### **Annual Report**

December 2022

# **ICCAS 2022**

Activity summary and publications





Dr. Clara Rubinstein

The time has come to take stock of what has been done. This past year found us working as always and gave us the opportunity of getting back together again with our dear colleagues, although the virtual modality brought by the pandemic is clearly here to stay.

In 2022 we organized 12 online activities, among these our **Charlas ICCAS del Mediodía** (*Lunchtime Talks*) have become an excellent habit that reaches tons of professionals interested in updating their knowledge in a variety of topics. Through our YouTube Channel (@ICCASCiencia) these have reached over 3,400 people on and offline.

This modality has allowed us to move forward on our mission of contributing to the capacity building of professionals in a more inclusive manner. In 2022, ICCAS has focused specially on capacity building sessions and professional update of excellence, not only because of the subjects but also because of the experts in charge of them. Some of the topics were: Obesity, Immunonutrition, and Alternatives Methods for Risk Assessment. Among the participants we had high level specialists both from different parts of Argentina as well as from other regions.

Regarding the our collaborative ecosystem, in September we held the **IV Forum on Responsible Communication**, this year was held on hybrid mode and was focused on how food and nutrition topics are communicated through different channels and platforms, including the doctor's office. These Forums are co-organized under the umbrella of **InfoAlimentos**, which ICCAS, **Barceló Foundation** y **ArgenBio** are part.

Last year, the three institutions were recognized with the prestigious 2021 **Braun Menéndez Award** for the transmission of knowledge and dissemination of science and/or technology in Argentina, given by the Argentine Association for the Progress of Science (Asociación Argentina para el Progreso de la Ciencia - AAPC equivalent to the AAAS in the US) to the InfoAlimentos portal. This makes us proud and encourages us to keep on this path of providing quality information on food and nutrition to different audiences that need it.

Additionally, we have collaborated with the Iberoamerican Society of Environmental Health (Sociedad Iberoamericana de Salud Ambiental - SIBSA) and the Argentine Association of Sanitary Engineering and Environmental Sciences (Asociación Argentina de Ingeniería Sanitaria y Ciencias del Ambiente - AIDIS Argentina) to co-organized the **Series of Talks on Safe Waters**; and with the International Society on Immunonutrition (Sociedad Internacional de Inmunonutrición - ISIN) on the International Course on Immunonutrition: From the Experimental to the Human.

Also, we signed cooperation agreements with the Foundation Center for Infectology Studies

(Fundación Centro de Estudios Infectológicos FUNCEI Stamboulian Foundation), with Barceló Foundation Medical School, ISALUD University and the Argentine Institute for Quality (Instituto Argentino para la Calidad IAPC). **ELANS** ata was shared with researchers from the Pediatric Development and Research Institute (Instituto de Desarrollo e Investigaciones Pediátricas IDIP), to be applied to a project on sodium sources in the Argentine diet. And we have provided the images from the Visual Guide of Foods Portions and Weights for a digitalization project of a Consumption Frequency Questionnaire to assess intake. This was done through a cooperation agreement signed with the School of Medical Sciences of the National University of La Plata.

But 2022 has also been a year in which the ICCAS Community has lost two of our dearest members: **Dr. Juan Carlos López Musi**, our founder and emeritus president, and **Dr. Moisés Burachik**, honorific member and founding member of our Biotechnology Working Group. They will always be remembered with great affection and appreciation.

Despite the difficulties we have all been through this past year, we have been able to move forward with our goal of sharing and spreading the best science, reaching professionals and the community at large, working under our tripartite cooperation philosophy.

There are not enough words to thank the commitment and the engagement of the volunteer professionals that have given their time and knowledge, the support of our members and benefactor partners, the collaboration of partner institutions and the tireless work of our small but enormous staff.

We wish that 2023 is fruitful, and it is our hope that you accompany us again in this path of joint learnings.

