ADVANCING WOMEN IN TECHNOLOGY, DESIGN AND ENVIRONMENT

Celebrating staff and students from across the Faculty of Technology, Design and Environment
There is a growing awareness in the UK that the future competitiveness of the economy rests heavily on the ability of businesses and universities to recruit and retain the best talent from all sectors of society.

At present women are particularly under represented in the Science, Technology, Engineering and Mathematics (STEM) professions. In the Faculty of Technology, Design and Environment at Oxford Brookes, we want to increase the proportion of women – students, academic staff and staff in senior roles.

The faculty is demonstrating its commitment to identifying barriers, taking action and making changes which will support more women to get in, get on and get to the top.

We intend to gain recognition for the practical action we are taking to advance women in the faculty by submitting for an Athena SWAN award in November 2016.

This booklet, which aims to raise awareness of our fantastic female role models and the help available to staff and students to plan and enact their career aspirations, is just one of a plethora of initiatives that we are planning.

We hope that these stories will inspire you to take any action you can to further your own career and to advance the careers of women in the faculty.
What proportion of women hold senior positions within your discipline?

Engineering as a discipline is not the first choice for women anywhere – even less in the UK, but gender balance is slightly better in academia. However females holding management positions in engineering are still quite uncommon.

What are the classic barriers to women’s advancement in your discipline?

In comparison with male colleagues, female engineers frequently find it difficult to balance the workload with family demands, despite great support from husbands and partners. This is due to the fact that a majority of husbands are also working full-time.

Furthermore, being a manager does not lend itself to job share, demanding tough choices to be made. However, there are great ‘returns’ on time invested, for example with students winning competitions under your leadership and later writing back to tell you about their job successes.

Who has been particularly influential in your career?

I was brought up in communist Yugoslavia, which had its many problems, but we were brought up to believe that women can take up any profession they like – nothing was out of our reach.

My family also empowered me to follow my choices. In particular, my mother gave me unconditional support throughout my studies and motherhood, allowing me to focus on what was necessary to maintain my career at the time.

Can you recall a moment in your career where being a woman was a disadvantage?

I have two children and found it very difficult to return to work each time after maternity leave, but I knew that in order to maintain my career progression, it had to be done.

Looking at the practices in Europe and recent developments here, I believe that perceptions are changing and in the years to come career breaks and job sharing in technical and senior roles will become more common.

Gordana graduated from university in Yugoslavia and worked for the Yugoslav Department of Defence prior to her arrival to the UK. She has held senior R&D and management roles in UK companies, including the position of Technical Manager for European Operations of a stock exchange-listed Singaporean company until 1999. Although the role was amazing, with lots of travel and new challenges, she found it difficult to juggle family and work.

Envy her lecturers – for the opportunity to continue learning and sharing their knowledge with bright, young people – Gordana decided to go back to study at Southampton University and took up an academic career.
What proportion of women hold senior positions within your discipline?

It is very low. I would say that only about 10% of the senior folk in this discipline are female.

What are the classic barriers to women’s advancement in your discipline?

The main one is that we don’t have a support network. There aren’t that many women out there and it is easier often to collaborate with other women than it is to collaborate with men, because their working styles are slightly different. Not all men are macho and aggressive – that would be a stereotype – but they do definitely have different styles of working and an all-female group will work differently to an all-male group.

Can you recall a moment in your career where being a female was a disadvantage?

There have been instances, particularly as I work in the very technical side of computing, where you have had people who are less willing to accept technical advice from a female member of staff than a male member of staff. I have told a student to do something technical – and it has been ignored, and our IT officer (who I manage and who is male) has told them and they have done it.

Have you any tips on dealing with high workloads?

You have to realise that you have to work on your work-life balance as much as you do anything else.

“You have to realise that you have to work on your work-life balance as much as you do anything else.”

Faye graduated from St Andrews and immediately went on to study at Aberdeen. There, whilst writing up her thesis, she became a teaching assistant, then a teaching fellow. Faye then came to Brookes, where she started off as a lecturer. She is now Principal Lecturer and Postgraduate Programme Lead and has acquired other roles, including Equal Opportunities and Diversity Co-ordinator.

Faye is interested in applying Artificial Intelligence (AI) and Machine Learning (ML) techniques to computer systems, systems administration and networks. In particular she is interested in using ML for cyber security and digital forensics and as a tool for helping with systems administration.

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What proportion of women hold senior positions within your discipline?

Clearly, there are a high number of women in professional services roles and it’s quite difficult to unpick how that feeds through to leadership positions. In Brookes, three of the four faculty Heads of Operations are women. In my own faculty, across the ten administrative and technical managers the split is exactly 50/50.

