

22nd ISPAD Science School for Physicians Report

April 16 to April 21, 2023, in Verbania, Villa San Remigio, Italy.

The ISPAD Science School for Physicians 2023 took place from April 16 to April 21, 2023. It was held in Verbania, Villa San Remigio, property of the University of Piemonte Orientale of Novara, Northern Italy. The course has enabled attendees to enhance their knowledge in the principles of research methodology, including basic/laboratory and clinical/translational approaches used in diabetes-related research. During the 5 days of the School we discussed different topics, from basic science to the highest technological achievements to date, including a section to give some tools to the future researchers, like 'how to' read a scientific paper, how to write a scientific paper, how to start a new study, how to submit a grant.

Topics included (see program here):

- 1. Genetic basis of diabetes (type 1, type 2, monogenic)
- 2. Immunology of diabetes
- 3. Insulin pharmacodynamics and kinetics
- 4. Exercise physiology and insulin therapy during exercise
- 5. Nutrition (theorical and practical approach)
- 6. Carbs counting and beyond
- 7. Fine tuning of insulin pump therapy
- 8. Psychological approaches to diabetes
- 9. Artificial intelligence and diabetes

Sessions enclosed plenary lecture and focus group (faculty and attendees mixed) on specific topics. We have privileged working in team (small groups) 23 Delegates from 16 countries and 5 continents (US, Canada, Brasil, Egypt, India, Arabian Emirates, Germany, UK, Greece, Denmark, Sweden, Romania, Poland, Turkey, India, Italy). 31 Faculty members from 14 countries and 2 continents (US, Canada, UK, Germany, Switzerland, The Netherlands, Luxemburg, Ireland, Poland, Norway, Belgium, Spain, Austria, Italy). We had 31 lectures, 4h small group discussion

(delegates, mentors, faculty members), 23 research projects discussed and presented, 12 case reports discussed and presented. Total expenses have been 112.691,14 euros. Till now we had 60.000 euros from ISPAD and 38.500 euros from local sponsors (without interfering with sponsorship of these companies to ISPAD).

The balance is 14.191,14 euros (plus 3.122,05 VAT 22%).

Summarising, the strength of the 2023 edition of ISPAD School for physicians has been:

- 1. Endorsement of the Italian Society for Pediatric Endocrinology and Diabetology through its president, prof. Maria Carolina Salerno and all members, many of whom will be actively involved in the Faculty.
- 2. Endorsement of the University of Oriental Piedmont and its School of Medicine and the Pediatric Department (Head Prof. Ivana Rabbone).
- 3. Renowned national (ISPED), and international (Europe, North America and Canada) Faculty.
- 4. Possibility to discuss in small groups and in plenary section study projects from each of the participants and awarded the best study project with one of the 4 ISPAD-JDRF fellowship. The winner of the best study project was Jantje Weiskorn, Hamburg, Germany with the project "Cardiac complications in diabetic ketoacidosis in children and adolescents".
- 5. Team building activity, exploring new ways to strengthen team activity for all Delegates and Faculty members. In particular we spent a half day in Simnova, an internationally renewed simulation centre and in small groups we had simulation about both diabetic ketoacidosis and severe hypoglycaemia.
- 6. Mentors from previous ISPAD school participants.

On behalf of the School Convenor Andrea Scaramuzza