

# Cambridge Combinatorial

It seems the market for suppliers and partners in the field of combinatorial chemistry is still far from complete. On the 25th February, a new company, Cambridge Combinatorial (CC) was launched, bringing together a range of talents from industry and academia. Not least, it brings together the Marchington brothers in what the *Financial Times* describes as the UK's first 'biotechnology dynasty'. Tony Marchington is the ebullient CEO of Oxford Molecular Group plc (OMG), a company with an established reputation as purveyors of integrated molecular design software, bioinformatics tools and collaborative research services, and itself a spin-off from the Dyson Perrins Laboratories of Oxford University. His younger brother Allan Marchington (30) will be the CEO at CC; until the end of 1996, Allan was a Project Team Leader in antiviral research at Pfizer Central Research (Sandwich, UK). The Technical Director will be Dr Ryszard Kobylecki, a former Project Team Leader in combinatorial chemistry with 16 years' experience at Pfizer and the coinventor of a new library method.

## Academic heavyweights

The team includes some of the UK's academic heavyweights – Steven Ley (Professor of Organic Chemistry, University of Cambridge) and Alan Fersht (Herchel Smith Professor of Organic Chemistry and Director of the Centre for Protein Engineering, University of Cambridge), who will become non-executive directors. Ley was the first UK academic to publish in the field of combinatorial chemistry. According to Tony Marchington, the company will benefit from the fact that Ley and Fersht have already established "high-level relationships in industry advising on drug discovery". Ley looks upon the new venture as an exciting challenge that will enable him to exercise academic expertise and to generate the inventive practical solutions required by industrial problems. Fersht's skills will be applied in the lead optimization programmes and will draw upon extensive experience of working with biotech companies in understanding drug-target interactions. The company will also retain Mark Bradley and Richard Brown (Southampton University, UK) as consultants.

The launch of CC is based on a funding deal from OMG worth £2 million over four years. The investment entitles OMG to a 20% stake in the issued ordinary share capital. The management, founding scientists and University of Cambridge will be principal shareholders. Tony Marchington sees the move as an important strategic step for OMG in being able to provide clients and partners with access to services at all stages of the discovery process. OMG intend the relationship with CC to be a close one. The new company will provide core combinatorial compound libraries and targeted libraries to the industry. Allan Marchington views the former as a bread-and-butter activity, while the considerable intellectual input required to develop targeted libraries of compounds and ongoing involvement in optimization programmes will generate long-term partnership deals with major pharmaceutical and biotech companies from which royalty payments will be derived.

## Strategic relevance

For OMG, these skills in providing solutions to companies seeking compounds for primary and secondary screening programmes will complement the core skills of OMG in drug design and discovery software. As such, this represents an important step in OMG's coverage of the discovery process. According to Tony Marchington the remaining gap (target identification) will be filled in 1997, or 1998 at the latest, either through organic growth, acquisition or collaboration.

The benefits for enhancement of the OMG boutique of discovery services are clear, but what of CC. With brothers as opposite numbers communication lines are likely to be short, and the funding is vital, but there are other considerable benefits for the nascent company. OMG is an established company with 140 staff worldwide, it can provide a quick start for CC with its established experience and informatics support.

Access to OMG's sales and marketing machine provides CC with an important shared customer base that many competitors would envy. The company will also be able to access OMG's IT resources.



*The Cambridge Combinatorial team: (from left to right): Dr Allan Marchington, Professor Alan Fersht, Dr Ryszard Kobylecki, Professor Steven Ley and Dr Tony Marchington.*

## Libraries on the Net

The new company plans to offer 'libraries on the Net'. Clients at the desktop will be able to find out detailed information on compound libraries, when they can be delivered and how much they will cost.

The brothers believe that the competitive advantages of the new company extend far beyond the strengths associated with the collaboration. The real strengths lie within the new company's team itself. Allan Marchington and Ryszard Kobylecki initiated the plan when seeking an external supplier for a project at Pfizer. They could not find a company able to provide a rounded solution to their problems; too frequently there was a shortfall in some dimension of the service offered. They believe that by bringing the skills of experienced medicinal chemists to bear, in combination with creativity from academia, the company will be able to offer potential clients a complete core skill set. Allan Marchington identified the following as key features of their service:

- Medicinal chemistry experience (the company anticipates hiring only those chemists with at least two years' pharmaceutical experience).
- Drug-like structures (they consider that too many suppliers synthesize compounds that are likely to fail in preclinical assessment)
- Quality and reproducibility (working to GMP)
- Premium product
- World-class informatics (strategic collaboration with OMG)

The global market for combinatorial chemistry is estimated to be £500 million, and on a conservative basis this can be expected to rise to £600 million in four years. Because business is anticipated from many of the medium-sized US companies as well as the major players, it is expected that most business will be derived from the USA (60–70%), with the remainder divided equally between Europe and Japan.

## The future

Neither OMG nor CC will have their own in-house drug development programmes. The risk is too high, and the companies would suffer from being perceived as competition by their customers.

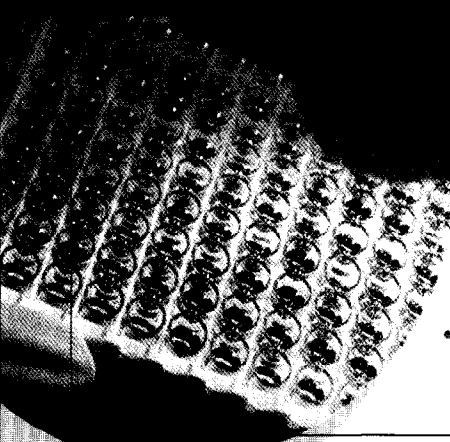
As yet, CC has no specific contracts established although the brothers point out that substantial progress has been made in negotiating with major companies. Tony Marchington expects the company to attract deals worth hundreds of thousands of pounds, possibly millions, in the course of 1997.

Ultimately, the company needs to capitalize on its pedigree. The company must distinguish itself from the rest of the field through demonstrating the quality in depth of service claimed by its founders – the name of the game will be 'value'. The brothers promise that deals will be announced sooner rather than later, so time will tell.

*David Hughes*

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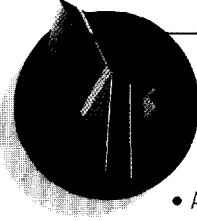
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