FY 2013 Round 2 - TCIP Grant Awardees

Univ.	Cluster	Application Title	Type	Technology Description
UU	IT	Add.it 2	Licensee	Add.it software runs on mobile devices where game-like animation and points are given to students with attention deficit disorder (ADHD) and high functioning autism (HFA) when the target school related tasks (organizing & tracking) are actually completed. When children earn points they are validated via wireless links to teachers. During after school hours, points are converted to minutes for play (games, videos, music) on the mobile device. Add.it will integrate the learning management system (LMS) used by the teacher in order to validate student activities and assignments. Parents will have access to daily information related to their child's assignments and grades via their own mobile devices. Add.it will help students with ADHD succeed at school related tasks and will significantly improve communication between teachers and parents.
UU	LS	AdvanceCath	University	AdvanceCath is a urinary catheter designed by a urologist and four engineers at the University of Utah. It is intended to replace Foley catheters, which are notorious for causing urinary tract infection (UTI), for patients requiring catheterization for longer than one day. We believe our new design will reduce the rate of UTI by allowing urine to flow external to the catheter, using the body's natural mechanism for flushing infection-causing bacteria from the urethra. This device will also offer improved safety and comfort for patients due to its significantly smaller diameter and a safe-release bladder retention mechanism.
UU	MMEE (Energy)	Black Wax Fix	Licensee	Newport's chemical formula makes Black Wax from the Uinta Basin flow at ambient temp, thereby allowing it to flow within pipelines. This solution is proprietary and currently no others have been able to duplicate it to our knowledge. Newport will work with UofU to develop a full end to end solution utilizing our chemicals enabling us to sell this total solution to the oil and gas refineries in Salt Lake City.
WSU	IT	BreathAdvisor	Licensee	We've created a touch screen operated breathalyzer that is wall mounted in alcohol serving venues. Our breathalyzer kiosk is the most accurate on the market because we have partnered with LifeLoc technologies to use the same breathalyzer that police agencies use. Because our software development is done in house, we are very agile in our deployment and can quickly adapt to changes. We've created new and innovative ways for advertisers to advertise to the 21+ drinking audience.
USU	IT	CityGro!	Licensee	CityGro technology consists of using Ipad's and Android Tablets to help business create their own network of customers and communicate with them. Marketing is turning digital and our technology allows all SMB's to compete in the digital world. The way this is done is by having consumers "check-in" on the Ipad/Android Kiosk with their phone number. Each customer instantly creates a "user profile" with that businesses. Businesses then send relevant mobile communication to that customer based on what information they have asked for. Businesses are currently using the technology to replace their loyalty program, redeem coupons, track customer buying habits, and save money from "shotgun" approach marketing.
UU	LS	DBS Electrode	University	This new electrode, the DBS10k, will allow for complete control over the electric field's shape and direction. No longer will the field center be limited to the electrode axis, and no longer will it be limited to a spherical shape. Using a unique cross shaped electrode with 10,000 individually controllable contacts, this device is able to shape the field to fit the particular region of the brain that requires stimulation, without crossing over into undesired regions. DBS treatment with this device will be more effective and safe, and more flexible, as it can make complex geometrical stimulation fields that better match deep brain target structures. A better fit means improved efficacy and fewer side effects.
UU	LS	Glaucoma Drugs	University	The UU-AshaVision team has a new approach to treat glaucoma, the most common sight threatening disease in the US. In glaucoma, the inner retinal tissue is destroyed, and the pressure inside the eye (IOP) increases. Current treatments slow disease by lowering IOP, but do not protect the inner retina. We developed topically active drugs that both lower IOP and protect the retina. Moreover, our drugs lower IOP for twice as long as current medications and block the disease in an animal model of glaucoma. The Trioptrx™ compounds and mechanism of action are novel and proprietary. This TCIP will be used to protect and improve the compounds, perform toxicity and pharmacokinetic tests, and advance the drops to primate studies.
