



## From the front line of innovation

Bray-based Megazyme has gone on to see its biotech products used by over 5,000 of the world's best-known analytical laboratories, universities, food, wine and industrial companies

**'If your products are innovative and good, you'll keep selling'**

Dr Barry McCleary and Dr Simon Charnock

**T**ALKING to Dr Barry McCleary about Megazyme, it is hard not to be impressed by his enthusiasm. Megazyme was founded in 1987 with the specific aim of developing and supplying innovative test kits and reagents for the cereals, food, feed and fermentation industries. The decision to form the company was based on insights that McCleary had obtained during his 20 years of experience in cereal, enzyme and carbohydrate research in Australia, USA, Switzerland, the UK and Ireland. He realised that there was a clear deficiency of good, validated methods for the measurement of the polysaccharides and enzymes that affect the quality of plant products from the farm gate to the final food product. In 1989, his wife, Angela Kennedy, joined the company as marketing director. The company relocated to Bray in 1996 and built a R&D facility in the IDA Business Park.

"Initially, the company focused on creating novel kits and reagents to measure enzymes and plant polysaccharides, such as starch and dietary fibre. All of these products were researched and developed within Megazyme. In most cases we are the sole world supplier," McCleary explains.

These novel products were immediately adopted by research and analytical companies, universities and government laboratories worldwide. Customers include well known brands such as Kellogg's, Heinz, Unilever, Procter & Gamble, Kraft and Nabisco. Several of Megazyme's test methods have been evaluated and accepted by scientific and

industry associations such as the highly prestigious Association of Official Analytical Chemists International. A determined approach to R&D has resulted in Megazyme now being the recognised international leader in the development of analytical methodology for dietary fibre components, glycaemic carbohydrates and industrial enzymes. "One of the major health problem facing the Western world at present is childhood obesity and the associated Type II diabetes. In terms of diet, the most significant contributions will come from the inclusion of more dietary fibre and less glycaemic carbohydrate in the foods we eat. Megazyme is supporting this effort by developing and providing advanced bio-analysis test kits," says McCleary.

"By 2002, we realised we had to develop new technology platforms. This paved the way for a major investment in a new molecular biology division to allow us to rapidly produce a wide range of enzymes and create new test kits aimed at the wine, dairy and food ingredients markets," outlines McCleary. "We employed Dr Simon Charnock to head this new division. In just three years, many enzymes have been produced with the development of 45 new test kits. This has enabled us to compete head on with major international companies such as Roche Diagnostics."

It has also opened up new worldwide markets for Megazyme in the wine and dairy industries. In Australia alone, the company has won many accounts, including those of Fosters and Hardys, resulting in a 100pc increase in sales of wine test kits over the past year.

An innovation-oriented approach has enabled Megazyme to break into important new markets, such as clinical research, with customers including Birmingham Children's Hospital, the Mayo Foundation in the US and Copenhagen University Hospital, Denmark. Another possible breakthrough market will be in the testing for food allergens and Megazyme has already initiated research in this area. McCleary believes that, as the world becomes more populated and health systems feel the strain, home food allergen testing will become a real possibility.

McCleary says that his partner, Angela Kennedy, has done a brilliant job in developing the company website. "This website is the hub of our business and marketing activities and contains a wealth of technical information. At present it attracts up to 600,000 hits per month." With such a strong global reach and installed blue-chip customer base, it is hard to believe that Megazyme employs just 16 people.

According to McCleary, the company wouldn't have been able to move into the molecular biology market with such effectiveness without the help of Enterprise Ireland. "Megazyme is self-funded and greatly appreciates the grant assistance from Enterprise Ireland. In the past few years, we have invested approximately €5m into facilities and equipment, allowing us to attract top scientists locally and abroad. This major investment allows us to take the next step forward." McCleary has every reason to feel optimistic for the future of Megazyme. "If your products are innovative and good, you'll keep selling."