Year 02(2023), Issue 02

esbra newsletter

European Society for Biomedical Research on Alcoholism

'ESBRA 2023 Conference and new ECIC members'

Elena Palma — Chair of ESBRA Early-Career Investigators Committee

Dear ESBRA members,

This issue is dedicated to the upcoming ESBRA event of the year: the anticipated biannual conference of our Society. ESBRA 2023 will be held in Graz (Austria) at the end of August and you will not want to miss it!! Check out the preliminary programme! Do you want to know more about the conference organiser and ESBRA's Secretary Prof. Carolin Lackner? Read her interview on **page 2**.

Also, we are very proud to announce one of the Early-Career Investigators Committee (ECIC) initiatives, which will be launched at the ESBRA 2023: the **ESBRA MENTORSHIP PROGRAMME**. We are currently looking for mentors and you will be contacted soon by the ESBRA office, think about it… **this is your chance to be who you needed when you were younger**! More details on **page 5**

Last but not least, the ECIC is getting bigger and we warmly welcome our new members Adelina, Camelia, Jorge, Lucia, Marcus and Sophie. Welcome and we are very happy to have you on board! Meet them on **page 5**.

More in this issue:

Opinions & News in the Alcohol World

* Jerome and Olli reflect on the differences across Europe of the recommended upper alcohol limits, how these differ between males and females and why this is important (page 3).
* Esi, Estelle and Marina have picked and summarised two studies recently published by ESBRA members (page 4).-

Meet the ESBRA Community

Interview with Carolin Lackner

Elena Palma

Elena Palma: What do you do and how have you started working on alcohol research?

Carolin Lackner: I am a professor of Pathology at the Institute of Pathology at the Medical University in Graz, Austria. In 1998, I started my training in pathology, but I was an internist and an oncologist before. I specialised in the liver quite early in my career as a pathologist under the guidance of Professor Helmut Denk. My interest was in fatty liver disease, and I became fascinated by the complex pattern of ALD, which is different in several aspects from NAFLD. I soon realised that morphologically ALD is often described using the same criteria as NAFLD, and I believe this is in part incorrect. It is a different disease with a clinically severe course. Although it is one of the most frequent liver diseases, research into alcohol-related liver disease is still limited. I wanted to do something about this and together with Helena Cortez-Pinto, Philippe Mathurin and Dina Tiniakos we founded the SALVE consortium, which is now endorsed by EASL EASL-SALVE).

We have just started a Europe-wide study, with the aim to include several thousand patients and to investigate the natural history of the disease. A proportion of these patients will be biopsied, and deepen our knowledge about the pathology of ALD. The consortium has its own histopathology group with 12 pathologists. The first step was to define an ALD-specific grading and staging system with a clear prognostic value (SALVE grading and staging). The intention is to record the activity and the stage for clinical studies. The system is also useful for routine because includes a simple version and an expanded version for research studies.

EP: What do you consider the highlight of your research?

Carolin: I would say the research published in Journal of Hepatology where we demonstrated that abstinence and histological factors determine long-term prognosis as well as the definition of the prognostic SALVE grading and staging system. These studies also included a cohort of non-severe ALD, very important because not much is known on this stage.

EP: What was the turning point in your career? And the most significant challenge that you faced?

Carolin: I became a pathologist relatively late and to be accepted as a student by Prof Denk, an expert liver pathologist, has been crucial for my career. He taught me the importance of strict diagnostic criteria to have reproducible and reliable interpretations. Then, a turning point was when I joined the FLIP Consortium, the consortium that defined the SAF scoring system for NAFLD When Professor Denk retired and I took his place in the consortium, I met colleagues and experts, and I was able to make international connections which brought other projects.

I think the most significant challenge for me was at the beginning of my career as a board-certified pathologist when I had to take on the responsibility of reporting. It was a tough job because before that, I had a mentor who trained and guided me, and I could rely on their past experience. But then, I had to take on the responsibility for everything, every little thing, and that was the biggest challenge for me. Even though I have become more experienced, there are still some areas, particularly with paediatric liver biopsies, that can be very challenging and stressful, but at the same time very exciting.

EP: Let's talk about research in Europe, is it a good place for alcohol research? What can be improved?

I believe that Europe is a good place to conduct alcohol research because it has a lesser stigma associated with it compared to some other parts of the world and biopsies are still performed in some centres which allow for better prognosis and patient studies, but the stigma associated with alcohol is still strong. Also, limited funding and a lack of attention

Carolin Lackner is a Professor of Quantitative Pathomorphology at the Institute of Pathology, Medical University of Graz, Austria. She completed her medical education at the University of Innsbruck, School of Medicine, Austria, from 1981-1989, where she earned her M.D. in human genetics. Prof. Lackner's postdoctoral research took her to the University of Texas, Southwestern Medical Center, Dallas, Texas, and the University of Bonn, Germany. She then completed residencies in Internal Medicine, Division of Oncology, and Pathology at the University Hospital Graz, Austria. She serves on international expert committees for the definition of histological scoring systems for grading and staging of fatty liver disease. She is a member of the editorial board for the Journal of Hepatology. Prof. Lackner has also served as Council member of the European Society of Pathology and is the Secretary of the EASL European Association for the Study of Alcoholic Liver Disease (EASL-SALVE) Consortium and of ESBRA.-

towards alcohol research are still significant obstacles that hinder progress in this field. Despite some positive indications, such as the increasing interest of reputable colleagues in the topic, there is still a long way to go to overcome these challenges.

