This issue focuses on:  
**Dysfunctional Immunity in Alcohol Use Disorder**

By Ricardo Pautassi

Alcohol consumption induces changes in the body's immune response, even in the absence of any diagnosed condition. Research in pre-clinical settings has revealed that acute exposure to alcohol, even in the absence of an infection, triggers inflammatory pathways, such as those mediated by toll-like receptor ligands, ultimately leading to a dysregulated neuroimmune profile (Barney et al., 2022). The impacts, however, become more pronounced with chronic alcohol exposure.

A recent study conducted in patients with biopsy-confirmed alcohol-related hepatitis (AH) revealed that 40% of them developed acute-on-chronic liver failure (ACLF, a condition associated with highly raised mortality and strong immune dysfunction) upon hospital admission, while 16% developed it within 28 days (Broekhoven et al., 2024).

Individuals diagnosed with alcohol use disorder (AUD) display a range of immune alterations, heightening their vulnerability to bacterial infections, particularly pulmonary infections like tuberculosis (Wigger et al., 2022). This susceptibility is attributed to alcohol's adverse effects on alveolar macrophages and other components of the pulmonary innate immune system. Moreover, AUD is a recognized risk factor for mortality due to sepsis and septic shock (Roychowdhury et al., 2023), with recent preclinical investigations beginning to unveil the underlying mechanisms. For instance, Gandhirajan et al. (2021) demonstrated in C57Bl6 mice a dampened immunity against bacterial sepsis, reduced bacterial clearance and reduced survival following chronic alcohol exposure, linked to an upregulation of the enzyme SIRT2.

Given the strong role played by the immune system, immunomodulation and immunotherapy strategies may represent a novel and promising area of investigation to develop new treatments for these patients.

**References**


**Lymphocyte-related ratios, systemic immune-inflammatory and systemic inflammatory response index in alcohol use disorder**

The idea that psychiatric disorders may be caused by chronic inflammation is being increasingly accepted. While previous research has addressed the direct link between alcohol use and reduced blood cell counts in Alcohol Use Disorder (AUD), the relationship between alcohol use and two novel markers, Systemic Immune-Inflammation Index (SII) and Systemic Inflammatory Response Index (SIRI), has not been established. In this retrospective observational study, the authors compared inflammatory parameters including SII, SIRI, and lymphocyte-related parameters between patients with AUD and healthy controls. Results showed that SIRI, neutrophil-to-lymphocyte ratio (NLR), and monocyte-to-lymphocyte ratio (MLR) were significantly higher in the AUD group, supporting the hypothesis that AUD is a chronic inflammatory psychiatric disorder.


**Single-cell transcriptomics of peripheral blood mononuclear cells indicates impaired immune and inflammatory responses in alcohol-associated hepatitis**

Defective immune responses are often observed in patients with alcohol-associated hepatitis (AH), which is also a contributing factor to the high mortality rate associated with AH. In this study, Liu and colleagues performed combined single-cell transcriptomics, cell-surface protein assessment, and lymphocyte antigen receptor analysis on peripheral blood mononuclear cells (PBMCs) from three AH patients and two healthy controls. The authors reported differences in monocyte, NKT, and MAIT cell counts between the two groups, as well as in the expression profile of cytokines and chemokines in monocytes. Moreover, it was suggested that the differentially expressed NK cell receptors KLRC2 and KLRG1 may be responsible for the defective NK cell response in AH. The authors also pointed out that the sample size was small as it was a preliminary study, and further studies were needed to validate the findings.


**Mean platelet volume and mortality in patients with alcohol use disorder**

There has been increasing attention on the relationship between mean platelet size/volume (MPV) and the overall survival of patients with various conditions such as infection, but the mechanism behind this is not fully understood. Given that there is evidence that some proinflammatory cytokines can affect platelet size, and that alcohol use disorder (AUD) is an inflammatory condition, Martin-Gonzalez and colleagues aimed to establish a link between proinflammatory cytokines, MPV, and survival in AUD. Serum levels of TNF-α, IL-6, and IL-8, and MPV of AUD patients were determined at predefined timepoints during a 42-month period. Results showed direct correlations of MPV with IL-6 and IL-8, and an inverse correlation between MPV and TNF-α. In terms of mortality, it was found to be related to MPV at admission, but only in patients who continued drinking.


