**3D printing of drug products for personalised therapy:**

3D printing (3DP) is an increasingly growing manufacturing technology that provides the ability to fabricate structures of precise geometries from a 3D model by deposition of many thin layers. 3DP is nowadays used as a production tool or for rapid prototyping in many areas. In the pharmaceutical field, the claimed advantages of the in-situ fabrication of unit dosage forms with doses and/or drug combinations personalised to the patient may change, in the future, medicines design and manufacture of medicines. It is predicted a change from limited dose range dosage forms manufactured in big industries to tailored-to-patient medicines, to meet the therapeutic needs of each individual patient (precision medicine), prepared in community pharmacies or hospitals. 3DP comprises an array of different additive manufacturing technologies of which some can be adapted to the use in pharmaceutics. The feasibility of using 3DP to fabricate immediate release, control release or enteric tablets with pharmaceutical-grade polymers have been demonstrated and the release profiles obtained can be modified by careful selection of the excipients. The application of these technologies to the pharmacy will make necessary to evaluate, develop and adapt these novel manufacture technologies to the high-quality standards demanded and regulated by the pharmaceutical industry, what will lead to new challenges and opportunities.

**Biography**

Alvaro is co-founder and Development Director at FabRx, the first company focused on developing 3D printing technology for fabrication of personalised medicines and medical devices. He is also honorary lecturer at University College London - School of Pharmacy (UK) and part-time lecturer at the Faculty of Pharmacy - University of Santiago de Compostela (Spain). Alvaro is one of the first researchers to evaluate the opportunities of 3D printing using new 3D printing technologies to manufacture oral dosage forms and medical devices. Alvaro has published more than 50 articles. He has listed amongst the World's Most Highly Influential Researchers in 2019 and 2020 by Web of Science and he is a recognized world expert in 3D printing of medicines with more than 100 communications to international conferences. He holds a PhD in Pharmaceutics from University of Santiago de Compostela (Spain) and he worked for 3 years as a Registered Pharmacist, thus has first-hand knowledge of the needs in terms of medicines in the community pharmacy.