

Microbial muses

Michele Banks (also known as [@artologica](#)) is a US-based painter and collage artist whose works are based on scientific and medical themes, and who has a particular fascination with all things microbial. We caught up with Michele to ask about her art and the inspiration behind it.

■ For those that aren't already familiar, please describe your artwork.

Most of my work is watercolour-based. A lot of my pieces are watercolour paintings, but sometimes I mix things up. I cut up the paintings and make collages with them, or I put paintings in Petri dishes and cover them with resin. And sometimes I work with a combination of ink and water.

As far as subject matter goes, pretty much all of it is inspired by science. Many of my pieces depict groups of cells or microbes that have meaning in some way, in terms of their role in disease or global warming, for example. And some of my work is more metaphorical; my brain paintings are more about images of thought than they are about actual neuroanatomy.

■ When did you first become exposed to scientific images?

I started doing watercolours about 15 years ago. I was mainly working in pure abstraction, just playing with colour and with the properties of the paint. One of the things I love to do is wet-in-wet technique, which gives a 'bleeding' effect. I showed some of my wet-in-wet work at the Children's National Medical Center here in Washington DC about 10 years ago, and they told me they liked my work because it looked like things under a microscope.

So I started looking at microscopic images, and just became totally Hooke-ed. Thinking about all these processes and interactions going on all the time, in our bodies, in the environment — it just took my work to a completely different place. And because scientists are discovering more and more about how microbes affect us and the world around us, there's always a steady stream of new ideas.

■ Can you describe the process from initial inspiration through to completing and selling a piece?

I was reading a novel that took place in the thirteenth century, and the characters were getting sick and dying of things that don't kill us so much anymore, like the plague and childbed fever. So I was intrigued by that and did a little research about the microbes behind those diseases. I ended up making a little piece



MICHELE BANKS

called *Medieval Microbes* featuring *Yersinia pestis*, the plague-causing bacteria, and several others, including *Claviceps purpurea*, a fungus that causes ergot poisoning. I really didn't know anything about ergot, so it was fascinating to discover that a lot of cases of 'demonic possession' or 'witchcraft' in the Middle Ages could have been caused by something as prosaic as mould on grain. I decided to tone down my colours for the painting to suggest a medieval illumination, so I used a deeper gold and a more subdued red, for example. I sold it online, so I don't know the person who bought it, but a lot of the science historians on Twitter enjoyed it.

■ Do you take commissions?

Yes, all the time, and I get tons of interesting ideas from them. Someone asked me for a painting of *Drosophila* embryos a few years ago, and I discovered this amazing model organism, so I've painted them many times since. Also things like arbuscular mycorrhiza, which are spectacular. And many microbiologists have requested paintings of the organisms they work on.

■ Do you sell mostly to scientists?

I do sell to a lot of scientists, but many non-scientists buy my work too. I think a lot of

people not directly in the field are intrigued by the concept that there's this hidden, microscopic world all around us, and that it's influencing our lives in profound ways.

■ What is the price range of the work that you produce and sell?

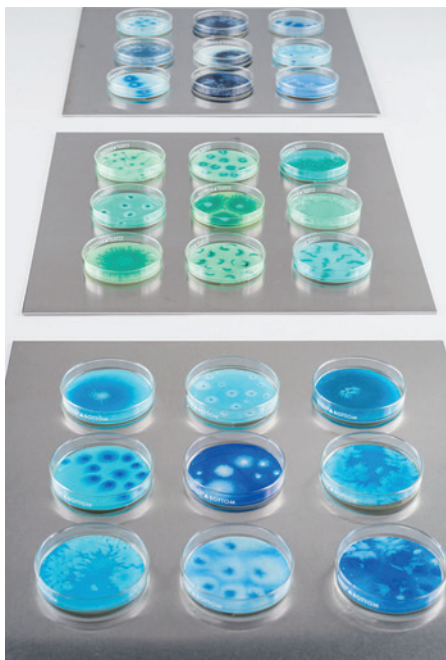
My prices range from US\$50–2,500. I also have scarves printed from some of my paintings. Those are very popular gifts for scientists.

■ What do laypeople say when they realize what your work represents?

Oh, I get some interesting reactions, especially at art festivals! Like I said, most people are fascinated, but there are some who are repelled, especially by images of disease-causing bacteria. Based on my observations, most people who took biology in high school have since forgotten the difference between mitosis and meiosis, but most can correctly identify a phage. Everybody loves phages! And people ask me at every show if there are real bacteria in the Petri dishes.

■ Is there a particular piece of work that you created or venue in which your work is on display that stands out in your mind?

I did a series a few years ago that I showed



at the National Institutes of Health (NIH) called Love and Death (<http://go.nature.com/OoQk6A>). I did three paintings of stuff that kills us (bacteria, viruses and cancer) and three of how love works on the body (the heart, brain and the externals, like skin, hair and eyes). And two of cell division, the process behind all of life and death. I really loved that series. It was a simple concept but it really got me thinking, and it was nice to show it at the NIH, where people could appreciate the science behind it. As a side note, somebody there who saw my work told me about EMBO, and I eventually ended up getting a piece on the cover of *The EMBO Journal* (<http://go.nature.com/f3y2eg>).

■ **Has your artwork opened any unexpected doors?**

The EMBO Journal is a great example. I've also created microbiome-themed work for some top microbiologists like Jonathan Eisen and Jack Gilbert. Vincent Racaniello, who runs the *This Week in Virology* podcast, has

been a big supporter of my work. Through him I've created two textbook covers, and he did a whole video episode on my work recently (<http://go.nature.com/3HJ4MD>). Also, I've been invited to be on a panel at the American Society for Microbiology's Microbe meeting (<http://www.asmmicrobe.org/>) in June 2016, which is super exciting.

■ **What advice would you give to a budding young artist with an eye for the sciences?**

I guess just to put some thought into the concept and meaning behind your art and not just get caught up in creating pretty pictures. Because when you start looking at the amazing microscopic images that scientists produce, that's easy to do!

Michele tweets as @artologica and blogs at <http://thefinchandpea.com/>. You can buy her work at <https://www.etsy.com/uk/people/artologica/>.

INTERVIEW BY ANDREW JERMY