# Mylnefield Research Services Ltd

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Mylnefield Research Services Ltd (MRS) was established in 1989 as the commercial arm of the Scottish Crop Research Institute (SCRI) to enhance competitiveness, and to understand and fulfil the needs of industry. MRS not only markets the resources and expertise of SCRI, but also undertakes near-market research and development. MRS places particular emphasis on developing partnerships and strategic alliances with industry.

MRS acts as the gateway to a variety of skills unique within the UK biological, agricultural and horticultural research services, ranging from fundamental studies on genetics, molecular biology and physiology, through agronomy and pathology, to glasshouse and field trials from a single site. As a technology transfer company, MRS is able to market the scientific expertise and resources of SCRI, and promotes the contribution of science and technology to wealth creation and the quality of life.

### Mission Statement

Mylnefield Research Services Ltd will exploit commercially the scientific expertise and resources of the Scottish Crop Research Institute while protecting its charitable status and intellectual property.

The aims of MRS are entirely consistent with the Government's policy objective of improving the contribution of publicly-funded science to wealth creation and ensuring the productive use of Government assets.

The commercialisation activities of MRS take a variety of forms and include: research and development collaborations with industry; licencing of technology to third parties; provision of services and consultancy. A future objective is the creation of joint ventures and spin-out companies which is consonant with the Scottish Executive Strategy for Agricultural, Biological and Related Research 1999-2003.

The calendar year 1998 was characterised by major mergers of seed and agbiotech companies and this has continued into 1999. The driving force for these mergers and alliances between agrochemical multinationals and specialist genomic companies is the acquisition of intellectual property (IP), freedom to operate, and realising a clear route to market.

### Roles and Responsibilities of MRS

MRS provides a service to SCRI scientists by

- Providing information on funding opportunities
- Assisting with the preparation of grant applications and research proposals
- Costing and financial management of programmes
- Negotiating contracts
- Project management
- Identifying and protecting IP
- Searching for 3rd Party IP
- Managing IP
- Writing business and implementation plans
- Marketing SCRI's scientific expertise
- Developing new markets for SCRI's and MRS's IP
- Licensing
- Diversifying the funding base
- Promoting SCRI as a centre of scientific excellence

### Finances

From the time of incorporation, MRS has been self-sufficient in providing its own accommodation and staffing, achieved without start-up funding, Government subsidy or venture capital.

The turnover in the financial year 1997/1998 was £1.79M, of which almost £1.16M was used to directly fund research projects at SCRI. Income was generated through royalties (6%, previously 3%), analytical services and consultancy (5%, no change), contract research (45%, previously 47%) and collaborative research (44%, previously 45%).

### Personnel

During 1998, Dr Julie Squires was appointed to work on a commercially-funded project related to soft fruit improvement and disease control.

### Intellectual Property

MRS has continued to manage SCRI's intellectual property portfolio. Three new preliminary patents were filed in the financial year 1998/1999. The first covers a method for the identification of strains of *E.coli* O157 (Toth and Hyman) which evolved out of work on *Erwinia*. This methodology is currently

being validated by the Scottish Reference Laboratory for *E. coli* testing in Aberdeen. Tissue-specific promoters (Machray, Hedley, Davidson) were also the subject of a patent application and have attracted interest from several commercial companies. Finally, SCRI's patent portfolio in the field of viral vectors was strengthened by the filing of a patent that covers the applications of a transporter protein (Talianski, Riabov, Robinson and Wilson) derived from umbravirus. This complements the Overcoat® virus vector patent (Chapman, Santa Cruz, Oparka and Wilson) which was granted in Australia and New Zealand in 1998 and is pending in the USA, EU and Canada. Another patent granted in 1998/1999 was the spliceosomal promoter patent which was granted in Australia, New Zealand and the USA.

### Training

Dr Jonathan Snape, Commercial Manager of MRS, was awarded a Sainsbury Management Fellowship in the Life Sciences by the Gatsby Foundation. This award, the first in Scotland, covers the fees for studying a MBA by distance learning at the University of Strathclyde, and will strengthen the management team at MRS.

### Marketing

MRS has continued to market vigorously the expertise and facilities available at SCRI. In addition to a number of new brochures and flyers highlighting specific areas of expertise, MRS has launched a company website which has attracted a great deal of interest and potential customers primarily from North America. MRS has been represented at BIO 98 in USA, ABIC 98 in Canada and numerous other conferences and exhibitions in the UK. The number of commercial companies visiting SCRI in 1998/1999 increased significantly, leading to several possible collaborations.

### Royalties

Royalty income increased by more than 30%, primarily due to the success of the strawberry cultivar Symphony which performed exceptionally well, both in the UK and The Netherlands. The blackberry cultivar Loch Ness continued to perform well, as did the raspberry Glen Ample. Potato royalties were disappointing, and several cultivars have been dropped by our commercial partners. However, royalties from brassicas (marketed by Advanta and Nickerson), in particular Caledonian kale and the swede varieties Invitation, Airlie and Kenmore, were higher than expected.

### Lipid Analysis Unit

The MRS Lipid Analysis Unit continued its steady growth and expanded its portfolio of services. A major move into the analysis of serum fatty acids has opened up a potentially very large market, and has necessitated the recruitment of another technician in 1999. The core business remains the analysis of evening primrose and borage oils.

### Collaborative Research

MRS has continued to be involved in the project management of four Link Schemes and two EU projects, and has assisted SCRI scientists in the preparation of proposals for funding from the EU and other sources. In 1998, eight EU contracts, with a total value of almost £950k were secured. The levy boards continued to support the research at SCRI; contracts with the BPC worth £241k (including one project jointly funded with SOAEFD) and with HGCA worth £31k were signed in 1998.

### Contract Research

Nine new contracts were signed with commercial partners in 1998, including a 3-year, multi-million dollar contract with Biosource Technologies of California, USA, to develop viral-vector technologies and eight other contracts worth a total of almost £1M. These contracts cover a wide range of topics including lipid analysis, plant breeding, plant biochemistry and genomics, and include several well-known multi-national companies that can not be named for reasons of confidentiality.

### Acknowledgements

MRS gratefully acknowledges its sponsors and the co-operation of SCRI scientists and administrative staff for their contribution to the success of the company.