On behalf of the ICCAS family, our kindest regards



# Seminar on Regulatory and International Trade of Pesticides

Between May and July 2022, we replenished the **Seminar on Regulatory and International Trade of Pesticides**, this time in an asynchronous mode. Throughout the seven asynchronous modules and the synchronous closing meeting, the regulatory aspects of waste and international food trade were addressed.



### The program of the Seminar was:

### Module I:

Regulatory and international trade.

#### Module II

Codex Alimentarius.

### Module III

Global residue package.

### **Module IV**

Regulatory studies on crops - Vegetables metabolism.

### **Module V**

Regulatory studies on crops - Residue scale.

### **Module VI**

Calculation of MRL.

#### Module VII

Risk communication: is it better not to talk about certain things?

Live closing meeting.

In a post-Seminar survey, the attendees highlighted the modality, the relevance and topicality of the contents, and the high theoretical and practical expertise of the speakers.

# Seminar: Regulatory Sciences: Alternative Methods for Product Formulations



Reducing the use of laboratory animals for toxicology studies is an ethically important goal to aim for and to which ICCAS is committed. To this end, and as part of our mission of fostering capacity building, the Working Group on Risk Analysis and Toxicology organized a **Seminar on Regulatory Sciences:**Alternative Methods for Product Formulations.

During the course of the modules an update on regulatory science trends for acute toxicology of formulated products was presented; what these products are like and how they are evaluated; and the newest trends in toxicological evaluation alternatives to the use of animals.

The speakers were experts from public and private sectors from Argentina, Brazil, Mexico and the US.

### The program was:

#### Module I:

Advances in Human Health Risk Assessment for Pesticides at USEPA. Dra. Monique Perron (US EPA).

#### Module II

Regulatory Toxicology: Alternative methods to assess oral, dermal and inhalation toxicity of formulated products.

Dra. Ligia Romeo (Corteva).

### Module III

Regulatory Toxicology: Alternative

methods to assess dermal irritation and corrosion of formulated products.

Dra. Rosana Murata (Bayer). Dra. Ligia Romeo (Corteva).

### **Module IV**

Regulatory Toxicology: Alternative methods to assess ocular irritation and corrosion of formulated products.

Dra. Andreia Latorre (Basf).

#### Module V

Regulatory Toxicology: Alternative methods to assess dermal sensitization.

Dra. Ligia Romeo (Corteva).

### **Module VI**

Importance of animal welfare as a driver of change.

Dra. Débora Racciatti (National Service for Agrifood Health and Quality - SENASA).

The audience was composed by: regulators, agronomists, toxicologists, professional councils, academics, specialists in regulatory sciences from the public and private sector. Participants were from: Argentina, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Mexico, Paraguay, Peru, Uruguay and Venezuela.

They highlighted the short-session format, and the quality and relevance of the content shared during the presentations.

### Series of Talks on Safe Waters



In November, in collaboration with the Iberoamerican Society of Environmental Health (Sociedad Iberoamericana de Salud Ambiental SIBSA) and the Argentine Association of Sanitary Engineering and Environmental Sciences (AIDIS Argentina) we co-organized the Series of Talks on Safe Waters.

These talks addressed different aspects of this issue and the speakers were specialists that are currently working on cutting edge initiatives to promote, mitigate and regulate this growing issue.

Below, the program of each talk:

### Microplastics, Health and Environment. Watch the video

### **Program:**

Micro & Nano plastics. Marine-coastal pollution in the Southern Buenos Aires and North-Patagonian system, impact and spatiotemporal evolution.

Andrés H. Arias y Ana Carolina Ronda (IADO).

Scientific Network of Plastics and Microplastics in the Environment (SEPIA). Monitoring Program. Jorge Marcovecchio (IADO).

Advances and challenges in the global agenda to the environmental management of plastics throughout its life cycle. Agustin Harte (Program Director at UNEP).