**Chronic alcohol consumption dysregulates innate immune response to SARS-CoV-2 in the lung**

A large body of research has provided evidence that alcohol use disorder (AUD) is associated with impaired immune responses and increased susceptibility to infection. More recently, increased severity of COVID-19 has been reported in patients with AUD, and the authors of this study set out to understand the effect of chronic heavy drinking (CHD) on the anti-viral response to SARS-CoV-2. Bronchoalveolar lavage (BAL) samples were obtained from healthy controls and AUD patients where BAL-resident immune cells were isolated and infected with SARS-CoV-2, and the expression of immune mediators was assessed. A non-human primate (NHP) model of voluntary ethanol self-administration was also used and results from the two were compared. Results showed that acute innate immune response to SARS-CoV-2 was predominantly affected by CHD. However, opposing trends in inflammatory mediators production was seen when comparing results from the NHP model to that from human samples.


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**Interesting Recent Publications**

By Phoebe Tsou & Maribel Rodriguez-Perez
News & Events

Past events

The Liver Meeting - AASLD (American Association for the Study of Liver Disease)
When: November 10-14, 2023
Where: Boston, Massachusetts, USA

APSAD Scientific Alcohol and Drug Conference (Australasian Professional Society on Alcohol & other Drugs)
When: November 12-15, 2023
Where: Adelaide, Australia

2nd International Conference on Addiction & Psychiatry
When: November 20-21, 2023
Where: London, United Kingdom

MCA Annual Symposium on Alcohol-related Health Harm
When: November 22, 2023
Where: London, United Kingdom

Gordon Research Seminar: Mind the Gap: Translational Approaches to Understand Alcohol Use
When: February 10-14, 2024
Where: Galveston, Texas, USA

Gordon Research Conference: Translational Neuroscience of Alcohol: Integration of Basic and Clinical Research
When: February 11-16, 2024
Where: Galveston, Texas, USA

Managing Addictions in Primary Care Conference
When: February 22-23, 2024.
Where: London, United Kingdom

EASL Liver Cancer Summit (European Association for the Study of the Liver)
When: February 22-24, 2024
Where: Rotterdam, The Netherlands

46th Annual IntNSA Educational Conference (International Nurses Society on Addictions)
When: February 27-March 1, 2024
Where: Charleston, SC, USA

Future events

National Drug and Alcohol Facts Week® (NDAFW)
When: March 18-24, 2024

33rd Annual Meeting of the Asian Pacific Association for the Study of the Liver (APASL)
When: March 27-31, 2024
Where: Kyoto, Japan

55th ASAM Annual Conference (American Society of Addiction Medicine): Innovations in Addiction Medicine and Science
When: April 4-7, 2024
Where: Dallas, TX, USA

12th Annual Collaborative Perspective on Addiction Conference
When: April 11-13, 2024
Where: Denver, CO, USA

Addiction Medicine Conference
When: April 19-20, 2024
Where: Asheville, NC, USA

Alcohol Policy 20
When: May 14-16, 2024
Where: Arlington, VA, USA

Be ready for an amazing Australian experience!

Congress of the International Society for Biomedical Research on Alcoholism 2024
23 – 26 September 2024, Melbourne Convention and Exhibition Centre
How did your interest grow in the area of alcohol research?

I was very fortunate to work as a staff research assistant in the Consortium on Genetics of Alcoholism (COGA) project at the University of California, San Diego. I had the opportunity to interview individuals and families affected by alcohol use disorder (AUD). That was a very eye-opening experience as I learned how devastating AUD can be to individuals and their loved ones. These formative experiences set the stage for me to study AUD in my doctoral and postdoctoral training. As I began my independent laboratory at UCLA, I have become increasingly committed to developing scientific protocols that can be clinically informative. As my career progresses, I have an increased sense of urgency to produce advances in the field that can have direct clinical care implications. As a practicing clinical psychologist, I learn so much from my patients as I continuously attempt to make my scientific knowledge of AUD, clinically useful to their recovery.

