

# medisphere



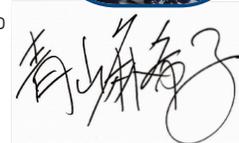
Business Support on Your Doorstep

Issue Ten, February 2010:  
Newsletter of the Emerging Medical Technologies Group  
A project of LTN (London Technology Network) and  
Enterprise Europe Network

Welcome to the latest issue of the EMT newsletter. This issue covers a review of our recent networking event which we organised around the Technology Strategy Board competition on fighting infection through detection. Two posters presented at this meeting have been hand-picked and are included on page 6. We introduce Stabilitech, a private company in London that allows for the stable storage of vaccines, and we also have an article on topical delivery of nail therapies from Dr Sudax Murdan at the School of Pharmacy, University of London.

Our upcoming conference Biomarker Discovery and Validation takes place on 28 April and I am pleased to say that we are already seeing an excellent number of companies registering. We are also working with the Oxford Biotechnology Network to run a technology showcase at the BioTrinity conference on 14 April in Oxford.

We hope you enjoy this issue and look forward to seeing you soon.



– Maki Aoyama, Business Development Manager, Life Sciences, LTN

## On helping you succeed

When working in industry, it might be difficult to imagine how many government-related employees spend a large proportion of their everyday job discussing how best to support your business. If you have attended a conference organised by LTN, for example, you will probably not be aware that we are taking every creative measure to ensure that you will get the most out of your day, and we cross our fingers behind our backs for you when we see you talking with potential collaborators over a glass of wine. When you tell us that you have spent half a day discussing a project with somebody we introduced you to, we get very excited in our office. If you then launch into a collaborative partnership, be it signing a material transfer agreement or a submission of a joint grant proposal, we go out for a pint on your behalf as the news absolutely makes our day (as sad as it may sound).

Governments, of course, aim to foster an array of vibrant industries in their countries and invest an extortionate

amount of resources in laying out the optimum policies and systems at all levels. At LTN (funded by the regional development agencies and the European Commission) we aim to do this on the ground level, focussing on supporting research-intensive industries in all sectors. Our core activities are in promoting collaborative projects between industry and academia, as well as business to business.

On Tuesday last week, I found myself representing London and the South East of England in a bi-annual meeting of the Biotech & Pharma Sector Group of the pan-European technology transfer network Enterprise Europe Network (EEN), of which, as you know, LTN is a partner in two consortia. The network is funded for by the European Commission and is the largest of its kind in the world; it is made up of 600 local contact points employing a total of nearly 3,000 experienced staff spread around Europe.

As the least European-looking member of this Sector Group, I sat there

discussing how we could promote internationalisation for biotech and pharma companies in our own regions. The immediate and obvious strategy has always been to organise international brokerage events and trade shows. It is becoming increasingly obvious to us, however, that these international conferences don't yield the proportional amount of successful outcomes (ie, international partnerships signed) considering the amount of resource that goes into their organisation. How can we add more value and distinguish ourselves from giant commercial conferences such as BIO and BioPartnering Europe? Should we be competing with these conferences anyway?

There is something to be said about small bilateral "missions" of a handful of invited companies in a particular field, say regenerative medicine, coming over from (say) France for a targeted networking and partnering meeting with around 50 UK delegates. Such missions are frequently organ-

*continued page 2*



## Sectors continued

from page 1

ised by UKTI and foreign embassies, some of which LTN has in the past co-organised. I have also in my separate capacity run the first Japan Biotech Forum in London last September, and was pleasantly surprised with the participation of a good number of European pharma and the number of meetings they requested with the invited Japanese biotech companies. "Targeted" and "personalised" are key words for us in planning our future activities. As such I have offered at the EEN Sector Group meeting, that LTN can host such a bilateral mission within the year ahead, resulting in a number of nods of approval from members representing biotech clusters around Europe - so do watch this space.

