

**General Business**

**1st Place: MediTelHealth Solutions**

MediTel Health Solutions is the only telemedicine-based, healthcare service provider connecting patient and physician via webcam and simple web-based video conferencing to provide subspecialty examination and assessment for Parkinson's disease (PD). We provide complete PD care with MediTel contracted specialist physicians to patients living in the nursing home and in their own homes using an online platform and video conferencing software linked to an electronic health record with video archiving, providing an ideal setting for a medical visit.

Benjamin George – Bloomberg School of Public Health, Graduate  
Jason Reminick

**2nd Place: HealthCloudSMS**

We are expert-sourcing mobile health. HealthCloudSMS is a web application that makes it easy for medical experts who know the problems to build text message interventions that solve the problems. HealthCloudSMS aims to be the leading platform used by researchers and clinicians seeking to develop and implement text message-based health and wellness interventions. The company is running and operational, offering a platform for researchers and providers to develop their own SMS-based interventions and partnering directly with experts to develop proprietary SMS-based interventions. HealthCloudSMS then licenses effective SMS interventions to healthcare providers and self-insured employers. Ultimately, HealthCloudSMS possesses the infrastructure necessary for experts in health and wellness to develop an evidence-based SMS solution and commercialize and scale novel interventions.

Ralph Passarella – School of Medicine, M.D. Student  
Michael Lin – School of Medicine, M.D. Student  
Henry Li – School of Medicine, M.D. Student  
Pramod Verma, School of Medicine, Graduate  
Sebastian Seiguer – Carey Business School, Graduate

**3rd Place: Easy-Trip LLC**

Arrive! is a website/smartphone app developed, which will be used for easy planning of a trip with reliable information. Suppose you and your friends want to go on a trip, each of you has \$1,000 to spend, five days of freedom, and the desire to explore somewhere with good food and interesting culture. How do you figure out where to go, what to do and which hotel to live in with the budget and time you have? You might go look at some package travel deals at your local travel agents or Groupon. Or you might do a ton of research and come up with something. Unfortunately, anyone who wants to plan a trip today needs to immediately become a statistician, researcher and event planner, all at the same time. This is because, 1) usually you don't know exactly what you want in the first place, 2) there's just too much travel information now freely available, and 3) unfortunately none of this information is particularly tailored to your interest. To solve these problems, EasyTrip, LLC., founded by graduate students at Johns Hopkins University and Carnegie Mellon University, designed a website/smartphone solution – Arrive!TM. Arrive!TM is a leisure travel planning solution that, 1) recommends places based on your unique

preferences with the information from people you can trust, 2) organizes your trip details in an itinerary that optimizes your route, and 3) saves the itinerary on your smartphone to access anywhere, any time for free. In general, Arrive!™ will recommend places to you just like how Pandora recommends music for you.

Yuanming Suo – Whiting School of Engineering, Graduate  
Zichan Wang – Whiting School of Engineering, Graduate  
Pranay Kasat – Whiting School of Engineering, Graduate  
Kun Niu

## Life Sciences

### 1st Place: Salveo Vascular

Salveo Vascular (Baltimore, MD) is a start-up medical device venture focused on preventing infectious and functional complications in vascular access devices through the identification of clinical needs and development of disruptive solutions. The company is undergoing filing to be incorporated as a limited liability corporation. Salveo Vascular's mission is to prevent the unnecessary death and suffering of healthcare's most vulnerable patients by developing novel medical devices that provide clinical and financial value to both hospitals and patients. Salveo Vascular has developed the Sonicade™, a patent-pending CVC accessory device that is the first product to adequately address both infections and occlusions in CVCs. The Sonicade will prevent unnecessary death and suffering for patients struggling with debilitating diseases. The Sonicade is compatible with all standard CVCs and is connected by a physician or their assistant at the time of catheter placement. The Sonicade provides a needleless connection site for high flow infusion and aspiration. The disruptive, platform technology transfers high frequency, low-amplitude surface acoustic waves throughout the length of the catheter. The patient does not feel these vibrations, and they have been shown to reduce the adherence of bacteria and proteins to an inert surface within the body. As shown by Hazan et al, the application of low-energy acoustic waves to indwelling surfaces of Foley catheters is an effective method of preventing biofilm formation. These vibrations do not destroy bacteria or protein, they prevent them from ever attaching to the surface. Cost analyses show an average 300 bed hospital will save \$2 million per year by using the Sonicade on all CVCs. Furthermore, by displacing the continuous use of current, inadequate technologies, the Sonicade pays for itself within one week.

