

Nervous System is an experimental design studio that uses new technologies to reinterpret natural phenomena.

Instead of designing individual objects, we write computer programs that detail a design process which generates a myriad of designs. Our studio is a place where necklaces aggregate like corals, rings structure themselves like radiolarians, and furniture grows, branches and blooms like plants.

New manufacturing techniques like rapid prototyping allow for the creation of series where each piece is unique and the production of three dimensional forms that would be impossible to make traditionally.

These interdisciplinary experiments borrow from our studies of architecture, biology, math, and computer science to produce works whose beauty and complexity is rooted in a deep understanding of natural systems.

Nervous System is based in Boston, MA and composed of Jessica Rosenkrantz and Jesse Louis-Rosenberg. They met at MIT in 2004 where she studied architecture and biology and he studied math and computer science.

http://n-e-r-v-o-u-s.com orders@n-e-r-v-o-u-s.com wholesale catalog june 2009

# Cell Cycle Rings and bracelets in nylon and sterling silver

Inspired by the complex forms of radiolarians, where intricate pattern is integral to structure, these shapes derive from a simulation of spring meshes which form mirrored catenoid surfaces. Surfaces based on catenary curves have long been used by architects like Gaudi to create forms of pure compression. Combining the strategy of the radiolarian with that of a catenary surface makes strong, yet visually delicate volumes with minimal material use.

We created interactive software to morph, twist, and subdivide each design, transforming a simple mesh to a complex patterned structure. The bracelets are composed of a bilayer structure that juxtaposes two patterns while creating a rigid frame.

The final designs are built layer by layer in durable nylon plastic using Selective Laser Sintering, a kind of 3d printing. These forms would be impossible to create by traditional manufacturing methods.

*design* generated by software created by Nervous System *manufacture* 3d printed using Selective Laser Sintering in the Netherlands





3d printed nylon bangles in 8 variations and three sizes. Each explores different aspects of cellular growth and structure.

small7.2in / 18.2cm circumferencemedium7,8in / 20cm circumference, fits mostlarge8.5in / 21.5cm circumference

#### available in white and black



from the bottom | cc06 porous, cc07 diagrid, and cc08 morphed









subdivision







porous

regular





## Cell Cycle rings

**2-layer rings** wholesale \$12.50

#### 1-layer rings

wholesale \$6.00

available in US ring sizes 5, 6, 7, 8





# 2-layer

cc09 2-layer twist







cc10 2-layer center







## 1-layer

cc11 1-layer twist







cc12 1-layer center











## Cell Cycle silver

**2-layer rings** wholesale \$110.00 retail \$220.00

available in US ring sizes 5, 6, 7, 8, 9

#### material

sterling silver

available in 14kt gold by request



cc13 wave















These sterling silver rings are cast from 3d printed waxes.



cc15 twist



cc16 thin









# dendrite

necklaces, earrings and brooches in stainless steel.

Tiny circles of varying sizes are aggregated into complex configurations. Each necklace in this series is a one of a kind piece. The process we use mimics the growth of corals and other branching forms.



### **d01** dendrite brooch

unfinished \$25.00

photochemically etched stainless steel. sterling silver pivoting mechanism

**d02** dendrite l earrings

unfinished \$15.00 gold plated 20.00

photochemically etched stainless steel. surgical steel findings

**d03** dendrite II earrings

unfinished \$17.50 gold plated \$22.50

photochemically etched stainless steel sterling silver chain + findings













### **F1** full moon necklace

unfinished \$30.00 gold plated \$35.00

stainless steel with 18" sterling silver chain

Each piece in this series is a unique pattern, please specify what degree of fullness you would like when ordering







#### **c1** coral necklace

c1-A + c1-B unfinished \$30.00 c1-A + c1-B gold plated \$35.00 c1-C unfinished \$45.00

stainless steel with sterling silver 18" chain

**c2** coral brooch

c2 unfinished \$30.00 c2-C unfinished \$45.00

stainless steel with sterling silver pivoting mechanism



Each piece in this series is a unique pattern, please specify whether you prefer sparse or dense designs and we will select appropriate pieces radiolaria

jewelry in stainless steel, silicone rubber, and wool felt

Inspired by the complex forms of radiolarians where intricate pattern is integral to structure., These patterns are derived from the simulation of a hexagonal spring mesh distorted by attractive and repulsive forces.