You may have also noticed that we are now proactively assisting companies find partners for joint grant applications and bid submissions. Although we can do little in terms of helping companies raise money from private sources such as business angels and venture capitalists, we can certainly advise companies on accessing public funds and forming consortia that would strengthen their chances of winning bids, thereby leveraging their R&D spend.

You will see that my colleague Jolyon White has written a review about a recent conference we organised surrounding the latest Technology Strategy Board competition in the area of infectious disease diagnostics. We are starting to receive feedback on the outcomes of our support, such as the number of partnerships formed surrounding this competition and beyond. It would be extremely interesting to us to see how much our clients have been rewarded as a result, and how much value this would add to their projects and eventually product lines - this may certainly result in a series of pub outings for us!

- Maki Aoyama  
Business Development Manager,  
Life Sciences, LTN

## 2011 FP7 Health call

The 2011 Health Call work programme will be published in July 2010 for proposals



to be selected in 2011. This year a significant emphasis has been placed on SME involvement, with a set of "SME friendly" topics that allow greater flexibility of research area and mandate that up to 50% of the allocated funding goes to SME partners. Many other topics require at least one SME partner and a high proportion use the two stage evaluation process to reduce the initial risks. Selected topic areas include genome-based biomarkers, regenerative medicine and microbial resistance, all with an emphasis on more applied aspects. Other notable features are the appearance of specific Clinical Trials topics across a range of disease types, again with encouragement for SME participation, a wide range of topics requiring international co-operation and two pilot High Impact projects with budgets of up to 30 million that will lead to integrated research programs in epigenomics and immunisation strategies.

Though the work programme is not yet available for public distribution it is anticipated that the full draft version will be agreed in the March-April timeframe. Look out for further information and announcements on the FP7UK website [www.FP7uk.co.uk](http://www.FP7uk.co.uk) or contact Graham Hughes, the Health Theme National Contact Point responsible for SMEs, through the central FP7UK helpline [help@fp7uk.co.uk](mailto:help@fp7uk.co.uk). Local support is also available through the Enterprise Europe Network.

## Upcoming LTN Events

**BioTrinity Technology Showcase**

14 April 2010  
Oxford, UK



**Biomarkers Discovery and Validation**

28 April 2010  
London, UK

LTN events have restricted access. To learn more phone 0870 730 8661 or email Lauren at [L.Gold@LTNetwork.org](mailto:L.Gold@LTNetwork.org)

## Upcoming External Events

**BioEurope**

8-10 March, 2010  
Barcelona, Spain  
[www.ebdgroup.com/bes](http://www.ebdgroup.com/bes)

**eHealth Conference**

15 March 2010  
Barcelona, Spain  
[www.ehealthweek2010.org](http://www.ehealthweek2010.org)

**Medical Innovation 2010**

17-18 March 2010  
University of Oxford, UK  
[www.sbs.ox.ac.uk](http://www.sbs.ox.ac.uk)

**Repairing the Body**

22-23 April 2010  
Cranfield University, UK  
[www.repairingthebody.com](http://www.repairingthebody.com)

**Chemical Biology Centre & Rasor: Joint Technology Showcase Event**

30 June 2010  
[www.imperial.ac.uk/chemicalbiologycentre/tsc2010](http://www.imperial.ac.uk/chemicalbiologycentre/tsc2010)

To submit your event to the EMT website email Natalie at [N.Tamiollo@LTNetwork.org](mailto:N.Tamiollo@LTNetwork.org).



# Fighting Infection Through Detection: Event Review

LTN'S JOLYON WHITE EXPLORES THE SUCCESSES OF A RECENT LTN EVENT.

