

eyes NEWS

The Newsletter of the ESE Young Endocrinologists and Scientists



LABORATORY TESTING

MANUFACTURING

GENOMICS

MEDICINE

LOGISTICS

PHYLOGENETICS

We invite you to **e-ECE!**

Corona Chronicles:
Humanities greatest heroes unite -
Meet Alex Cagan

European Society
of Endocrinology

Cagan



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www.e-se-hormones.org

and also  fb.com/groups/eyes.endo and

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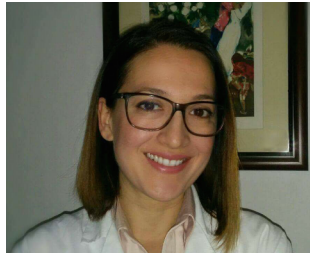
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EDITORIAL



This issue of the EYES Newsletter is about us during COVID-19 pandemic.

Read about the latest EYES news on page 3 and exciting event e-ECE 2020 and EYES symposium on page 4. Pituitary and neuroendocrinology focus area leads tell us more about navigating pituitary pathophysiology and disease in the new decade. You can read about hormones and viruses on pages 6 and 7.

Scientist and artist, Alex Cagan has illustrated his vision of the united fight against COVID-19 which is why we have such an amazing cover page. Read about his scientific and artistic journey on page 8.

You have shared with us how the pandemic has influenced your life on pages 10 - 12. The members of the brand-new SIMBA initiative tell us more about their international collaboration on page 13 and on pages 14 and 15 we present ESE Journals to you.

Last but not least, read the latest hot topics in the research selection on page 16.

We hope you enjoy this newsletter!

Ljiljana Marina, EYES

eyes 

ESE young endocrinologists
and scientists
looking forward



EYES news

Who would have thought that 2020 would try to stop the world? And not only the world, but it also felt like time has stopped as well.

Yet, WE did not stop. We continued, each and every one of us in our own way, united, like never before, in the fight against the powerful, frightening, yet invisible enemy.

We worked as front liners, doctors, scientists, nurses and volunteers. We helped each other, cared for our patients, families, elderly, friends, neighbors and ordinary citizens.

We also Zoomed and Skyped, and here we are now, happy to be sharing the latest EYES news with you all. As we have announced, two great EYES initiatives were set to start in 2020. The EYES Mentoring Programme had a great start. It is now in full swing. Mentees have been matched to mentors. Some have already had their first meeting. We have received positive and encouraging feedback and we look forward to hearing more from you as to how it is progressing.

Due to the pandemic, the EYES Clinical Observership Programme (C.O.P.) had to be slightly delayed, but we are thrilled to see it being launched in June. Successful candidates will be announced during e-ECE in September! Read more about the exciting and historical event of the e-ECE on page 4.


Sadly, it was necessary for the EYES Annual Meeting in Birmingham, UK to be postponed to 2021; we will let you know the exact dates in due course!

Finally, this is my last report as the official member of the EYES Committee. The time has come to say goodbye. Meeting wonderful people, making new friends, working on great ESE and EYES projects with the greatest minds of European endocrinology has been an amazing experience. And all of this in a friendly and inspiring atmosphere set by Helen Gregson and her team. I feel truly honored and grateful for the time spent within the ESE and EYES community.

To further continue with the EYES journey, we have elected a new co-chair! Ayse Zengin will be joined by Eva Coopmans! On behalf of the entire EYES Committee congratulations to Eva on this well-deserved election! EYES is set to continue strong!

Last but not least, soon we will announce the election of the new EYES Committee members, so stay tuned as the EYES community will grow and bring you more exciting news and initiatives!

Ljiljana Marina, EYES

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Key dates

5 - 9 Sep 2020

e-ECE 2020, 22nd European Congress of Endocrinology

15 - 18 Oct 2020

27th ESE Postgraduate Training Course on Endocrinology, Diabetes and Metabolism *Bucharest, Romania*

22 - 22 Oct 2020

Endobridge 2020 *Antalya, Turkey*

29 - 31 Oct 2020

ESE Clinical Update on acromegaly 2020

Ljubljana, Slovenia

11- 14 Mar 2021

28th ESE Postgraduate Training Course on Endocrinology, Diabetes and Metabolism *Tbilisi, Georgia*

16 - 17 Apr 20201

Postgraduate Training Course in Clinical Endocrinology
Zagreb, Croatia

22 - 25 May 2021

23rd European Congress of Endocrinology *Prague, Czech Republic*

29 Aug - 01 Sep 2021

ESE Summer School 2020 *Innsbruck, Austria*

6 - 9 Oct 2021

45 Symposium on hormones and cell regulation
Sex and signaling: The molecular basis of sex and gender
medicine *Mont Ste Odile, France*



eECE 2020

22nd European Congress of Endocrinology

5-9 September 2020

Join the first ever virtual e-ECE!

The COVID19 pandemic has temporarily prevented us from meeting face to face during the most important annual ESE event - the European Congress of Endocrinology. However, the fantastic program organizing committee has worked hard to bring the excitement and joy back to our community by setting up the first ever fully digital congress. e-ECE 2020 will run live from 5-9 September, with high quality lectures, symposia, Meet the Expert sessions, New Scientific Approaches and much more.

Early career investigators will have the opportunity to showcase their work through carefully planned sessions, such as oral communications, pre-recorded audio files coupled to pdf ePosters and stand alone ePosters. These will all will be available on "ESE on Demand" as well.

e-ECE will also enable you to stay up to date with the industry through virtual exhibition, ECE Hub sessions and satellite symposia. Moreover, there will be plenty of opportunities to meet online, extend your network and spark discussions.

Registration for e-ECE2020 is FREE for all ESE members, so if you are not already, become a member! See you soon at the first ever e-ECE2020!