What are the classic barriers to women’s advancement in your discipline?

There’s no getting away from the work-life balance tensions. It’s still the case that women tend to shoulder most of the burden when it comes to ‘caring responsibilities’. That includes childcare and other family caring responsibilities so, while maternity and early years parental leave is the thing people are often more aware of, there’s the potential for these issues to impact throughout a woman’s career.

Is there anyone who has been particularly influential in your career?

I’ve been fortunate enough to work with and for some fantastic people who have inspired and influenced me. A couple of women in particular have been true role models and have really shaped my development – those at Brookes will know who they are! Outside work, my husband has really supported me in changing direction at a (relatively) late stage in my career. He’s a great believer in just going for things and not regretting what you don’t do.

Prior to coming to Brookes in 2010, Sally spent 20 years working in the NHS in a variety of clinical and non-clinical roles, and in settings including hospital trusts and health authority commissioning.

Following a five year career break, whilst her children were in primary school, Sally decided to go into the higher education sector. During the five years Sally has worked at Brookes, she has been presented with lots of opportunities to change roles and move into new areas. She started as an administrator in 2010, went into management roles in the Faculty of Humanities and Social Sciences and moved to her current role as Head of Operations in the Faculty of TDE in May 2015.
IGEA TROIANI
Senior Lecturer in the School of Architecture

Igea graduated in Architecture in 1994 from the Royal Melbourne Institute of Technology and has practised architecture in Australia, Germany and the UK.

She began a part-time career in academia in 1996 after becoming a mother and has since worked in Schools of Architecture in Brisbane, Australia and the UK. Igea completed her PhD in 2005, one year after she had her second child.

In her role as chair of the Architectural Humanities Research Association (2009-2012) Igea initiated the internationally award winning journal, Architecture and Culture of which she is Chief Editor. She has taught at Brookes since 2005.

Is there anyone who has been particularly influential in your career?

My husband, Andrew Dawson – with whom I share some studio teaching and practice work, but more importantly he shares parenting and housework with me so that I can pursue full-time work.

Another influential person has been my PhD Director of Studies, Professor Jennifer Taylor, who sadly passed away in December 2015. Her intelligence and strength of character, warmth and generosity have always been an inspiration to me.

Has there been a point in your career where you felt you had to compromise your family life for your work?

I have always felt compromised being a working mother and an architect/academic.

I have been made to feel inferior at different moments in my career. I have also had to work harder than many of my male colleagues to achieve progress in my career.

The primary way that I feel I can make positive change in the work-life balance of working mothers in architectural practice or academia is to write and speak publicly about the issues that need to be dealt with on a daily basis.

I am unsure what a woman architect or woman architectural academic is meant to be and many of the conventional practices that I am meant to adhere to are often antithetical to a mothering nature of selflessness, instead focused on self-interest. The inherent contradiction that women who are mothers have to deal with is mainly linked to competition in the workplace, most of which I find disdainful and unhealthy. Working life should be collaborative and enrich the lives of colleagues, students and their/our families and friends.

Have you any tips on dealing with high workloads?

Go for long walks or do exercise to refresh your mind from work. When you return to work, it seems easier and more manageable. Don’t aim to do more than five tasks per day so that you can achieve your goals without creating anxiety.
What are the classic barriers to women’s advancement in your discipline?

I wouldn’t say I’ve encountered major barriers associated with being a woman. Of course combining a career with family life is always going to involve getting well organised, and there are times when I’ve really struggled to juggle competing responsibilities. But teaching can be enormously rewarding, and I’d recommend it to anyone.

Who has been particularly influential in your career?

As both a lawyer and an academic I’ve been lucky to work with inspiring female role models in senior positions – in fact my line manager has been a woman for my entire career.

In the School of the Built Environment, where I work now, only 25% of professors, readers and principal lectures are female, although in my own discipline there are a number of prominent female academics with major international reputations.

Our work in the school tries as much as possible to engage students in community-based events, and in that context we often meet very inspiring women volunteering their expertise and time (see picture). This sort of engagement with local community groups and events like the Cowley Road Carnival have the potential to be hugely powerful learning experiences in relation to diversity, for staff and students alike.

What is next for you in your career?

I’m looking forward to becoming more involved in research and publication. I want to use my experience and teaching fellowship to explore innovation in teaching excellence here in our very diverse Brookes community.

“Our work in the school tries as much as possible to engage students in community-based events and in that context we often meet very inspiring women volunteering their expertise and time.”

Emma’s career started as a solicitor specialising in commercial law in the City of London, including stints in Paris, Dubai and Limassol. On returning to the UK, and the birth of her second child, she signed on to the MSc Planning in Developing Countries programme at Brookes.