As those of you who attend LTN events will know - it depends on a combination of marketing to get the right audience mix, then partnering and networking, not to mention a lot of prior communication with the delegates on the mix of organisations. These activities require the heavy use of the LTN's CRM database and a number of other server based programmes. But electricity shortages in early January left the LTN offices closed for three days and in addition the weather worsened and it was looking like any delegates coming from more than a few miles away would not be able to make it in. The event went ahead and LTN thanks its supporters for making some fantastic efforts to attend. The forecast was far from optimistic, however delegates came from all over the country by a variety of means. Several made emergency contingency arrangements to stop overnight. As far as we know only one was stopped - being trapped overnight at an airport.

**Fighting Infection through Detection** was particularly important in the current economic climate. For some time now, LTN has been working with the LDA and the TSB to assist companies and public sector research centres come together in consortia in order to bid for TSB R&D support. The event was designed to on the one hand explain the criteria and mechanisms for obtaining TSB support and on the other, to explore the issues around working in consortia.

The event opened with a succinct introduction from LTN's Maki Aoyama and proceeded with presentations

from Penny Wilson and Sue Dunkerton for the TSB. Penny and Sue are key figures in the TSB's Infectious Disease Diagnostics Programme. This programme has been joined by the Department of Health and DEFRA and is aimed at the rapid detection of a number of human and animal diseases (see table 1.)

These are familiar targets where late detection leads to increased levels of

magnified when this is across organisational boundaries. Lines of communication are often unclear, availability of resource is less predictable and authority is sometimes not obvious. The skills of the project manager in these circumstances are of paramount importance and their job is made all the more difficult by the often ignored cultural differences between the organisations in the consortia.

Both Dr Roger Rosedale and Professor Phillip Butcher brought out these issues and the importance of addressing them at the outset, illustrating these points with case studies of both successful and less successful projects.

Dr Rosedale concluded that it is important to consider the strategic importance and fit of the project to all the partners in the consortia and to ensure that this was not missed behind the bright light of low cost finance for the research programme. There is a real risk that the benefits of the leverage will be lost if the consortia objectives are not clear and aligned. Furthermore a failed project in these circumstances can lead to considerable loss of reputation and credibility.

Conversely both speakers concluded that with the right mix, alignment of objectives and competent project management, consortia can reap enormous benefit from collaborative R&D.

- Jolyon White,  
Technology Consultant,  
Life Sciences, LTN

Human	Animal
<ul style="list-style-type: none"> <li>• Tuberculosis</li> <li>• Sepsis</li> <li>• Antimicrobial resistance to: MRSA</li> <li><i>C. difficile</i></li> <li>ESBL producing bacteria</li> <li>Community acquired pneumonia</li> <li>Antibiotic prescribing</li> <li>• STD:</li> <li>Chlamydia</li> <li>Gonorrhoea</li> </ul>	<ul style="list-style-type: none"> <li>• FMD</li> <li>• Swine Vesicular</li> <li>• <i>M. bovis</i></li> <li>• Bluetongue</li> <li>• Classical swine fever</li> <li>• African swine fever</li> <li>• Avian influenza (H5 and H7)</li> </ul>

Table 1. The priority areas for the Detection and Identification of Infectious Agents Innovation Platform

morbidity, mortality and economic cost.

The next two speakers addressed the issues of working in consortia towards a common goal.

It is often overlooked that the typical tensions of managing a project are

## LTN tweets and links

LTN is now on Twitter as [Ltechnetwork](#) and join the LinkedIn group [LTN Events](#) to discuss future topics and have your say in determining upcoming event topics



# Topical therapy of nail diseases

The nail plate - commonly referred to as 'the nail' - is the most obvious part of the nail unit, which also includes the nail matrix (the 'root' which produces the plate), the nail folds (the skin surrounding the nail plate), the hyponychium (the tissue underneath the nail plate at the tip of the digit) and the nail bed (the tissue underlying the nail plate), as shown in the Figure. A remarkably wide range of afflictions can affect the nail plate and alter its size, shape, colour, mechanical strength, growth rate, attachment to the underlying tissue, as well as cause inflammation of the skin surrounding the nail.

