

2020/2021 UQ Summer Research Project

Project title:	3D printing oral solid dosage forms
Number of positions available:	2
Location	PACE, UQ
Project duration:	10 weeks
Preferred start date	Flexible depending on student preference (from 30 November onwards)
Description:	The inter-individual variability often leads a significant issue in the therapeutic treatment using oral dosage forms. The emergence and continuous growth of 3D printing can potentially resolve this issue by offering the potential to produce personalized medicines where the dose and dose regimen are customized according to the patients need. In our laboratory we are designing prototype 3D printing technology where we will use our existing encapsulation platforms and using 3D printing convert them into oral solid dosage forms. This will improve not only oral bioavailability of poorly soluble compounds but also a first step forward towards customized dosage forms.
Expected outcomes and deliverables:	Participants will gain skills in emerging area of pharmaceutical manufacturing e.g Hot-Melt extrusion and 3D printing.
Suitable for:	Pharmacy students
Primary Supervisor:	Dr Amirali Popat (e) a.popat@uq.edu.au