

# WITS WORDS

*WITS International Women's Day—March 7th*



P. Kelly, D. Cahill, S. O'Sullivan, T. O'Donnell, M. Finlay at the Bar Council

## **Hard Science, Hard New Choices: Science, Ethics and the Law**

Do you own your own body? Should women be paid to donate eggs for research? And if someone was conceived from a donated egg, should they be told? Just some of the issues raised in a fascinating and wide-ranging discussion of science, ethics and the law, held to mark International Women's Day, and organised jointly by Women in Technology & Science (WITS) and the Bar Council of Ireland.

The speakers who addressed the invited crowd at the Law Library in Dublin, were: Dr Siobhan O'Sullivan, scientific director of the Irish Council for Bioethics; the Hon Mr Justice Peter Kelly, president of the Medico-Legal Society of Ireland; Professor Dolores Cahill, UCD entrepreneur and biologist, and member of the Science Council of Ireland; and chairman of the Bar Council Mr Turlough O'Donnell SC.

Society cannot expect scientists to go beyond the frontiers on our behalf without legal or ethical backup or guidelines, Mr O'Donnell said in his opening remarks. Dialogue is essential, he said. The English Enlightenment philosopher, John Locke, believed that 'we own our own bodies', but as Mr O'Donnell explained, that is not now generally the view of the Law: that we cannot really be said to 'own' our own body, as if it was 'property', and could be disposed of, sold, given away, or bequeathed to someone else.

However, as WITS member Miriam Lee pointed out later during the discussion, historically married women were considered to be a chattel, and the 'property' of their husband -- one consequence being that a husband could claim compensation if his wife had been 'damaged' or insulted.

Dr Siobhan O'Sullivan, in her presentation, revealed that egg donation is increasingly used by Irish women availing of in vitro fertilisation (IVF). This is particularly so for women in their late 30s and early 40s, with growing numbers of them travelling to Spain in search of eggs donated by younger women. Traditionally, women have not been compensated for donating eggs, despite the risks involved (10% of women undergoing the necessary hormone treatment and egg collection procedures suffer complications, and 1% of women die). This contrasts markedly with the fact that traditionally, men were paid for sperm donations (a risk-free procedure), and in some countries, people are paid for donations.

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### **SPECIAL POINTS OF INTEREST:**

- ◆ WITS BITS
- ◆ GOOGLE Tech Talk
- ◆ *An Astronomical Centenary*
- ◆ Women of Wealth
- ◆ *4000 years of Women in Science*
- ◆ *Women in Science- The Heidelberg Conference*
- ◆ *Calender of 2007 Events*
- ◆ *WITS membership form*



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Increasingly, however, women are now receiving compensation, or even substantial payment, for example up to \$10,000 in the US, and in the UK, £250. While the latter may not seem much, as Dr O'Sullivan pointed out it might still be sufficient inducement for a young woman immigrant -- raising further ethical questions.

Other new technologies raise other issues for scientists, society and the legal profession, according to Dr O'Sullivan, including the use of brain scan evidence in courts. UCD molecular biologist, Prof Dolores Cahill, asked who should pay for biomedical research. Cahill set up her own biotechnology company at the age of 26, to exploit her patented discovery for a molecular marker for disease. She discussed the legal requirements for patent protection, and the cost of drug development, as well as the unethical use of patents by some researchers and companies, for example to exploit traditional plant remedies.

In the debate that followed the presentations, it became clear that, such are the complexities of the issues, and the speed of the scientific developments, that there is a need for regular discussions on these topics. Already, there is a Medical-Legal society, as outlined by Mr Justice Peter Kelly, bringing together representatives from the medical and legal professions. And perhaps one lasting outcome from this important IWD event might be the formal establishment of something similar bringing together the scientific and legal professions. Article submitted by: Mary Mulvihill

## WITS BITS

Clare O'Connell, former WITS Executive member and science journalist, has had a baby boy, Leo. He was born April 1 and is her second child. Congratulations, Clare.

If you have any news items or notices or articles that you would like to share,

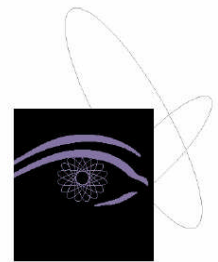
### [Google Tech Talk](#)

On Thursday 8th March, Google Dublin hosted an Open House event for students, PhDs and Faculty in Computer Science, Mathematics, Physics and other related fields. The speaker was Joseph O'Sullivan, who completed his PhD at Trinity; he started with Google in Silicon Valley back in 2000 and now works in the company's London engineering centre. He explained some of the challenges involved in large-scale information retrieval across billions of web pages, as well as the difficulties in understanding user intent across hundreds of millions of search queries a day. He also described some of the solutions Google has developed for these challenges, and held Q&A afterward. Two new WITS members, Diana Garcia Alonso and Maria Velasco Rodriguez attended the event.