While some of these symptoms, such as white spots on the nail plate, only pose minor cosmetic concerns, others cause considerable pain and distress (e.g. infections) or can be symptoms of more serious, internal disease (e.g. nail clubbing).

Topical therapy of nail diseases, where appropriate, would be ideal to target drugs to their site of action and avoid the side effects and drug interactions associated with systemic drug exposure. However, the poor permeability of the nail plate limits unguinal drug flux,

and thence the success of topical therapy. Consequently, few topical nail medicines are currently available, and these are mainly for the treatment of fungal infections - the most common nail disorder. Nail varnish containing an



antifungal agent e.g. Curanail (also called Loceryl®, containing the antifungal amorolfine) and Penlac® (containing ciclopirox) have the advantage of longevity on the nail over the older formulations, Trosoyl® (a solution containing the antifungal tioconazole) and Phytex® (a paint containing the fungi-

cidal boric acid, tannic acid), which have to be applied twice a day, being easily removed during normal daily activities such as washing. All the formulations however have to be applied for long durations - up to one year.

In an attempt to improve topical therapy, the nail plate and especially its permeability is the subject of much research. Potential physical and chemical drug delivery enhancers, such as electricity, ultrasound, lasers, acids and other keratin-disrupting chemicals, are being identified. The nail varnish remains a popular choice as a drug carrier, although other formulations, such as patches and films, are also under investigation, as are new drugs designed specifically for topical delivery. The research should lead to more effective topical nail medicines, not only for fungal infections, but also for other nail diseases such as psoriasis.

Dr Sudaxshina Murdan, The School of Pharmacy, University of London. 29-39 Brunswick Square, London. S Murdan's research includes topical drug delivery to the nail. Tel: +44-2077535810, email: sudax.murdan@pharmacy.ac.uk

## Detection & diagnosis event



The Infectious Disease Research Network and the Health Protection Agency are collaborating on a one-day workshop entitled **Applications of Point of Care tests to infectious disease detection and diagnosis**. The

event will be held on 14 May 2010 at the National Space Centre, Leicester.

The workshop will discuss research priorities in the area of infectious disease diagnostics, including topics such as the development of diagnostic/triage devices with regards to infectious disease diagnosis, and the development of point of care tests for diagnosis of GI infections, STIs and

blood borne viruses.

There is also the opportunity to submit abstracts for a poster presentation.

Speakers include representatives from: Technology Strategy Board, University of Leicester, Ministry of Defence, University of Bristol, University of Cambridge. To learn more and register visit: <http://idrn.org/events/upcoming/diagnostics.php>

## Newsletter Feedback!



We are constantly seeking to improve our news services. We would therefore be very grateful if you could spare a few minutes to complete a short online questionnaire about "Medisphere", which you have subscribed to. This will help us to improve this service. All answers will be handled in strictest confidence. Visit <http://tinyurl.com/ltnemtsurvey>.

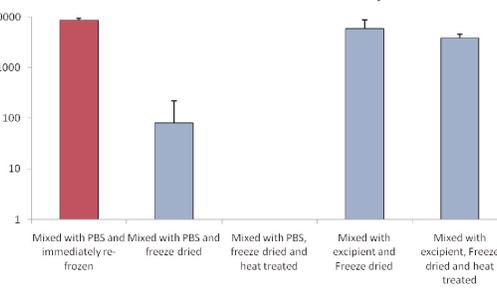
# Stable storage of vaccines

Stabilitech's core technology allows the stable storage of vaccines and other biological molecules at ambient temperature, removing the need for refrigeration. Inspiration for the technology came from nature, which has already solved the challenge of stabilising complex biological materials against thermal and desiccation stress, as for example in seeds, which can be stored under hot and dry conditions for extended periods of time, but still germinate successfully.

Stabilitech's approach mimics some aspects of these natural principles and uses entirely chemical excipients which are inexpensive, readily available and have already been previously used in a clinical setting. The process can be readily integrated into existing cGMP manufacturing processes and involves freeze-drying using standard equipment.

