

Dear Friends

In September we will meet together to talk about future in medical devices that will revolutionize the diagnosis and treatment of patients. End stages kidney diseases patients depend on dialysis machines and technology for living. However our machines are not able to make changes when unexpected changes happen. In addition, dialysis machines do not learn about previous experience to improve the therapy. Artificial intelligence (AI) applied to medical devices with new intelligent machines able to learn from experience seems Science Fiction. But sometimes dream become real. Thus, In Hospital Bellvitge we will learn about this new branch of sciences and we will dream with a better future for our patients.

Topics

1-PRESENT: What is the Artificial Intelligence (AI)?. Challenges for the application of machine learning in medicine. The importance of model interpretability and intelligibility.

ALFREDO VELLIDO (avellido@lsi.upc.edu). Departament de Ciències de la Computació (CS) Universidad Politècnica de Catalunya (UPC) (30 m).

2-Application of AI in nephrology: What we would like our dialysis machines can do.

MIGUEL HUESO. Nephrology Department (H Bellvitge). (30 m)

3-Some experiences in nephrology:

A. FRESENIUS. Anemia therapy control. How algorithms make System Smart. CARLO BARBIERI. Fresenius Medical Care (Carlo.Barbieri@fmc-ag.com). (15 m)

B. BAXTER/GAMBRO. Hemocontrol™ and machine learning systems. Confirmation pendent (15 m)

4- Lets dream about the FUTURE. Is Artificial Intelligence the future for therapy and decision problem solving in medicine or it is Science Fiction? A vision towards potential applications of AI in medicine.

ANDERS JONSSON (anders.jonsson@upf.edu) Artificial Intelligence and Machine Learning Research group. Universitat Pompeu Fabra (30 m).