6 SEPTEMBER, SUNDAY
16.00 - 17.00

The funday Sunday!

e-ECE 2020 EYES symposium

Join us on Sunday, 6 September 2020 from 16.00 to 17.00 for EYES symposium "It is time to grow out of endless growth". It will be followed by Jens Christiansen Awards and Young Investigators Award presentations.



This year we will miss the all time favorite EYES social networking event but instead we invite you to the Quiz and Social Event starting at 20.00 so make sure to join!

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ESE Focus Area: Pituitary and Neuroendocrinology

Navigating pituitary pathophysiology and disease in the new decade



Marily Theodoropoulou & Jens Otto Jørgensen

During the last few years, we have witnessed a renaissance in the pituitary field. The advent of “omics” technologies revealed genetic anomalies present in pituitary tumours and laid the foundations for their pangenomic classification¹. We now know that mutations in single somatic hotspots encoding for USP8 and USP48 deubiquitinases characterize many Cushing’s disease cases¹⁻³. CABLES1 loss in corticotroph tumours accounts for the impaired glucocorticoid negative feedback, a hallmark of Cushing’s disease⁴⁻⁵. A new syndrome, X-linked acrogigantism (X-LAG), presents with early onset growth hormone (GH) excess and gigantism due to GPR101 duplications⁶. In parallel, animal studies brought the LATS signalling pathway into the spotlight^{7,8}. We are now just beginning to understand the potential of senescence-associated secretory phenotype (SASP) on pituitary tumorigenesis¹⁰ and the complexity and impact of the pituitary tumour microenvironment^{11,12}.

The frequency of immune checkpoint inhibitors in cancer treatment brought attention to hypophysitis, an otherwise rare pituitary pathology¹³⁻¹⁵. This Focus Area has recently presented insights on immunotherapy-induced hypophysitis¹⁶. On the other hand, immune checkpoint inhibitors may prove useful for the treatment of aggressive pituitary tumours and carcinomas¹⁷. The management of aggressive pituitary tumours is notoriously difficult and hindered by their rarity. A survey under the umbrella of the European Society of Endocrinology (ESE) brought together experts from over 70 centres and provided guidelines on diagnosis, treatment and follow-up in aggressive pituitary tumours and carcinomas^{18,19}.

Finally, “what’s in the name”- the decade closes with challenging discussions on how to call these cumbersome neoplasms doing justice to their complex pathology, respecting the patient and acknowledging their impact on their lives²⁰⁻²². Discussions whether to PitNET (pituitary neuroendocrine tumour) or not to PitNET will continue among endocrinologists, pathologists, healthcare professionals and patient support groups, and may influence the way other disciplines, as well as journals and grant awarding bodies view pituitary tumour research.

Marily Theodoropoulou
Germany

Basic lead

Jens Otto Jørgensen
Denmark

Clinical lead

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Hormones and viruses

Nowadays viral infections have gained importance in our society, practically a “trending” topic, mainly due to the COVID-19 pandemic. Virology and endocrinology may appear to be completely independent, however, viral infections have been shown to have an effect on some hormones. In fact, some hormones have been reported to facilitate the transmission, while others have been established as protective agents against viral infections.

For instance, Bernard Roizman demonstrated that parathyroid hormone directly suppresses viral adsorption and penetration into human cells in vitro, as early as 1962¹. More recently, sex hormones have been shown to influence viral infections. In particular, oestrogens hamper the replication of several viruses (e.g. HIV, ebola, hepatitis, influenza), reduce transmission and the severity of symptoms. Men with high circulating testosterone levels benefit less from vaccination against influenza compared to men with lower testosterone levels and women². This could be one of the reasons why men are more susceptible

to viral infections than women. In addition, these reports may explain male vulnerability to SARS-CoV-2 and why oestrogen treatment has been proposed as a therapeutic approach to battle COVID-19.

Hormones not only have an impact over viral infections, but viruses can also alter the endocrine system of their hosts, since they have the ability to produce peptides with high sequence similarity to human peptide hormones. For example, some members of the Iridoviridae family, produce viral insulin/IGF-I-like peptides, which are capable of binding to human IGF-I receptors and stimulating this molecular pathway³.

Taken together, these studies demonstrate a connection between hormones and viruses, which leaves us to question whether or not we should be paying more attention to the endocrine system in COVID-19 patients?

Juan Manuel Jimenez Vacas, Spain

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Obesity and COVID-19

The new pandemic caused by SARS-CoV-2 brought the whole planet against a disease very poorly known. Early on, a substantial percent of patients, and those who died from COVID-19, were obese. We looked into the mechanisms of the two diseases and tried to identify a link; there seem to be two different ways through which an obese patient is more prone to suffer from COVID-19.

On one hand, obese patients often need bariatric hospital beds, which are not always available; on top of that, proper radiologic imaging diagnosis may be compromised.

Moreover, an obese patient is by default prone to diminished airway flow, due to adipose tissue covering the lungs and oxygen consumption and respiratory potential is low, making it easier for an infection to occur. Finally, these patients are difficult to intubate, a measure that has been widely used to treat patients with COVID-19.

In terms of deeper molecular mechanisms, obesity seems to represent a state of low grade inflammation, because the adipose tissue secretes many molecules, which favour a microenvironment of defensive cells against inflammation, but from a certain point, this reaction does not help the body, but rather destroys it in a phase of exaggerated response. This state is usually accompanied by low oxygen flow (hypoxia) and the production of reactive oxygen species, which may cause harm to the body.

Adipokines are molecules that are secreted by adipose tissue. In obesity, the balance between adipokines are reversed, giving place to a reduction in the cells that would otherwise fight against the virus.



Close to that, COVID-19 has been described to induce a similar inflammation storm, something like a cataract of various molecules, which finally leads to infection and the involvement of the whole body with various organs.

When we looked closer to these molecules, we realised that most of them were common among COVID-19 and obesity, a fact that shows a common inflammatory profile in the cataracts of the two diseases.

