

**Strong Arms**

The MetaForm team discovered that hip bones go through extensive stress-strain cycles when a person sits down and rises. People try to use their arms while sitting or getting up to balance and to take some of their weight, more so as they age. Aeron's arms and overall stability were designed to allow for young, strapping office workers to use their arms more fully when sitting and standing, in anticipation of their aging bones.

**Lumbar Support**

While the chair was designed to offer extensive support for maintaining a correct seating position, the later addition of a lumbar support module helps to provide additional lower-back health for those who need it.

**Aerated Seating**

One focus of the MetaForm group was the issues of sores and heat build up over time. As Stumpf described it, "We were trying to figure out a way to pierce the foam and get air to go through...Spenglatex was an aerated material. We cut a hole out of the back of an Equa chair and stretched the [Spenglatex] over that." This prototype was a precursor to the semi-transparent and flexible mesh material, called pellicle, in today's Aeron.

**Tilt Mechanism**

Sarah (developed by Chadwick and Stumpf in 1988) was a recliner with a novel tilt mechanism giving thoracic support. The concept was mothballed but the research and design behind it became part of the basis for the Aeron chair's arm supports and unique seat tilting mechanism.



# A Hipster Chair, Born from Bad Hips

by Bill Cockayne

For furniture company Herman Miller, Inc. (HMI), design is a way to solve problems, and it's a long standing philosophy of the company to particularly focus on the future. Designer Bill Stumpf emphasized the need to "own the problem"—if you could thoroughly understand a problem, in the context of now and in the future, it would take the competition years to figure out the design and replicate it. HMI often

employs leading thinkers whose outside expertise can provide insight into the issues relevant to designing for the edge of tomorrow. The Aeron chair (1994) is emblematic of the success of such an innovation strategy. Its existence is borne out of a Don Chadwick-Bill Stumpf collaboration, who together had worked with HMI on antecedents of today's ergonomic chairs: the Ergon (1976) and the Equa (1984), and a synthesis of a number

of previous forays into designing the future. One particularly influential foray was a HMI multi-million research project (MetaForm) on the future of aging in the 1980s. Chadwick and Stumpf along with others experienced in gerontology, architecture, public policy, and the field of aging worked together on helping older people remain independent. Chadwick and Stumpf specifically focused on issues of long-term sitting for these populations.

