

# Designing gradient plotted scaffolds as a tool for improving osteochondral regeneration

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# **STATEMENTS**

With the thesis

**Designing gradient plotted scaffolds as a tool for  
improving osteochondral regeneration**

1 It's not necessary to engineer our body, we rather should improve and exploit the regeneration system already present in our body nature. [This thesis]

2 The human body is composed of organs, which are composed of tissues. To proceed from one tissue to another a gradual passage is ensured by gradients. Hence, gradients can be seen as key components of our body. This thesis is based on the regeneration of one of these transition tissues, the osteochondral interface. [This thesis]

3 The bioactivity of the scaffold does not rely on the addition of bioactive molecules: structural properties can be as strong as soluble factors. [This thesis]

4 3D printing has entered in our daily life, with shops able to make your desired 3D printed object. You can buy your own 3D printing machine today. Even Uncle Scrooge asked Gyro Gearloose to provide every citizen of Duckburg with a 3D printing machine. [This thesis/Zio Paperone (Uncle Scrooge) e i prodigi della 3D pi – Topolino nr 3062]

5 In regenerating the osteochondral interface, we should skip the ex-vivo step and aim at single-step procedures for the wellbeing of the patients, using the regeneration capacity of stromal cells present in our bone marrow. [This thesis]

6 If we think about the knowledge gathered during the human history we may be really impressed, but if we think about what we don't know yet we can conclude that rather than having waded deep into the sea of knowledge we have merely dipped our toes in the water. [Michael Hanlon - 10 questions science cannot answer (yet)]

7 Science has become something like politics used to be, a vast ocean of shifting opinions, tides of fashion that wash in and out. [Michael Hanlon - 10 questions science cannot answer (yet)]

8 Well, here at last, dear friends, on the pages of this thesis comes the end of my PhD in Twente and Maastricht. Go in peace! I will not say: do not weep for not all tears are an evil – [Rearranged from Gandalf, J.R.R. Tolkien, The Grey Havens, The Return of the King]