Finally, most obese patients suffer either from diabetes or from hypertension. COVID-19 in a very strange way, is implicated in the pathway that regulates glucose, while on the other hand, its entrance into the body is supported by an enzyme that is implicated in the control of hypertension.

Since we can't prevent obesity within a few months of the pandemic, the least we can do is be aware of those linking mechanisms when treating an obese patient with COVID-19.

Konstantinos Michalakis, Greece

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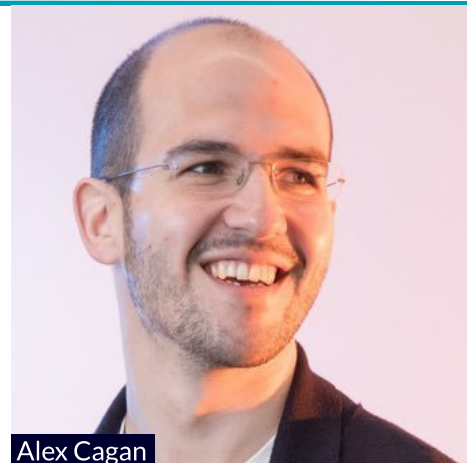
When science meets art

He is the scientist studying DNA changes as we age.

He is the artist, illustrator and a storyteller.

Maybe one day he will illustrate your talk and visually tell your story.

Meet Alex Cagan.



Alex Cagan

Could you tell us about yourself and your scientific work?

My main job is a postdoctoral researcher at the Wellcome Sanger Institute in the UK where I do work on evolutionary genetics in the department of Cancer, Ageing and Somatic Evolution (CASM). In my free time I also work as a scientific illustrator, doing all sorts of interesting commissions including live sketching of scientific conferences and meetings. My plan was to be a social anthropologist, so I started a degree in anthropology at the University of Cambridge, however the courses on human evolution and primate behaviour really caught my interest.

After I graduated I was tempted to continue in this direction and become a primatologist, so I spent several months in Uganda studying chimpanzee behaviour. The work was fascinating and exciting (how could living in the jungle studying wild chimpanzees not be!). However this was also the time of the genomics revolution and I was really intrigued by what could be learned using genetic sequencing approaches. So I did my PhD at the Max Planck Institute for Evolutionary Anthropology in Leipzig, Germany.

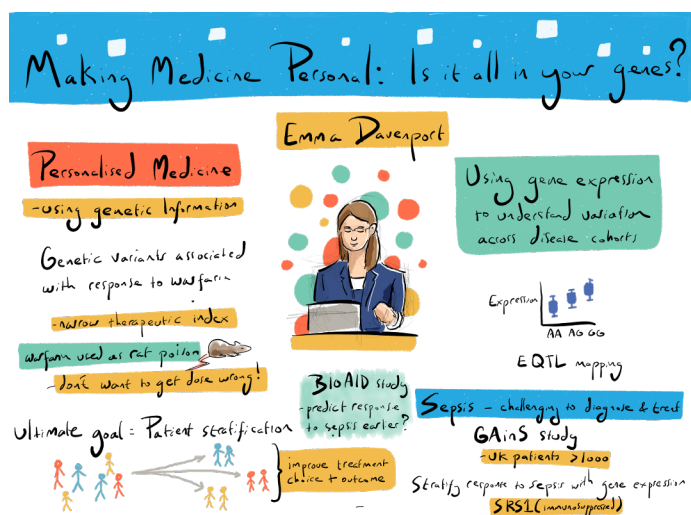
Now for my post-doc I am applying genome sequencing techniques to a new frontier in genomics, somatic evolution. Somatic evolution is all about the mutations that happen in the DNA in our own cells as we age. To many people, even geneticists, it is a surprise to learn that the DNA in our bodies is constantly changing as we age and that there is a whole world of natural selection and evolution going on inside us as cells compete and replace one another. This is the process that can ultimately lead to cancer but we are just starting to understand the myriad of other ways that somatic evolution could be influencing our health and its involvement in the ageing process.

When did you start drawing?

I have been drawing since I was a kid. My mother is a set designer for theatre and television, so I was often around creative and artistic people growing up. I have always enjoyed doodling and drawing as a form of playing, it's a chance to explore your imagination and bring ideas to life. I studied art at school along with many other subjects, and while I was tempted to go to art school I decided I would prefer to keep art as a hobby and not lose the chance to study and work as a scientist.

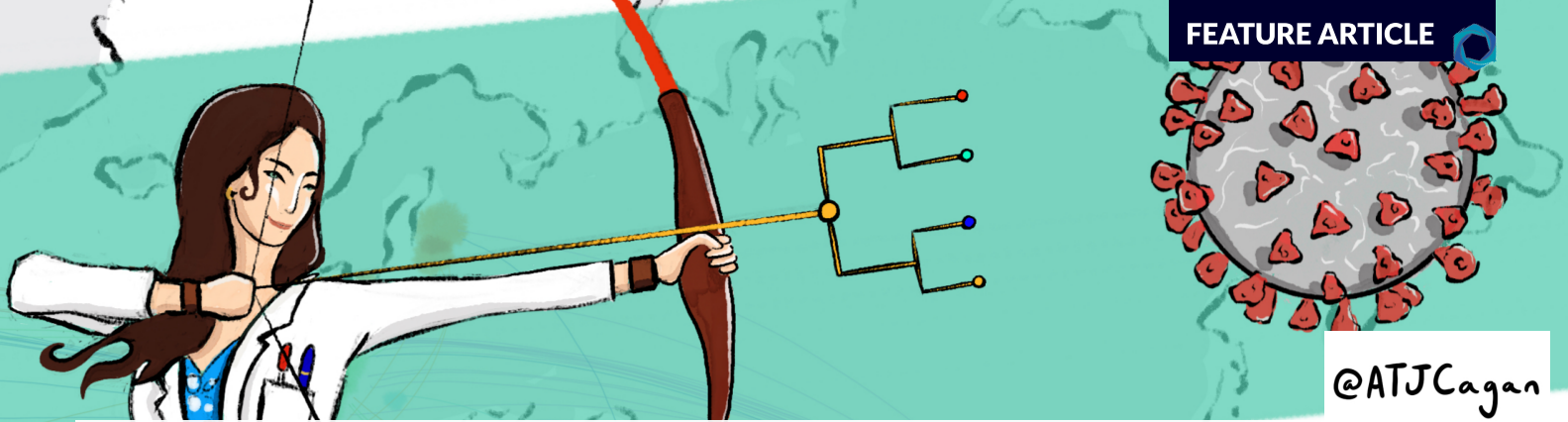
When and why did you start sketching during conferences?