You served as President of the Research Society on Alcohol from 2022 to 2023. How did you get involved with the societies for research on alcohol, and how do you think global academic organizations can fuel the development of research?

It was an honor to serve as the President of RSA last year. I was involved in RSA since my very first year as a graduate student. During my presidential year, the focus on inclusiveness and strategic planning for the society’s future were my top priorities. I have had the opportunity to attend multiple ISBRA meetings abroad and I deeply value my membership in ISBRA. It is a great opportunity to broaden my thinking and understanding of AUD as a global health issue. It is also important to recognize how clinical research in AUD is conducted in countries outside the US. As a Brazilian national, I understand first-hand the differences in the context of AUD development and its treatment between Brazil and the US. Participating in global academic organizations has only expanded my understanding of contextual factors in AUD. In my opinion, the more we can foster an understanding of determinants of AUD globally, the more we can reach our shared goal of reducing the burden of alcohol use disorder. Global academic organizations are critical to fostering such broad and inclusive understanding of diseases which can in turn inform the development of research that has the potential for global impact.

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What were the challenges you found during the early stage of your career as a scientist, and how did you overcome that?

One of the main challenges I experienced in the early stages of my career was the need to demonstrate independence. I had to demonstrate...
that my independent laboratory could produce high-impact research, including the execution of sound human laboratory studies and clinical trials. I was able to overcome those efforts with determination and some acceptance that those were the “growing pains” of developing an independent laboratory. I am a firm believer that the “data always have something to tell us, even if contrary to our hypotheses” and that hard work is necessary for success. I am fortunate to the amazing trainees who have embarked on this journey with me to develop and advance an independent clinical laboratory in AUD.

What are some of the significant discoveries you have made in your research regarding the role of the immune system in alcohol use disorder?

The immune system has been extensively studied in preclinical models over the past decade. I am proud that my laboratory has been able to translate some of these findings to clinical samples with alcohol use disorder. Through our study of ibudilast, a neuroimmune modulator, we found that this medication reduced central and peripheral markers of inflammation in individuals with AUD. Importantly, those reductions were in turn associated with reduced alcohol consumption and alcohol craving. I am puzzled by the durability of the ibudilast effect since our positive trials had a 2-week duration, whereas our 12-week trial did not support the efficacy of this medication. As we continue to elucidate these findings, I believe it will be critical to understand how neural systems adjust to neuroimmune modulation and in turn, how that affects alcohol consumption. Individuals at elevated levels of inflammation at baseline showed the best response to ibudilast. This is, in my opinion, another important avenue to continue to pursue as we move towards precision medicine.

What, in your opinion, are the most significant advancements in potential treatments for alcohol use disorder within the field of immunomodulation?

As I alluded to in the previous question, the durability of the effects of neuroimmune modulators and the identification of treatment responders are two critical areas for future research. I would love to see the use of biomarkers, such as C-reactive protein (CRP), used in immunomodulation treatment development. I believe that clinicians would respond...
well to biomarker-informed treatment recommendations, especially when such markers are readily accessible in clinical care.

In terms of the most significant advancements, I would say that the faster rate of translation from preclinical to clinical studies is a major collective achievement in the field. These translational approaches provide a robust model for additional studies in immunomodulation for AUD, as well as other treatment development efforts.

What is the take home message you want to convey to the young investigators

I would love to encourage young investigators to follow their passion for science and to think deeply about the ways in which their findings truly affect clinical outcomes. I firmly believe that having a “big picture perspective” is key to success as a scientist. I would also encourage young investigators to learn from their data and to stay open to what the results may teach them. A perceived “failure to support a hypothesis” is truly an opportunity to refine that hypothesis and to grow. Lastly, I would like to encourage young investigators to develop their own network of near-peers. It is wonderful to grow up in the field with peers who support one another. Science is not an “arms race”, it is a lifelong journey that is much more enjoyable with like-minded and supportive peers.

