

Company aims to screen 'virtual progeny' from sperm banks

When economic development consultant Anne Morriss and her partner were looking for a sperm donor, genetics was an afterthought. "We trusted that the companies were using bleeding-edge science. It turns out that that was not true," says Morriss. "We chose a wonderful donor but he was a carrier for a rare Mendelian disorder called MCADD." Unbeknownst to Morris, she was a carrier too.

Morriss' experience starting a family set her thinking about ways to radically improve the sperm bank screening process, culminating in the launch last year of her own company—Genepeeks. Her business partner is Princeton University geneticist Lee Silver, the author of the bestseller *Remaking Eden*, published shortly after the cloning of Dolly the sheep. Although a mouse geneticist by profession, he has been fascinated with the technology and ethics of human reproduction.

As Silver first discussed publicly at CHI's Consumer Genetics Conference in October, the working model for Genepeeks is to match the sperm bank client with hundreds of potential donors by generating thousands upon thousands of virtual progeny *in silico* to identify donors who are less likely to be a good genetic match for the particular client. Those individuals can then simply be filtered out of the pool of potential donors reviewed by the client—for example reducing a pool of 400 potential donors to 300—thereby minimizing the chances of an embryo being conceived with a rare genetic disorder.

Morriss is the first to admit that this sounds rather like a science fiction scenario. "It smacks of designer babies. People winning the narrative are the GATTACA's," she says. But she and Silver insist that their technology could dramatically reduce the risks of sperm bank customers conceiving babies with rare genetic diseases.