I started sketching during conferences during my PhD. I had a small iPad mini tablet and stylus I used for taking notes and like all my notes I filled them with doodles. A side note: At school I know you get told off for doodling but I think it can be a useful way for your brain to breathe in a sense. I think while we doodle we are letting our mind process things even if we are not fully consciously aware of it. I was at a conference and it was my first time using Twitter. I saw all these scientists live-tweeting the talks, trying to summarise the content in 140 character tweets. I thought this was very hard to do but I realised that you can upload images to Twitter. I was already making my notes and thought hey, here's a way I can get around the 140 character world limit and contribute something in my own style. My first illustrations were very different to how they look now, but people seemed to like them so I continued and my style evolved over time.



What do you think about the role of visual arts in science?

I am, unsurprisingly, a huge advocate for the significance of the visual arts in science. I would say that the visual arts and science have historically been almost inseparable and it's only very recently that a divide has developed. I am constantly inspired by figures such as Robert Hooke, Ramon y Cajal and of course Leonardo da Vinci, who you could describe as both artists and scientists, so intertwined were there ways of working.



@ATJCagan

To me both art and science share a common foundation of the desire to explore the world around us. Only the tools and techniques vary and different languages and approaches have developed over time. There are so many examples of art and science informing one another that I think society benefits when they are not kept so far apart. Besides that there is also an important role of using visual arts to convey scientific discoveries to a wider audience that lacks the technical vocabulary to comprehend the language in a scientific manuscript. The visual arts have a way to capture the awe of science and discovery in a way that sometimes words cannot.

What do you think about the storytelling in science?

I think that storytelling is crucial for communicating science. I believe that narratives are very important to us as human beings. We love stories and good stories are able to hold our attention and teach us important lessons. In science communication I think there is a growing emphasis on storytelling which I am happy to see and to learn from. Of course I think in doing research one has to be careful because there is also the criticism of 'scientific storytelling' where scientists can end up misleading themselves by putting too much emphasis on crafting a good narrative rather than following the data. But as long as the research is done properly I think that the best way to communicate it to the public is through a good understanding of how to craft a narrative. What excites me is seeing all the different ways that scientific stories can be told, through visuals, music, books. There are as many ways to tell stories as there are people.

One talk can contain 25 slides and you manage to put it all in one slide along with the character of the speaker. How do you do it?

For me this is just how my note-taking has evolved over the years. I think anyone who takes notes during a talk already has the main skills. For me the most important thing is summarising the talk well, getting the key points. In drawing and in taking notes a key skill is knowing what to leave out! I use a large iPad pro and apple pencil as my preferred tools. During a talk I start with the title and the name of the speaker. If I am doing a big conference with several talks a day I will write the name of the talk in advance to save time to focus on the contents of the talk. Then when the talk starts I will make a quick pencil sketch of the speaker, trying to capture their gestures rather than be too accurate about all the proportions. As the talk

progresses I try to capture the key points with words and images and keep darting back to the drawing of the speaker to tidy it up and finish it with ink and colour. Lots of coffee helps too.

Do you usually know the person you are sketching?

No usually not and in fact it's much easier to sketch people you don't know! When you know the person your mind already has a very fixed image of what they look like and it's actually harder to draw them properly. An exercise I remember from art class that demonstrates this is that you often do a more accurate drawing of a person if you turn the photo upside down first! Then your brain is no longer seeing the object as a human but as a series of shapes and shadows. It helps to get your preconceptions out of the way and really look at what is in front of us. This is another reason I think that art can really help scientists, through drawing you are training yourself in observation, to see things as they really are not as your mind imagines them to be.

Thank you for letting us use "Corona Chronicles" as our cover page! When I first saw it I was already treating the Covid19 patients and it really touched me! Could you tell us about the moment when you have decided to draw it? It makes me very happy to hear this. It is wonderful when you can make something that touches someone. I made this piece along with another illustration about scientists uniting together to fight covid19 right at the start of the lockdown. There was so much fear and anxiety in society, I had never felt anything quite like it before. There was so much uncertainty because it's a new disease and suddenly everyone was having to change how they were living. I think in such times the arts have the power to provide people with hope and to create a sense of community, which is especially important when our physical communities are separated. I wanted to create images that communicated the message that this is a frightening time but we are not alone, there is a global community of people from different walks of life working together and eventually we will be able to overcome this challenge. Creating the illustrations was cathartic for me and I am really very happy to see that others have also found comfort in them. Though as the illustrations show the real heroes are the people all over the world who are working so hard in these times.

Ljiljana Marina, Serbia



EYES during COVID-19 pandemic



Everyday life at our hospital in Milan, Italy is completely overturned. As early as the first week of March, all outpatient activity, with the exception of urgent consults, were canceled.

Meanwhile, microbiological isolation wards have been setting up daily. By the 15th of the month, 9 COVID divisions were operating (emergency room, Intensive Care Unit, 7 inpatient wards) with a weekly average of 300 hundred COV+ patients receiving medical assistance. New multidisciplinary units have been created including experienced and young

doctors, all with the aim to cooperate and help as many people as possible (including both the hospital staff and the community itself). Fortunately, we have gradually gained experience with the management of this infection and its related complications, the number of confirmed cases began to fall and things got better everyday. Nowadays, we still live in an "emergency" setting, as social distancing

rules are slowing down, but fortunately the majority of physicians could restore their regular daily routine. There have been mandatory suspensions on clinical trials for over 6 weeks; we have only recently received approval to recall patients and commence ongoing studies.

