Why take action on inequality?
by Dr Jenna Stevens-Smith, Outreach & Public Engagement Manager

The term ‘taking action on gender inequality’ can evoke a mixture of reactions. However, no one can deny that women are under-represented in engineering. The recent Perkins Review: Engineering Skills illustrated that the UK is not training enough engineers and that we are already facing a shortage of engineers in the workforce. The UK has the lowest proportion of female engineers in the European Union- less than one in ten engineering professionals are women. Bioengineering as a discipline tends to attract more women than other engineering disciplines, for example our undergraduate cohort is 42% female. But, as in all Science Technology Engineering Maths (STEM) subjects this percentage decreases as you rise up the career ladder.

Two key actions are to 1) increase the number of women and girls studying STEM subjects, and 2) improve the career advancement pathways for those that want to pursue a career in STEM.

There are a number of programmes and organisations out there providing mentoring, training and support for women and girls. These include events such as WOW- Women of the World festival which looks at the challenges facing women and girls in today’s world through a series of interesting events at the Southbank from 1-8 March.

Following International Women’s Day on 8 March, Imperial College London is celebrating the past and present Women at Imperial through a public exhibition and events, running from 9-13 March. Imperial is well-placed to assist in rectifying this inequality issue by showcasing its engineering excellence and inspiring the next generation of female engineers. The Faculty of Engineering are supporting this through an Engineering Summer School for 11-14 year old girls, running from 20-25 July 2015.

The Department’s reason for addressing gender equality

The Department understands that acknowledging the presence of gender inequality in academia is not enough. That is why it is taking action to address these issues in a productive, meaningful and measurable way.

It has done this by conducting self-assessments through surveys and focus groups and deriving key points of action. The Department’s intention is to submit an application for the Athena SWAN Bronze Award in 2015 in order to gauge progress made with respect to gender equality.

Two common misconceptions surrounding those taking action on gender equality are that 1) progress can only benefit one gender, and 2) it could lead to negative progress, giving rise to standards, situations and/or environments that are actually worse (particularly for one gender; i.e. positive discrimination) than those in place before.

Thank you to all who have been involved in the process so far. The changes made will continue to improve the culture and environment within the Department.

Please send comments to be.equality@imperial.ac.uk

This month saw the arrival of some entrepreneurial heavy weights to Imperial as SynbiCITE, the Centre for Synthetic Biology and Innovation’s IKC, welcomed Steve Blank and Jerry Engel to College to run Lean Launchpad for Synthetic Biology.

Steve Blank is a serial entrepreneur based in Silicon Valley in California. He is credited with founding the Lean Start movement and is listed by the Harvard Business Review as a master of innovation. Jerry Engel is an internationally renowned expert in innovation and entrepreneurship and is Founding Executive Director Emeritus at the Lester Center for Entrepreneurship at Berkeley Haas. We are delighted to have them on board.

SynbiCITE’s aim is to support businesses as they take their technology from bench to market. Lean Launchpad provides our partners with a way of doing just that but without the need for lengthy business plans.

This process is rapid and iterative and as such is entirely suited to synthetic biology technologies. Indeed, the UK government has recognised synthetic biology as one of the UK’s Eight Great Technologies and has invested £150 million in synthetic biology research and training. The need for commercial technologies is urgent and we are addressing that urgency by providing our partners with the skills and knowledge they need to get their products and technologies out there.

Our teams of entrepreneurs are nurturing some incredible business ideas from synthetic biology technologies and is listed by the Harvard Business Review as a master of innovation. Jerry Engel is an internationally renowned expert in innovation and entrepreneurship and is Founding Executive Director Emeritus at the Lester Center for Entrepreneurship at Berkeley Haas. We are delighted to have them on board.

SynbiCITE’s aim is to support businesses as they take their technology from bench to market. Lean Launchpad provides our partners with a way of doing just that but without the need for lengthy business plans.

This month saw the arrival of some entrepreneurial heavy weights to Imperial as SynbiCITE, the Centre for Synthetic Biology and Innovation’s IKC, welcomed Steve Blank and Jerry Engel to College to run Lean Launchpad for Synthetic Biology.

Steve Blank is a serial entrepreneur based in Silicon Valley in California. He is credited with founding the Lean Start movement and is listed by the Harvard Business Review as a master of innovation. Jerry Engel is an internationally renowned expert in innovation and entrepreneurship and is Founding Executive Director Emeritus at the Lester Center for Entrepreneurship at Berkeley Haas. We are delighted to have them on board.

