabilities, based near our U.S. Operational Headquarters in Lexington, MA.

Support in 2016 included:

- A $25,000 donation to support the school’s career program, which places students in local businesses to explore realistic career options, while gaining vocational experience and developing social skills. The donation also purchased adjustable desks that can comfortably accommodate students in wheelchairs or with disabilities.
- An enlarged internship program. We now offer four internships in Shire’s mailroom to upper school students.
- A donation of excess office supplies for use in writing and arts classes.

Since 2010, the Education Advantage scholarship program awarded more than 200 scholarships to students with a bleeding disorder, totaling over $1.3 million.

Education Advantage is designed to help recipients pay for school and continue their education. The program is open to anyone with Hemophilia A or B, including those with inhibitors, regardless of which brand of treatment they use. Beginning in 2016, students with von Willebrand Disease were also eligible to apply. In 2016, 16 young people with bleeding disorders were awarded University Scholarships, Community College and Technical Scholarships, or GED Assistance worth up to $7,000.

In 2016, the Shire ADHD Scholarship Program selected 55 U.S. recipients for a scholarship from more than 2,000 applicants. In Canada, the program awarded bursaries to five recipients from more than 300 applicants. 2016 was the third year that the program supported Canadian adults living with ADHD who are pursuing a post-secondary education. Find out more at shireADHDscholarship.com.

In 2016, we made a £15,000 grant to the Sick Children’s Trust in the UK, which will provide accommodations for around 50 families with sick children in the hospital.
Disaster relief
We understand the need to react to and support unforeseen crises globally. In significant disasters, local communities still require support long after the crisis has passed. We continue in our role as a board member of the Partnership for Quality Medical Donations (PQMD), a global alliance of non-profit and corporate organizations, that aims to enhance access to healthcare in underserved communities and areas affected by disaster.

In December 2016, a massive fire in Cambridge, Massachusetts, close to our Kendall Square office, destroyed 15 buildings and displaced 89 people. In response to the tragic incident, we supported the Mayor’s Fire Relief Fund with a $25,000 donation, which was established to assist the families and individuals directly affected by the devastating fire.

In 2016, we supported the relief effort following an earthquake in central Italy, just 60 kilometers from Shire’s manufacturing plant in Rieti. The earthquake resulted in more than 290 fatalities and largely destroyed many small towns. We were very fortunate that all of our employees were unharmed. We donated approximately $71,000 to the relief effort — a $60,000 corporate donation and $11,000 raised by our employees.

In 2010, our Massachusetts sites have donated more than $900,000 worth of surplus equipment, such as microscopes and laptops, to local schools and non-profit organizations. We also made a $25,000 donation to the Community Therapeutic Day School in Lexington, to celebrate the opening of a new building for Shire’s U.S. Commercial operations.

In the UK, we made a £15,000 grant to the Sick Children’s Trust, which operates 10 houses that provide accommodations for parents with sick children in the hospital. The Trust also provides emotional and practical support, and was established on the belief that having parents on hand during hospital treatment benefited a child's recovery. Our donation will provide accommodations for around 50 families over an 18-month period.

We continue to invest in local projects designed to make a difference to disadvantaged young people and their families, from financial donations to the donation of equipment such as microscopes and laptops.