

Hello Eurekaians,

Welcome to the September issue of *Eureka Briefing*. We talk to Carol Gregorio about the upcoming Eureka certificate course, introduce a new section called 'About my research' and, as usual, highlight some publications from Eurekaians.



The upcoming certificate course will be held in the Sicilian city of Siracusa (images from Pixabay)

A chat with Carol Gregorio



[Carol Gregorio](#) recently moved from the University of Arizona to the Icahn School of Medicine at Mount Sinai Health System in New York, USA, where her various roles include Senior Associate Dean for Basic Science Research, Vice-Chair for Strategic Innovation and founding director of the Center for Cardiac Muscle Biology. Together with [Monica Kraft](#), she runs the newly established partnership between Eureka and Mount Sinai. Carol is also the course director of the upcoming Eureka [certificate course](#) in translational medicine, which will be held in Siracusa, Sicily, Italy in October. Eureka Briefing spoke to Carol about the course.

How does the Eureka certificate course differ from other courses that people may have attended?

First of all, the certificate course is very intensive. Trainees have left their jobs for a week to take part; they are immersed in the course. I think a lot of universities have several individual courses, but they are not all under one umbrella. That is, we cover many topics each day that build on the ones before. We also have world-renowned faculty who are available most of the week to interact with the trainees, most often in informal settings.

The certificate course is global and you meet people who are in the same career stage – most trainees are assistant professors or early fellows, usually just when they are planning to become, or have just become independent researchers. This is the opportune time in their careers for them to do something different and we provide them with the skillset, support and contacts to do so. They then take new ideas back to their home institutions independent of their previous advisors. Both the faculty and trainees grow professionally during the course.

And of course, it's in an amazing location!

What's the premise of the course?

It's to give trainees a toolbox to make a difference in patients' lives, whether they are a basic scientist, a physician-scientist or someone in industry. It is really about giving trainees the information to eventually get something to the patient; letting them know that the journey to the patient is going to be rough, it's going to be great, and it's going to be crazy – but here are resources and the type of people you need to contact to get you where you need to be.

The uniqueness of the course combined with the incredible group of faculty [who teach the course] who are so committed is why the course works so well.

What topics are you planning on covering?

We cover team building, how to work with people, and how to present your research. We learn how to write grants, how to get funding and give examples of how to go from academia to industry or how to start a company. We talk about intellectual property. We have a patent attorney who talks about the legal logistics and how you need to protect your ideas.

Preclinical models are another topic. We also hear about the patient perspective, we hear what they want and how to listen to what the patient needs – which isn't always the strategy that's going to make money. We learn a lot about clinical trials, from the pre-market analysis to real-world evidence and the role of technology in clinical trials.

And we learn how to problem-solve. This part is really very fun – we challenge trainees to come up with problems and recognize that they're going to be very uncomfortable initially, but by dealing with the uncomfortable feelings and uncertainty they will get to the answer.

I've heard about the hidden curriculum – can you tell me more?

We also teach trainees that unstructured time outside the classroom is an incredible opportunity to advance their careers. It's about really taking advantage of networking to build relationships at every opportunity. When you're having a glass of wine or lunch with someone, or walking with them you could take the opportunity to listen to how they need help with their work or to come up with a collaboration.

What aspect of the course are you most looking forward to?

It's magic when you're at the course...just watching how trainees grow over the week. And also what I really love is what happens afterwards, because so many trainees get ideas from the course and then implement them at their home institution – that's really exciting.

A big focus of the course is what you take back to your home institution, and what you could do now to be a leader in translational science at that institution in the future.

At several institutions – the University of Arizona where I used to work for example – end up with a critical mass of former trainees and sometimes Eureka faculty that they become so-called hubs. The hubs have get-togethers and reunions for Eureka, and also disseminate Eureka knowledge to smaller courses at those hubs.

If you want to find out more about upcoming Eureka courses or more about Eureka hubs please reply to this email.

Do you have a story to share? Then please get in touch! I'll arrange to chat with you for 15-20 minutes, then write up our conversation as a Q&A (editing for clarity and length) and you can check this before it's published in *Eureka Briefing*.

Next, we have a new section in Eureka Briefing called 'About my research'. I hope the title is self-explanatory! And if you'd like to be included in this section, please reply to this message.



About my research: [Greta Kasputė](#), Centre for Physical Sciences and Technology, Vilnius, Lithuania

What's your area of research? My research is about the development of drug delivery systems for natural products such as essential oils and honey products.

What translational research questions does your work try to address? My research aims to construct a drug delivery system using electrochemistry methods. Essential oils or honey have the potential to be valuable for treating various diseases but this area still needs research and more data.

What excites you most about your research? I'm really enthusiastic about natural products and opportunities to educate other people about the value they have.

What's the biggest challenge that you face? For me, challenges are so normal that I think of them as a process. So they are not challenges but casual steps or activities I have to do. I don't really think that I face big challenges (but that's just thinking about today, I don't know what tomorrow will bring me).

What does it mean to you to be a Eurekian? Actually, I like this question! It is also a question about what it means to be you. Eureka for me is like the spine of my body. I did translational research and work for many years, especially with technology transfer. In Eureka, I don't feel alone, Eureka makes me feel stronger.



Publications by Eurekians

Below are some recent publications that have Eurekians as first or last authors, or were highlighted by Eurekians. Have a scroll to see if any catch your eye!

[Serine starvation silences estrogen receptor signaling through histone hypoacetylation.](#)

Li AM...**Ye J**. Proc Natl Acad Sci USA. doi: 10.1073/pnas.2302489120.

[Identifying Membrane Protein-Lipid Interactions with Lipidomic Lipid Exchange-Mass Spectrometry.](#)

Zhang G...**Marty MT**. J Am Chem Soc. doi: 10.1021/jacs.3c05883.