SynbiCITE’s aim is to support businesses as they take their technology from bench to market. Lean Launchpad provides our partners with a way of doing just that but without the need for lengthy business plans.

This month saw the arrival of some entrepreneurial heavy weights to Imperial as SynbiCITE, the Centre for Synthetic Biology and Innovation’s IKC, welcomed Steve Blank and Jerry Engel to College to run Lean Launchpad for Synthetic Biology.

Steve Blank is a serial entrepreneur based in Silicon Valley in California. He is credited with founding the Lean Start movement and is listed by the Harvard Business Review as a master of innovation. Jerry Engel is an internationally renowned expert in innovation and entrepreneurship and is Founding Executive Director Emeritus at the Lester Center for Entrepreneurship at Berkeley Haas. We are delighted to have them on board.

SynbiCITE’s aim is to support businesses as they take their technology from bench to market. Lean Launchpad provides our partners with a way of doing just that but without the need for lengthy business plans.

This month saw the arrival of some entrepreneurial heavy weights to Imperial as SynbiCITE, the Centre for Synthetic Biology and Innovation’s IKC, welcomed Steve Blank and Jerry Engel to College to run Lean Launchpad for Synthetic Biology.

Steve Blank is a serial entrepreneur based in Silicon Valley in California. He is credited with founding the Lean Start movement and is listed by the Harvard Business Review as a master of innovation. Jerry Engel is an internationally renowned expert in innovation and entrepreneurship and is Founding Executive Director Emeritus at the Lester Center for Entrepreneurship at Berkeley Haas. We are delighted to have them on board.

SynbiCITE’s aim is to support businesses as they take their technology from bench to market. Lean Launchpad provides our partners with a way of doing just that but without the need for lengthy business plans.
Dr Jenna Stevens-Smith ran a Public Engagement Workshop for the Centre for Neurotechnology on 12 February. The workshop, which was attended by postgraduate researchers focussed on how to design a public engagement activity.

Karla-Luise Herpoldt, PhD student in the Stevens Group is currently undertaking a 3 month fellowship in science policy at the Parliamentary Office of Science and Technology funded by RSC.

Dr Claire Higgins spoke to 6th formers on 27 February at Culford School, Bury St. Edmonds, about the link between Science and Medicine.

Lab Manager Ken Keating was awarded the Provost Excellence in Health and Safety Award on 26 February.

Fourth Year undergraduate student Bianca De Blasi came runner-up in the IET Young Scientists and Engineers Taught Programme Project Poster Competition on 25 February.

Congratulations to Naiara Rodriguez Florez for successfully passing her viva on her PhD thesis entitled Mechanics of Cortical Bone: Exploring the Micro- and Nano-scale. Naiara was a GTA in Mechanics and Programming. We thank Naiara for all her service and wish her all the best on her next adventure!

Amanda Foust, a new postdoctoral fellow in the Schultz laboratory, has been awarded an Imperial College Junior Research Fellowship. Amanda also played a major role in the preparation of the NIH “Obama” BRAIN grant, “Three dimensional holography for parallel multi-target optogenetic circuit manipulation (2015-18)”, which as a Paris-London collaboration is one of only two such grants awarded outside the USA.

Early this month the Centre was visited by Lady Emma Joy Kitchener, great granddaughter of Lord Kitchener, and her husband Lord Julian Fellowes. With an interest in this Centre’s work on lower limb injury and rehabilitation, the visitors enjoyed a tour of the newly refurbished injury simulator lab and met with several researchers and academics of the Centre. Upon departure Lord Fellowes said they were both “very interested and encouraged to see the tremendous work being done in the Blast Centre to improve treatment of amputees and the war wounded”.

On February 10th CBIS Director Prof Anthony Bull took to the dizzy heights of Queen’s Tower as part of the College’s annual Raising and Giving (RAG) Festival. RAG Week is a College wide event dedicated to raising money for, and awareness of, selected charities. This year the Mines Advisory Group (MAG) was one of Imperial’s chosen charities. MAG was established in 1989 to save lives and build futures for civilians worldwide by finding ways to reduce the daily risk of death or injury due to landmines. After his bungee jump from the Tower, Professor Bull explained why he has undertaken such a feat:

“100 years ago landmines were a problem for the military. Today, they are a problem for civilians. CBIS remains committed to ensuring that all that is learned through its research is transferred to the civilian domain. We must continue to support the work undertaken by charities such as MAG and Find a Better Way in the clearance of landmines around the world.”

Along with a CBIS led cake sale on Friday 13th, the Centre successfully raised £531 for MAG (10% of the money we raise (a minimum of £5 to participate) goes to MAG (Mines Advisory Group) a charity that disarms landmines in post-war zones. There will be sweet prizes for the winners!