Stabilitech technology has been shown to be successful in the stabilisation of a wide range of live viruses, both for enveloped viruses such as the thermally fragile measles virus, and non-

Stabilisation of Measles virus over 6 days at 37°C



enveloped viruses such as adenovirus, as well as inactivated viruses and sub-unit vaccines. For example, the figure shows an extremely high level of active-virus retention in the presence of our excipients, even after treatment

of measles virus at 37°C for almost a week in a freeze-dried state. This is in contrast to the complete loss of virus activity in the absence of excipients under the same conditions. Stabilitech technology clearly has the potential for use in both human and animal vaccines.

Stabilisation of proteins and other unstable biological molecules has also been successfully achieved. So far, Stabilitech has stabilised specific antibodies, enzymes, peptides and other proteins such as growth factors.

- Stephen Ward,  
Director of Development,  
Stabilitech Ltd

Stabilitech is a private company based in London, in the Imperial College Incubator providing stabilization solutions to the vaccine and biopharma community.

# Novel odour analysis device

Testing has begun on a device that can sniff out the presence of disease by smell, thanks to a £1.3 million Translation Award from the Wellcome Trust. OdoReader, developed by Chris Probert from the University of Bristol and Norman Ratcliffe from the University of the West of England, uses pioneering technology to rapidly diagnose Clostridium difficile, by 'reading' the odour of stool samples. Clostridium difficile can cause severe diarrhoea, especially among hospitalised patients.

With the help of University Hospitals Bristol NHS Foundation Trust, the technology enables gases emitted from faeces to be analysed in under an hour, leading to a rapid and inexpensive diagnosis. Such early detection could reap real health benefits for millions of people and help to prevent the spread of infectious disease.

The Wellcome Trust Translation Award will cover a three-year programme of work to support the development of

OdoReader prototypes, which will then be tested against the industry 'gold standard' method of making the diagnosis.

Rick Davis, Business Development Manager at the Wellcome Trust, said: "Wellcome Trust Translation Awards are designed to facilitate the development and commercialisation of new



ing and we are hopeful that this diagnostic platform will prove valuable in the race against 'superbugs'."

Researchers from both academic institutions and early-stage companies are eligible to apply for a Wellcome Trust Translation Award. The awards aim to support applied research and development projects that address an unmet need in healthcare. Funding is available for projects from the following areas: diagnostics, enabling technology, regenerative medicine, therapeutics, vaccines and medical devices.

The deadline for preliminary applications is 23 July. For more information visit [www.wellcome.ac.uk/techtransfer/emt](http://www.wellcome.ac.uk/techtransfer/emt)