# Removal of pathogens in water. Miércoles Wednesday, November 16th. Watch the video

### **Program:**

Removal of pathogens in drinking water supply systems. Valeria Ferrer.

One Health and parasites of sanitary importance: contributions for the study of the groundwater quality of the

Platense Horticultural Belt (CHP). Andrea Celina Falcone.

Disinfection with sodium hypochlorite generated in situ. Fernando Cruz Molina.

Disinfection of water by UV radiation. Carlos Alberto Rivas.

# Pharmacontamination: what do we know and what can be done? Miércoles 23 de noviembre. Watch the video

### **Program:**

Strategies to mitigate pharmacontamination: current situation in Argentina and Iberoamerica. Noelia Gonzalez Vidal.

Radiation technology for effluent treatment and removal of organic contaminants. **Verónica Vogt**.

Hospital effluents: their potential as a tool in the study of the evolution mechanisms of bacterial resistance to antimicrobials and their use in epidemiological surveillance. Barbara Ghiglione.

Moderate by Dr. Edda Villaamil (ICCAS)

### **Article on Microplastics**



In 2022, ICCAS continued with the development of the Document Series, short outreach publications regarding issues of interest for our community. The newest article is: **Microplastics in the Environment, a growing issue**, written by members of our Risk Analysis and Toxicology WG.

Throughout the document an overview of the increase in industrial production of plastics, the consequent generation of waste and how this affects the environment and human health is presented.

You can read this publication in Spanish here



### Webinar: Why trust Science?



This year, we continued with our Series of Webinars, ICCAS Lunchtime Talks, and to celebrate our first anniversary we invited **Dr. Mario Rossi**, researcher from CONICET and member of our Scientific Integrity Working Group, to talk about the scientific process, the step by step of the investigation and how consensus is reached.

You can watch the video here

### AAPC - Braun Menéndez Award

InfoAlimentos¹ was recognized with the prestigious 2021 Braun Menéndez Award for the transmission of knowledge and dissemination of science and/or technology in Argentina, given by the Argentine Association for the Progress of Science (Asociación Argentina para el Progreso de la Ciencia - AAPC). The initiative was unanimously chosen as the winning proposal.

InfoAlimentos and its social media channels constitute a platform from which content is disseminated that includes information on food technology, agricultural production, nutrition, safety, composition and innovation in food, in order to respond to the social demand for responsible information on how food is produced from the field to our table. InfoAlimentos is read by specialized and non-specialized professionals, teachers, and the general public. It carries out capacity building and dissemination activities for the general public and professionals specialized in health, nutrition and food technology. Furthermore, and for the past 3 years, InfoAlimentos has organized the Forums on Responsible Communication in Science and Health, an event that gathers scientists, resear-



chers, health professionals and communicators to talk about current issues regarding the communication of science, health, nutrition and food topics to society.

The interdisciplinary team of specialists in food technology, nutrition, health, agricultural production, and communication (among others) that contribute to InfoAlimentos makes it possible to have high quality contents and scientific rigor, proposing a respectful conversation and talk about sensitive topics to society, such as health and food.

Read more about the award here

# IV Forum on Responsible Communication in Science and Health

For the fourth consecutive year, we held the Forum for Responsible Communication in Science and Health in collaboration with our partners. This time the theme was: "The information sits at the table. The importance of communication in the adoption of eating behaviors".



Under this premise, professionals from health, communication and food production got together and shared their experiences when it comes to communicate responsibly about these topics.

Each panel addressed communication about food and nutrition from different perspectives: from the use of digital platforms and media outlets spaces, to the social networks, and the medical and dietitians practice, including how the information circulates among health professionals and their sources.

You can watch the video of the IV Forum and the key messages at InfoAlimentos

### Webinar: ICCAS Lunchtime Talks: IAFNS

As part of our series of webinars, we started introducing some of the institutions that we work with, and are part of ICCAS' ecosystem.