Contact the CBIS Advisory Group. For more information, visit: http://www3.imperial.ac.uk/bioengineering/events/departmentalseminars


dr jenna stevens-smith

UPCOMING EVENTS

Departmental Seminars

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 March</td>
<td>12:00-13:00</td>
<td>RSM2.28</td>
<td>Dr Ryan Pedregi from Imperial College London</td>
</tr>
<tr>
<td>12 March</td>
<td>12:00-13:00</td>
<td>RSM2.28</td>
<td>Professor Kenith Meissner from Swansea University</td>
</tr>
<tr>
<td>19 March</td>
<td>12:00-13:00</td>
<td>RSM2.28</td>
<td>Dr Tim Schoof from University College London</td>
</tr>
</tbody>
</table>

Science Friday Seminar Series

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>27 February</td>
<td>16:20</td>
<td>RSM 2.28</td>
<td>Samira Jamalain (Professor Jimmy Moore’s group)</td>
</tr>
</tbody>
</table>

Imperial Events

9-13 March  Women@Imperial Week
A week celebrating the achievements of women at Imperial

9-10 May  Imperial Festival www.imperial.ac.uk/festival

4-5 June  BME-IDEA/BioDesign EU Symposium

20-25 July  Engineering Summer School for 11-14 year old girls

Volleyball charity tournament
When: Saturday 7th of March, 8-11am
Where: Ethos
The Imperial College Volleyball Club and RAG are calling all the volleyball fans, experts and beginners to the best volleyball tournament yet! All the money we raise (a minimum of £5 to participate) goes to MAG (Mines Advisory Group) a charity that disarms landmines in post-war zones. There will be sweet prizes for the winners!

Kirubin Pillay (MEng 2014) won the Blackwood’s student design competition with his final year project eye-controlled wheelchair with Dr Aldo Faisal’s group.

Alex Dahinten (BEng 2010) currently Technical Coordinator of the Developing World Healthcare Technology Laboratory, Duke University, has secured a graduate school place at Baylor College of Medicine to study prosthetics and orthotics.

Send news for the next issue to: Dr Jenna Stevens-Smith

OUT AND ABOUT

Centres for Blast Injury Studies Update
by Dr Emma Burke, Centre Manager

Early this month the Centre was visited by Lady Emma Joy Kitchener, great granddaughter of Lord Kitchener, and her husband Lord Julian Fellowes. With an interest in this Centre’s work on lower limb injury and rehabilitation, the visitors enjoyed a tour of the newly refurbished injury simulator lab and met with several researchers and academics of the Centre. Upon departure Lord Fellowes said they were both “very interested and encouraged to see the tremendous work being done in the Blast Centre to improve treatment of amputees and the war wounded”.

On February 10th CBIS Director Prof Anthony Bull took to the dizzy heights of Queen’s Tower as part of the College’s annual Raising and Giving (RAG) Festival. RAG Week is a College wide event dedicated to raising money for, and awareness of, selected charities. This year the Mines Advisory Group (MAG) was one of Imperial’s chosen charities. MAG was established in 1989 to save lives and build futures for civilians worldwide by finding ways to reduce the daily risk of death or injury due to landmines. After his bungee jump from the Tower, Professor Bull explained why he has undertaken such a feat:

“100 years ago landmines were a problem for the military. Today, they are a problem for civilians. CBIS remains committed to ensuring that all that is learned through its research is transferred to the civilian domain. We must continue to support the work undertaken by charities such as MAG and Find a Better Way in the clearance of landmines around the world.”

Along with a CBIS led cake sale on Friday 13th, the Centre successfully raised £531 for MAG (10% of the money we raise (a minimum of £5 to participate) goes to MAG (Mines Advisory Group) a charity that disarms landmines in post-war zones. There will be sweet prizes for the winners!

Contact the CBIS Advisory Group. For more information, visit: http://www3.imperial.ac.uk/bioengineering/events/departmentalseminars

ALUMNI UPDATE

Kirubin Pillay (MEng 2014) won the Blackwood’s student design competition with his final year project eye-controlled wheelchair with Dr Aldo Faisal’s group.

Alex Dahinten (BEng 2010) currently Technical Coordinator of the Developing World Healthcare Technology Laboratory, Duke University, has secured a graduate school place at Baylor College of Medicine to study prosthetics and orthotics.

Send news for the next issue to: Dr Jenna Stevens-Smith

OUTREACH & PUBLIC ENGAGEMENT MANAGER

CONTACT