Emma started teaching at Brookes whilst completing a PhD on informal housing markets and spent a year in Zambia researching informal settlements surrounding Lusaka. For the last ten years she has taught on foundation, undergraduate and graduate level courses focused around urban development in the global south, urban social theory and urban diversity. She recently became a Fellow of the Higher Education Academy.
NADHIRA ABDUL HALIM
Masters in Applied Design in Architecture (MArchD)

Nadhira graduated from Brookes with a BA in Architecture in 2013 and went on to work in Sabah, Borneo, with an architecture design company focusing on community and eco/sustainable designs. Due to the nature of the project, she was located on site in a remote village in the forest, to oversee and assist on the project construction.

Nadhira then went to Kuala Lumpur and worked with EPIC Homes, a social enterprise that builds houses for indigenous communities in Malaysia. She was hired as a Community Developer, ensuring clear communication between villagers/house recipients and her team. She returned to Brookes in September 2014 for the Masters programme, specialising in Development and Emergency Practice.

What are the classic barriers to women’s advancement in your discipline?

Family commitments are probably the most common answer, but I feel like there might be something more. In the industry, architects work with engineers, contractors, builders – all of which are often men. It’s possible that the built environment is still seen as a ‘male industry’ and therefore makes women feel uncomfortable or intimidated.

Is there anyone who has been particularly influential in your career or studies?

My parents are both very supportive, although not coming from an architecture background, they lack the understanding of the challenges in the field. Having said that, they are very encouraging of the path that I’m interested in.

My mum is one of five sisters who were brought up in a time when traditional families in Malaysia wanted at least one son to be the pride and joy of the family. However, in their early years, they were raised by both parents who often reminded them that there’s nothing a boy could do that they couldn’t. All five of them grew up to become successful, confident women in various industries, and ensured that my sister, cousins and I always knew that we too can do what we want in life. So I’ve always had support and encouragement.

Can you recall a moment in your career where being a woman was a disadvantage?

When I was working in Sabah, Borneo, part of my role was to encourage local villagers to work on the construction of the Community Centre. They were not used to women being on construction sites, so they were a bit reluctant to co-operate, especially seeing a relatively small-sized city girl.

It took a few days, weeks for some, to see me working onsite, literally hammering nails, sawing timber and mixing concrete, for them to trust my abilities and become willing to work together. So it worked out really well in the end.

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JESSICA DOWDY
BSc Construction Project Management

Is there anyone who has been particularly influential in your studies?

In 2015, I had the pleasure of attending the final of the Undergraduate of the Year Awards, where I was presented with the ‘Design, Construction and Engineering Undergraduate of the Year Award’ by the inspirational Fiona Bruce. Fiona hosted the final and gave a fantastic speech about her own career path and the challenges that she has faced along the way.

Other influential women who inspire me to succeed in this male-dominated industry include Anna Stewart, previous CEO of Laing O’Rourke and Louise Brooke-Smith, who became the first female president of the Royal Institution of Chartered Surveyors.

Can you recall a moment in your studies where being a female has been a disadvantage?

At university, I’ve found that all of the females on the course tend to try harder and achieve better on average, maybe because we feel we have more to prove.

Being the minority I’ve found that the females tend to take a natural leadership role when working in a team of other males.

When I set up OBUCS (Oxford Brookes University Construction Society) during my second year, I found that it was mostly the females who wanted to get involved in helping to run the society. Generally, I knew when I entered this industry that it would be a challenge and that is part of what attracted me to this career path. I am proud to say that I do something different to the majority and the journey so far has been incredible and I can’t wait to keep progressing and working towards my goals in this industry to prove certain people wrong and prove myself right.

What is next for you in your career?

At the moment, my primary goal is to really give my all to my last semester of university to ensure I achieve the best possible grade that I am capable of. Once I graduate I will probably work as a project manager for a contractor or developer in London and continuously build on my portfolio, expanding my skillset, networks and knowledge.

Jessica is currently in her fourth year studying BSc Construction Project Management and has already gained valuable work experience. On finishing her first year she secured a four-month work experience placement with a property development company, and later spent two weeks with one of the largest construction companies in Dubai, Al Habtoor Group.

Jessica worked at her father’s company before starting her industrial placement with Quinn London Ltd, where she worked as an Assistant Project Leader. Jessica had to leave this placement a month early after winning her category of the TargetJobs ‘Undergraduate of the Year’ awards with the prize of a two month summer placement working for Laing O’Rourke in Australia.

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What are the classic barriers to women's advancement in your discipline?

