

MESSAGE FROM HoP

"We are fortunate to have such a rich and diverse group of faculty and researchers whose work have pioneered breakthroughs in key areas of engineering, science, design fields and society. We highlight these studies in our newsletter in a bid to share knowledge and strengthen the bond within our EPD family."

UPCOMING EVENTS

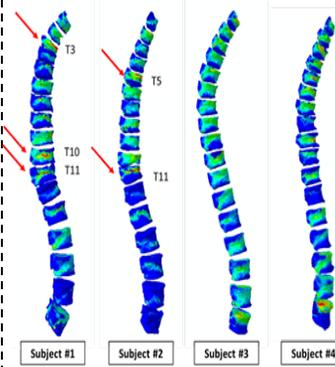
FEATURED STUDY

Patient-Specific Whole Spine Analysis

Dr. Subburaj Karupppasamy (PI), Dr. Thomas Baum (Technical University of Munich)

Description: Patient-specific whole spine analysis is a novel computational technique to non-invasively assess bone strength in patients at a pre-disposal to vertebral fractures, due to excessive bone loss attributed to osteoporosis and other skeletal disorders. This method allows identification of vertebral segments that have either sustained or at high risk of vertebral fractures.

Published in: D Anitha, T. Baum, J.S. Kirschke, K. Subburaj "Risk of Vertebral Compression Fractures in Multiple Myeloma patients: A finite-element study," *Medicine*, 96(2), (2017), e5825.



Awarded **MSD Pharma FIRST Industry Workshop Award** for project titled "Bone Loss in the Elderly: Vertebral Fractures in Multiple Myeloma Patients" at the Fostering Industrial Research Success Together (FIRST) Industry Workshop in SUTD, Singapore

DISTINGUISHED LECTURE SERIES : 31 May, 1.30-2.30pm, LT4 (2.404)

Professor J. Michael McCarthy & Associate Professor Haijun Su will be speaking about innovations in machine design: From Machines that Trace Curves to DNA Origami Machines.

PHOTOSHOOT by EPD: 7 June, 1-5PM, EPD Office

Looking to update your resume photo but no time to venture out for a shoot? EPD brings you a free photoshoot, spearheaded by our very own Eric Tan who has years of professional experience behind the camera. Only 15 spaces available, open to all EPD undergrad, grad, post-doc and researchers! Samples, information and sign up at <http://tinyurl.com/epdphotoshoot>

VISIT TO HOPE TECHNIK: 14 June, 2-4PM

Mr. Peter Ho, CEO of Hope Technik and member of EPD Advisory Board will be hosting EPD students for a special 2h tour of the site. Sign up at <https://goo.gl/forms/lzHrCwlsqfmQCUKq2>

MAKER IMMERSION PROGRAMME 2017

The Maker Immersion Programme is an opportunity for you to explore making as an active culture in SUTD and discover what the various maker clubs have to offer. Sign up now at <http://bit.ly/MIP-2017>

Introduction to CAD: Solidworks
29th May 2017 (Monday)
1900 - 2200
Computer Lab (1.611)

Solar Powered Lamp Making
30th May 2017 (Tuesday)
1900 - 2200
Cohort Classroom 10 (2.308)

Introduction to Robotics
1st June 2017 (Thursday)
1830 - 2130
Cohort Classroom 10 (2.308)

Supported by: SDC, MSC, SSMAR, IEEE

ACHIEVEMENTS

- Asst. Prof. Joel Yang's research on guided self-assembling nano-spirals in collaboration with MIT was recently highlighted in journal *Nano Futures*. For more info, please visit <http://nanotechweb.org/cws/article/tech/68366>
- Mobearlize/EMMA, a retrofit motorized wheelchair unit, emerged as the winner in the **Create4Good Challenge**. The team comprises EPD students Kimberlyn Tjipto, Chua Rui De, Foo Zhi Chuen, Eugene Meng, and an ESD student. Congratulations to the team!
- SUTD Multi-Rotor Society participated in the **Singapore Amazing Flying Machine Competition 2017**. Three teams - **La Casier**, **Triton** and **Klee** - comprising entirely EPD students won various awards in different categories. **Team Le Casier** built the top-winning drones where the surrogate can repeatedly exit and enter the mothership for reconnaissance missions, exhibiting innovative and precision engineering while being waterproof.