healthcare technologies. OdoReader has shown great promise in early test-

# LTN infection posters

LTN REPRINTS TWO POSTERS FROM OUR JANUARY EVENT:  
FIGHTING INFECTION THROUGH DETECTION

<p><b>London School of Hygiene &amp; Tropical Medicine</b> Contact: Professor Brendan Wren <a href="mailto:brendan.wren@lshtm.ac.uk">brendan.wren@lshtm.ac.uk</a></p>	
<b>Tuberculosis Diagnosis</b>	
<b>Research Summary</b>	<b>Current Projects</b>
<p>Photo: <a href="http://www.1halliance.org">www.1halliance.org</a></p>	<ul style="list-style-type: none"> <li>• Risk factors for drug resistance.</li> <li>• Volatile organic compounds analysis using 'electronic noses'.</li> <li>• TB could be diagnosed using a 'broathalyscr' type system.</li> <li>• Novel antigens for detection.</li> <li>• Rapid and selective detection by field deployable thermochemolysis-gas chromatograph-mass spec.</li> </ul>
<b>Diagnostics of Infectious Diseases</b>	
<ul style="list-style-type: none"> <li>• Disease diagnostics currently under development:             <ul style="list-style-type: none"> <li>– Malaria (<i>falciparum</i>, <i>vivax</i>, <i>ovale</i>, <i>malariae</i>)</li> <li>– Leishmaniasis</li> <li>– Pathogenic bacteria (including resistance)</li> <li>– Leprosy</li> <li>– <i>Mycobacterium tuberculosis</i> and <i>bovis</i></li> </ul> </li> <li>• Potential for new, point of care (PoC) diagnostic tests to reduce morbidity and mortality due to infectious diseases in developing countries.</li> <li>• Analyse performance, impact and cost-effectiveness of PoC tests for malaria, syphilis, TB, trachoma and human African trypanosomiasis.</li> </ul>	<ul style="list-style-type: none"> <li>• Over 55,000 cases of <i>Clostridium difficile</i>-associated infections were reported last year in the UK, with half the cases due to the hypervirulent 027 strains.</li> <li>• We have identified several biomarkers characteristic of the 027 strain that may aid rapid diagnosis.</li> <li>• In collaboration Cranfield University, LSHTM is developing a device which could save lives by 'smelling' <i>C. difficile</i> bacteria directly from patient samples.</li> <li>• Useful to have a simple test for the presence of <i>C. difficile</i>, allowing such patients to be diagnosed more rapidly to enable physicians and nursing staff to take appropriate action.</li> </ul>
<b>Can you smell Clostridium difficile?</b>	

<p><b>Schools of Biosciences and Chemical Engineering</b> Contact: Lynne Macaskie <a href="mailto:L.E.Macaskie@bham.ac.uk">L.E.Macaskie@bham.ac.uk</a></p>	
<b>Live cell high resolution imaging</b>	<b>Diagnostic test for infectious agents</b>
<b>Visualisation of pathogen-macrophage interactions</b>	<b>Rapid diagnosis of disease</b>
<p><b>Technology</b> Various high resolution microscopies for following pathogen/macrophage interactions in real time. Will allow us to develop intervention therapies.</p> <p><b>Existing applications</b> Research focus: <i>Cryptococcus</i> and <i>Streptococcus</i></p> <p><b>Opportunities for companies</b> Collaborative research and intervention therapy development. Access to advanced light microscopy and electron microscopy (ESEM) facilities</p>	<p><b>Technology</b> New method for rapid identification of pathogens. Result within a few minutes from a small sample of body fluid.</p> <p><b>Existing applications</b> Routine GP's diagnostic equipment is planned. Current trialling is against STDs</p> <p><b>Opportunities for companies</b> R &amp; D and exploitation; licensing/manufacturing</p>
<b>Inhibiting bacteria</b>	<b>Vaccine and drug development</b>
<b>Bacterial survival</b>	<b>Functional genomics, recombinant protein production and drug development</b>
<p><b>Technology</b> Microbial defences/cloaking against host defences</p> <p><b>Existing applications</b> Applied research currently</p> <p><b>Opportunities for companies</b> Collaborative research towards new antibacterial agents; away from conventional antibiotics</p>	<p><b>Technology</b> Genomics, high throughput genome sequencing, genetic epidemiology (e.g. <i>Helicobacter</i>, <i>Salmonella</i>, <i>F. coli</i>, <i>Campylobacter</i>, <i>Pseudomonas</i>, <i>C. difficile</i>, <i>Mycobacterium tuberculosis</i>, <i>Neisseria gonorrhoea</i>). Influenza and cytomegalovirus. Category 3 laboratory available. Proteomics and recombinant protein production. Pilot plant recently refurbished; up to 600 L scale</p> <p><b>Existing applications</b> Platform technologies underpinning drug and vaccine development</p> <p><b>Opportunities for companies</b> Collaborative H &amp; D. Use of functional genomics and proteomics/biophysical characterisation of proteins; facilities and expertise. Access to category 3 lab and pilot plant</p>

# Online technology profiles from Enterprise Europe Network



Business Support on Your Doorstep

The following profiles are examples of the latest innovations available online now, at [www.LTNetwork.org/services/tech-search.asp](http://www.LTNetwork.org/services/tech-search.asp), as part of **Enterprise Europe Network** (a free service of which LTN is a key partner). If you're seeking new technologies, would like to market your own innovations to Europe, or would like to learn more about the profiles below, then email the name and profile number to Maki Aoyama at [m.aoyama@LTNetwork.org](mailto:m.aoyama@LTNetwork.org).