In this case, the presentation was given by **Dr. Wendelyn Jones**, Executive Director of IAFNS<sup>3</sup>, and she talked about the Institute and its publication: "Framework for Funding Food Science and Nutrition Research"<sup>4</sup>, one of the most recent publications on Scientific Integrity<sup>5</sup>.

Watch the Webinar here



<sup>&</sup>lt;sup>3</sup>IAFNS: Institute for the Advancement of Food and Nutrition Science.

<sup>&</sup>lt;sup>4</sup>Learn more about the publication Framework for Funding Food Science and Nutrition Research.

<sup>&</sup>lt;sup>5</sup>Learn more about IAFNS' work on IAFNS Scientific Integrity.



# Continuing Education on the Treatment of Childhood and Adolescent Obesity

The prevalence of obesity has increased among children and adolescents, becoming a global epidemic that challenges health systems to provide more frequent specialized consultation.

ICCAS, together with **Dr. Irina Kovalskys** and **Dr. Marisa Armeno** have organized the **Continuing Education Program on the Treatment of Childhood and Adolescent Obesity**, aimed at doctors who have completed or are completing their postgraduate training in any of the areas of children's health.

The main objective of this program is to improve the skills in addressing childhood and adolescent obesity in a highly interactive environment, promoting personal and professional growth and helping participants to be more effective in their work.

The program covered topics ranging from the epidemiological aspects to the family and social impact that obesity produces in children and adolescents. A fundamental axis was the treatment of clinical and metabolic comorbidities addressed from the distribution of adipose tissue and the classification of obesity, based on cardiometabolic, mechanical, psychological and social compromise aspects.



The trainings were conducted over 18 weeks in an interactive environment through ICCAS virtual campus.

Literature and theoretical material were provided, in addition to asynchronic classes with practical information, followed by highly interactive sessions with resolution of clinical cases where it was possible for the directors to share their vast experience, providing guidance and advice, while promoting the construction of a network of trained clinicians in the treatment of childhood and adolescent obesity.

### Webinar: Lunchtime Talk on Food Allergies



As part of our series of Lunchtime Talks, we invited **Dr. Claudio Parisi**, expert allergist, who talked about: **Food Allergies: New knowledge from a multidisciplinary perspective** During his talk, he presented the newest data on allergy in our country and

the guidelines for the prevention of allergic diseases.

The importance of a multidisciplinary vision in their treatment was highlighted.

Watch the webinar here

### Webinar on dietary habits in Argentina



As part of the celebration of our first anniversary, Luciana Zonis, Ignacio Mendez Gonzalez and Irina Kovalskys presented a Webinar on "Habits, Diet and Food Groups in Argentina: How do they combine together?" (Hábitos, dieta y grupos de alimentos en Argentina, ¿cómo se combinan entre sí?).

In these presentations, the experts shared the latest information on the diet of the Argentine people coming from the ELANS Project, among these, the association between socioeconomic status and the quality of the diet, and the dietary patterns in the local diet.

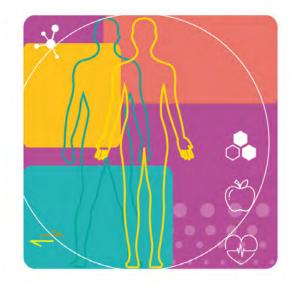
Watch the Webinar here

### **Immunonutrition: International Course**

As part of our mission of fostering capacity building and collaborative work, we teamed up with ISIN (International Society on Immunonutrition) and with University of Buenos Aires School of Biochemistry faculty to organize the International Course on Current knowledge in Immunonutrition: From the Experimental to the Human. This activity was carried out along twelve virtual, synchronous and consecutive modules between the months of September and November.

Immunonutrition is an emerging and cross-sectional area of knowledge that studies the interaction between nutrition and immunity, as well as all of the systems and factors that affect the former.

