

Hi everyone,

It's March already! If you missed pancake day, Employee appreciation day (March 4th) and International women's day (8th March) then don't worry there is still International Day of Awesomeness (yes this is really a thing! It's 10th March), National Pi Day is the 14th (Because it's 3.14 in the US format) and Mother's day is on the 27th. "But what is happening in the world of Organ-on-a-chip?" I hear you ask. Well we are here to help you out. Read on.

Yours always,
Paul, Luana, Matthew and Nomty



ECR Newsletter March 2022

ECR events:



The ECR Summer Poster competition event

Get your diaries out now. And write in permanent marker "ECR poster event" from 3 -5pm on the **22nd July**

Yes that's right we are having a live online poster competition. With prizes! All you need to do is submit a poster of your work and turn up online at our live GatherTown event to chat with other ECRs. You will also be in it to win a bunch of kudos and goodies from our super secret (yet to be confirmed) sponsors. The whole thing is meant to be relaxed and informal, so don't stress. Reuse old posters, we don't care.

Whether you want to present or just turn up and see what others are doing **Registration deadline is the 1st of July**. Register [here](#).

Poster submission deadline is 18th July.

See you there on the 22nd July.



Did you know that the Emulate chip has been on display in the MoMA? Yes that's right, only one of the most famous Museums of Modern Art in the world.

Everyone agrees, organs on chips look great!

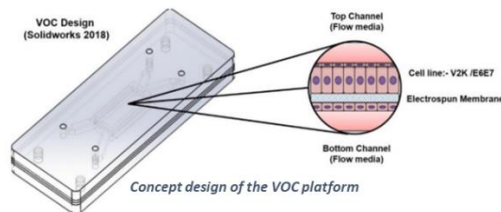
So send us your images of your OoC research and be in with a chance to win hard cash, a year's subscription to Lab on Chip and some prime CV fodder.

Deadline: 28th April

Submit here:

<https://www.organonachip.org.uk/imagecomp/>

Researcher Spotlight: Every month get to know a new Network ECR



Who are you? Hi! My name is Angel Naveenathayalan, and I am a visiting researcher and lecturer at Brunel University

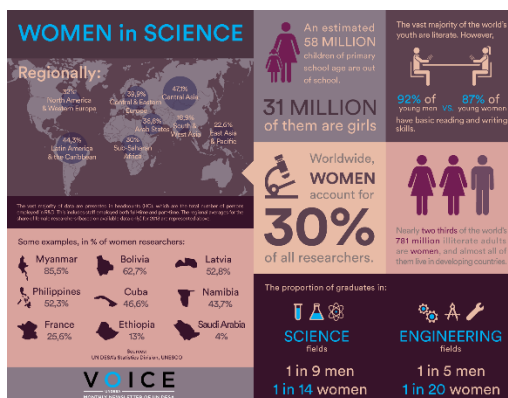
What is your organ? I have developed the Vagina -on-Chip (VOC) to understand Bacterial Vaginosis (BV).

What is your chip? The aim of my project was to develop a microfluidic device that could mimic the *in-vivo* vaginal tissue, within an *in-vitro* system. To make this Vagina-on-a-Chip (VOC) we used a combination of techniques including 3D printing, electrospinning, and micro engineering.

Why? The purpose of the VOC was to have a platform that represents the human physiology of the vagina, in order to study factors that disrupt the vaginal microbiome and understand the interaction between vaginal epithelial cells and bacterial strains. The VOC also has the potential to replace animal testing by providing a realistic platform that can be used by researchers and clinicians.

We also hear you just got a new job! Congratulations, and how is it going? I am now a lecturer at Brunel University on the MSc Biomedical Engineering course. I am lecturing the Tissue Engineering module which is going really well. With this great teaching opportunity offered by Brunel, I have gained a lot of experience and the insight to academic life

Women in Organ on a Chip research



Since we narrowly missed International Women's Day, and International Day of Awesomeness is still to come we thought we would merge the two and celebrate those women leading the field of Organ on Chip. We then almost immediately realised there were too many awesome researchers to choose from! Feel free to browse our network in your own time

<https://www.organonachip.org.uk/people/>

So here is just a small sample of some women in Organ on Chip research that ended up either founding their own spinout or becoming the CEO of a major OoC company. So check out their stories and their companies.

[Rosa Monge](#) – Co-Founder and CEO of BEOnChip
[Paula Occhetta](#) - Co-Founder and CEO of Biomimix
[Cinzia Silvestri](#) – Co-Founder and CEO of Bi/ond
[Geraldine Hamilton](#) – CEO of Emulate
[Victoria Marsh Durban](#) – CEO of Cellesce
[Jacquelin Ten Dam](#) – CFO Mimetas
[Anne Taylor](#) – Co-Founder and CSO of Xona microfluidics
[Julie Rosser](#) – Founder and CEO of Pregenerate

Tips on chips: Share your microfluidic tips. Email [Paul](#) or post on the [ECR forum](#).



Problems with oxidation?

Certain chemicals react and degrade due to oxygen in the environment. Things like the cell culture additive ATRA. But also the liquid plastic mentioned in last month's tip for replicating microfluidic moulds doesn't keep for long periods after being exposed to air.

The solution comes from the world of fine wines!

You can buy wine preservers online, they are just aerosol cans filled with inert gas (mainly nitrogen and argon). Spray a little of this in the bottle of whatever you want to preserve and hey presto, you are protected from oxidation.

Question of the month:



Last month:

How do you deal with stress?

No one is feeling stress!

Or maybe everyone was too stressed to share any advice last month.

