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The R-Evolution in Laboratory Medicine: The Need for a New Medical Paradigm



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The EuroMedLab Congress this year aims to offer insight into the direction of Laboratory Medicine in the 21st century. On the agenda is the role this field can play in a fast-changing health environment and the medical and scientific innovations that continue to take place.

In an exclusive interview with *HealthManagement*, Prof. Damien Gruson shares his thoughts about the goals of EuroMedLab 2015, the future of laboratory medicine and the role it will play in the years to come.

#### The motto of the EuroMedLab 2015 is R-evolution in Laboratory Medicine. What does that mean?

R-evolution refers to the different revolutions ongoing in laboratory medicine and impacting healthcare at large. There is the revolution from the clinical angle and the rise of molecular medicine and nanotechnologies and how laboratory medicine is now directly contributing to personalised care and precision medicine. There is also an ongoing revolution in laboratory structures and management, with laboratories becoming more and more consolidated and automated. In the meantime, laboratory medicine is also engaged in the revolution of communication and mobile health. Laboratory specialists are becoming counsellors for physicians and are assisting them in choosing the best tests and the most suitable testing procedures. This enhanced communication plays a very important part in improving patient care. The entire dynamic in laboratory medicine - communication between researchers, laboratory specialists, physicians and between physicians and patients - is fundamental.

In the congress invitation, it is mentioned that there is a need for a new medical paradigm. Would you care to elaborate on that? The paradigm is shifting in many different ways. Science; more personalised tools and molecular medicine tools are being used because of the role of laboratory medicine in precision medicine. Mobility; nanotechnologies; point-of-care testing and the use of information and communication technologies are contributing to mobile health and the continuous monitoring of patients. Process and controls; lean, automation and ISO standards are changing the game of laboratory operations and quality.

## What does the translational nature of laboratory medicine mean?

The translational nature of laboratory medicine refers to the integration of innovation from basic research and research and development as well as the transfer of information. It refers to the interrelation needed between researchers, laboratory and professionals of the in vitro diagnostic industry to facilitate the access of patients and physicians to innovation. It also refers to the challenge of financing innovation in difficult economic climates.

## What are some of the primary goals of EuroMedLab Congress? Will there be a discussion on any new initiatives or breakthrough ideas?

There are different objectives focusing on continuing education of all laboratory stakeholders in laboratory medicine, clinical chemistry, haematology, microbiology, molecular medicine and patient safety. EuroMedLab 2015 in Paris is designed to facilitate networking among the different players in laboratory medicine and caregivers. At the same time EuroMedLab and the JIB exhibition will discuss the latest innovations in laboratory science and will allow IVD manufacturers and companies to showcase their latest products and technologies,

### Diagnostic errors are an unfortunate reality. What role can laboratories play to prevent this?

This is a very good and up-to-date question. There is a specific session in the programme regarding diagnostic errors and several other workshops and posters will be centred on this subject. The prevention of diagnostic errors in laboratories relies on the improvement of pre-analytical phases (outside the laboratory) as well as the peri-analytical processes. More automation, more process control and accreditation are also important in the recipe.

# What are some key measures that you believe could help improve lab efficiency? Are there any specific technologies that you recommend?

Laboratory efficiency relies on different factors, but I think that more process control, automation and implantation of lean culture can have a significant impact on e-lab operations, the turnaround time of analysis and, in effect, patient care. In the same way, the accreditation of laboratories represents another opportunity for the improvement of laboratory efficiency. Furthermore, communication with caregivers is central nowadays. Lab ef ficiency is also driven by the performances of the IT solution(s) used.

#### What measures can help to ensure optimal use of laboratory testing? How can you add more value to laboratory tests?

The paradigm is also shifting for specialists in laboratory medicine and they are now counsellors for physicians. They are also adding a lot of value for the interpretation of results, test selection and control of an efficient test ordering.

#### What do you think the future of laboratory medicine holds?

The future is in molecular and personalised medicine, information and communication technologies and mobility.

Patient safety is one of the key issues today. What do you perceive to be the biggest challenges with respect to patient safety and outcomes that laboratories face?

The use of a more automated and controlled process as well as the accreditation of laboratories through ISO standards contribute to patient safety. The balance should be found as these measures are not free of charge.

HealthManagement promotes management and leadership in healthcare. Is there anything you would like to add about the field of laboratory management?

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The use of technology plays a key part in management as there is a need to manage laboratory logistic and services flows and operation in a consolidated manner. Networking amongst stakeholders is of core importance. Published on : Mon, 11 May 2015