UU	LS	iVeena	Licensee	The Bioerodible Ophthalmic Delivery System (BODS) is an annular shaped ophthalmic implant that is designed to fit in the anterior segment of the eye. It is being designed to safely and effectively deliver anti-angiogenic protein drugs to combat age-related macular degeneration for 9 months to a year during which the BODS will slowly degrade until it is entirely eliminated by the body. The manufacturing process allows for superb drug stability with one step mixing & extrusion at low temperatures (< 42° C) with no organic solvents necessary. All of the materials used in manufacturing have safely been used in the body previously and will be GMP quality. To date, there are no FDA approved large molecule sustained release products for the eye.

UU	MMEE	Metallosensors	Licensee	The MSI technology licensed from the UUtah provides a portable, easy-to-use chemical sensor with high sensitivity and selectivity for detection of mercury ions (Hg2+). Decreased fluorescent light from the chemical sensor-Hg2+ complex gives fast quantitation. The QuikChek-Hg™ system has a re-usable hand-held fluorimeter and single-use sensor solutions. This razor/razor blade model has five pending patents. The 1st TCIP grant tested MSI's system with hydrocarbons that require pre-treatment to convert total mercury into mercuric ions. A 2nd TCIP grant would give MSI short- and long-term impact: (1) simplify Hg detection for WRI to speed work flow, and (2) develop an MSI-Thales device to reduce long, toxic lab work for total mercury analysis.
UU	LS	MFI	Licensee	MultiFunctional Imaging (MFI) is a development stage University of Utah healthcare technology start-up that improves the efficiency and accessibility of Myocardial Perfusion Imaging (MPI), via PET/CT scanners. MFI's patented technology increases patient throughput and scanner utilization, reduces costs, increases image quality and delivers patient safety through the reduction of radiation exposure.
UVU	LS	PBIT	Licensee	Optimize sensitivity of hair peptide MS delivery. The DNA in hair is very informative, but it is often absent or degraded. Hair however, has one major advantage: the proteins are stable. The proteins in hair persist in the environment well after DNA is degraded. Proteins however, contain evidence of DNA variation, and therefore can be used to identify crime victims and / or suspects. We have established a proof-of-concept technology, that uses less than a mg of hair protein to identify individual peptide fingerprints with up to a 1 in 200,000 probability for an individual. A racial likelihood of 700-fold (for a European Background) was also calculated. We seek in this proposal to protect the intellectual property, develop a graphic user interface and do R&D to increase the sensitivity of the analysis.
WSU	MMEE	Plane Winglets	University	The Vortex Winglet Technology provides up to a 12% increase (from 3 years of Vortex test data) in either operational efficiency or air speed for no additional increase in engine power for the aircraft owner. Current general aviation winglet designs are expensive and only marginally efficient. Due to patented, proprietary technology, the Vortex winglet design dramatically reduced the drag created by a typical wing as it flies through the air. This reduction in drag equates to the improvement in either operational efficiency or air speed for the aircraft owner / pilot.
UU	LS	Veristride	Licensee	"Rapid Rehab" is an instrumented insole worn in the shoes and a phone application (app) to provide user feedback. The proprietary insole measures forces, timing, and movement of each foot. The phone app provides real-time adaptive feedback about how the user is walking. Feedback is visual, auditory, or vibrotactile, or a combination. Amputees can use the system to reduce how much they limp, by setting a target symmetry for timing and force within an allowed range (with guidance from a physical therapist). Our solution is unique because other options are orders of magnitude more expensive and require a laptop or commercial motion equipment. Our product is designed for at-home use for a variety of activities compared to current clinical use.
BYU	LS	XOJO	Licensee	The XOJO technology developed at BYU and exclusively licensed to XoomDrinx is a novel nutritional technology and method of manufacture which finally allows consumers to take protein during exercise without the negative gastric problems associated with other protein products that are restricted for use before and after exercise. Independent studies show that protein taken during exercise enhances aerobic endurance and improves muscle recovery. Consumers must binge on high levels of protein before and after exercise and don't get the full benefits of protein during exercise. Using a new method of manufacture, XOJO delivers iso-osmotic proteins which can be taken during exercise without the negative effects. In addition, XOJO offers consumers the 3-in-1 benefits of hydration, performance and recovery in a single bottle.