Affiliated societies updates

Updates will be published in the next issue (May 2024)

European Society for Biomedical Research on Alcohol (ESBRA)
https://www.esbra.com/

Japanese Medical Society of Alcohol and Addiction Studies (JMSAAS)
https://www.jmsaas.or.jp/

Latin American Society for Biomedical Research on Alcoholism (LASBRA)

The Research Society on Alcohol (RSA)
https://researchsocietyonalcohol.org/

Asia-Pacific Society for Alcohol and Addiction Research (APSAAR)
https://www.apsaar.org/
The 34th American Academy of Addiction Psychiatry (AAAP) Annual Meeting and Scientific Symposium

The 34th Annual Meeting and Scientific Symposium of AAAP took place from December 7th to 10th in San Diego, California, USA. The conference program included multiple symposia, workshops, and case conferences with topics spanning across various areas of addictions. There were two sessions specifically focusing on alcohol use disorder. The first was a case conference titled “Alcohol use disorder in one of our own—Challenges of treatment engagement in a resident physician”, which was led by Arun Prasad, MD from the Mount Sinai Health System. The second was a symposium titled “Alcohol and addiction psychiatry—Where are we now?”, led by Laura Kwako, PhD, Chief of the Treatment, Health Services, & Recovery Branch (THSRB) in the Division of Treatment and Recovery at the National Institute on Alcohol Abuse and Alcoholism (NIAAA). The presenters of this symposium included George F. Koob, PhD, Director of the NIAAA; Brett Hagman, PhD, Program Director of the Treatment, Health Services, and Recovery Branch at the NIAAA; and Nancy Diazgranados, MD, MS, Deputy Clinical Director of the NIAAA. This symposium presented NIAAA’s broad perspective on the intersection of addiction psychiatry and alcohol use, misuse, and alcohol use disorder. The three learning objectives of the symposium included: 1) identify major causes of the alcohol treatment gap and health outcomes related to alcohol misuse, 2) define the new NIAAA recovery definition and describe clinical implications of this definition, and 3) describe the three neurofunctional domains included in the addictions neuroclinical assessment and their corresponding brain circuits.

More details on the conference program is available online at https://www.aaap.org/training-events/annual-meeting/2023-annual-meeting/schedule/. •

Figure 2: Publishing journals on dysfunctional immunity on AUD. For more information go to “Figure Legends” at page 11
Research assistant – Institute for Drug and Alcohol Studies, Virginia, United States

Position Overview:
Join the dynamic team at VCU’s Institute for Drug and Alcohol Studies (IDAS) as a Research Assistant! In this role, you’ll support our cutting-edge research on the neuroscience of addictions, particularly focusing on data collection for the Adolescent Brain Cognitive Development (ABCD) Study. As part of a premier urban public research university, you’ll have the opportunity to contribute to groundbreaking discoveries and advance your career in a supportive environment.

Desired Skills:
We’re seeking candidates with a strong interest in neuroscience and addictions research, along with excellent organizational and communication skills. The ideal candidate will demonstrate proficiency in data collection techniques and possess a keen attention to detail. Prior experience in biomedical behavioral research or working with human-subject volunteers is preferred.

If you’re interested, you can find more information at: https://n9.cl/mkyh2

Research Assistant – Addiction Recovery Research Center (ARRC), Virginia, United States

The Addiction Recovery Research Center (ARRC) at the Fralin Biomedical Research Institute in Roanoke, VA, is currently seeking a Research Assistant to join its team. Dedicated to understanding and treating substance use disorders, ARRC focuses on decision-making processes and interventions related to substances such as tobacco, alcohol, and cocaine. As a Research Assistant, you’ll be integral to supporting NIH-funded research projects, collaborating with a team to collect and organize human subject data for grant-funded initiatives.

