

### IASE News December 2021

# IASE Executive News written by Ayse Aysin Bilgin (President of IASE)

I believe that we all deserve a nice holiday with loved ones during the festive season. Whatever you do, make sure to take care of yourselves and your loved ones.

Have you logged into IASE online forum yet? If not, here is the link for registering for the forum <a href="https://iase-web.org/forum/index.php?action=register">https://iase-web.org/forum/index.php?action=register</a> and more information at <a href="https://docs.google.com/document/d/1gBRs7Iaoouf9jOgUObwYevFJ0YTnV9H8Ci40zTxi7">https://docs.google.com/document/d/1gBRs7Iaoouf9jOgUObwYevFJ0YTnV9H8Ci40zTxi7</a> 8/edit

The second IASE online workshop will be on 15 December 2021 on Statistical Literacy by Iddo Gal. More information is below, read on. For future or past such events check our webinars web page <a href="https://iase-web.org/Webinars.php">https://iase-web.org/Webinars.php</a>.

# IASE online workshops and webinars this month written by Pip Arnold

The International Association for Statistical Education (IASE <a href="https://iase-web.org/">https://iase-web.org/</a>) presents our second online session this year. Iddo Gal, University of Haifa, Past-President of IASE, is our presenter and we welcome you all to join us. We also ask you to share this invitation with high school statistics teacher networks in your country. We welcome IASE and non-IASE members to the session. Details about the session are at <a href="https://iase-web.org/Webinars.php">https://iase-web.org/Webinars.php</a>.

# Statistical literacy demands are evolving —How do we cope with the challenge?

#### Iddo Gal

Department of Human Services, University of Haifa, Israel Iddo@Research.Haifa.ac.il

### Register here: https://forms.gle/FXEwUsegbVjRtALr5

This webinar focuses on 'big picture' issues and dilemmas related to the promotion of statistical literacy, as part of the aspiration for a numerate citizenship that has key competencies required in modern societies. The talk will first sketch and illustrate several frontiers, seemingly known but rapidly changing, involving real-world demands for 'official statistics literacy', understanding of models and prediction issues, and expanding demands for criticality. Such and related developments, some of which are supported by recent research or global realities, challenge traditional curricula and teaching practices in mathematics education, in college-level introductory statistics courses, and in adult education systems. I will then ask you to reflect on systemic tensions and 'social equity' gaps associated with how such evolving demands for statistical literacy are currently handled (or not) in education systems. The last part of the webinar will be an open discussion that aims to clarify some of the (hard) choices and realities we need to face regarding curricular goals and course design and explore some solutions that may support the development of statistical literacy for all. We may not come out of this webinar with all the right answers - but certainly with some good questions.

Iddo Gal is an Associate Professor (retired), Dept. of Human Services, University of Haifa, Israel. Iddo enjoys multidisciplinary interests and works in two fields, encompassing the conceptualization, development and assessment of adult numeracy, statistical literacy and related functional competencies; and management of service organizations and empowerment of workers and clients of service organizations. Iddo is a Past-President of the International Association for Statistical Education (IASE), past Editor of the Statistics Education Research Journal, and a Consulting Editor of the Journal of Disability Policy Studies. He has chaired the Numeracy Expert Group of the OECD Survey of Adult Skills (PIAAC) and has been working for the last few years with UNESCO on developing conceptual and assessment frameworks for evaluating and enhancing adult numeracy for the U.N. Sustainable Development Goal 4.6. Ngā mihi nui

Pip 🕄

If you missed the first one, you can find the relevant videos and files at <a href="https://iase-web.org/Webinars.php">https://iase-web.org/Webinars.php</a>

#### **ICOTS 11 News**

Do not forget to submit an abstract before it is too late (see main topics at <a href="https://icots.info/11/?topics">https://icots.info/11/?topics</a> and important dates at <a href="https://icots.info/11/?dates">https://icots.info/11/?dates</a>). Joachim and Bruno visited Rosaria and had meeting with various key stakeholder of ICOTS 11. Enjoy reading Joachim's travel reflections on Rosaria.

Rosario: Impressions of a journey to the other end of the globe Nov 27,2021

### By Joachim Engel

Two weeks in Argentina: Summer temperatures at 30-35° degrees and a country that just awakened back to life from a harsh Corona caused two-year lockdown. Now the incidence rates are very low (while Europe is discussing mandatory vaccinations in the middle of the fourth wave and in anticipation of the omicron variant). Public transport for the 300 km between Buenos Aires international Airport and Rosario has not yet resumed its pre-lockdown schedule, but the van our local host Teresita had organized in advance picked Bruno and me up just on time to deliver us to our Rosario Hotel, where Teresita was anxiously awaiting us. Very warm welcome with immediate transfer to Teresita's garden with fruit trees and piscina at the outskirts of Rosario— what a relief after 28 hours on planes, airports and buses.