In order to maintain good health, the human body develops a series of complex defense natural systems to protect itself from pathogens and harmful environmental factors. Malnutrition situations, either because excess or deficiency, create important alterations in the immune system, without forgetting the



impact caused by the determinants of lifestyle (diet, physical activity, neuroendocrine balance, stress). In addition, in this Immuno-nutrition Course, the role of the microbiota in nutrition and the immune system was discussed in depth, as well as the key mechanisms to preserve health, preventing the development of many pathologies associated to immune-inflammation.

In preparation for this course, we held an informative webinar where **Dr. Ascensión Marcos** and **Dr. Nora Slobodianik** highlighted the importance of keeping up to date in immune-nutrition as a cross-sectional and emerging area of knowledge, and why is important that professionals, inside and outside of nutrition, acquire knowledge about this subject.

Watch the webinar here

### These modules were presented by local and international experts:

General features of the immune system. Wilson Savino.

Methods and lab techniques applied to the study of immunonutrition. Ligia Esperanza Díaz.

History of immunonutrition as an interdisciplinary subject. Ascensión Marcos.

Thymic enzyme. Potential indicator of the nutritional status. María Susana Feliu.

Effect of regular tomato consumption. Study in an experimental model.

María Fernanda Godoy.

N-3 polyunsaturated fatty acids and nutritional recovery Study in experimental models. Nora Slobodianik.

Nutritional situation and immunodeficiency: the particular case of food disorders. Esther Nova.

The importance of vitamin D in maintaining an efficient immune system.

Roxana Valdés.

The role of the nutrients in the immune system. Nora Slobodianik.

Action of probiotics on the immune system. Gabriela Perdigón.

Microbiota-immunonutrition interaction: lifestyle factors. Ascensión Marcos.

Obesity and physical activity in adolescents. Sonia Gómez-Martínez.



### **PUBLICATIONS**

Alcohol Contribution to
Total Energy Intake and Its
Association with Nutritional Status and Diet Quality
in Eight Latina American
Countries. The average
consumption of alcohol and
the repercussions that such
consumption has at the nutritional, anthropometric and
sociodemographic level were
calculated. Read publication

**Energy Imbalance Gap,** Anthropometric Measures, Lifestyle, and Sociodemographic Correlates in Latin **American Adults-Results** from the ELANS Study. The objective was to analyze the gaps between energy intake and expenditure in the adult population in Latinamerica, as well as its relationship with sociodemographic variables and nutritional status and draw an epidemiological perspective based on the observed trends. Read publication

Diet quality and diversity in the urban population of Argentina. The objective of the study was to assess the quality and diversity of the diet of the Argentine population, identifying the differences by gender, age, socioeconomic level, nutritional status and region. It was evidenced that the quality of the diet in the Argentine population is low and with a limited consumption of the food groups that provide the most micronutrients. Read publication

Infographic: Diet quality and diversity in the urban population of Argentina. In this work the quality and diversity of the diet in the Argentine population is assessed, identifying the differences by gender, age, socioeconomic level, nutritional status and region. See Infographic

Dietary Patterns in the Argentinian Population and Their Association With Sociodemographic Characteristics: Results From the ELANS Study (2014-2015).

This article describes the association between food consumption patterns and the sociodemographic features in

the urban Argentine population. *Read publication* 

Cow's milk protein allergy; new knowledge from a multidisciplinary perspective. This revision describes the current data about the immunological mechanisms involved in cow's milk protein allergies, the role of the microbiota and the future perspectives in treatment. Read publication

Breakfast in Latin America: Evaluation of Nutrient and Food Group Intake
Toward a Nutrient-Based
Recommendation. Researchers from the ELANS Project analyzed the breakfast diet of the urban population of Latin America and, based on the findings regarding macro and micronutrients intake, proposed recommendations for a balanced breakfast. Read publication



# Endpoints for agrophenotypic field trials for GM crops

The Biotechnology Working Group conducted a Workshop on Endpoints for Agrophenotypic Field Trials for risk assessment with Dr Andrew Roberts (AFSI) as a special guest.

