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Protein Sculptures

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Drawing on his previous career as a quantum physicist, Julian Voss-Andreae creates wood and steel sculptures of proteins. He begins each project with help from a computer program he wrote that calculates how his materials will be cut before they are assembled and finished.

The sculptures are based on proteins found in nature, and his models must meet two criteria: They have certain aesthetic qualities and are "scientifically significant." His sculpture *GFP* is based on the green fluorescent protein that is commonly used in genetic experiments.

Light-Harvesting Complex, 2003. Wood, particle board and casting resin, diameter 25".

Green Fluorescent Protein (GFP), 2004. Steel with process marks, height 5'6".

Tall Fir Alpha Helix, 2003. Douglas fir and steel.

Other sculptures include *Light-Harvesting Complex*, which is based on a process that occurs in plants during photosynthesis, and *Tall Fir Alpha Helix*, which echoes the form of the alpha helix, a fundamental structural element in proteins.

His artistic process is documented in great detail in an article called "Make Your Own Protein Sculpture," available on his Web site. Though mathematics plays an important role in his creative process, he says that "there is an equally strong intuitive and irrational side."

Julian Voss-Andreae studied art at Pacific Northwest College of Art in Portland, Oregon, where he now works.

All images courtesy Julian Voss-Andreae. To see more works visit www.julianvossandreae.com.

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