Press Release

For Immediate Release: September 30, 2015

RightAnswer.com, Inc. a knowledge management software company, in partnership with researchers from the University of Washington, has been awarded a Small Business Innovation and Research (SBIR) grant in the amount of $150,000 from the CDC (Centers for Disease Control and Prevention) to design and develop a mobile application with evidence-based information on the risks associated with the use of prescription and over-the-counter medications during pregnancy. The mobile application is intended to assist health care providers in counseling pregnant patients who have concerns about the possible effects of drugs on their developing babies.

In the past three decades the prevalence of medication usage during pregnancy in the United States has increased more than 60%. The implication of this increased usage is concerning because pregnancy is experienced by 10% of US women each year and approximately 40,000 infants are born each year with birth defects directly attributed to medication exposure during prenatal development. The impact on the affected children and their families can be devastating. Elimination of medications during pregnancy is not always feasible because many of them, including some medications with teratogenicity risk (for example antiepileptic or antineoplastic drugs) are medically indicated. The potential risks and benefits need to be weighed for each woman and considerations must include the indication, potential alternative therapies, the stage of pregnancy and the dosage and route of administration. Unfortunately, as noted in the CDC's program announcement, "A few existing databases provide an expert review and an evidence summary of the available literature on the fetal risks of specific medications during pregnancy, but these resources are not widely available to women or their healthcare providers and are thus underutilized."

According to Glen Markham, Corporate Business Development Executive for RightAnswer.com and Principal Investigator on the grant, "The primary goal of this research project is to investigate the informatics needs of healthcare providers that care for pregnant women and to use their viewpoints to develop the key features of a high-value mobile application to improve drug safety by delivering current and authoritative information. We believe one of the reasons the CDC decided to fund our project is because of the unique collaboration of content experts from UW combined with the technology expertise of RightAnswer.com, and that this project has the potential to enhance the assessment of clinical management options for pregnant women in ways that have never been done before."

RightAnswer.com, Inc., established in 1996, is an information technology company. Sarah Albee, Director of IT with RightAnswer.com, will handle project management tasks. The interdisciplinary team of UW scientists will be led by Dr. Janine Polifka, Ph.D., Manager of the TERIS database. TERIS (The Teratogen Information System) is located in the Department of Pediatrics at the UW. The database was created in 1984 by J.M. Friedman, M.D., Ph.D., a medical geneticist at the University of British Columbia. TERIS provides up-to-date, authoritative information regarding the effects of drugs and chemicals on the developing embryo. This database contains evidence-based information on the developmental toxicity of more than 1,600 agents, addressing 95% of the most frequently prescribed drugs. TERIS is unique in

that an external review board comprised of six experts in clinical teratology rates the magnitude of teratogenic risk for each agent on the system.

Dr. Gary Hsieh, assistant professor of Human Centered Design and Engineering at the University of Washington, will use his expertise in human-centered design to evaluate the information needs of healthcare providers that treat pregnant women and develop specifications for the mobile application. He will also test the usability of the prototype. Dr. Carol Collins, clinical associate professor in the Department of Pharmaceutics at the University of Washington has extensive experience in drug safety information and the design of drug safety databases. She will assist Dr. Hsieh in the design and conducting of the clinical usability trials and assist in the development of the application.

TERIS and RightAnswer.com have worked together since 2011.