### *An Astronomical Centenary*

The life and work of Cork woman and astronomy writer, Agnes Mary Clerke (1842-1907) was held at Ely House on March 20th.

The Irish Astronomy Association monthly talk for March was given by Irish-born astronomer and writer, Dr Maire Bruck. Dr Bruck contributed two of the chapters to the WITS book, *Stars, Shells & Bluebells*, and has single-handedly helped to raise awareness of the important work done by early Irish women astronomers, and others such as Clerke.



**WITS**

women in technology  
and science

**WITS IS  
WORKING ON  
A 2ND EDITION  
OF STARS,  
SHELLS AND  
BLUEBELLS**



## EVENTS: HERE, THEN and THERE

### WOMEN OF WEALTH

#### Empowering Women to lead wealthier lives

WoW , Woman of Wealth, was founded in 2004 with the objective of offering **motivation, support and services** to enable women to lead wealthier lives. Wealth, in WoW's definition, is a positive, holistic way of living that celebrates material prosperity within a context of mindful personal development.

WITS hosted a WoW event at the Stillorgan Park Hotel on April 18th. Anna Ross outlined WoW's ideas around women, wealth and money. Anna introduced the ABCDEs (attitudes, beliefs, concepts, denials and expectations) that limit access to wealth and introducing the WoW Way to Wealth. The session covered a discussion and information on dealing with your money for investment, pensions or just day-to-day finances. For more information: [www.womenofwealth.com](http://www.womenofwealth.com) or contact 086 167 5275.

### 4000 Years of Women in Science

*How long have women been active scientists?*

Actually, how long have people been active in science? The answer is the same for both women and men -- as long as we have been human. One of the defining marks of humanity is our ability to affect and predict our environment. Science - the creation of structure for our world - technology - the use of structure in our world - and mathematics - the common language of structure - all have been part of our human progress, through every step of our path to the present. Women and men together have researched and solved each emerging need.

The first literature appeared some 4,000 years ago. Stone and bone records stretch back further than those first alphabets, but give us no names. The very first technical name was male - Imhotep - the architect of the first pyramid. The second technical name was female - [En Hedu'Anna](#) (c.2354 BCE). Certainly women were questioners and thinkers long before that. Most myths and religions place the beginnings of agriculture, of laws, of civilization, of mathematics, of calendars, time keeping and medicine into the hands of women. The names of these goddesses may not be realized as actual people, but they must have been real women, else why preserve the myths?

### Women in Science—the Way Forward

Conference 9-11th May, 2007, EMBL, Heidelberg, Germany

There is a negative pervasive gender stereotype from a very early age, with a dominant myth that boys are good at math and girls are not. Our beliefs become self-fulfilling. Therefore, the popular, yet untrue belief, by girls that maths/science is hard has a negative effect on their results in such subjects. Toy manufacturers perpetuate this myth that boys are better at math by marketing certain toys for boys (e.g. science kits almost always have photos on the boxes of boys in the action position and girls observing. The first talking Barbie said "Math class is hard"). Boys have a greater self-belief in their maths ability, even if girls are actually scoring better. By the age of 9-12 gender stereotyping is well established. (continued on next page)



THE SECOND  
TECHNICAL  
NAME ON THE  
FIRST PYRAMID  
WAS  
FEMALE.

## **Women In Science – the Way Forward (continued) 9-11<sup>th</sup> May 2007, EMBL, Heidelberg, Germany**

Gender bias is often implicit (frighteningly so! See <http://implicit.harvard.edu>). Conference attendees were subjected to an interesting experiment during a keynote talk – and even for a room full of women scientists, we demonstrated that we associate men with career and women with home. Highlighting these biases to, for example, interview panels and research committees, can remove some of the bias which is implicitly present.

In the EU25, 43% of PhD students of SET are female while only 13% reach professorial level. When recruitment to PhD programmes is standardised e.g. through a central administration, there is a higher % of successful female candidates. Reason – homosocial co-optation; based on psychological studies, it has been shown supervisors are more likely to choose/promote people of the same gender as themselves.

The “Trailing Spouse” issue, as a much more significant problem for female researchers than males, as often their career takes the backseat to that of their partner. Some Universities (e.g. Irvine in California) have programmes to help spouses find positions also, which has had a dramatic impact.

Gender quotas on boards, panels, government (e.g. Finland) were seen to be important, although a number of people highlighted how difficult it can be to get senior women to sit on research review committees. Women need to make sure their web pages are up to date and that their names are on the various national databases which exist (for a review of European databases see <http://www.cews.org/cews/files/166/de/datawomsci.pdf>). There was some discussion around quotas for research positions – but there was no support for this.

Where are the women going if they are dropping out of academia? Not to industry, as figures of women researchers are even lower in industry. Ireland is an exception here, with a high proportion of women in industrial research (28%) in comparison to other EU countries (Germany 9.6%).

### **What can be done to help?**

**Mentoring** of young scientists, particularly women, is largely deficient. A mentoring programme should be offered to young scientists (especially females) at junior faculty level to encourage them to continue in SET careers.