Figure 3: Authorship network on dysfunctional immunity on AUD. For more information go to “Figure Legends” at page 11
Desired Skills:
The ideal candidate for this position will have demonstrated organizational prowess and experience in data management. Candidates should thrive in fast-paced research environments and possess exceptional attention to detail, as well as strong written and oral communication skills. Given the nature of the work, maintaining confidentiality and professionalism is paramount. Candidates will work both independently and collaboratively to support various laboratory and research activities.

If you’re interested, you can find more information at the following link: https://n9.cl/ag6cz

Epidemiologist - Center for Chronic Disease Prevention and Control (CCDPC), Maryland, United States

Position Overview:
The Center for Chronic Disease Prevention and Control (CCDPC) within the Maryland Department of Health is seeking an Epidemiologist I (Alcohol Surveillance Epidemiologist) to join its team. This position plays a crucial role in supporting state and local initiatives aimed at preventing excessive alcohol use by providing high-quality surveillance and statistical data analysis. As part of the BRFSS and Data Team, the Epidemiologist I contributes to the development and implementation of effective chronic disease prevention programs, serving as a key resource for data-related needs.

Desired Skills:
The ideal candidate will demonstrate proficiency in programmatic and budget oversight, surveillance system expertise, and data analysis techniques. Strong communication skills are essential, as the Epidemiologist will be responsible for presenting data to various audiences through reports, presentations, and other documents.

If you're interested, you can find more information at the following link: https://n9.cl/8vpbk

Figure 4: Authors’ keywords networks on dysfunctional immunity on AUD publications. For more information go to “Figure Legends” at page 11.
Who are we?
The International Society for Biomedical Research on Alcoholism (ISBRA) Early Career Investigator (ECI) Association, henceforth referred to as ISBRA-ECI, is a committee that acts as the representative body for ECI members of ISBRA. Early career investigators are defined as 1) undergraduate students, 2) graduate students, 3) postdoctoral fellows, 4) individuals who have completed their terminal degree or their post-graduate clinical training within the past 5 years and are currently engaged in alcohol-related research.

What is our mission?
The mission of ISBRA-ECI is to cultivate a vibrant and supportive community for emerging scientists dedicated to advancing knowledge in alcohol research. We are committed to providing resources, mentorship, and networking opportunities to empower early career investigators to excel in the research and career pursuits. Through collaboration and knowledge exchange, we aim to foster innovation, nurture talent, and contribute to the growth and impact of alcohol research globally. Our mission is rooted in a collective dedication to shaping the future of scientific inquiry, promoting interdisciplinary collaboration, and ultimately advancing solutions for the challenges posed by alcohol-related health issues.

How do you join?
You can join us by emailing us at eciisbra@gmail.com or by joining the ISBRA-ECI Whatsapp group chat. We meet monthly, and these virtual meetings are open to all members. Currently, the ISBRA-ECI meets on the second Tuesday of each month at 9AM PST/12PM EST/6PM GMT+2. Meeting minutes from each meeting are distributed through the ISBRA-ECI mailing list, and archived in the ISBRA-ECI Google Drive.

What’s our plan for the ISBRA 2024 Congress?
We are excited to announce our inaugural Mentor-Mentee Speed Dating session during the ISBRA 2024 Congress! Mentors play a pivotal role in shaping the growth of professionals, influencing their career goals, and contributing to the evolution of their professional identity. This mentoring session brings together early-career and senior researchers from diverse backgrounds—academic, industry, nonprofit, and government. It features a unique “Mentor-Mentee Speed Dating” format, where mentees rotate among multiple mentors, engaging in sessions for mutual questioning. The purpose is to facilitate rapid yet meaningful interactions, promoting networking, confidence building, and research collaborations. The event provides a framework to discuss various aspects, including personal and professional challenges, career paths, and transitions from research to industry/clinical work. Overall, the session encourages the development of a supportive research community, outlines career paths and research opportunities, and promotes individual growth.