Gender bias is a real issue. Google image search for ‘manager’ and you’ll see a lot of images of white males. In academia specifically, senior managers tend to be senior academics. This can create an additional barrier to support or professional services staff seeking advancement. Having said that, Oxford Brookes has been very supportive of programmes like the Aurora Programme and Athena SWAN to help women to advance in management roles.

Who has been particularly influential in your career?

I’ve been fortunate to have had the support of senior staff in my faculty who have encouraged me to develop my skills. I also have a mentor. I think one of the most influential experiences for me was a Women in Leadership conference held at Brookes in 2011 with speakers from an incredible range of professions speaking openly and honestly about barriers and ways to surmount them.

“Annual leave is not gold and you are not a dragon, trying to accumulate a massive hoard of it. Annual leave is like water and you are like a plant, needing small amounts regularly to sustain you and leave you refreshed!”

Have you any tips on dealing with high workloads?

Remember that you can only do what you can do. Working flat out or over hours isn’t sustainable in the long term. Be realistic in your assessment of what is possible and leave some contingency. If you give others a false impression of your capabilities they’ll expect that level of service in future.

Don’t work tired – you’ll make mistakes. Take your annual leave. I tell my team: “Annual leave is not gold and you are not a dragon, trying to accumulate a massive hoard of it. Annual leave is like water and you are like a plant, needing small amounts regularly to sustain you and leave you refreshed!”
ADVANCING WOMEN IN TDE
10 things you can do now ...

Oxford Brookes is committed to identifying barriers, taking action and making change to support more women to get in, get on and get to the top. Here are some practical actions to help take positive steps towards your own career aspirations.

1. **Get a mentor, be a mentor.**
   Whatever your situation and career stage, access to support from a mentor can help shape and focus your goals. Becoming a mentor also gives you the opportunity to develop your listening skills, reflect on your learning, gain from supporting colleagues and boost your own profile.

2. **Identify, value and showcase your transferable skills and leadership potential.**
   TDE specialisms need diverse skills in team and project work, problem-solving, creativity and innovation. You are unique – highlight both your work and personal life experiences and skills.

3. **Get yourself noticed – in and out of work.**
   Put yourself forward for opportunities for exposure through work events, institutional initiatives, committee work and in public life – join a board, or become active in your local community.

4. **Think laterally about your career path. The way up may be sideways!**
   Women’s career paths in TDE are often non-linear and the sectors benefit from gaining experience elsewhere. Look for inspiration from role models and stories which show that changing direction in your career is possible.

5. **Get networking and use your contacts from all areas of life.**
   Use professional and social networks to connect with people who inspire you.

6. **Be proactive and collaborate.**
   Reach out, find allies and put yourself forward to contribute to their work and invite their input into yours.

7. **Get top-up skills, informal development opportunities or work shadowing.**
   Look where you want to build your strengths and find ways to gain these skills and knowledge to improve your overall performance, for example, look for work-shadowing opportunities.

8. **Develop your win-win negotiating skills for flexible working.**
   Think about how flexible working can benefit your team and the organisation. Let managers know what’s in it for them.

9. **Believe in yourself!**
   Look after your health and wellbeing to support your resilience and confidence.

10. **Men and women can be allies and advocates for women in TDE.**
    Speak up, offer positive solutions and challenge any initiatives or decisions where women are not included or their contributions are not visible or recognised. Encourage connections with colleagues from across the organisation and from outside.

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Oxford Centre for Staff and Learning Development

Workshops on offer to support personal effectiveness at work. Contact ocsld@brookes.ac.uk for more information.

Oxford Brookes Leadership Programme

A range of programmes based on the new Brookes’ Leadership Capabilities Model to develop staff with different levels of experience.

Springboard Women’s Development Programme

This programme is designed to enable women to make choices about their whole lives and career planning, boost confidence and take action.

Athena SWAN Charter

The Athena SWAN Charter recognises commitment to advancing women’s careers in STEMM employment in higher education and research.

Aurora: A Leadership Foundation Programme

This programme is designed to encourage more women to move into leadership positions in higher education.

Other networks for women in technology, design and environment

These networks include: British Computer Society Women, Women in Property (pictured), Women’s Engineering Society, and Architects for Change.

To obtain a large-print copy of this publication or to enquire about other formats please contact +44 (0) 1865 484848 or email query@brookes.ac.uk

Oxford Brookes promotes equality of opportunity for all who study, work and visit here. For more details please visit www.brookes.ac.uk/services/hr/eod or phone +44 (0) 1865 486929.

All information is correct at the time of going to press (February 2016). Please refer to the University’s website for the most up-to-date details.