Title	Description	Country	Type
<b>New drug for prevention and treatment of Parkinson and related diseases (10 ES 24D8 3G7K)</b>	A Spanish university has developed a new drug based on 3-phenyl-6-substituted coumarins' preparation that can be used as a powerful and selective inhibitor of monoamine oxidases (MAO). The prepared compound is much more active and selective inhibitor of MAO-B than selegiline, a drug used clinically for treating of Parkinson disease. Its easy preparation from inexpensive starting materials suggests a good development for commercial use.	Spain	Offer
<b>Smart Prostheses – Electro Mechanic Systems for Prostheses Equipment (09 TR 980A 3G1C)</b>	Turkish company specialized on production of prosthesis products for medical industry is searching for technology, product and partner company to develop innovative prostheses products. It needs technologies for electro mechanic systems for prosthesis equipment.	Turkey	Request
<b>Special new adjustable, tiltable wheelchair and seating (10 HU 50S5 3GBE)</b>	A Hungarian technology-transfer agency offers a new adjustable, tiltable wheelchair and seating designed and developed by a team composed of hospitals, distributors, college professors, and disabled persons' associations. This new wheelchair is repairable and cheaper than the others in the market.	Hungary	Offer
<b>Technology to stick miniature metal parts for production of miniature hearing aids being sought (09 PL 63AW 3G25)</b>	Polish company is looking for a solution to stick miniature metal parts used for production of miniature hearing aids. An alternative technology to laser binding and gluing is sought. The requested technology is to be used for the production of electromechanical advanced solutions and miniature components. Requested technology can either be at the laboratory stage or fully developed.	Poland	Request
<b>New pharmaceutical molecule with kynurenic acid to treat gastrointestinal disorders (10 HU 50S5 3GB1)</b>	A Hungarian medical research institute, active in the field of the kynurenic acid research, has developed a molecule with highly protective effects on the gastrointestinal system. Pharmacological values, effects of the molecule could be interesting for the pharmaceutical industry.	Hungary	Offer
<b>Regional Registry of new borns with congenital malformations for implementing new methods of prevention and treatment. (10 RO 75DV 3G8W)</b>	A Romanian company is looking for an innovative database to register new borns with congenital malformations for implementing new methods of prevention and treatment. Technology requested can either be at developing stage or fully developed. Preferred type of collaboration is commercial and/or subcontracting agreement.	Romania	Request
<b>Pharmaceutical composition and pharmaceutical kit for the treatment of Hepatocellular Carcinoma (10 IT 54V8 3G3Z)</b>	An Italian University research laboratory has developed an invention, in which the expression of Notch receptors in human tissue samples of Hepatocellular Carcinoma (HCC) and adjacent HCC-free tissue has been explored. This invention can be very useful in the treatment of HCC, which ranks fifth in frequency worldwide among all human cancer and causes 1 million deaths annually.	Italy	Offer
<b>Technology for modeling and simulating human behavior in light of diminishing behavioral disorders (Ref: 10 RO 75DV 3G8T)</b>	A romanian company is looking for an innovative solution for modeling and simulating human behavior in light of diminishing behavioral disorders. The technology requested can either be at developing stage or fully developed. Preferred type of collaboration is commercial and/or subcontracting agreement.	Romania	Request