Well aside from stress balls and fidget spinners. I like to try put things in perspective. Whether that be just doing something different, going for a run, have a change scenery to refresh, or spending an evening looking at the night sky and think about how we are all made of star dust and are just insignificant, fleeting moments in space and time, and will all be dead very soon. So whatever you are stressed about probably doesn't really matter all that much, does it.

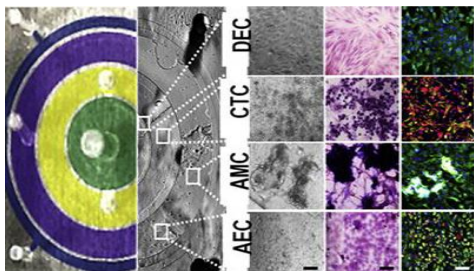
This month:

To pump or not to pump? That is the question.

Do you just make use of gravity or do you need a bit more power to pump? And if you do pump then what do you use and why? Syringe pump, peristaltic, pressure driven?

Get on the [FORUM](#) or Twitter and join the discussion.

Chip of the month:



Every month we will highlight an interesting/ unusual / lesser known chip.

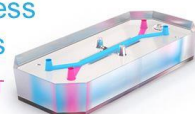
This month: A Human feto-maternal interface on chip!

What! Yes you heard us. Check out the poster by Lauren Richardson and friends [here](#)

Coming up:

Humanizing the Drug Discovery & Development Process with Organs-on-Chips

MARCH 9, 2022 | 11AM-3PM EST



TODAY!!!

Humanizing the Drug Discovery & Development Process with Organs-on-Chips

It's free and it's today 4:00 PM - 8:30 PM Register and join [here](#).



Organ Modelling UK

Coming up soon. [Register here](#)

What: Conference talking Organ-on-a-Chip, Tissue-on-a-Chip & Organoids

When: 21st -22nd April

Where: London, or if you like join virtually.



Tell us what you have been up to!

Share your achievements, papers, awards or whatever you like with the community.

Post on the [NEW ECR FORUM](#) or email the [ECR group](#).

Opportunities:



Lasker Foundation 2022 Essay Contest

Graduate and post-graduate students and aspiring researchers are encouraged to enter! Winners receive up to \$5,000 in educational expenses.

This year's **theme**: *Solving complex questions often calls for expertise in many fields. Describe how multidisciplinary collaborations and approaches (or future opportunities for them) have already or will in the future impact your own training, research, or career.*

The 800-word essays are due March 30. For detailed submission guidelines and stories on past winners please read [HERE](#).

SUMMER STUDENT PROGRAMME 2022



Wondering why a highly qualified and intelligent person such as yourself spends most of their time just moving liquid round?

Well why not automate that process and get a summer student to do it?

Animal Free Research UK are open for summer studentship project applications and Organs on chip are the perfect fit. Find a student and apply [here](#) by the 29th of March.

For your ears:

Learn during those long hours in the lab and beat the boredom of pipetting with our picks from this month.

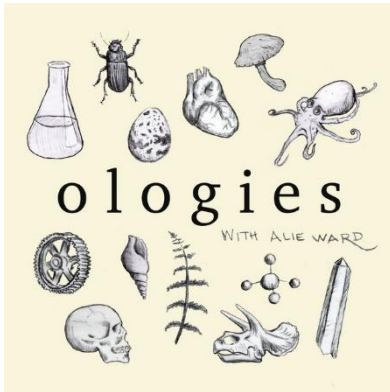
Ologies

Need to brush up on your biology? Neuropathology? How about Medusology (the study of jellyfish), Gastroegyptology (Ancient Egyptian foods), Tiktology or Cider-ology?

In [Ologies](#) Alie Ward talks to the experts of anything that “ology” can be added to the end of, with her trademark enthusiasm, humour and occasional bad language.

Listen, laugh and learn in the lab.

Get it on Spotify, apple podcasts or wherever you get your podcasts.



For your eyes:



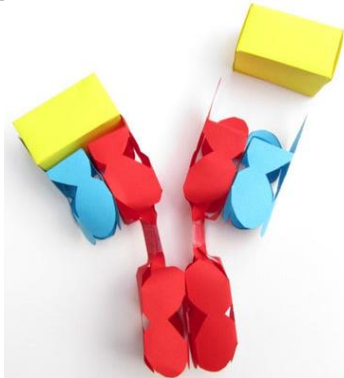
We've already told you. Submit your best images to the image competition!

<https://www.organonachip.org.uk/imagecomp/>

This is the best I have, and I'm not eligible to submit. They are Neuro-diodes. The heart shaped channels allow axons to grow through only in one direction. If axons grow through from the wrong cell culture chamber they are rerouted back from whence they came. Read about it [here](#).

You can do way better than this! So submit your images.

And just for fun..



(it's an antibody.. clearly)

Need a break?

Folding paper can be relaxing.
Origami Organelles?
Sure, why not.

<https://origamiorganelles.com/>



Bad Joke of the Month

My grandfather was told a joke about genetics. My dad didn't get it, but I did.



Punny Papers

It's *Snow* joke. This is the puniest paper we could find this month. Well it's all *White* I suppose.

**miR miR on the wall, who's
the most malignant
medulloblastoma miR of
them all?**

Review article

Wang X, et al. Neuro Oncol. 2018.

[Show full citation](#)

Have your say!

Got any news or info you'd like added to the newsletter? Or would you like to organise an event for the Organ on Chip ECR group? Ping the ECR group an email at : paul.holloway@rdm.ox.ac.uk
Or get on the [NEW FORUM](#).