Adam Clark – Whiting School of Engineering, Graduate  
Shuja Dawood – Whiting School of Engineering, Graduate  
Nathaniel Moller – Whiting School of Engineering, Graduate  
Luis Soenksen – Whiting School of Engineering, Graduate  
Jonathan Moller

### 2nd Place: Discreet Secrete Solutions

Working mothers embrace the tedious process of pumping breast milk for hours each day to secure health benefits for their infant. DSS presents a hands-free, concealable, and quiet breast pump that allows women to discreetly pump. The pump's unique massaging technology allows the entire collection system to be contained into a concealable brassier.

Susan Thompson – Whiting School of Engineering, Graduate  
Kathleen McDowell – Whiting School of Engineering, Graduate

Andrew Thompson  
Angela Jillson

### **3rd Place: Sinuglide**

The SinuGlide is a new medical device that will end suffering and prevent surgeries for chronic sinusitis patients. Chronic sinusitis is persistent sinus inflammation that causes severe pain and 500,000 elective surgeries in the US per year. Patients attempt non-surgical treatment with sprays, but it is ineffective because medication fails to reach the diseased areas. SinuGlide is a small insert that the physician places deep inside the nasal passage during an office procedure. The patient uses an external device to deliver medication directly to the affected sinus surfaces via the insert. By treating the source of inflammation, SinuGlide relieves symptoms and prevents sinus surgeries.

Lauren Smith – Whiting School of Engineering, Graduate  
Anastasia Borok – Whiting School of Engineering, Graduate  
Creighton Petty – Whiting School of Engineering, Graduate  
Marton Varady – Whiting School of Engineering, Graduate

## **Social Enterprises**

### **1st Place: Momo Scientific**

Momo Scientific (Baltimore, Maryland, USA) is a social venture medical device company aimed at reducing the global burden of cervical cancer. Momo Scientific is working with Jhpiego to develop the CryoPop, a low-cost cryosurgical medical device aimed at ablating pre-cancerous lesions of the cervix.

John-William Sidhom – Whiting School of Engineering, Graduate  
Marton Varady – Whiting School of Engineering, Graduate  
Shuja Dawood – Whiting School of Engineering, Graduate

### **2nd Place: Innovostics**

Innovostics is developing a novel, low-cost, point-of-care microfluidics platform to provide antibody-antigen based diagnostic testing to differentiate between bacterial, viral, and parasitic infections.

Divya Maxwell – Whiting School of Engineering, Graduate  
James Barger – Whiting School of Engineering, Graduate  
Luccie Wo – Whiting School of Engineering, Graduate  
Luis Soenksen – Whiting School of Engineering, Graduate  
Omid Akhavan – Whiting School of Engineering, Graduate

### **3rd Place: Stroke Solutions**

Stroke is the leading cause of long-term disability in the industrialized nations. In the United States, more than 7 million people have survived a stroke; annually there are about 795,000 people suffering a stroke, which is equivalent to 1 person per every 40 seconds. In the world, there are 15 million people suffering a stroke and 10 million of them survive a stroke every year. Stroke patients experience difficulties in body movements; and the current recommendation for stroke rehabilitation is high-intensity, repetitive exercises for 6-8 hours per day and keeping the patients informed of their own progress. Stroke patients usually only spend the first 3 months in the rehabilitation center and then spend years at home alone doing home rehabilitation exercise. The current market all focuses on the first 3 months of stroke rehabilitation process via designed expensive (the average price is \$20,000 which is not covered by health insurance companies) and complicated robotic assisted rehabilitation system. There is no effective home rehabilitation therapy available on the market and patients feel the repetitive rehabilitation exercises are boring and without any feedback on their rehabilitation progress. To address this pressing unmet need with a huge market size, our company, Stroke-Solutions.com is created by providing stroke patients a low-cost, highly effective, interactive rehabilitation system for home use. Our rehabilitation system is under development with experienced rehabilitation physicians and therapists at two large national rehabilitation centers. Our rehabilitation system can potentially eliminate or greatly reduce the required follow-up hospital visits of stroke patients, significantly speed up the rehabilitation progress, which in turn will promise a faster recovery, a higher quality of life and an increase in productivity for millions of stroke patients around the world. The immense social value is what truly sets Stroke-Solutions.com apart from other businesses.

Xiaoxu Kang – School of Medicine, Graduate

Daniel Mirota – Whiting School of Engineering, Graduate