Walter Vena
Clinical Doctor
University of Milan
Humanitas Research Hospital
Milan, Italy



The COVID-19 pandemic has delayed my residency at the University Hospital centre in Zagreb, and so I have been brought back to the General Hospital in Dubrovnik. The General Hospital in Dubrovnik takes care of patients with a catchment size of

approximately 120,000 residents. It is peculiar in its size and its seclusion, numerous islands and many hot zones for tourists, all of which contribute to a large possibility of COVID-19 transmission. I have been appointed to the Infection Department, where I was working with COVID-19 patients. We worked in teams, 14 days of work followed by 14 days of self-isolation. I was involved with treating patients in a field of medicine in which I don't usually work in,

patients who would under normal circumstances be treated by a neurologist, pediatrician, or surgeon. The majority of endocrinology patients, are diabetic patients and patients with hypothyreosis, and sometimes hypopituitarism and osteoporosis. None of us were previously involved in such a situation, rules for protective equipment have never been so strict, we were not used to treating patients with minimal to no physical contact, and we

were separated from our families and friends for a couple of months. But through hard work (and most importantly team-work), mental strength and persistence, we managed to overcome all these obstacles. Fortunately, epidemiologically speaking, our country is now doing well.

Anja Barač
Resident in Endocrinology and Diabetes
General Hospital Dubrovnik,
Croatia



COVID-19 changed our way,
At home we will have to stay,
New rules to obey
Some ideas will wait
For a while no Lab, no assay
Team apart to play
Some projects on archives will lay
For a while as everybody is afraid
Risks and benefits to weight
But we need to be brave
In this COVID-19 highway
Maybe we discover there is

no delay
And COVID-19 just changed the pathway
Blocking the reaction unexpectedly on a Friday
How many overnights until the next work-day?
We dream the antibody is right away
Where is the stop solution for this bioassay?
Lets see the fluorescence measurement on the display?
No more life to overpay
Keep headway

We are together in this match play
There is color even in the grey
And also more rhymes to relay
On the next days.
Stay.

Júnia R.O.L. Schweizer
Postdoctoral Scientist
Ludwig Maximilians Universität
Munich, Germany



EYES during COVID-19 pandemic



Here in the University Hospital of Antwerp, we established ourselves as a reference center to battle the COVID-19 pandemic. During the peak of the crisis, 3 wards were transformed into

COVID-19 wards, with one more ward acting as a transit zone. All clinical practice, except when urgent, was postponed for a total period of 6 weeks. Patients were contacted over the phone as much as possible to guide their therapies. Just now, we are starting it all up again at a slow pace, making outpatient consultation possible again under strict conditions. All clinical experiments, including my

own, are still on hold. PhD students and scientists with medical degrees, volunteered to take over shifts to aid in times of work overload. Clinical trials could sometimes proceed, if approved by the hospital, but limited to the bare minimum. The when and where of relaunching of trials and experiments is still uncertain, since lockdown measures are still active. We are concerned about our patients with

chronic comorbidities, since the number of patients visiting the ER has dramatically declined. We are worried about patients with serious illnesses who are too afraid to visit the hospital, so a second wave of non-COVID morbidity and mortality is expected.

Jonathan Mertens

MD, PhD Candidate
University of Antwerp/University Hospital of Antwerp Edegem, Belgium



I work in the Intensive Care Unit (ICU) as a Critical Care doctor. The number of coronavirus patients is overwhelming and we don't have enough ventilators, N95 masks, sanitizers and personal protective equipment to protect ourselves, which makes treating these patients less

efficient due to the fear of contracting the virus. Staying in isolation for 15 days after a work period of 15 days is frustrating and affects mental health. Elective procedures have been put on hold as the number of ICU beds are limited and are prioritised for COVID19 patients. Private hospitals in Gurgaon, India are struggling economically due to a decrease in the number of non-COVID19 patient admissions; this resulted in salary cuts to all hospital employees,

including doctors. Following the recent update on the lockdown laws by the Indian government, Out Patient Departments (OPDs) have resumed - but with great adversities. OPDs have resorted to telemedicine consultation, but not everyone in India knows how to contact doctors via telemedicine platforms; because of this technical hindrance, not only are patients suffering but doctors too as they are unable to provide effective, efficient healthcare and

advice to their patients. Shortage of doctors providing emergency services like emergency medicine and intensive care across the nation has resulted in doctors working overtime which definitely decreases the efficiency of healthcare. Still as doctors we are trying to do our best and also are working towards treating each and every patient that comes to us for help.

Arsh Wasoori, Clinician
Paras Hospital, Gurgaon
Haryana, India



I started my St3 training in Diabetes and Endocrinology in March 2020. However,

immediately after starting my training, the COVID pandemic had affected Europe and the United Kingdom very badly. I was supposed to start my Endocrinology and Diabetes clinics plus other training related activities but all trainee doctors were put into the COVID-19 rotation, which meant we

were on call, and working long days and nights. Since then, I haven't had any proper endocrine or diabetes exposure. But it is worth mentioning that it was a good learning experience. To see, review and treat a variety of presentations of COVID-19 was very interesting. It boosted my confidence in

managing acutely unwell general medical patients. Things are slowly changing now; hopefully I will be starting my Endocrinology and Diabetes training soon.