These trials are part of the comparative study plan for GM crops. The endpoints for these field trials depend on the crop, and generally, they are focused on morpho-physiological features.

In this workshop the relevance of these endpoints was discussed, as well as the need to identify those that best fit the purpose of the assessment and the importance of harmonizing them for comparative and transportability purposes

### Some of the conclusions of this activity were:

- The assessment of agrophenotypic features serves as confirmatory evidence
- Assessment of weediness and invasiveness: must respond to a risk hypothesis regarding characteristics that potentially contribute to this
- Unintended effects assessment: assessment of a large number of features to see if there is any evidence of these effects-not necessarily based on risk hypotheses
- Is key not to confuse these two purposes
- There are reasons to reconsider the endpoints that are being used
- Improve application of reasoning on a case-by-case basis
- Reduce the recollection and analysis of unnecessary data



To become more sustainable organic agriculture needs genome editing technology is an opinion article, published in Frontiers in Bioengineering and Biotechnology journal. It discusses how solving the conflictive relationship between biotechnology and organic agriculture a still ongoing discussion would be essential for the mitigation of food insecurity and would be a way to go towards a truly sustainable agriculture.

It is pointed out that, if there were no regulatory obstacles, CRISPR technology and materials derived from it could be available to family farmers and be the basis of sustainable organic agriculture.



# Numbers of Activities & Publications

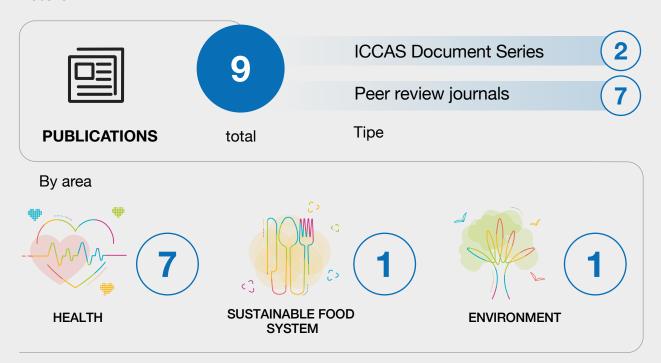


## About ICCAS activities



### **PUBLICATIONS IN NUMBERS**

At ICCAS the accessibility to open scientific knowledge is one of our priorities, and so we make public the results of our WG's activities both in peer-reviewed journals, as well as with reports or divulgation articles in the Documents and Special Reports Series. All publications are available in the Library of our website.



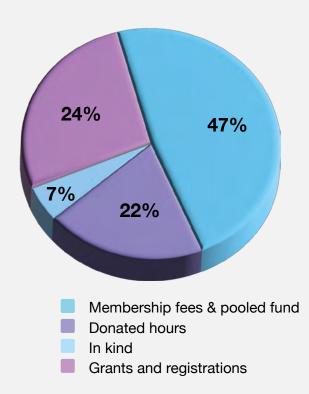


# \_ About ICCAS resources

- Our WGs and advisors are 90% volunteer. These resources are translated into donated hours, expertise, teaching workshops and trainings, writing, revision and edition of publications.
- In a similar way, the institutions which we work with (foundations, institutes, universities and government agencies) provide in kind resources: from access to venues and digital platforms, to grants for specific projects.
- The companies and institutions that are associated and support ICCAS contribute to the activities and to the proper working of the Institution in a collaborative way. This is achieved through a pool of resources (joint fund) that is managed according to the Institution's strategic plan, in a participatory and transparent decision-making process, coordinated by the working groups and the Executive Board.