As part of the SALVE consortium and societies like ESBRA, I believe we have the responsibility to attract attention on alcohol research trying to change the lack of funding.

Public engagement is necessary to promote awareness of the dangers of alcohol.

There should be a joint effort from researchers, clinicians and politicians to make people aware of this harm. In Austria, we are proud of our health system, but there are still significant gaps in care. Clinical practice should be implemented connecting physicians from addiction centres with liver specialists. Only recently, patients attending rehab are monitored for liver disease. It is unbelievable that the major organ involved in alcohol metabolism was not even included in routine checks for those patients. But now this is possible, especially thanks to non-invasive methods for the detection of liver fibrosis like the fibroscan.

Another big limitation comes from the fact that, because of the stigma associated with alcohol, physicians may be hesitant to discuss alcohol consumption with patients as this could affect their interaction with them and in some countries the diagnosis of alcohol-related organ disease may also have legal consequences and influence health insurance coverage. There is a lack of guidelines on this topic, and medical students should specifically be trained to appropriately interact with somebody who has an addiction problem.

By the public, the presence of alcohol-related injuries is often perceived as a sign of alcohol dependence, but this is often not the case. While some individuals may struggle with addiction and need professional help, many others simply have a habit that they can change. People may not even realise that social drinking, which is common in Europe, can still put them at risk of alcohol-related injury if they are susceptible.

EP: Are there any funds particular for alcohol in Austria?

Carolin: No. Absolutely nothing.

EP: What is missing in Europe for alcohol research?

Money, money, money! Funding is crucial, grant calls should specifically target alcohol research, too many groups struggle to secure funding.-

Opinions & News in the Alcohol World

Differences in Harm Reduction Policies in Europe: What about the sex factor?

Jérôme Jeanblanc & Olli Kärkkäinen

Most countries in Europe have separate low-risk drinking recommendations for men and women. Exception to this rule are France, Lithuania and United Kingdom, where the recommendation is same for all. Does it make sense to have separate limits, or would it be clearer to communicate only one recommendation for all individuals?

There are sex differences in response to alcohol. There is evidence that suggests that females have higher risk of developing alcohol associated diseases like liver disease, hypertension, and brain damages (here and here). On a level of individual dose, blood alcohol concentrations are on average higher after a standard drink in females, due to lower distribution volume and first-pass metabolism. This would seem to support having separate limits for different sexes. However, one could also argue that the biological variance between individuals is higher that the differences between sexes and that sex is by no means the only thing influencing risk of developing alcohol associated diseases. Furthermore, using same low-risk drinking recommendations for all individuals would enable making recommendations gender inclusive, i.e., using gender neutral language.

Furthermore, if we look at the current recommendations, they are in most countries high compared to recent evidence. To certain alcohol related diseases, there is no safe level of use and drinking at the level of even one drink per day already has been associated with negative health effects. Indeed, the limit fixed by the different countries is not linked to an absence of negative effect. For example, in France the calculation of these 2 drinks per day and no more than 10 per week has been made based on the risk of having no more than 1% of the population who will die from this regimen of alcohol consumption.

If one would do a toxicological risk-assessment on alcohol in a similar manner as to other chemicals, the acceptable daily intake would be around 3-4 grams of alcohol per day (~20-50% of a standard drink, depending on the definition of standard drink which vary between European countries). If looked in this light, all European recommendations for low-risk drinking might be too high.

Overall, governments had to choose between making simple message easy to understand but with less information, and at the expense of prevention for women, or giving specific limits by sex making more information and potentially more complicated messages. Unified low-risk drinking recommendations across Europe by sex would make communication of these recommendations more straightforward and adapted to the real risks.-

