



CONSULTANCY

Case studies



A SKINCARE REVOLUTION

BOOTS NO7 PROTECT & PERFECT – THE PERFECT PRODUCT LAUNCH

What started as a small piece of consultancy for Boots, and the testing of some experimental products using the Manchester Patch Test Assay – led to one of the most successful product launches in companies history. With independent data, and expert insight from The University of Manchester, the launch of No7 Protect & Perfect Serum was an overnight success.

Sales rose
from
1,500
to
24,000
units a day

following the BBC
Horizon screening

Prof Chris Griffiths was initially approached by Boots to advise on a number of their new skincare products, specifically targeted at the causes of aging and skin damage. Chris applied his Manchester Patch Test Assay to determine the clinical effects of their products on skin.

This work was showcased in a BBC Horizon documentary, demonstrating the efficacy of the 'Protect and Perfect' anti-aging serum, leading to unprecedented demand and sales of the product. Up and down the country, queues formed outside Boots' shops for the launch, and sales surpassed even the highest of expectations.

This initial piece of consultancy has led to a 15 year, £11m Strategic Partnership with Boots, alongside £4.5m of leveraged funding and numerous PhD and PDRA projects, and is one of the most successful industry collaborations with the University of Manchester.



NEW TREATMENTS FOR LYMPHOMA

CONSULTANCY AS AN ONGOING TOOL TO MAINTAIN A VALUABLE INDUSTRY PARTNERSHIP

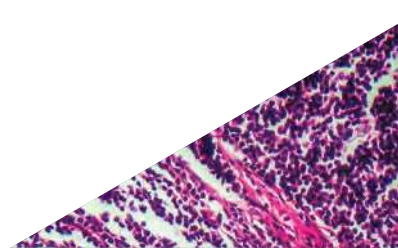
Since 2010, consultancy has played a key role in helping maintain the relationship between Prof John Radford and Takeda – a Japanese multinational pharmaceutical company. As a world leading expert in Hodgkin and non-Hodgkin lymphomas, John has provided valuable insight and expertise to Takeda and their relationship has helped improve the lives of people with lymphoma around the World.

160
children

are diagnosed with
lymphomas every
year in the UK.

Prof John Radford has provided invaluable academic and clinical advice for Takeda, leading or being involved in a number of clinical trials around the World. Most recently, John developed and is leading an international trial (RADAR) of a novel treatment for early stage Hodgkin lymphoma. Prof Tim Illidge, also from Manchester, is leading on the radiotherapy aspects of this trial. In addition to the clinical questions, RADAR has an important translational science component led by two other Manchester academics, Drs Kim Linton and Beth Phillips.

Consultancy acts as a complimentary activity to the larger studies and clinical trials between the University and Takeda, where they can access his expertise flexibly and quickly. This includes advising their board of Directors, engaging with commercial partners, representing Takeda at the European Medicines Agency, or presenting results of clinical trials at conferences.



BUILDING THE UK BIOENERGY STRATEGY

A CROSS-WHITEHALL PROJECT TO INFLUENCE AND STEER THE UK GOVERNMENT'S BIOENERGY STRATEGY

Energy from biomass will play an important part for the UK to achieve its net zero targets. The UK Government reached out to academics specialising in bioenergy research at the University of Manchester to improve their modelling and knowledge base around biomass. In addition to leading the delivery of a crucial scoping report, consultants from UoM took part in cross-Whitehall policy briefings and influenced future tenders and the forthcoming UK Bioenergy Strategy.

Andrew helped
advise on

£110m
of UK Government
funding

for renewable incentive
schemes and climate
change policy.

Working as part of the UK Supergen Bioenergy Hub, Dr Andrew Welfle worked across UK Government Departments to provide expertise around biomass and bioenergy, reviewing their models and strengthening their knowledge base.

Andrew led the development of a scoping report for the Department for Transport (DfT) and the Department for Business, Energy & Industrial Strategy (BEIS) in collaboration with Aston University, Aberystwyth University and Southampton University.

The key recommendations from the scoping report will contribute to the development of the upcoming revamped UK Bioenergy Strategy, and will also influence upcoming tenders that will aim to fill some of the knowledge gaps identified.

Alongside this project, Andrew has worked on a number of consultancy projects for UK Government departments. One project with the Department of Energy & Climate Change (DECC) came about as a direct consequence of Andrew presenting to a visiting delegation, showing the importance of communicating research beyond the University.



SHINING A LIGHT ON LED TECHNOLOGY

CONSULTANCY FOR A CUSTOM TOOLKIT TO OPTIMISE LED PERFORMANCE

In order to tackle issues facing the current generation of LED Devices. Kubos Semiconductors partnered with Dr Patrick Parkinson at the University of Manchester to develop a characterisation toolkit for a new material used in LED and micro LED devices. The current generation of these devices has limitations, including reduced efficiency at longer wavelengths and at high drive currents. The project aimed to provide a toolkit for independent measurements of electrical and optical performance, allowing for the optimization of LED and micro LED devices with improved efficiency and colour purity.