[Sterile triggers drive joint inflammation in TNF- and IL-1 \$\beta\$ -dependent mouse arthritis models.](#)

Thiran A...**Vereecke L**. EMBO Mol Med. doi: 10.15252/emmm.202317691.

[Empiric treatment with aspirin and ticagrelor is the most cost-effective strategy in patients with minor stroke or transient ischemic attack.](#)

Narasimhalu K, Chan J, Ang YK, De Silva DA, Tan KB. Int J Stroke. doi: 10.1177/17474930231202374.

[High-Throughput Deconvolution of Native Protein Mass Spectrometry Imaging Data Sets for Mass Domain Analysis.](#)

Hale OJ, Cooper HJ, **Marty MT**. Anal Chem. doi: 10.1021/acs.analchem.3c02616.

[Do Nanodisc Assembly Conditions Affect Natural Lipid Uptake?](#)

Odenkirk MT, Zhang G, **Marty MT**. J Am Soc Mass Spectrom. doi: 10.1021/jasms.3c00170.

[Role of Conserved Tyrosine Lid Residues in the Activation of the M₂ Muscarinic Acetylcholine Receptor.](#)

Pham V...**Valant C**. Mol Pharmacol. doi: 10.1124/molpharm.122.000661.

[Impact of living donor liver transplantation on long-term cardiometabolic and graft outcomes in cirrhosis due to nonalcoholic steatohepatitis.](#)

Karnam RS... **Bhat M**. Clin Transplant. doi: 10.1111/ctr.15008.

[TIL Therapy: Facts and Hopes.](#)

Monberg TJ, Borch TH, Svane IM, Donia M. Clin Cancer Res. doi: 10.1158/1078-0432.CCR-22-2428.

[Predictors of myopic macular degeneration in a 12-year longitudinal study of Singapore adults with myopia.](#)

Foo LL...**Wong CW**. Br J Ophthalmol. doi: 10.1136/bjophthalmol-2021-321046.

[Effect of Moderate-Intense Training and Detraining on Glucose Metabolism, Lipid Profile, and Liver Enzymes in Male Wistar Rats: A Preclinical Randomized Study.](#)

Shakoor H, Kizhakkayil J, Khalid M, Mahgoub A, **Platat C**. Nutrients. 2023 Aug 31;15(17):3820. doi: 10.3390/nu15173820.

[External validation of a multivariable prediction model for identification of pneumonia and other serious bacterial infections in febrile immunocompromised children.](#)

Martin AJ...**Emonts M**; PERFORM consortium. Arch Dis Child. doi: 10.1136/archdischild-2023-

[Factors influencing myopia stabilisation in young myopic adult Singaporeans.](#)

Foo LL... Saw SM. Br J Ophthalmol. doi: 10.1136/bjo-2023-323680.

[JAK Inhibition with Baricitinib for Severe COVID-Related Enteropathy: a Case Report.](#)

Abdelmoumen A, van Montfrans J, van Wijk F, Leavis H. J Clin Immunol. doi: 10.1007/s10875-023-01569-6.

[Bone Regeneration in a Large Animal Model Featuring a Modular Off-the-Shelf Soft Callus Mimetic.](#)

de Silva L... Gawlitta D. Adv Healthc Mater. doi: 10.1002/adhm.202301717.

[Temporal Analysis of Inflammatory Bowel Disease and Pancreatitis Co-Occurrence in Children and Adults in the United States.](#)

Zhang KY...**Sellers ZM**. Clin Transl Gastroenterol. doi: 10.14309/ctg.0000000000000628.

[Living donor liver transplantation can address disparities in transplant access for patients with primary sclerosing cholangitis.](#)

Onofrio F... **Bhat M.** Hepatol Commun. doi: 10.1097/HC9.0000000000000219.

[UniDec Processing Pipeline for Rapid Analysis of Biotherapeutic Mass Spectrometry Data.](#)

Phung W, Bakalarski CE, Hinkle TB, Sandoval W, **Marty MT.** Anal Chem. doi: 10.1021/acs.analchem.3c02010.

[Posterior scleral birefringence measured by triple-input polarization-sensitive imaging as a biomarker of myopia progression.](#)

Liu X... Schmetterer L. Nat Biomed Eng. doi: 10.1038/s41551-023-01062-w.

[Mitochondria and the eye-manifestations of mitochondrial diseases and their management.](#)

Chen BS, Harvey JP, Gilhooley MJ, Jurkute N, **Yu-Wai-Man P.** Eye doi: 10.1038/s41433-023-02523-x.

[Clinical characterization of patients diagnosed with prostate cancer and undergoing conservative management: a PIONEER analysis based on big data](#)

G. Gandaglia... **T. Hulsen...** J. N'Dow. European Urology <https://doi.org/10.1016/j.eururo.2023.06.012>

[Explainable artificial intelligence \(XAI\): concepts and challenges in healthcare](#)

T. Hulsen. AI. doi: 10.3390/ai4030034

[Air pollution-associated shifts in the human airway microbiome and exposure-associated molecular events](#)

Laurita Klimkaite, Tomas Liveikis, **Greta Kaspute,** Julija Armalyte & Ruta Aldonyte

Future Microbiology doi: 10.2217/fmb-2022-0258

And finally.....some trivia. The upcoming certificate course will be held in Siracusa, a historic city notable for its rich Greek and Roman history. Greek and Roman architecture features several styles or orders of columns; can you name the three principal ones shown in this picture? The answer can be [found here](#) (via the Museo Tattile Statale Omero website) when you've had a think.



Thank you for reading!

[Charlotte Harrison](#)

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If you're thinking about culinary uses for honey, I can highly recommend this [honey chocolate cake recipe](#). The bees are optional, but they are fun to make!