We are looking for mentors to participate in this event! If you are interested, please reach out to us at eciisbra@gmail.com, or sign up for the speed dating session when you register for the ISBRA 2024 congress! We look forward to meeting mentees and mentors in Australia.

Tommy Gunawan
Post-doctoral researcher,
National Institute on Alcohol Abuse and Alcoholism,
National Institutes of Health,
Bethesda, MD, USA.

Paola Palombo
Post-doctoral researcher,
Department of Psychobiology,
University of São Paulo,
Brazil.

Florencia Anunziata
Post-doctoral researcher,
Department of Pediatrics,
University of California San Diego, USA.

Pek Kei (Becky) Im
Intermediate Research,
Nuffield Department of Population Health (NDPH),
University of Oxford, UK.

Taija Voutilainen
PhD in Pharmacy in the University of Eastern Finland,
Kuopio, Finland.

Leandro Ruiz-Leyva
Post-doctoral researcher,
Neurobiology department,
University of Alabama at Birmingham, Alabama, USA.

Natália Almeida-Antunes
PhD student,
Psychological Neuroscience Laboratory (PNL),
Research Center in Psychology (CIPsi),
University of Minho, Portugal.

Marion Friske
Post-doctoral researcher,
Waggoner Center for Alcohol and Addiction Research,
The University of Texas at Austin, Texas, USA.

Franca Schmid
Post-doctoral researcher,
Department of Psychology,
University of Reims Champagne-Ardenne,
Reims, France.
Join the Leading Edge of Alcohol Research: ISBRA Offers 2-Year Free Membership for Emerging Investigators!

Are you an aspiring Early Career Investigator (ECI) looking to make your mark in the field of alcohol research? Look no further! The International Society for Biomedical Research on Alcoholism (ISBRA) is thrilled to present a limited-time opportunity that will catapult your career to new heights.

Introducing ISBRA’s Pathway to Excellence: 2-Year Free Dues for New ECIs

At ISBRA, we understand the critical role that ECIs play in shaping the future of alcohol-related biomedical research. That’s why we’re excited to extend an exclusive invitation to new ECIs worldwide. Join us in our mission to advance scientific knowledge and promote cutting-edge research in alcoholism by taking advantage of our unprecedented 2-year free dues offer.

Why Choose ISBRA?

- **Global Network**: Connect with a diverse community of researchers, clinicians, and experts in the field of alcohol research. Expand your horizons through collaborations and discussions that transcend geographical boundaries.

- **Educational Resources**: Gain access to numerous resources, including the ISBRA Bulletin, ISBRA Podcast and ISBRA Newsletter, which provides information about publications, webinars, and conferences, providing you with the latest insights and developments in alcohol-related biomedical research. Access promising career opportunities through job listings, stay attuned to updates from affiliated societies, and indulge in thought-provoking interviews with renowned scientists.

- **Career Development**: Harness the power of ISBRA’s mentorship programs and workshops tailored to ECIs. Receive guidance from seasoned professionals and refine your skills to achieve your career goals in our events.

- **Impactful Research**: Showcase your work on a global platform through ISBRA’s events and publications. Contribute to groundbreaking discoveries that have the potential to shape public health policies.

- **Awards**: As a ECI member, you will have the chance to apply for travel grants, affording you the privilege of attending ISBRA meetings! Your dedication and exceptional contributions as an ECI will be acknowledged through our prestigious Early Career Investigator Award. You will have the opportunity to show your work through oral presentations at our future meetings.

- **Fostering Diversity and Equity**: Introducing the Underrepresented ISBRA Trainees/Students (UNIT) Award. ISBRA’s commitment to inclusivity is unwavering, and to amplify this dedication, we proudly unveil the Underrepresented ISBRA Trainees/Students (UNIT) Award. This innovative initiative creates a vital fund tailored to bolstering underrepresented students engaged in alcohol research. Our aim is to level the playing field, extending equitable opportunities to ISBRA trainees/students from developing countries. This award covers the expenses associated with a visit to a lab of choice (from a list of available labs) in the metropolitan area of the congress for a week.

