Re-engineering your body

Inside and out, we expect perfection. Now, technology is providing the tools. By Dan Ferber, PhD

A new era in medicine is dawning. And it's just in time for a culture that worships youth and beauty, that has witnessed a parade of scientific and technological triumphs, and that believes in the American Dream, with its endless opportunities for self-renewal. We don't just hope to stay young and vital, healthy and happy, forever—we expect it. What is surprising is how far medical science has come toward meeting those expectations. Now there are treatments to repair or replace tissues and organs, therapies that compensate for defective genes, devices that stand in for failing body parts, and treatments to keep us thin and wrinkle-free.

COSMETIC ENHANCEMENT

Last year, Nancy Curren, 61, of San Diego, California, was a "retired schoolteacher looking for my next passion in life." She decided to do something about the wrinkles around her eyes, roughened skin and brown spots caused by years of sun exposure. "We all age. No matter what we're feeling inside, the world starts to judge you," she says. So she underwent a laser-ablation procedure called Fraxel to remove signs of aging. Fraxel patients are treated five or six times with a grid of pinpoint laser beams that zaps tiny spots on the skin. That triggers the skin's inner layer, the dermis, to produce the collagen that makes skin look full and smooth, says Cameron Rokhsar, MD, a cosmetic surgeon, now at the New York Aesthetic Center, who treated Curren. The treatment tightened her skin, improved its texture, removed the photodamage and made wrinkles less visible. The results were "tremendous," she says.

New technologies, all introduced in the past few years, are changing the face of plastic and cosmetic surgery, allowing surgeons to nip, tuck, smooth and plump with finer control and less downtime than ever before. Cosmetic and plastic surgeons now use easy-to-inject fillers like Restylane to plump lips, barbed sutures to allow outpatient face-lifts, Botox to relax wrinkles, Thermage to lift and tighten skin, and ultrasound devices to melt small bulges of fat. "All of these things are less invasive ways of facial rejuvenation," says V. Leroy Young, MD, chairman of the Task Force for Emerging Trends of the American Society for Aesthetic Plastic Surgery.

RELIANT
Fraxel Laser Treatment