Kalyan Mansukhbhai Shekhda

Speciality Trainee
General Internal Medicine
Southend University NHS



EYES during COVID-19 pandemic



COVID-19 has changed everyone's life. Spain is one of the most mistreated countries by this virus so far. The mandatory confinement has also affected the research

community. In my case, thesis, projects, and experiments have been all stalled. In other words, everything seems to be frozen, like cells waiting in liquid nitrogen for coming back to life at some point. Only a few lucky researchers who were in charge of feeding and taking care of the animal models could get to the lab during these days. But we know one thing for sure:

this situation will come to an end and everything will go back to normal. Until then, patience, responsibility, and solidarity are needed. Sooner rather than later, we will be sharing our scientific results at conferences and discussing them face to face again. So it is right now, more than ever, when we should be immensely grateful to all the clinicians that are

fighting on the front lines of this battle, and also, we should support our scientists, who have become essential in this race to formulate a vaccine. Let's never forget the most important lesson here: we all are necessary. Together, we will succeed.

Juan Manuel Jimenez

Vacas, Scientist

Maimónides Biomedical Research Institute of Córdoba (IMIBIC), Spain



Surprisingly, the COVID19 outbreak has been quite a productive period for me. Due to the limited clinical activities and prioritising urgent in-patients, I had a lot of time to focus on research - especially because our region in Italy

was not devastated by the COVID19 pandemic to the same degree as the rest of the country (and I hope it will never be). Not to be misunderstood, I miss my patients very much. I love to chat, stay in touch, and taking care of their problems - this is what I trained for many years to become a medical doctor. A few months leading up to the lockdown, I had started to follow up hormonal transitioning in transgender people, it's such a shame

that this work got interrupted....

During the outbreak, I was able to complete many tasks on my list, including writing papers, completing revisions and data collection, and new, interesting projects were settled down. For instance, a study on the psychological impact of COVID19 quarantine in transgender people is actually ongoing, and we hope to complete it as soon as possible.

When everything goes back to "normal", I guess we will slow down again, but I'll surely be grateful for the interactions that I'll have with my patients; it will mean that our world has started to heal.

Rosario Ferrigno

*In-training Medical Doctor in Endocrinology and Metabolism Diseases
Università degli Studi di Napoli "Federico II", Italy*



**European Society
of Endocrinology**

European Board Examination

As a consequence of the ongoing global COVID-19 situation, the European Board Examination in Endocrinology and Metabolism has been rescheduled for 9 December 2020

For the latest updates please see www.ebeedm.eu and

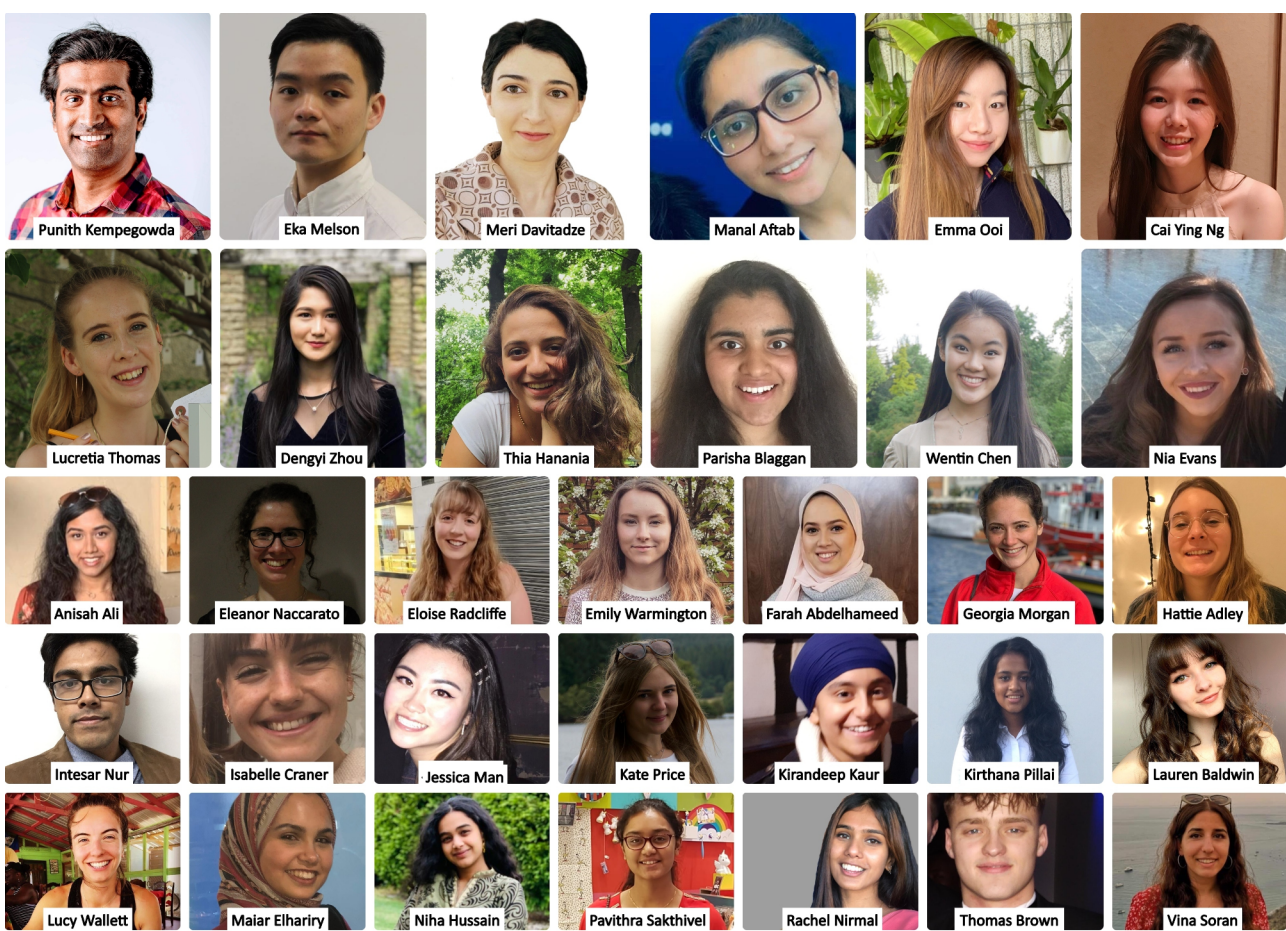
<https://www.es-e-hormones.org/education/european-board-examination/>

You will also find an online practice paper at

<https://www.es-e-hormones.org/education/european-board-examination/sample-european-board-exam/>.



