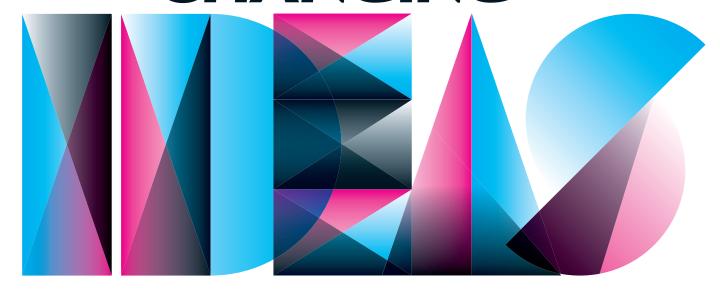


INNOVATION

WORLD CHANGING



10 BIG ADVANCES

with the potential to solve problems and improve life for all of us

The phrase "world changing" is overused. Yet how else do you capture the full world-historical influence of an invention like the transistor, or the World Wide Web, or the cellular phone? Some ideas really do bend history. It's too early to know whether carbon-breathing batteries, ingestible robots, quantum satellites, and the seven other ideas described in these pages will have a similar effect. Most plans fail, and the biggest ideas tend to carry the greatest risk. But it doesn't take long for an idea to go from laughable to inevitable. And a few of those, of course, go on to become transformative. $-The \ Editors$