



**The Gift of Life**



**The Gift of Life Dedicates the  
September 24 - October 8, 2016 Medical Mission to  
Nizhny Novgorod, Russia in Loving Memory of Peter Tymus**



**Peter Tymus**

November 8, 1957 - July 20, 2016

Peter Tymus served on the Board of Directors of the Russian Gift of Life USA children's charity from March 2009 until his death. Peter was dedicated to the charity's mission of saving children's lives through heart surgery. He shared the vision of saving as many young lives as possible by bringing children to America for heart surgery and by partnering with other organizations to develop children's heart centers abroad.

**Gifts in Peter's memory are helping to make that vision a reality.  
His spirit of kindness, friendship, and giving lives on.**



The Novick Cardiac Alliance (NCA) is committed to bringing sustainable health care solutions to children with cardiac disease in the developing world.

NCA is dedicated to improving the skills, knowledge, technology and experience of local health-care providers in regions of the world without access to quality Pediatric Cardiac Care.

NCA aims to provide comprehensive care to all children with congenital or acquired heart disease regardless of gender, ethnicity, religion, political ideation, genetic factors or economic means.

NCA's vision is that in the future all children with heart disease, no matter where they are born, will be able to receive the medical and surgical care they require to live a long and healthy life.



*“In our cardiac center, significant progress has been made in pediatric heart surgery. This all became possible, in large part, due to Dr. Novick’s missions.”* **Dr. Anton Maximov**, Head of the Nizhny Novgorod Cardiac Center and

Chief Specialist in Cardiovascular Surgery, Ministry of Health of the Nizhny Novgorod Region.

The Gift of Life, Russian Gift of Life USA, and renowned cardiac surgeon Dr. William Novick are collaborating to improve the care of children with heart disease by developing children’s heart centers abroad. Currently, several areas of Russia still do not provide comprehensive pediatric cardiac care to children in need. Instead these little patients are being referred to Moscow, St. Petersburg, or out of the country, while others face a shortened life expectancy.

## **Nizhny Novgorod – Gift of Life in Historic Russia**

Nizhny Novgorod, colloquially shortened to Nizhny, is a city located in the Nizhny Novgorod Region and Volga Federal District. The city was founded in 1221 by Prince Yuri II of Vladimir and the old citadel is preserved to this day. In 1817, Nizhny Novgorod became a great trade center of the Russian Empire. In 1896, at a fair, an All-Russia Exhibition was organized. From 1932 to 1990, the city was known as Gorky after the writer Maxim Gorky, who was born there. The city is an important economic, transportation, and cultural center in Russia and the vast Volga-Vyatka economic region, and is the main center of river tourism in Russia. In the historical part of the city there are a large number of universities, theaters, museums and churches. Nizhny Novgorod is located about 400 km east of Moscow, where the Oka river empties into the Volga. Nizhny’s population is over 1.2 million people.



## Medical Missions – Touching Many Lives

After a site assessment in March 2014, Dr. Novick, Russian Gift of Life USA and the Nizhny Novgorod Cardiac Center agreed to collaborate on a project to improve pediatric cardiac services in Nizhny Novgorod, Russia. Eight months later, a ten-member international medical team arrived for the inaugural Gift of Life medical mission to Nizhny. The team performed sixteen open-heart surgeries in collaboration with their Russian counterparts. Since then Dr. Novick has continued to coordinate and send international teams of pediatric cardiac specialists to work with the appropriate colleagues at the cardiac center to expand cardiac services. The visiting teams work side by side with their Russian colleagues at all times providing direct hands on teaching at all levels. The visiting teams also provide 24-hour coverage in the intensive care unit and provide life-saving open-heart surgery to some ten children on each visit.

The second medical mission to Nizhny took place from June 6th through 20th of 2015. The eleven-member team performed thirteen open-heart surgeries in collaboration with their Russian counterparts. The third medical mission to Nizhny took place from May 14th through 28th 2016. The twelve-member international team performed eleven open-heart surgeries and five endovascular closures in collaboration with their Russian counterparts. The fourth medical mission to Nizhny took place from September 24 through October 8, 2016 and was dedicated in memory of Peter Tymus, who passed away on July 20th.

### Nizhny Novgorod, Russia September 24 - October 8, 2016



This was the Novick Cardiac Alliance's second trip of the year to the Specialized Cardio-surgical Clinical Hospital in Nizhny Novgorod, Russia. Since this is a dedicated cardiac center, the local team regularly performs cardiac surgeries for both pediatric patients and adult patients in need. While most of the patients this trip were children, there were several adult congenital consultations for possible surgeries in the future.





## Some of this trip's patients



**Daria**      Tuesday 27 September

Daria is a precious baby girl who had surgery on her heart at just eleven days old. Her diagnosis was an arterial switch which calls for a complex operation. Her surgery was performed by local surgeons Dr. Orlov and Dr. Shirokov.

The next day she needed a reoperation and it was also performed by the local surgeons. Even with the reoperation, she recovered incredibly and was discharged from the ICU just four days after her initial surgery. The NCA team loved holding this beautiful baby girl and were happy to see her heart healed. Everyone feels great knowing she can grow up without her heart defect getting in the way.