Title	Description	Country	Type
<b>Improved Orthopedic Device (10 IT 54V8 3G3X)</b>	An Italian University research laboratory has developed designs of internal knee prosthesis. These designs allow the replication of the relative motion between tibia and femur quite well since they rely upon mechanical guided connections between them instead of the residual anatomical structures (such as ligaments, muscles, soft tissue) after the surgical implantation of the prosthesis, like most of the existing prostheses do.	Italy	Offer
<b>Innovative technologies for agro-food and biopharmaceutical production (09 IT 53U9 3FS0)</b>	An Italian company supplying molecular biology services, with expertise in the development of engineered enzymes for fine chemicals, agro-food and biopharmaceutical production, is looking for new devices, methods, ingredients or additives useful for agro-food or pharmaceutical or nutraceutical industries to obtain new products. The company is interested in technical cooperation or commercial agreements.	Italy	Request
<b>Tracing and Localization System for People and Goods in Hospitals and Healthcare Institutions (10 PT 65BN 3G4H)</b>	A Portuguese SME has developed a tracing and localization system that can be used in healthcare institutions to locate people and goods. This technology improves the access in all the restricted areas of the institution specially in the pediatric and obstetrics and psychiatric wings.	Portugal	Offer
<b>Innovative technologies for the obstetrics gynaecology and fertility market (Ref: 09 NL 60AH 3FK7)</b>	A Dutch company is specialized in valorization and commercialization of pharmaceutical products in the field of obstetrics gynaecology and fertility. The main expertise is focussed on testing, implementation and product development. For implementation and the review of new technologies the company makes use of a broad network of gynaecologists in the Netherlands.	The Netherlands	Request
<b>New radiation device for urinal-genital passage disinfection (10 ES 23D1 3G62)</b>	A Spanish technological based company created by a multidisciplinary team has developed a new ultraviolet device to avoid urinary tract infection (UTI). It allows new ways of sterilizing with at least one ultraviolet lamp and ozone transmitter radiating with a removable device from the exterior to the catheter and conducting the radiation from the catheter to the bladder and/or to the drainage bag.	Spain	Offer
<b>Tool for the profiling of small RNAs (09 DE 1169 3FS5)</b>	A German research institute with a research priority in epigenetics intends to develop a kit to enrich small RNAs from different samples (human, animal, plant). The institute is looking for a private partner who is interested in co-developing and marketing the kit.	Germany	Request
<b>Behavioral and physiological testing studies on small mammals for pharmacological and toxicological studies (10 ES 27F3 3G9T)</b>	An Andalusian research group (Spain) has developed two simultaneous types of testing in small mammals, the physiological (which measure the internal dynamics of the nervous system) and behavioral (measuring behavior viewed from the outside). The institute seeks to transfer the technology through entering into license agreements.	Spain	Offer
<b>DNA or RNA based molecular diagnostic technologies that provide quantitative analysis (09 GB 48P9 3FTX)</b>	A small British company is looking for technologies that provide quantitative analysis of biological materials in water or soil samples. The company currently uses 'qPCR' techniques and seeks contact with organisations using either this technology or alternatives, especially those with higher throughput.	UK	Request
<b>Tracking of enhancer substances and its use in the cognitive abilities of healthy or deficient individuals (10 ES 27F3 3G8C)</b>	An Andalusian research group (Spain) has developed a sophisticated technology to detect substances that enhance cognitive abilities in young healthy rodents and rodent with models of neurodegenerative diseases. The institute seeks to transfer the technology through entering into license agreements.	Spain	Offer

## Would you like to contribute an article?

If you have an idea for an article or would like to include an event listing in the next EMT SIG newsletter, contact Natalie at [n.tamiollo@LTNetwork.org](mailto:n.tamiollo@LTNetwork.org). Or if you're involved in an event you would like fellow members to know about, email Natalie and we'll include it on our website, which is updated weekly with the latest news and events, in the UK and internationally.



Visit [www.LTNetwork.org/sig/emt](http://www.LTNetwork.org/sig/emt)

