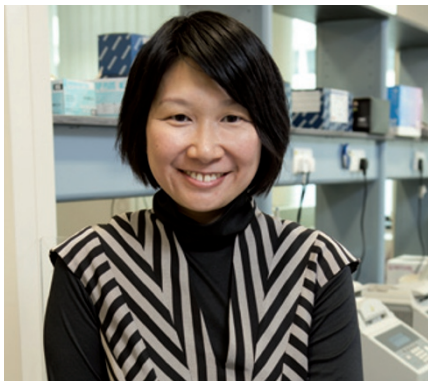
TURNING POINT
Rossa Chiu

Rossa Chiu, a chemical pathologist at the Chinese University of Hong Kong, helped to develop the first non-invasive diagnostic test for Down's syndrome. This year, she has won two awards, including the 2011 Professors' Prize to acknowledge general achievement in clinical biochemistry, given by the Professors and Heads of Academic Clinical Biochemistry Departments in the United Kingdom.



You're from Hong Kong, but earned your medical degree at the University of Queensland in Australia. Did you always plan to return to Hong Kong?
A change in the licensing legislation convinced me to return. They would no longer automatically recognize Hong Kong citizens trained overseas as doctors. There was a two-year grace period, however, in which citizens could return and do an internship without having to take the licensure exam. No one knew what the exam would be like, so I applied to come back.

How did your research career take shape after that move?
I got my first job in 1999, as a medical officer to be trained as a chemical pathologist at the teaching hospital of the Chinese University in Hong Kong. I was affiliated with the hospital, but not the university. Within three months, the department chair thought that I had potential, and suggested I pursue a career in research — a move I hadn't considered. I wondered how I would cope doing independent research for a PhD while also completing six years of training at the hospital, but I decided to go for it. An opportunity landed in front of me, and I thought I shouldn't waste it. That became my motto — never say no to an opportunity.

What was your PhD research?
My supervisor, Dennis Lo, had two streams of research: developing non-invasive prenatal diagnosis by sampling fetal DNA from the mother — a young field — and using nucleic acids in plasma of cancer patients as diagnostic markers, a productive area. Years later, Dennis told me that he put me on the higher-risk fetal project because I would have a better chance of making breakthroughs.

Which of your successes do you consider a turning point?
In 2002, I got my first career boost when I was the first to detect nucleic-acid signatures of fetal autosomal recessive disorders in the mother's blood plasma. That expanded my profile such that research started to take up more time than my hospital duties. My research is focused on finding diagnostic tests for clinicians to implement easily. Earlier this year, we published a large-scale trial to show that the sequence-based test for Down's is clinically robust. We believe that using this technology, we can develop tests to diagnose any fetal disease. Unfortunately, the test is still very expensive; we are working to make it cheap enough to roll into clinics.

What do the awards mean to you?
The awards are nice; they are the icing on top. I feel lucky to have a career I love so much. But what means the most is the support of the pregnant women who donate blood samples, knowing that they themselves will never benefit from the results.

Would you go elsewhere if you got an offer?
One can never say no, but I would not move elsewhere if it was not complementary to what my family needs. I'm not in this career to try to secure a high-power research position at a prestigious university; my goal is to see non-invasive prenatal diagnosis in use. Here, I have family support while I pursue my goals.

What decisions have had the most impact on your career?
I think jumping into an area of science that was relatively new was a good strategy, because there was so much to be discovered. And I had a mentor who said that fortune only lands on those who are prepared, so I worked hard to be prepared to take advantage of good fortune. ■

INTERVIEW BY VIRGINIA GEWIN

ECONOMY

Recession hits industry

The recession has taken its toll on industrial research around the world, according to a scientific-indicators report released on 20 September by the Organisation for Economic Co-operation and Development (OECD) in Paris. As of 2009, the report says, PhD holders in industrial-research posts earned less than their counterparts in industrial executive or management jobs. Meanwhile, academic and government researchers earned more than non-researchers in those sectors. Mariagrazia Squicciarini, an OECD economist, says that the recession has squeezed industrial-research funding globally, even as governments struggle to maintain support for scientific research. "In some countries, the government is trying to ensure minimum funding despite the crisis," she says.

ACADEMIA

Energy institute at Yale

A US$25-million gift will help to create the Energy Sciences Institute, the latest of six research centres forming Yale University's West Campus outside New Haven, Connecticut. The gift from Yale graduate Thomas Steyer and his wife, Kathryn Taylor, announced on 13 September, will support the hiring of a director and the first of eight researchers. Recruitment continues at the other five centres, each of which has a different biological focus. Possible research areas for the Energy Sciences Institute are biofuels and materials science. "This is about as clean a slate as you can get in academics," says Scott Strobel, Yale's vice-president overseeing the West Campus development.

ENTERTAINMENT

PhD film launches

On 15 September, the first of some 180 screenings of *The PhD Movie*, a spin-off of popular online comic strip *Piled Higher and Deeper*, launched at universities around the world (see go.nature.com/fixuqb). The film is about the high-pressure world of academia. Comic-strip creator Jorge Cham, who holds a PhD in robotics from Stanford University in California, wrote the script; graduate students at the California Institute of Technology in Pasadena produced and acted in the film. Cham hopes that it will help to break down stereotypes about PhD scientists (see interview with Cham at go.nature.com/yxlb9q).