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FOR IMMEDIATE RELEASE

SensAble’s Customer Wins “Most Innovative Teacher of the Year” Award for “Haptic Cow” Veterinary Simulator

*Touch-Enabled Computer Simulation Teaches Palpation Skills for Examining Pregnant Cows,
As Developed by Royal Veterinary College’s Dr. Sarah Baillie*

WOBURN, MA, November 5, 2009 –[SensAble Technologies, Inc.](http://www.sensable.com), announced that its customer, Dr. Sarah Baillie, a senior lecturer at the Royal Veterinary College in London, was named the “Most Innovative Teacher of the Year” in the United Kingdom for creating a haptically-enabled simulator that teaches veterinary students essential skills of examining a pregnant cow. The acclaimed “Haptic Cow” uses a SensAble haptic (force-feedback) device to deliver the feeling of internal organs that a veterinary student must assess as they place their arm inside a cow to perform a ‘blind’ examination. The application allows an instructor to watch what’s taking place inside the cow on a computer screen as the student palpates its internal organs – an impossibility in traditional training on live animals. The Haptic Cow even says “Moo!” when the student’s rough handling exceeds a predetermined vet-safe force threshold.

Dr. Baillie's Haptic Cow was called "possibly the most significant innovation in veterinary education in the past 50 years" by the Times Higher Education Awards program, which is held annually in association with THE magazine.

Dr. Baillie spent five years developing the application, and learned to program in C++ after a 20-year career as a practicing veterinarian in order to create a lifelike simulator. The Haptic Cow is now in use at 4 of the 7 veterinary colleges in the UK, has been presented at over 20 conferences and won awards worldwide. It is joined by the Haptic Horse, Haptic Cat and Core Skills Trainer — applications for teaching perceptual and manual skills that are the foundation of many common clinical techniques and diagnostic procedures. Dr. Baillie is presently working to commercialize the Haptic Cow for use by veterinary institutions in the US and Canada.

The simulator presents unlimited practice opportunity to develop “just the right touch” associated with examination skills that otherwise could harm, or at the very least cause discomfort, especially when a student first learns to examine a live cow. The Haptic Cow includes a hollow fiberglass shell of the animal’s posterior outfitted with a SensAble PHANTOM[®] haptic device inside, and a PC and monitor located on a table nearby. The veterinary students gently apply pressure using the haptic device with their middle finger placed in a thimble-like holder — just as they would gently press with their fingers during an actual exam. The haptic device provides force feedback based on the student’s touch, literally pushing back on their finger to deliver the specific feeling of a cow’s uterus compared to its ovaries, bladder, and other anatomy. The ability to program a ‘sense of touch’ with associated forces

means that the Haptic Cow simulator can easily present new teaching scenarios, so that students can learn the feeling of a soft fluid-filled pregnant uterus, compared to a firmer and doughy-feeling infected one. Dr. Baillie used SensAble's GHOST[®] developer's toolkit, and one of its premium haptics devices in the Haptic Cow.

"SensAble's haptic devices and programming tools let me create a sense of touch that's extraordinarily representative of the real animal," said Dr. Sarah Baillie. "It's extremely difficult to teach blind procedures, where neither student nor instructor can see what's being palpated inside the animal's body. It's also getting harder to provide enough practice opportunities as student numbers increase. Haptically-enabled training has proved to be a great help, and it was a genuine honor to have our haptic work in veterinary education recognized as the most innovative in higher education."

"Dr. Baillie is a visionary in the use of haptics for improving clinical education," said Dr. David Chen, chief technology officer of SensAble Technologies. "She has developed a truly remarkable simulator that will allow better training of veterinary students while limiting the health risks to animals. We are proud to be associated with her pioneering work, and happy that she was chosen to receive this high honor."

About SensAble Technologies

Founded in 1993, SensAble Technologies is the leading developer of 3D touch-enabled (force feedback) solutions and technology that allow users to not only see and hear an on-screen computer application, but to actually "feel" it. With 41 patents granted and over 7,000 systems installed worldwide, SensAble Technologies' haptic technology is being used in applications ranging from designing toys and footwear, to surgical simulation and stroke rehabilitation, to dental restorations, as well as a range of research and robotic applications. The company markets its own 3D modeling solutions as well as its haptic devices and developer toolkits to medical, dental, design, and manufacturing companies; educational and research institutions; and OEMs. SensAble products are available through direct and reseller channels worldwide. www.sensable.com.

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