#### **r01** radiolaria brooch

unfinished \$37.50

stainless steel wtih attaches with sterling silver pivoting mechanism

#### **r02** radiolaria pendant

unfinished \$20.00 gold plated \$26.00

stainless steel with 18" sterling silver or gold-filled chain

**r03** radiolaria earrings

unfinished \$20.00 gold plated \$26.00

stainless steel with surgical steel or gold-filled findings

### **r04** large radiolaria pendant

unfinished \$37.50 gold plated \$47.50

stainless steel with 25" sterling silver or gold-filled chain

















### **r05** radiolaria bracelet

black or white

\$27.50

waterjet cut silicone rubber. adjustable fit with silk closure











# **r07** radial necklace l

fuschia, orange, black or grey \$33.00

laser cut wool felt. snap closure, adjustable fit









# **r08** radial necklace II

fuschia, orange, black or grey \$33.00

laser cut wool felt. snap closure, adjustable fit







#### **a01** filament necklace

unfinished \$42.50 gold plated \$52.50

stainless steel with 18" sterling silver or gold-filled chain

#### **a02** undergrowth earrings

unfinished \$25.00 gold plated \$30.00

stainless steel with surgical steel or gold-filled ear wires

#### **a04** algal bloom pendant

unfinished \$20.00 gold plated \$25.00

stainless steel with 18" sterling silver or gold-filled chain

















### **A05** algal bloom pendant large

unfinished \$22.50 gold plated \$27.50

stainless steel with 18" sterling silver or gold-filled chain

**A07** branch earrings

unfinished \$20.00 gold plated \$25.00

stainless steel with surgical steel or gold-filled ear wires

**A08** conifer pendant

unfinished \$28.00 gold plated \$33.00

stainless steel with 18" sterling silver or gold-filled chain















### L01 orchid necklace

stainless steel \$75.00

52 layers of steel riveted with sterling silver, with a steel cable and sterling silver clasp. The layers can twist to create a morphed shape.



2.3311

white plastic \$52.50

37 layesr of plastic sewn together and hung from steel cable with a sterling silver magnetic clasp. The layers can twist to form a morphed shape.











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45 Mansfield St #2 Somerville, MA 02143

http://n-e-r-v-o-u-s.com

contact: orders@n-e-r-v-o-u-s.com

Jesse Louis-Rosenberg 914.466.0727 Jessica Rosenkrantz 617.785.0675

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-	Nylon Bracelets	white b	lack white	black v	vhite black	#	price	subtotal
cc01	interstice bracelet						37.50	
cc02	pinch bracelet						37.50	
cc03	wave bracelet						37.50	
cc04	regular bracelet						37.50	
cc05	subdivision bracelet						37.50	
cc06	porous bracelet						32.50	
cc07	diagrid bracelet						32.50	
cc08	morphed bracelet						32.50	
`ell Cucle	Nylon Rings	5	6	7	8	#	price	subtotal
cc09	2-layer twist ring		-	, í			12.50	l
cc10	2-layer center ring			-			12.50	
cc11	1-layer twist ring						6.00	
cc12	1-layer twist ring						6.00	
CCIZ							0.00	
Cell Cycle	Silver Rings	5	6	7 8		#	price	subtotal
cc13	wave ring						110.00	
cc14	center ring						110.00	
cc15	twist ring						110.00	
cc16	thin ring						110.00	
Radiolaria	Metal		mat	erial		#	price	subtotal
r01	radiolaria brooch		stainle	ess ste	el		37.50	
	radiolaria populant		stainle	ess ste	el		20.00	
r02	radiolaria pendant		golo	l plate			26.00	
0.7		stainless steel				20.00		
r03	radiolaria earrings		golo	l plate			26.00	
0.4	radiolaria	stainless steel			37.50			
r04	pendant large		golo	l plate			47.50	
Radiolaria	Silicone	bl	ack	w	hite	#	price	subtotal
r05	radiolaria bracelet						27.50	
r06	radiolaria necklace						37.50	
Radiolaria	Wool Felt	pink	grey	black	orange	#	price	subtotal
r07	radial necklace l						33.00	
r08	radial necklace II						33.00	

Company Name Buyer Name

Shipping Address

Email

Phone Website

subtotal page 1

continue on the next page -

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Dendrite		material	#	price	subtotal
d01	dendrite brooch	stainless steel		25.00	
d02	dendrite l earrings -	stainless steel		15.00	
		24kt gold plated		20.00	
10.7	dendrite II earrings -	stainless steel		17.50	
d03		24kt gold plated		22.50	
f1	fullmoon necklace	stainless steel		30.00	
		24kt gold plated		35.00	
c1-a	coral necklace single hanging	stainless steel		30.00	
		24kt gold plated		35.00	
c1-b	coral necklace double hanging	stainless steel		30.00	
		24kt gold plated		35.00	
c1-c	coral necklace large	stainless steel		45.00	
c2	coral brooch small	stainless steel		30.00	
c2-c	coral brooch large	stainless steel		45.00	

Algae		material	#	price	subtotal
a01	filament necklace	stainless steel		42.50	
		24kt gold plated		52.50	
	undergrowth earrings	stainless steel		25.00	
a02		24kt gold plated		30.00	
a04	algal bloom pendant	stainless steel		20.00	
		24kt gold plated		25.00	
a05	large algal bloom pendant	stainless steel		22.50	
		24kt gold plated		27.50	
a07	branch earrings	stainless steel		20.00	
		24kt gold plated		25.00	
a08	conifer pendant	stainless steel		28.00	
		24kt gold plated		33.00	

Lamina		material	#	price	subtotal
101	orchid necklace l	stainless steel		75.00	
102	orchid necklace II	plastic		52.50	

grand total	
shipping	
subtotal page 1	
subtotal page 2	

#### Terms

#### Minimum order is \$300

**Payment** by paypal in advance is preferred for opening orders.

Lead Time is 1 to 3 weeks, depending on availability

**USA orders** ship via UPS Ground (~\$15). If you prefer to use a different carrier, please let us know by email

**International orders** ship via USPS Express Mail (5 days, ~\$40) or USPS Global Express Guarranteed (1-3 days, ~\$80)

**Shipping costs** depend on the size of your order. We will calculate the cost and get back to you with an updated invoice when you order is ready to ship.