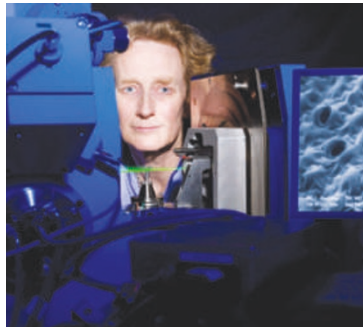


M. PELLETIER/L'ORÉAL

do not currently work in these fields.

In addition to focusing on how individual women can develop strategies for success, *Beyond the Boys' Club* highlights effective government legislation. In Norway in 2002, for example, the government proposed legislation requiring 40% female representation on companies' executive boards, and by the deadline of 2008 the target had been reached.

Quotas and affirmative-action policies are often frowned upon by sceptics, who argue that this will lead to a loss of quality. But Doyle-Morris points out that men have always benefited from favours within male networks. "Most



Career success: physicist Athene Donald.

men know that building relationships for mutual benefit is the only way to build a career," she notes, so women should not be afraid to do the same.

The book explains how best to develop these relationships. It offers tips on how to raise your profile, build your image, network within and outside the organization, take appropriate risks, negotiate

office politics and choose a mentor or coach.

Although Doyle-Morris addresses most of these strategies to women working in companies, two professors add advice from academia. They discuss mentoring in universities and the use of flexible working time in

their laboratories. They suggest specializing in a field other than your PhD topic during the postdoc years, and finding cross-disciplinary collaborations. However, they don't address more particular problems, such as how to complete your doctorate if you suffer sexual harassment from a supervisor, or how to maximize visibility for your work in order to gain an influential position such as dean or president of a university.

Doyle-Morris has great experience and a passion for her subject. I hope she will write a sequel offering strategies for women in academic science — and that the sequel will offer insights from women belonging to different class backgrounds, races, nationalities, sexual orientations and physical abilities. ■

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Q&A: The algorist

Having moved from engineering to art, **Jean-Pierre Hébert** applies mathematical rules to generate artworks that explore themes of chaos and determinism. As resident artist at the Kavli Institute for Theoretical Physics, and with an exhibition on in Los Angeles, Hébert explains his interest in algorithms.



J.-P. HÉBERT

How did you become fascinated by algorithms?

At 19, I was exposed to the first computer that came to Europe. I took a summer job at IBM and became interested in mathematics and computer science. My taste in art was influenced by Mondrian and the Bauhaus. I was very interested in geometry. Soon I made algorithmic pieces by hand. Then I figured that I could program that.

Some of your works are computer-drawn, others are sculptures. Which do you prefer?

I have more affinity with the physical than the virtual world. I like to mark paper or water or sand, and I like to explore algorithms without using computers. There is a richness in something beautifully made on paper, stone, clay or canvas that is more inspiring than a flat image.

How have you interacted with researchers?

I've always had a strong interest in physics. In collaborations with scientists I learnt about new phenomena in physics and nature and about new ways to express them. I have learnt tricks to define spirals and made graphical presentations of the gravitation around black holes.

How did your style develop?

At first my work was monochromatic and flat, and used only certain themes in geometry. I wanted to animate it more and make it happen in three dimensions — to make it subject to fields and forces and waves, and to submit it to phenomena like reflections on the surface of water.

How did you define the 'algorist' movement?

We established, 40 years ago, that the work should

be based on algorithms but it should also produce an object of art — something concrete, such as a drawing, a painting, a sculpture, a piece of music. It should not be simply the concept behind an algorithm.

Are algorithms important in art?

Over the past century most artists were algorists, even if they did not know it. Mondrian has an algorithm; cubism was a set of algorithms. Algorithms are just a tool, as is a computer, a brush or a pencil. The personality of the artist takes over and should transpire through the work. Algorithms are not an end in themselves. ■

Interview by *Nature* reporter **Daniel Cressey**.

Jean-Pierre Hébert: Drawings as Thoughts
SCI-Arc Library, Southern California Institute of Architecture, Los Angeles until 13 December 2009

Kavli Institute for Theoretical Physics, University of California, Santa Barbara
A sand sculpture has been placed on permanent display.

J.-P. HÉBERT