**Networking** – evidence was shown that male scientists are more involved in networking than women, and that women often find it much more difficult to network. This lower level of networking, particularly internationally, has a knock on effect on grant applications and publication acceptances, when the scientists name is less well known.

**Female representation on Committees** - When sitting on committees and being in the gender minority, it is important for us to question ‘why am I the only woman?’, ‘did you try to get other women to sit on this committee?’ This will lay the demonstrated bias on the table. Also, it is important to have more than one woman as you may have a woman who has ‘closed the door behind her’ when it comes to the advancement of other women.

**Gender Bias** – many universities give Committees/Interview panels instruction before the meeting on inherent gender bias, which alerts members so they can compensate for this

*A note for parents:* An interesting study of parental attitudes to boys/girls carried out in a US science museum – parents (particularly fathers) gave much longer explanations to sons than to daughters, even though initial interest in the exhibits and the questions asked by girls and boys were similar. This is a concrete example of gender bias.

There was a healthy Irish representation at the meeting with attendees from SFI, TCD, UCC and UL. As usual there was approximately 5% male attendance!

For further information on the meeting please contact::

Sally Cudmore, APC, UCC ([s.cudmore@ucc.ie](mailto:s.cudmore@ucc.ie)) or

Ita Richardson, LERO, UL ([ita.richardson@ul.ie](mailto:ita.richardson@ul.ie))



## WITS Calendar of Events

### Recent events

**International Women's Day** - hosted with the Bar Council look at Science, Ethics and the Law

**Entrepreneurship Policy for Ireland focus group** – women entrepreneurs and executives looked at how to develop the current situation for entrepreneurship in Ireland,

**Google Tech Talks**

**Women of Wealth** – Empowering Women to lead wealthier lives

### **Upcoming 2007 Events:**

**May 22**

**Consultation Discussion Forum on current issues affecting women in science**

NWCI strategy with government in relation to science and WITS link in with this.

Discussion forum on how this is to be addressed.

**Venue: DIT, Kevin Street. Time: 6:45 pm – 8 pm**

**June 16, 17**

**Wet N'Wild Waterwomen Enniscrone, Co. Sligo**

Free surfing lessons for beginners of all ages (5-65) Sponsored by Denny's.

Initiative by Irish Surfing Association to encourage women to think about trying surfing.

Last year over 400 lessons were given in the 2 day session.

For more information contact:: [charlotte@techworks.ie](mailto:charlotte@techworks.ie)

**June 24**

**Tour of Da Vinci Codex Leicester exhibition**

This is one of most famous and important of Leonardo da Vinci's scientific manuscripts .

Written in mirror script between 1506-1510, it contains his observations on a wide variety of

topics including theories on rivers and seas; the properties of water; rocks and fossils;

air; and celestial light.

**Venue: Chester Beatty Library, Dublin Castle**

**Time: June 24<sup>th</sup> at 2 pm**

We have 12 tickets and will be contacting members soon to see who would like to attend.

**SEPTEMBER**

**Science and Beauty – Because we are worth it!** – How Science is used in the Beauty

Industry - Information and awareness evening

**Venue and time to be arranged**

**OCTOBER**

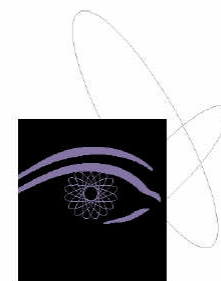
**Science, Ethics and the Law – Part II** Raising the debate and continuing to examine

issues with the legal and medical professions – continuation from

IWD. **Venue and time to be arranged**

**NOVEMBER**

**Annual General Meeting**



**WITS**

women in technology  
and science

# 2007 Membership & Renewal Form



Membership is open to women and men throughout Ireland who work, have worked or who are studying in any area of science, engineering or technology

Please choose:

- a) New Member   
b) Renewal for 2007   
c) Corporate member

## Membership fees:

Individual €50  Concessions €20 (retired, unemployed and student members)

Surname:..... First Name:.....

Job Title:.....

Do you want information send to home  or work address

Home Address: .....

Work Address:.....

Contact telephones: home.....work..... mobile.....

Email ( s) .....

*Note: WITS send most communication electronically for cost reasons. This membership information will be stored electronically by WITS for administration and circulation but will not be disclosed or circulated in accordance with Data Protection legislation.*

**WITS is a voluntary organisation and needs the membership to work together to thrive. If you are willing to help out, what are your areas of interest'?**

WITS will run 3-4 events in 2007. Any particular areas/activities you feel WITS should cover?

Suggestions: .....

WITS are interested in hearing from members with training skills:

Training Skills (if any): .....

For Office use only:

a) New member  b) Renewal for 2007  c) Corporate Member Yes  No:

Cash/Cheque/PO Received  Date: .....

Processed by: .....

Receipt Sent: Y  N:

Date: .....

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