**How to Redeem This Offer**

Claiming your 2-year free dues as a new ECI couldn’t be simpler:

1. Visit our website at [www.isbra.com](http://www.isbra.com) and navigate to the “Membership” section.
2. Select the “Early Career Investigator” option during the registration process.
3. Complete the application, providing your information and background details.
4. Enjoy two years of full membership benefits without any financial obligation!
5. Join Us Today and Be Part of the Next Wave of Alcohol Research Pioneers!
6. Seize this unique opportunity to ignite your research career and propel your work to the forefront of alcohol-related biomedical research.

**ISBRA welcomes you!**

Terms and conditions apply. **The offer is valid for eligible Early Career Investigators for a 2-year period with waived dues.** Offer valid for eligible Early Career Investigators for 2-year free dues. ISBRA reserves the right to modify or terminate this offer at any time.

**E-mail:** isbra@isbra.com

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**Infographics on publication analysis.**

**Figure 1 — Abstract text analysis.** The main co-occurrence network constituted by the top 4.8% semantical units (570/11767) appearing in abstracts from all the English-language papers on immune dysfunctions in AUD (2013-2023) (n=1514). Each semantical unit is scaled by number of occurrences. The coloured density gradients identify clusters of more closely co-occurring keywords.

**Figure 2 — Publishing journals.** The main density network with the top 23.8% journals (67/281) publishing English-language papers on immune dysfunctions in AUD (2013-2023) (n=1514). Each journal is scaled by number of citations. The coloured density gradient identifies more or less cited journals.

**Figure 3 — Authorship network.** The main co-authorship network constituted by the top 9.6% authors (217/2261) who have published English-language papers on immune dysfunctions in AUD (2013-2023) (n=1514). Nodes are individual authors, scaled by normalized citations. Lines are co-authorship links.

**Figure 4 — Authors’ keywords network.** The main co-occurrence network constituted by the top 20.2% semantical units (268/1328) used as authors’ keywords in all the English-language papers on immune dysfunctions in AUD (2013-2023) (n=1514). Each semantical unit is scaled by number of occurrences. The coloured density gradients identify clusters of more closely co-occurring keywords.

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National Institute on Alcohol Abuse and Alcoholism announces content on Kahoot!

Friday, February 16, 2024

How does alcohol affect a teen’s health? Test your knowledge about underage drinking with an online quiz, now available from Kahoot! The National Institutes of Health (NIH) has partnered with Kahoot!, an online learning platform, to provide free interactive quizzes and games for educators and learners. The National Institute on Alcohol Abuse and Alcoholism (NIAAA) is excited to have content available in NIH’s Kahoot! quiz collection. High schoolers, whether at home or in the classroom, can take NIAAA’s Kahoot! quiz about underage drinking to learn how alcohol affects their brain and body. The quiz is designed to help students have a better understanding of underage drinking, the negative health consequences associated with drinking, the signs of an alcohol problem, and how they can find support for friends, family, or themselves.

Explore NIAAA’s other resources for students, educators, and parents about underage drinking, including the new website Facts About Teen Drinking. This resource, designed for teens, contains more in-depth information about how alcohol affects health—both short and long term—how to identify signs of a problem, and how to get help.

You can visit NIH’s Kahoot! profile page for quiz content from other NIH components. Topics include teen depression, superbugs, health literacy, lung health, and more.

For more information:


https://create.kahoot.it/profiles/e2704dfe-cfda-4b92-bb23-666f2463fe29
ISBRA Communications Committee—Who are we?

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Be part of an organization that is dedicated to building community amongst ISBRA’s diverse population; that is committed to bringing news about career building resources and events to ISBRA members; to being a voice regarding issues that are of importance to ISBRA members. Contact the Communications Committee Chair to find out about being a part of the Communications Committee.

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**We are on the Web**

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