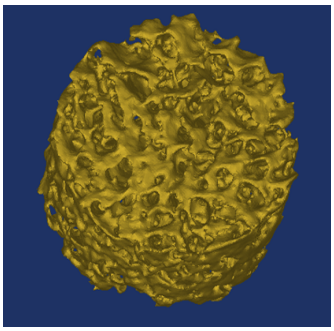
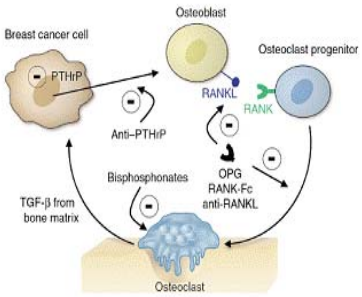
Program of Seminar in Mathematical Biology (WS 2010/11)

Biology, Mathematics and Physics of the Bone





Seminar Dates & Topics	Titles of Subtopic	Speakers (Host)
7th November, 2011 **Structure and Function**	1. Biology: Structure and function 2. Physics of the bone 3. Morphology of trabecular bone	*Matthias Schumacher* *Robert Müller* *Christoph Jentzsch* *Robert Müller* (Manfred Bobeth)
21st November, 2011 **Cellular Dynamics I:** **Remodeling and Tissue Engineering**	1. Calcium influence on bone remodeling 2. Modeling of the Basic Multicellular Unit (BMU) 3. Cell migration & Tissue Engineering	*Thomas Hanke* *Rico Fischer* *Katrin Boettger* (Christoph Landsberg)
5th December, 2011 **Mechano-transduction**	1. Mechanotransduction 2. Bone growth models 3. Modeling of mechanical loading	*Osvaldo Chara* *Nadine Hohmann* *Fabian Rost* (Robert Müller)
16th January, 2012 **Cellular Dynamics II:** **Angiogenesis & Cancer**	1. Role of angiogenesis in bone formation 2. Multiple Myeloma 3. Wrap up-interesting modeling aspects	*Alvaro Köhn-Luque* *Roland Zimm* *Andreas Deutsch* (Andreas Deutsch)

Location
INF 1096, Dept. of Computer Science, Nöthnitzer Str. 46

Seminar Website
http://www.tu-dresden.de/zih/lehre/bio/ws1112_sem

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