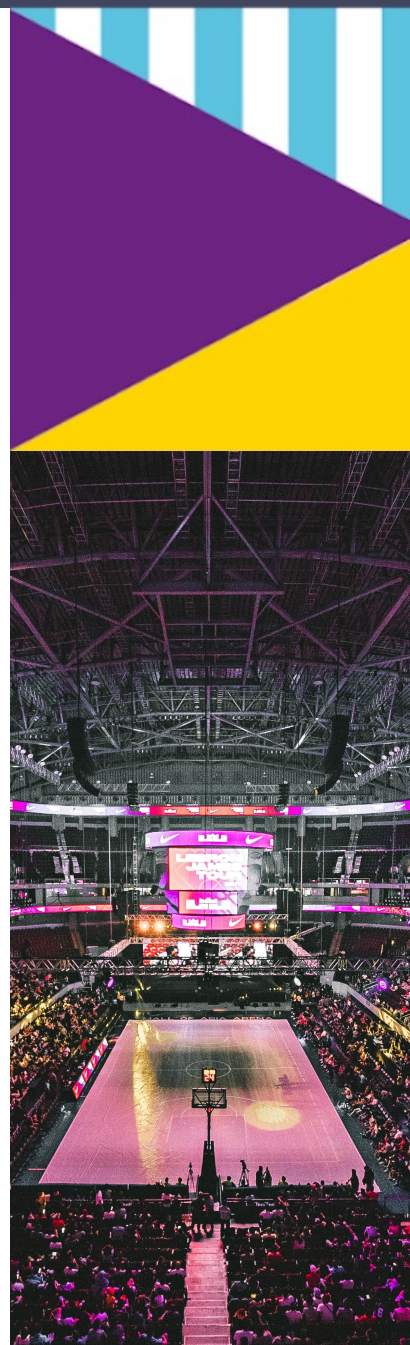
“The ability for Kubos to access this world leading facility and support the development of the UoM toolkit has had substantial benefits for our material development.”

Caroline O'Brien
CEO Kubos

By using Kubos' emerging cubic-Gallium Nitride based LEDs, the team demonstrated the capabilities of the toolkit, resulting in improvements and leading to a commercialised product. The goal; to replace traditional hexagonal-nitride LEDs and microLEDs with new cubic-Gallium Nitride ones, which allows for increased efficiency at longer wavelengths.

The partnership also benefits Kubos Semiconductors by providing access to world-leading facilities and expertise in opto-electronic characterization, leading to the acceleration of LED technology development and commercialisation.

The project has significant potential for impact across the UK and EU semiconductor industry, providing comprehensive insight into emergent materials and lowering the barrier to entry for SMEs in the sector.



IMPROVING CUSTOMER JOURNEY

ACADEMIC EXPERTISE TO DEVELOP WEBHELP'S CUSTOMER EXPERIENCE INDEX

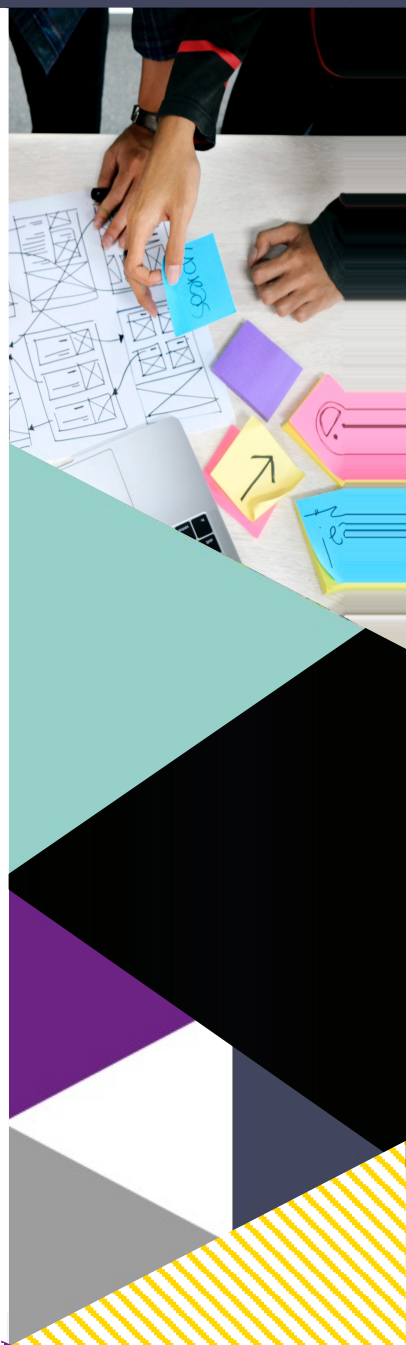
In collaboration with Gobeyond Partners, Professor Heiner Evanschitzky, an expert in marketing and retail at the University of Manchester, provided consultancy to Webhelp - a provider of customer experience and business solutions - to create a Customer Journey Index that enables firms to holistically measure the consumer experience and help predict business outcomes such as Net Promoter Scores.