Simulation via Instant Messaging – Birmingham Advance (SIMBA)



Due to the ongoing COVID-19 pandemic, there is a significant disruption of medical training worldwide. In times like these, continuing education is more important than ever.

Dr Punith Kempegowda and Dr Eka Melson from the University of Birmingham’s Institute of Metabolism and Systems Research (IMSR), conceptualised the idea of an interactive simulation-based learning through instant messaging for medical education. Alongside other like-minded individuals, the idea evolved into Simulation via Instant Messaging – Birmingham Advance (SIMBA). SIMBA was initiated in 2019 as a joint venture between the IMSR and Health Education West Midlands Diabetes and Endocrinology Specialist Training Committee. It is a simple virtual learning environment with case scenarios modelled from real life encounters, which the participants solve by interacting with a moderator in real-time via WhatsApp®. You can learn more about SIMBA at <https://sites.google.com/view/simbasimulation>.

In 2019, the first two sessions of SIMBA with pituitary and technology in diabetes themes were organised for specialist training registrars in West Midlands, UK. Motivated by the success, the third session of SIMBA focusing on adrenal disorders was open for all interested professionals. 40 participants from 15 different countries interacted with 27 moderators. The session was a huge success with 5,537 WhatsApp® texts exchanged between moderators and participants over four hours. This was followed by live interactive Q&A regarding simulated cases between participants and Professor Wiebke Arlt, a leading expert in adrenal pathology at IMSR.

More SIMBA sessions are being planned in the future. While participation is entirely free, places are limited. For more information, please contact simbasimulation@gmail.com

Nia Evans, Meri Davitadze, Punith Kempegowda
On behalf of SIMBA team





ESE Journals

As part of the ESE's mission to advance endocrinology, the society publishes a portfolio of highly-respected journals helping endocrinologists to progress their individual careers through publication and collaboration. The journals cover a broad range of topic areas and cater to both basic scientists and clinicians. Below is an overview of everything you need to know about two of the journals in this collection, the European Journal of Endocrinology (EJE) and Endocrine Connections.

Both journals are published by Bioscientifica, a well-established and trusted society publisher, and run by global and highly-esteemed editorial boards. Should you have any questions about the journals, or how best to get your work published in them please contact a member of the editorial teams at eje@bioscientifica.com or ec@bioscientifica.com.

EJE Clinical & translational endocrinology
from around the globe



European Journal of Endocrinology

EJE is the official journal of the ESE, and publishes high-quality original clinical and translational research papers and reviews in paediatric and adult endocrinology, as well as clinical practice guidelines, position statements and debates. Topics covered include adrenal and steroid, bone and mineral metabolism, hormones and cancer, pituitary and hypothalamus, thyroid and reproduction.

The journal welcomes papers in the fields of diabetes, obesity and metabolism addressing endocrine mechanisms of the disease and its complications, management of obesity/diabetes in the context of other endocrine conditions, or aspects of complex disease management. Reports may encompass natural history studies, mechanistic studies, or clinical trials. The journal publishes several article types, including Clinical Studies, Reviews, Debates, Position Statements and Clinical Practice Guidelines.

The Clinical Studies and Reviews are the standard article types. The Debates take the format of a general introduction written jointly by the proposer and opposer, followed by two distinct sections presenting the evidence for each point of view, followed by concluding remarks.

Debates are published as single articles, providing readers with an excellent overview resource for topics around which there is no current consensus, covering the latest controversies in clinical endocrinology. Debate articles are commissioned by the editorial board and undergo peer review by experts in the field. If you would like to suggest a debate topic please submit a brief outline to the editorial office.

The Guidelines are commissioned by the ESE, a focal point for endocrinology and hormone research in Europe. The ESE collaborates with national and specialty societies, and champion endocrinology at a pan-European level. The Guidelines published are completely free to read. EJE is very proud to be the home of the ESE's Clinical Practice Guidelines.





Endocrine CONNECTIONS

Endocrine Connections is an open-access journal co-owned by the ESE and the Society for Endocrinology (SfE), working together to further research, education and clinical practice in endocrinology. The journal offers authors the highest possible visibility for their work and stimulating cross-discipline collaboration.

The journal publishes basic, translational and clinical research and reviews in all areas of endocrinology, including papers that deal with non-classical tissues as source or targets of hormones and endocrine papers that have relevance to endocrine-related and intersecting disciplines and the wider biomedical community. Topics include metabolic syndrome and diabetes, cardiovascular, thyroid, adrenal, bone and mineral metabolism, hormones and cancer, pituitary and hypothalamus, and reproduction.

The journal considers basic, translational and clinical studies. The journal will consider review proposals on the following subjects:

- **Endocrinology of Chronic Disease:** Covering aging, inflammation, autoimmune endocrine disease and late effects of cancer treatment on the endocrine system including endocrine effects of novel biologicals.
- **Endocrinology of the Nervous System and Behaviour:** Including general neuroendocrinology, with a particular emphasis towards none typical themes such as endocrine effects on behaviour, cognition, circadian rhythms, appetite, libido, stress, neuro-enhancement and gut microbiota effects on the brain.
- **Endocrine-Disrupting Chemicals:** Comprising all aspects of endocrine disruption from exogenous chemicals including nutritional contaminants affecting the endocrine system as well as epigenetic mechanisms involved in endocrine disruption.
- **Drug Interactions on Endocrine systems:** Covering all aspects of drug interactions including effects of immunotherapy, (cancer) kinase inhibitors, interaction of novel biologicals such as monoclonal antibodies as well as side effects of chronic hormone treatment e.g. by corticosteroids.

