UWA strikes stem cell deal

Cynata tie-up could help find a cure for a lung disease

JOHN ROSS

IN a deal that plumbs the potential of one of medicine’s most hyped branches, the University of Western Australia has secured a supply of one of the human body’s most formative cells.

The Perth sandstone has partnered with one of Australia’s few commercial-scale stem cell manufacturers to find a cure for an incurable lung disease. Idiopathic pulmonary fibrosis has no known cause and limited treatment options, and a diagnosis usually means the sufferer will be dead within five years.

For the university, the alliance offers a consistent supply of identical stem cells for a trial study in animals. For the company, it offers “intellectual horsepower” to validate the products.

“There are some (deals) where the company just throws money at academics and hopes for the best,” Cynata Therapeutics chief executive Ross Macdonald said.

“In this case it’s a genuine two-way relationship. The more areas we expose our cells to, the better the commercial opportunity. If it was found that our stem cells were only useful for ingrowing toenails, they wouldn’t be much good commercially, but lung fibrosis — which is a particularly devastating condition — has an annual therapeutics market of a billion dollars.

“(That’s) fine for relatively rare diseases, but if you want to treat diseases of economic importance — like heart attack, stroke or lung fibrosis — (you need) an off-the-shelf product, where (someone’s) stem cells can be used in any patient,” he said.

Professor Laurent, who also directs the Lung Institute of WA, said the hope was that injected cells would “go straight to the tissues we want to treat (and) regenerate viable functional tissue”.

He said there had been significant breakthroughs in treating blood cancer and macular degeneration using stem cells.

While the field was still to live up to its more general promise, “at some stage people will be treated with stem cells off the shelf. I don’t know when it will be, but it will come, and I don’t want Australia to be behind the eight ball.

“We need to be leading in this area. It will be good for people’s health and good for Australia’s economy.”
Cynata chief Ross Macdonald says his firm will provide a consistent supply of identical stem cells for the university's trial.