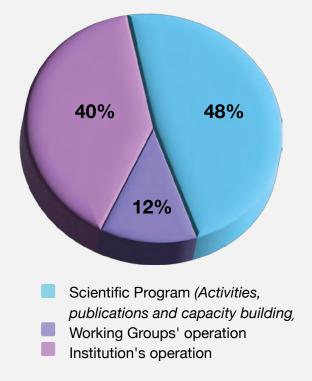
### **Budget Distribution**

In 2022, the funding sources of our Institution were distributed as follows:



### Distribution of Funds<sup>6</sup>

As part of the ICCAS work philosophy, the Institute receives resources from various sources:





## Website & social media



In 2022, our website iccas.org.ar has exceeded **127.000 visits**<sup>7</sup>. Surpassing the 108,000 in 2021.



We have a **Library** where publications from our Special Report Series and Document Series are available, as well as articles published in peer-reviewed journals.



Regarding our **Newsletter**, **ICCAS Informs** (*ICCAS Informa*) the opening rate has grown in comparison to 2021, and it's **23.24**%. And **over 7,300 people** receive our news.

In the **News** section section all news about our Institute, publications, upcoming and past activities can be found, among other pieces of information.



We continue working on expanding our social media platforms to make our Institution better known. Currently, you can find us at:

Facebook / Instagram / LinkedIn / Twitter



And, finally, we have a YouTube channel, ICCAS Ciencia, where you can find the recordings of our activities. These videos already add more than **3.400 views**.

### **ICCAS FIRST ANNIVERSARY**

To celebrate our first anniversary, we launched a series of commemorative plaques where we showcased the highlights of the first year of ICCAS, which are available here. Also, we shared a message from our Board that you can read here.









# The most downloaded documents are

Familiarity in the Context of Risk Assessment of Transgenic Crops: Focus on Some Countries in the Americas – 3.659 downloads

Poster Risk Analysis and Toxicology WG GT ARyT - 3.209 downloads

Shelf life of Food: What do we know?

- 3.126 downloads

Poverty as a determinant of food quality in Argentina. Results of the Argentine Study of Nutrition and Health (EANS)

- 2.411 downloads

Latin American consumption of major food groups: Results from the ELANS study

- 2.246 downloads

Our Documents Series are also quite popular

Risk vs. Danger
– 2.032 downloads

ELANS: Contributions to an Evidence Based Nutrition for Latin America

1.682 downloads

Attention Arsenic! Why is it the bad guy?

- 1.642 downloads

What are pesticides and how are they regulated in Argentina?

- 1.485 downloads

Infographic: Diet quality and diversity in the urban population of Argentina

- 1.141 downloads



# Below, you can find the list of some proposals for next year:

### 쏬

### **Capacity building**

We will continue to foster professional capacity building and continuing education through our Workshops, Courses and Seminars. In the Scientific Integrity area, we are collaborating on two projects on Critical Reading.

The first one is a Postgraduate Course in collaboration with the Barceló Foundation School of Medicine, aimed at heal-th professionals, so they can acquire a methodology for the critical analysis of scientific publications, identify biases and methodological problems and interpret the research in the context of current knowledge. The second one, organized by InfoAlimentos, addresses a broader audience, (dietitians, nutritionists, communicators, etc.) and will focus on the analysis of media articles, from both traditional and social media. Additionally, it will explore the reporting of research studies in the news, and the myths that exist (and circulate in different media) about food and nutrition.

Furthermore, we will continue with updates and courses in the Health area with a new edition of the Continuing Education Program on the Treatment of Childhood and Adolescent Obesity



### **ICCAS Lunchtime Talks**

We plan to continue our series of webinars at noon, where we will continue to address topics and emerging issues of interest to our community. In 2023 we will include new contents, like the role of Ethics Committees, a topic in the list of our new Working Group on Clinical Research and its Relevance to Society<sup>9</sup>.



### **Publications**

We will continue to publish in peer review journals and will keep on publishing divulgation articles as part of the ICCAS Documents Series.



And, last but not least, we will launch the "Resources Guide on Biosafety for Researchers and Crop Breeders Using Transgenesis", an interactive tool aimed to researchers and developers.



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