Members of the ESE or SfE are eligible for a 40% discount on the cost of publication in *Endocrine Connections*. All you need is the membership number for the corresponding author when submitting the manuscript, and the unique discount code will be sent to you.

When a manuscript is submitted to either journal, it will be seen by the Editor-in-Chief or Lead Editor panel (for *Endocrine Connections* and *EJE* respectively), and Senior Editors will be chosen for peer review. The editorial office will gladly guide you through the peer review process and help you with any questions you have. The Publishing Assistants guide the manuscripts through peer review and assist the Editors with any queries on individual papers. The Publishers have a more general oversight of the journals and the topics they represent; they make sure the journal is publishing the most up-to-date, relevant content and help with the commissioning of new reviews and special issues. It's the Publisher's job to help the journal develop and grow, and the Publishing Assistant's job to make sure the day-to-day operations run smoothly. Once a paper is accepted, our dedicated Production team make sure the papers are published as efficiently as possible.

Thank you for taking the time to read this, we look forward to providing you with more information on the other ESE journals throughout the year!

Stephanie Gill & Sarah Morgan
Bioscientifica



Latest research

Type B insulin resistance syndrome in a patient with type 1 diabetes

Sjöholm and colleagues have produced a case report on a young patient who increased her insulin requirements 20-fold within months of developing autoimmune type 1 diabetes. After persistent difficulty in maintaining plasma glucose of <40-60mmol/L, her practitioners suspected type B insulin resistance syndrome and prescribed glucocorticoids. The patient's plasma glucose stabilised at 7-8 mmol/L and she went into remission for around 4 months. Upon relapse, a number of treatments were used (rituximab, mycophenolic acid, and bortezomib), with varying impact. The report highlights the importance of considering type B insulin resistance syndrome in type 1 diabetes patients who demonstrate a sudden and dramatic increase in glycaemia or insulin requirements.

Sjöholm, A., Pereira, M.J., Nilsson, T., Linde, T., Katsogiannos, P., Saaf, J., Eriksson, J.W. (2020). Type B insulin resistance syndrome in a patient with type 1 diabetes, *Endocrinology, Diabetes & Metabolism Case Reports*, 2020, 19-0157

Hepatic inflammation precedes steatosis and is mediated by visceral fat accumulation

There is a wide body of evidence that demonstrates the negative impacts of obesogenic diets on obesity and hepatic health, and cessation of this type of diet has been shown to improve health over the long term. This study sought to investigate the results of withdrawal over a 48-hour period. Male 60-day-old Wistar rats were given standard chow (n = 16) or a high-sugar/high-fat diet (n = 32) for 30 days. A subset (n = 16) of the high-sugar/high-fat diet group were then given standard chow for 48-hours. Casagrande et al. found that hepatic inflammation preceded hepatic steatosis, and that the 48-hour withdrawal from the high-sugar/high-fat diet was able to reverse the majority of the risen inflammatory mediators.

Casagrande, B., de Souza, D., Ribeiro, D., Medeiros, A., Pisani, L., Estadella, D. (2020) Hepatic inflammation precedes steatosis and is mediated by visceral fat accumulation. *Journal of Endocrinology*, 245 (3), 369-380.

Developmental programming of insulin resistance: are androgens the culprits?

In recent years the focus on understanding the developmental pathways of insulin resistance has continued to grow. This review by Puttabyatappa et al. discusses the possibility of maternal androgens acting as key mediators in the programming of insulin resistance. The team discuss various insults that are associated with insulin resistance, such as stress, over/undernutrition, lifestyle, and exposure to endocrine disrupting chemicals, and how they may cause alterations in the balance of maternal steroid hormones and lead to specific increases in androgens. The review suggests that further work is needed to confirm the contribution of androgens to the programming of insulin resistance due to maternal insults. Höybye, C., Puttabyatappa, M., Sargis, R., Padmanabhan, V. (2020). Developmental programming of insulin resistance: are androgens the culprits?, *Journal of Endocrinology*, 245 (3), R23-R48

Adult height prediction by bone age determination in children with isolated growth hormone deficiency

Reinehr et al. wanted to evaluate the precision of height prediction by bone age in children with idiopathic growth hormone deficiency in order to give patients and their parents a realistic prognosis of their adult height. The team retrospectively compared near adult height to adult height predictions derived from bone age. The researchers concluded that predictions of adult height through bone age at the onset and first year of growth hormone treatment in idiopathic growth hormone deficiency children underestimated adult height. Further, when predictions were made based on 6 years post onset of growth hormone treatment, adult height was overestimated.

Reinehr, T., Carlsson, M., Chrysis, D., Camacho-Hübner, C. (2020). Adult height prediction by bone age determination in children with isolated growth hormone deficiency. *Endocr Connect.* 2020 May;9 (5):370-378

Testosterone replacement therapy of opioid-induced male hypogonadism improved body composition but not pain perception: a double-blind, randomized, and placebo-controlled trial

Glintborg and associates sought to deepen the understanding of the effect of testosterone replacement therapy in men experiencing hypogonadism due to opioid treatment. 41 men with total testosterone levels <12 nmol/L were randomised to 24 weeks of testosterone undecanoate injections three times per 6 months (n = 20) or a placebo (n = 21). The 6-month testosterone replacement therapy did improve body composition of the participants. Change in testosterone levels was 12.3 (7.0; 19.9) nmol/L, increased lean mass was 3.6 (2.3; 5.0) kg, and decreased fat mass was -1.2 (-3.1| 0.7) kg. However, there were no significant changes to pain perception, quality of life, or adrenal function.

Glintborg, D., Vaegter, H., Christensen, L., Bendix, E., Graven-Nielsen, T., Andersen, P., Andersen, M. (2020) Testosterone replacement therapy of opioid-induced male hypogonadism improved body composition but not pain perception: a double-blind, randomized, and placebo-controlled trial, *European Journal of Endocrinology*, 182 (6), 539-548.

Philip McBride, UK