

## Birth Defects Tests now possible in Jamaica

SCIENTISTS AT one of the region's premier genetic laboratories have made huge leaps for the Caribbean in the area of diagnostics, which could provide hundreds of women with life-altering information about their babies long before they are born.

Compton Beecher, lead scientist at Caribbean Genetics (CARIGEN), based at the University of the West Indies (UWI), Mona, said the company was now offering the service of testing amniotic fluid samples to detect genetic abnormalities, such as Down's and Edward's syndromes.

The samples are first collected through an invasive technique known as amniocentesis, which is conducted by an obstetrician/gynaecologist and then sent to the lab for testing.

### Prenatal test

Amniocentesis is the most common pre-natal test used to diagnose chromosomal and genetic birth defects. The procedure has been possible for some time. However, testing of the samples has never before been offered to the public locally, or in the region.

Previously, samples from expectant mothers would have to be sent overseas for a type of testing known as karyotyping. Through this procedure, scientists would look at the complete profile of the fetus's chromosomal set-up to identify genetic abnormalities.

However, karyotyping is quite costly, and results could often take up to two weeks to be sent back to the island. Beecher recently said that CARIGEN would be offering the service locally for half the cost of a karyotype, with a turnaround time of about three to five working days.

A karyotype usually costs about US\$600 (J\$53,400), while the tests being offered by CARIGEN will cost about US\$300 (J\$26,700). "It's not karyotyping, but it's a test that's just as accurate and will give you the same information," Beecher said.

"We do a full-screen DNA test for the most common trisomies, as well as sexual abnormalities," he said. Beecher further added that the tests were about 99 per cent accurate.

### Breakthrough for medicine

Currently, the service is only available through Central Medical Labs Limited in Jamaica, however, Beecher said one of CARIGEN's main focuses is to eventually offer the service through other labs locally, and throughout the wider Caribbean.

Dr Nadine Johnson, maternal-fetal medicine specialist in the Department of Obstetrics and Gynaecology at the University Hospital of the West Indies, said this represented a breakthrough for medicine and maternal-fetal health in the Caribbean.

She said with more women now choosing to get pregnant at a later age, there was a need for the service locally, particularly one that was cheaper, with a shorter turnaround time.

Dr Johnson further said with this new option, women might now be more willing to do the diagnostic test in cases where previous screening exams had come back positive. "The costs of similar tests are pretty prohibiting," she said. "We've had some cases where women have had the screening test and it came back positive, but they couldn't afford the full karyotype. So at least now they have a cheaper alternative."