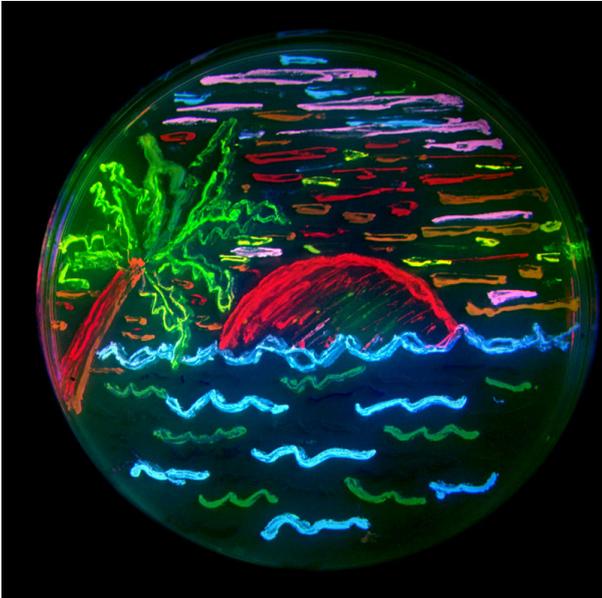


Contemporary Bioart: Inspiring Weirdos Since 1985



By Alex Berezow — June 10, 2016



[1] *Credit: Wikipedia (Artwork by Nathan Shaner, photography by Paul Steinbach, and created in the lab of Roger Tsien in 2006.)*

While I could spend endless hours gazing at paintings in the Louvre or marveling at the antiquities in Berlin's Egyptian Museum, I find most modern art to be infuriatingly inane. For instance, the first and only time I went to the Museum of Modern Art in New York City in 2002, there was an exhibit by Martin Creed in which the wall of a room was lined with [39 ticking metronomes](#) [2] ... presumably ticking down the seconds until I either left or shot myself.

Modern paintings are just as awful, an opinion supported by the fact that researchers have [actually investigated](#) [3] whether people can tell the difference between abstract art painted by a human or by a chimpanzee, monkey, or elephant. Surprisingly, they could, but not everybody can. In 1964, a clever Swedish journalist had paintings by an unknown French artist named Pierre Brassau placed in an art show. One critic [raved](#) [4] about the work, claiming that the artist "perform[ed] with the delicacy of a ballet dancer."

Pierre Brassau, however, was neither an artist nor a ballet dancer. He was a [chimpanzee named Peter](#) [4] with a fondness for eating blue paint.

It is with this extreme skepticism toward modern art that I read a review on biological art ("bioart") in the journal *Trends in Biotechnology*. The authors' goal was to discuss the history and relevance of this artistic sub-discipline to contemporary society.

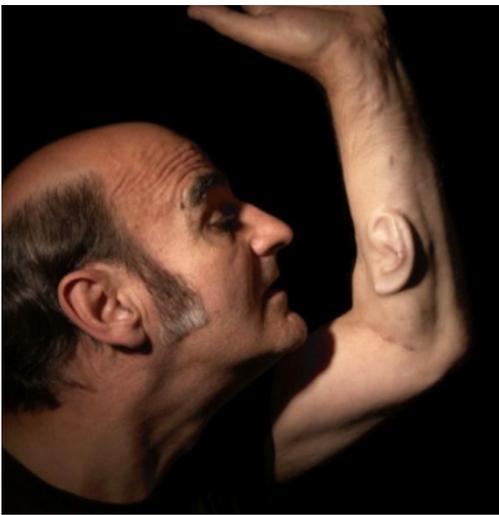
Some bioart, I must admit, is utterly fascinating. My favorite work is of a beach scene on a Petri

plate made of bacteria that were genetically modified to express various fluorescent proteins. (See image at the top of the page.) To me, the artwork demonstrates the elegance and power of modern molecular biology. It shows that there is nothing to fear from biotechnology, as long as it is used for admirable purposes.

Other forms of bioart are both beautiful and practical. DNA origami, which creates tiny 2D and 3D structures from segments of DNA, has been used to create [smiley faces](#) [5] and a [nanobox](#) [6] that can open and close. Eventually, DNA [origami techniques](#) [7] may be used in fields as diverse as biosensing and drug delivery.

And some bioart is deeply philosophical and thought-provoking. In the early 1990s, a synthetic segment of DNA was encoded with the words, "I am the Riddle of Life. Know me and you will know yourself." Other works focus on bioethics or politics.

Alas, not all bioart is created equal.



[8] *Can you hear me now?* (Credit: Yetisen et al. *Trends Biotech* 2016)

The authors give a nod to a performance artist named Stelarc. His claim to bioartistic fame was the surgical implantation of an ear created in a bioreactor on his arm. Why? The artist would probably respond, "Why not?" According to the review, the point of this seemingly pointless exercise was to "raise awareness about 'what it means to be human.'" There are probably other equally plausible explanations.

For instance, an explanation the authors didn't consider, but should have, is that Stelarc is a masochistic exhibitionist weirdo who likes to [pierce his skin with hooks and dangle naked in front of strangers](#) [9]. So, surgically implanting an ear on his arm is probably less about "making a statement" than it is about drawing attention to himself.

Other bioartists are dishonest or unethical. Eduardo Kac circulated photos of his creation "[GFP Bunny](#) [10]," supposedly a bunny rabbit that glowed green due to genetic modification. But, Kac did not create the bunny, scientists did. Also, the bunny's creators say that [only the rabbit's eyes and ears glow green and only under UV light](#) [11]. The rabbit's body would only glow green if its fur was shaved. The photo, in other words, is fake.

Irresponsible bioartists have even released (unbeknownst to them) opportunistic pathogens into

the environment to make a convoluted point about the inefficacy of biological terrorism.

Ultimately, the trouble with bioart is that too many of its practitioners have no training in biology and, hence, are unconcerned with whatever message (if any) they send to society. That lesson ought to be sensible, but it may not get through to artists who are mostly interested in naked dangling.

Source [8]: Ali K. Yetisen, Joe Davis, Ahmet F. Coskun, George M. Church, Seok Hyun Yun. "Bioart." *Trends Biotech* 33 (12): 724–734. Published: December 2015. DOI: 10.1016/j.tibtech.2015.09.011

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Links

- [1] <https://en.wikipedia.org/wiki/BioArt#/media/File:FPbeachTsien.jpg>
- [2] <https://www.youtube.com/watch?v=EeINk-U7nUs>
- [3] <http://pss.sagepub.com/content/early/2011/03/01/0956797611400915.abstract>
- [4] http://hoaxes.org/archive/permalink/pierre_brassau_monkey_artist/
- [5] <http://www.nature.com/news/2010/100310/full/464158a.html>
- [6] http://www.medgadget.com/2009/05/smart_nanobox_built_out_of_dna_origami.html
- [7] <http://onlinelibrary.wiley.com/doi/10.1002/cbic.201600038/abstract>
- [8] [http://www.cell.com/trends/biotechnology/abstract/S0167-7799\(15\)00205-X](http://www.cell.com/trends/biotechnology/abstract/S0167-7799(15)00205-X)
- [9] <http://www.theage.com.au/entertainment/art-and-design/still-hooked-after-all-those-years-stelarc-suspends-pain-threshold-20120313-1uyia.html>
- [10] <http://www.conncoll.edu/ccacad/zimmer/GFP-ww/images/alba2.jpg>
- [11] <http://archive.wired.com/medtech/health/news/2002/08/54399?currentPage=all>