**Alex**      Wednesday 28 September

Alex is a six-week old baby boy diagnosed with Total Anomalous Pulmonary Venous Return, or TAPVR. In this defect, his pulmonary veins do not connect to the left atrium normally. His operation was performed by Dr. Novick and assisted by Dr. Shirokov. He was discharged from the ICU on the following Monday to recover in the pediatric ward with his parents. His mother was very grateful for the team's help and was very happy to know he would be growing up without any problems!



## **Denis**      Thursday 29 September

Denis is a two-year-old baby boy diagnosed with Transposition of the Great Arteries, or TGA. This is not his first operation. In his two years of life, this sweet boy has had two prior surgeries. On this trip, he had a Fontan Procedure. His surgery was performed by Dr. Orlov and assisted by Dr. Novick and Dr. Shirokov. He recovered from surgery like a champion and was discharged from the ICU on Monday!



## **Ksenia**      Friday 30 September

Ksenia is a beautiful thirteen-year-old diagnosed with a Ventricular Septal Defect. Her operation was performed by local surgeon Dr. Shirokov and assisted by Dr. Chistiakov. Her surgery went very smoothly! She was taken off of the ventilator just two hours after surgery and had no complications afterward. She was discharged from the ICU on Tuesday to recover with her family.

Ksenia is entering her teenage years and will be able to hang out with her friends with no issues from her heart. Everyone loved her positive spirit and beautiful smile.



## **Nikolai**      Thursday 06 October

Nikolai is a five-year-old boy who has had two previous operations. He first had an operation in 2011, followed by a re-operation in 2013. This operation was a RV-PA Conduit augmentation with Cormatrix. His surgery was performed by Dr. Orlov and assisted by Dr. Novick and Dr. Shirokov. Nikolai was taken off of the ventilator just 3.5 hours after surgery. When the team left he was recovering in the ICU.



# Core Principles of NCA

## Collaborate

We Collaborate with Governments, Health Ministries, healthcare professionals and Humanitarian Organizations to provide total cardiac care to children in developing countries. The children we serve have limited access to quality care and the families lack the financial resources to seek care elsewhere. This collaboration will enable local health-care authorities to build Pediatric Cardiac care services in-country and in time eliminate the need to send these children abroad for surgery.

## Educate

We educate Local health-care professionals and work with their educational institutions to improve the standard of training and hence care provided to children with Heart disease. Our education model is open and flexible and is delivered using multiple modalities. We work with each site individually to find the best template for education and development of clinical judgement. We provide clinical bedside teaching, didactic lectures and ad hoc teaching sessions on site; and encourage the use of internet based resources and access to international academic journals. We are currently in the process of building a virtual learning environment using “Moodle”<sup>™</sup> as the platform.

## Sustain

Our goal is that our partner site’s develop full independence over time and to operate on and care for the children with a home grown team of experts and no continuing need for direct outside assistance. We monitor the quality and effect of our assistance, and tailor our teams size and skill set accordingly. We commit to maintaining professional relationships with those hospitals and personnel well into the future and focus on areas such as academic work, conference attendance and occasional short visits. We have seen that a significant proportion of volunteers and core staff on our teams enthusiastically emerge from previously assisted sites.

## Innovate

We facilitate practical and affordable solutions to a variety of clinical, technical and patient problems, which are unique to the sites we work in. First world approaches are often unaffordable or inappropriate to the needs of our partner sites. Surgical, Interventional Catheter and ICU techniques are tailored and modified to address the needs of the population we serve. Many of the children we see are much older than would typically be seen in developed countries and consequently the medical and surgical options for these children are very different. Many of these innovations emerge from professionals at our partner sites and we encourage presentation and publication of such in conferences and journals.







**Thank you, Gift of Life and Russian Gift of Life USA for your generous and continued support.**

**Thank you for helping the children of Russia fight congenital heart disease!**

## Patient List

1. Daria Begusheva	Newborn	Arterial Switch, Pericardial Patch
2. Alex Rukomoynikov	6 weeks	ASD closure
3. Denis Khrapunov	2 years	Fontan Procedure
4. Ksenia Krobotova	13 years	VSD closure
5. Denis Grechianikov	8 months	Mitral Valve Repair
6. Viktoria Ustinova	11 months	PA debanding, Blalock- Taussig shunt
7. Nikolai Lysev	5 years	RV- PA Conduit augmentation w/ Cormatrix
8. Arina Makarova	10 years	Mitral Valve Replacement
9. Vlad Lapshin	4 years	Mitral Valvuloplasty

## Cardiac Alliance Team

Dr. William Novick	Surgeon	Tennessee, USA
Olga Kozhemiakina	Anesthesiologist	Minsk, Belarus
Jamie Penk	Cardiologist	Chicago, USA
Amanda Pakuts	Respiratory Therapist	Edmonton, Canada
Eugene Suslin	Intensivist	Minsk, Belarus
Frank Molloy	PICU Nurse/Educator	Tennessee, USA
Lauren Gardiner	PICU Nurse/Educator	Melbourne, Australia
Mary Ann Lo	PICU Nurse	Vancouver, Canada
Oksana Shablyko	PICU Nurse	Minsk, Belarus
Artur Barsumyan	PICU Nurse	Minsk, Belarus
Alexander Kryzhanovski	PICU Nurse	Minsk, Belarus

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