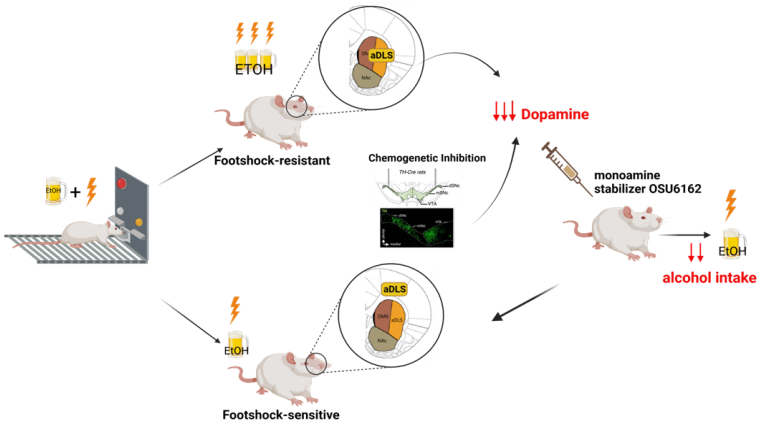
Research highlights

Graphical summaries or mini-reviews of recent publications

Esi Domi, Estelle Barbier, Marina Vetrova

Dopamine plays an important role in alcohol use disorder but its exact role remains to be determined. This paper provides a potential critical role of tonic nigrostriatal hypodopaminergic states in compulsive alcohol use, a cardinal feature of alcohol use disorder.

Hypodopaminergic state of the nigrostriatal pathway drives compulsive alcohol use



R. Goutaudier et al., https://www.nature.com/articles/s41380-022-01848-5. Psychiatry 2022; DOI: 10.1038/s41380-022-01848-5

HIGHLIGHTS

- **Compulsive alcohol use** is a core feature of alcohol use disorder.
- Rats expressing compulsive-like alcohol use, operationalized as punishment-resistant self-administration, showed a **decrease in Dopamine (DA)** levels in the dorsolateral striatum.
- **Hypodopaminergia of nigrostriatal DA** pathway induces compulsive-like alcohol self-administration
- The **mononoamine stabilizer OSU6162** decreased compulsive-like alcohol self-administration in vulnerable rats.
- This study provides new insights into our understanding of the neurobiological mechanisms underlying compulsive alcohol use.

Can body mass index (BMI) of patients with alcohol use disorder (AUD) predict their success in addiction treatment?

Understanding the potential relationship between the individual physiological characteristics of the patient, such as body mass index (BMI), and the success of addiction treatment in patients with alcohol use disorder (AUD) might be important for developing personalized and effective treatment strategies.

A recent study found that BMI and sex interacted to predict the risk of readmission within 24 months, which is an indicator of the difficulties in maintaining recovery.

In male patients, a higher BMI was associated with higher risk of readmission, while the opposite was true for female patients. Therefore, BMI potentially could be used as a sex-sensitive to predict the outcome of AUD treatment in clinical practice. However, the results should be interpreted with certain limitations in mind, such as retrospective nature and risk of data-driven results, and consideration of other clinical parameters (e.g. comorbidities, severity of AUD, and drinking quantities) should be taken into account.-

Hoffmann, S., Gerhardt, S., Koopmann, A., Bach, P., Sommer, W. H., Kiefer, F., ... & Lenz, B. (2023). Body mass index interacts with sex to predict readmission in in-patients with alcohol use disorder. *Addiction Biology*, *28*(1), e13239.; DOI: 10.1111/adb.13239

ESBRA Early-career Investigators Committee (EECI)

Welcome to our new Committee members!

Camelia Gianina Foncea

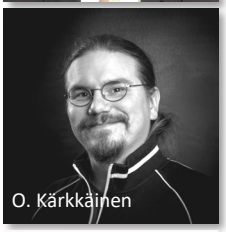
Lucia Hipolito

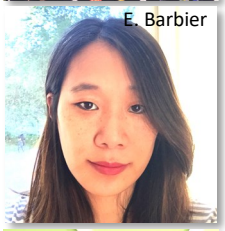
Adelina Horhat

Sophie Leclercq

Jorge Martins

Marcus Meinhardt





The ESBRA Early-career Investigator Committee launches an ESBRA mentorship programme

The aim of this ESBRA mentorship programme is to provide support to early career investigators in their career development. Mentees will receive guidance from senior and experienced mentors over the period of 6 months via mentor-mentee (virtual) monthly meetings. Are you interested in applying for this programme, then please provide the following:

Eligibility criteria:

- Applications are sought from early career investigators.
- The candidate must have a background in alcohol-related research.
- The candidate must be living in a European country.
- The candidate must become an ESBRA member when accepted for the ESBRA mentorship programme (or be already a member at the time of application).

Your application should include:

- A complete CV showing your career path and your research focus.
- A motivation letter detailing your interest in joining mentorship programme, the objectives you would like to achieve and some suggestions for preferred mentors (if any).

And if you are a senior investigator and would like to volunteer to become a mentor, please let us know. A survey will be sent out soon via email to collect potential interest.

The call is ***open until 15th July 2023***. Send your application to the ESBRA office (office@esbra.com). All applications will be reviewed by the ESBRA ECI committee. For questions, please do not hesitate to contact the EECI committee chair Elena Palma (e.palma@researchinliver.org.uk).-

contacts & links

European Society for Biomedical Research on Alcoholism

How to become a member of ESBRA:
https://www.esbra.com/membership

ESBRA calendar:
https://www.esbra.com/calendar

Job opportunities:
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The Society's journal:
Alcohol and Alcoholism

Year 02(2023), Issue 02