



**Susan Farricielli** MID '89, the energetic owner of a.k.a. prototype in Branford, CT, doesn't have time to sit much herself—which is ironic for someone who's something of an expert on seating. Building on lifelong interests, she recently reinvented the traditional wheelchair, thanks in part to a \$25,000 grant from the National Endowment for the Arts.

Farricielli calls her newest prototype the "Nanochair" — as in nanosecond — and attributes the design to her grandmother, who spent the last few years of her life confined to a wheelchair. During her weekly visits to her grandmother's convalescent home, the designer couldn't help but notice the shamefully poor design of standard hammock-style wheelchairs, which are not only difficult to get in and out of, but "place pressure at the outside of the hip where there is minimal cushioning and no support," Farricielli notes.

So in 1992 she set out to design a wheelchair to compete with the most popular models in weight, price and utility, but far surpasses them in ergonomics. After "a thousand unbillable hours of work" and repeated consultations with wheelchair-bound people, physical therapists and metal craftsmen, Farricielli has developed a promising prototype.

## A chair is born

Her Nanochair has a bent stainless steel frame, solid wheels and leg rests that fold out of the way when a person is getting in or out. It offers dual arm levers as a means of moving the chair forward as opposed to the traditional circular band inside a chair's wheels. Her design is not motorized because self-propulsion is sometimes the only exercise wheelchair-bound people get, she notes. It also avoids having occupants reach behind their bodies to begin rotating the wheels forward. Stimulite Honeycomb™ cushions permit ventilation and are easily washable, and at 21 pounds, the chair weighs in at considerably less than standard models, which range from 29-49 pounds.

Farricielli's interest in seating — particularly kinetic seating — dates back to her days at RISD, where her thesis project revolved around a kinetic automobile seat that allowed subtle, articulated body movements. After graduation, she began her business with the "tremendous" help of the Service Corps of Retired Executives (SCORE). Within three months of following the steps SCORE suggested, she had a commission from American Standard to design bathroom fixtures — a thought that makes her laugh remembering that at the time she was living in rural Maine and "didn't even have a toilet."

Now, although she's still in the midst of the trade show circuit and pitching her Nanochair to manufacturers, Farricielli has launched a separate business to concentrate solely on seating. She calls it KISS, for Kinetic Innovative Seating Systems. "Good design isn't market-driven," she observes; "it's market driving." And if she has anything to say about it, the people who need better designs the most — people like the elderly and the disabled — will drive the market in a direction that's better for everyone.

*For more information on the Nanochair or Farricielli's other projects (such as The CADD Desktop Tutor, which she developed recently with OrthoCADD), contact her at 203 488-1758 or via e-mail at [susanfarricelli@yahoo.com](mailto:susanfarricelli@yahoo.com).*