Webhelp
analyses

**10,000
data
points**
every single
minute.

The project aimed to measure the quality of the customer journey through data, pattern analysis, and both qualitative and quantitative analyses. This led to the development of an index whose predictive power could be tested through experimentation and regression analysis.

Overall, the project aimed to help businesses understand customer perceptions of all interactions with the firm in order to improve their experience. The index allows businesses to identify areas for improvement, leading to increased customer satisfaction and loyalty as well as economic outcomes such as sales. The project's success demonstrates the importance of developing a valid and reliable measurement approach to holistically capture customer experiences.



REVOLUTIONISING POULTRY HEALTH

3D XRAY IMAGING TO IMPROVE BONE HEALTH IN THE POULTRY INDUSTRY

Aviagen, a world-leading poultry breeding company, approached Professor Timothy Cootes from the University of Manchester to develop a software tool that could identify signs of joint disease in the legs of broiler chickens from 3D X-ray images. Aviagen wished to use such images to enhance its current selection for improved broiler chicken leg health and welfare, through the detection of clinical and sub-clinical Tibial Dyschondroplasia (TD), a disease of the leg joint.

Using the software
Aviagen can
analyze up to

12,000
birds a week.

Professor Cootes developed a prototype that showed promising results enabling Aviagen to identify the birds exhibiting TD more simply, accurately and with higher throughput than the hand-held 2D X-ray devices previously used. The system was adopted by Aviagen and is now monitoring over 10,000 birds a week across several sites.

The success of this initial collaboration led to a series of further projects in which a range of different measurements related to skeletal health of each bird were automatically calculated from the 3D X-Ray images.

As a result of this successful synergy, Aviagen have recently agreed to an on-going consultancy with Prof Cootes and a software licensing deal with the University of Manchester Innovation Factory. This agreement allowed them to use the technology exclusively on a larger scale across multiple sites.



DEVELOPING BRAND POWER

MEASURING SOCIAL PURPOSE IN BRAND REPUTATION ASSESMENT

In today's competitive business environment, building and maintaining a strong brand image is crucial for success, and effective public relations strategies play a critical role in shaping that image. Dr Ilma Nur Chowdhury, Senior Lecturer in Marketing, and Citypress, a leading public relations agency in Manchester, have collaborated to develop the Reputation Assessment Profile (RAP) framework, which measures the power of their clients' brands.

Citypress is a

Top 40

UK PR Agency and
the second largest
independent
employee-owned
PR agency.

The framework combines customer-built research with thousands of media and social media data points to evaluate a brand's performance against four identified building blocks of reputation – salience, relevance, advocacy and approval. As a result, brand communications activity can be better tailored and targeted for the greatest positive impact.

The overall consultancy process has proven to be very helpful and allowed Citypress to refine their brand assessment framework.

This case study illustrates the mutually beneficial relationship between industry and academia, where companies can leverage the knowledge and expertise of universities to advance their products and innovations



SOCIAL IMPACT OF DEVELOPMENT

SHAPING THE INTER-AMERICAN DEVELOPMENT BANK'S FUNDING CRITERIA

The Inter-American Development Bank (IADB) enlisted Professor Karen Lucas's help as an expert in transport and mobility to evaluate transport systems in low and middle-income communities in Latin America and the Caribbean. Karen advised IADB on the urgent need to consider social and environmental impacts of transport projects in addition to their economic and environmental benefits. Her guidance led to IADB's funding criteria shifting to include social equity outcomes from its transport infrastructure investment programs.

Inter-American
Development Bank
has a
\$600m
investment budget.

Inter-American Development Bank is owned by 48 sovereign states and provides development financing to 26 countries, with an annual investment budget of over \$600 million. Its funding is designed to promote sustainable economic growth and social and regional integration across Latin America and the Caribbean.

One project in Colombia involved the construction of a new road in a low-income community. Instead of cutting through the community, the road was built along the outskirts, connecting it to the nearby town. This approach ensured that the road did not disrupt the community's daily lives or create safety hazards.

As a result of Karen's guidance, IADB-funded transport projects now not only bring economic benefits, but also contribute to the social and environmental well-being of the communities they serve.



MATERIAL TESTING & DEVELOPMENT

HOW TECHNICAL FIBRE PRODUCTS LEVERAGED UNIVERSITY EXPERTISE TO INNOVATE AND GROW

While consultancy can often be for short, focused periods, some academics provide ongoing consultancy to companies over many years. In 2005, Technical Fibre Products (TFP) approached Prof Bill Sampson, from the University of Manchester, to help model the structure of their advanced technical non-woven textiles. The output of this initial consultancy was a 20-page technical report, which TFP still uses to this day.

Technical Fibre
Products and Prof
Bill Sampson have
been collaborating
for

12
Years

The relationship continued with TFP producing samples for a PhD student, the analysis of which were incorporated into TFP's sales literature. TFP also funded two PhD studentships and supported an Impact Acceleration Award project. These projects resulted in theses, papers, know-how, and additional sales literature for the company.

Through these collaborations, TFP gained expertise and advice that informed commercial and investment decisions, leading to added value for their customers and increased credibility for their products.

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