The following days were filled with meetings at the university, with technicians, administrative staff, deans and the rector. Teresita seems to know almost everyone, and they all seem to be supportive of her. For the afternoon (and part of the following day) Teresita had organized, with support of the city's tourist office, sightseeing to some of the main attractions in town which included to test culinary delicacies such as spectacular fish and most delicious ice cream. Between our dense schedule of inspecting potential seminar rooms for ICOTS (which are still under construction!) and checking out hotels as potential lodge (including testing the menu, hmmm) the two European visitors slowly began to familiarize themselves with the confusions a city of about 1.3 million in South America offers. One of the main attractions of Rosario's inner city include the neoclassical, Art Nouveau and Art Deco architecture from the time 1880-1920 preserved over the centuries in hundreds of residences, houses and public buildings and which gives testimony of the city's wealth in earlier times. Today the spectacular older architecture is interrupted by less attractive, sometimes dilapidated more recent buildings and

an endless traffic that tries to find its way through the narrow streets. Generous and cheerful parts of the city can be found along the Parana river and in several of the city's parks. Also, a high number of cafes, bars and restaurants invite to slow down and to relax. The high number of health food places give convincing evidence that the Argentine kitchen is more than varieties of delicious steaks. Many restaurants have large screens that show nothing but football from early morning until late night, the modern *panem et circenses* to keep the masses united and appeased.

While bookshops are an endangered species in many cities in Europe and the US because too many customers prefer the convenience of online shopping, I discovered several nice *librerias* in town, all of them in conjunction with a coffee shop allowing customers to peacefully explore the literature they are about to acquire.

To familiarize myself more with the social life and culture in Rosario, but primarily to improve my Spanish conversations skills, I hired during my second week two local Spanish teachers – a great treat that gave me the opportunity to learn about culture and language and to have insightful conversations to improve my Spanish with the acquaintanceship of two inspiring local ladies. For my last few days in Rosario, if the schedule of resolving some last(?) urgent issues in preparing ICOTS allows, I will visit some of the museums in town, el Museo Municipal de Bellas Artes, the Museo de Arte Contemporáneo de Rosario or – with a focus on more recent history - el Museo de la Memoria commemorating the victims of the "dirty war" during the dictatorship between 1976-1983. When I leave Rosario in a few days, I take with me the memories of many hospitable, generous and open-hearted people. Because of its strong European influence, some locals like to see their city in comparison with Barcelona, a perspective which is highly influenced by everywhere in town revered local native Lionel Messi; a comparison with Naples may seem to be more appropriate (but would need rather a reverence to Maradonna). I spent two enlightening weeks in Rosario and look very much forward to my visit in September 2022 at ICOTS.

# Pictures:

Upper left: Florida beach at the Parana river

Upper right: Meeting at the Universidad Nacional de Rosario

Lower left: Building at center of Rosario

Lower Right: Teresita and Joachim at Parque de la Independencia







#### **COMMUNITY NEWS**

### Online workshop on Risk Literacy by Prof Manfred Borovcnik as part of PISTAR workshops

The Pak Institute of Statistical Training and Research (PISTAR) is organizing a workshop on Risk Literacy on 5 December 2021 between 2-5pm PKT.

# Modeling and Statistics in Medicine - Risk and Decision Making

Information in health issues is generally justified by statistical methods; decisions ideally are evidence-based and supported by probability models. To increase rationality in dealing with such information, experts advocate the methodology of empirical research, which implies complex mathematical concepts, which are rarely well understood. The focus of this workshop is on statistics in medicine and the fact that, not least with the increasing access to information via the Internet, there are advantages as well as drawbacks. Those who are concerned to improve the quality of decisions, focus on approaches and strategies to understand the given methods (and thus the resulting information) more clearly. We will outline the framework and several approaches to boost risk literacy.

# What you can learn from the workshop

How stakeholders in a decision differ in their criteria to optimize the decision: health system, medical doctors, individual patient, etc.

How to use medical jargon and connect it to statistical terms: sensitivity, specificity, prevalence, ROC curves, etc.

How to judge a good treatment or diagnosis - find the relevant criteria and apply them to the situation: this includes prevalence or prior probabilities and, thus, Bayes methods get essential.

How to communicate risks in a comprehensible way by using tables, diagrams, and suitable language: contingency tables with expected numbers, icon diagrams, mosaic plots, micromort and microlive, etc. How to use EXCEL efficiently for simple tasks.

### Technical support

We will EXCEL. We analyze secondary data and use simple techniques of contingency tables, and built-in functions. For the diagrams, as far as possible, templates in EXCEL will be prepared. Technicalities may be explained demand.

### Case Study 1: Risk Communication

The Case of Lipitor: Absolute and Relative Risks. Simplifying the Methods for Easier Communication and Understanding of Risks

# Case Study 2: Dialogues on a Medical Diagnosis

To Screen or Not to Screen: A First Attempt to Compare Alternatives, Find Data, and Interpret the Risk Numbers Prevalence: The Incidence of Breast Cancer is Dependent on Age

An Interpretation of Correct-Negative: The Correct-Negative Rate

### Case Study 3: Benefits and Drawbacks of Screening

Measuring the Success of Screening Programs. Stakeholders Involved in the Introduction of Screening Programs. Meta-Analyses: The Attempt of an Evaluation of Screening for Breast Can Does the Evidence Support the Recommendations?

Details regarding registration can be obtained by contacting Dr. Syed Wasim Abbas via WhatsApp (+92 336 6550630) or via email (alsyed edu@hotmail.com).