

DIESSE IS AN ISO CERTIFIED COMPANY: UNI EN ISO 9001:2008 - UNI CEI EN ISO 13485:2012 - ISO 13485:2003, DIRECTIVE 98/79 CE

## LEADERSHIP IN BUSINESS

*Stefano Marchese, Chief Executive Officer*

Leadership is one of the key element for an effective and efficient development of a business.

It is a topic that inspired many thoughts, many reflections.

For instance, it has been said that the courage of leadership is giving others a chance to succeed even though you bear the responsibility to get the things done.

Indeed, a leader inspire others to dream more, to learn more, to do more.

However, leadership is not something that one can obtain, is not a conquest, but is a gift that can be received by others.

Leaders that do not listen will eventually be surrounded by people that have nothing to say, for there is no better test of a man's integrity than his behavior when he is wrong.

The most important thing to remember is that leadership is no longer about your position: it's much more about your passion for excellence and making a difference.

You can lead even without a title.

## INFECTIOUS DISEASES - COMPLEX TORC- MEANING AVIDITY

*Naesan Shikhouni, Export Area Manager*

**TORC** is the acronym of a group of congenital diseases which may alter the foetal brain: **Toxoplasmosis, Rubella, Cytomegalovirus.**

Screening for **TORC** is currently performed in pregnant women during first trimester, to verify their immune status. Seronegative patients can develop primary infection, which carries the risk of vertical transmission to the foetus, serological follow-up is necessary.

	Rubella	Toxoplasmosis	Cytomegalovirus
Incidence / 10 <sup>5</sup> births	< 0,1	10 - 30	100 - 200
Maternal clinical picture	Acute exanthema or asymptomatic	Mostly asymptomatic	Mostly asymptomatic
Fetal transmission	60 - 90% of cases Before 12 <sup>o</sup> week of gestation	1 - 15% of cases Before 15 <sup>o</sup> week of gestation	30 - 40% of cases 1 baby out of 10 will develop cytomegalic inclusion disease

In case of congenital infection fatal damage depends on the gestational age at which the infection has been acquired. Generally, **severe fatal damage** is more probable to occur during the **first half** of pregnancy. The **timing of the maternal infection** thus is of critical importance to determine the risk for the growing foetus, and the measure of the

**avidity** of the specific anti-TORC IgG is a convenient way to do it.

**Avidity:** measure of the functional binding strength of antibodies to multiple antigenic determinants (epitopes) on natural antigens. In natural situations, *in vivo* a variety of antibody molecules are generated in response to many multivalent antigenic stimuli. Avidity is therefore a measure of the stability of the multivalent antigen/ multivalent antibody complex. The test is based on the principle that antibodies formed in response to primary infection have relatively low avidity to the corresponding antigen. With time, a broader antibody response develops with antibodies being formed to more epitopes on the antigen and with a corresponding increase in antibody-antigen Avidity. When a secondary antibody response occurs with reinfection, it stimulates clonal expansion of memory B cells to a much wider spectrum of epitopes producing antibodies of considerably greater avidity. The avidity can be quantitated by incorporating a protein denaturing agent such as **urea** into the washing fluid of the ELISA test and performing the test in parallel with and without the denaturing agent. Primary response antibodies will therefore result in an ELISA test with a **far lower optical density reading after washing with urea**, i.e. a **low avidity index** (expressed as a percentage) than reinfection antibodies. *Primary antibody response ELISA avidity indices are usually 30% or less while reinfection indices are usually 70% or greater.* An IgG Avidity test should be requested when a primary infection is suspected and when TORC specific IgM are found in the mother's serum. As a matter of fact, in some case IgM can persist for years and low titre IgM can be produced in reinfections and timing by detecting IgG avidity can help in avoiding a misleading diagnosis.

## INDEX

- ▶ LEADERSHIP IN BUSINESS
- ▶ INFECTIOUS DISEASES - COMPLEX TORC- MEANING AVIDITY
- ▶ DIESSE'S CHECK UP
- ▶ AUTO\_DAT SYSTEM: LC & HT
- ▶ THE EVOLUTION STILL GOES ON..
- ▶ A COFFEE WITH..... MR. ALBERTO CALVO
- ▶ NEWS FROM THE WORLD

## DIESSE'S CHECK-UP *Catia Perazzolo, Finance Department*

Every three months, DIESSE makes a check-up in order to see if it is financially and economically healthy. Here are the results of its last check-up, referred to the period Jan. 1 - Mar 31, 2017 compared to Jan. 1 - Mar 31, 2016:

Consolidated figures (€ k.)	1Q2017	1Q2016	1Q2017/1Q2016
Value of production	€ 5.794	€ 5.589	104%
EBITDA	€ 1.117	€ 1.035	108%
EBIT	€ 696	€ 630	110%
Profit from ordinary activity before tax	€ 537	€ 393	137%
Net financial position at the end of the period	€ 14.997	€ 14.666	102%

## AUTO\_DAT SYSTEM: LC & HT

*Michele Meloni, R&D Director Instruments—Special Projects*

Diessa is going to enter a new system called AUTO\_DAT on the market.

The acronym "AUTO\_DAT" means automatic system for the processing of direct agglutination test.

An agglutination test is defined as:

**agglutination test** - a blood test used to identify unknown antigens; blood with the unknown antigen is mixed with a known antibody and whether or not agglutination occurs helps to identify the antigen; used in tissue matching and blood grouping and diagnosis of infections

**heterophil test**- a blood test to detect heterophil antibodies that agglutinate sheep red blood cells; positive result indicates infectious mononucleosis

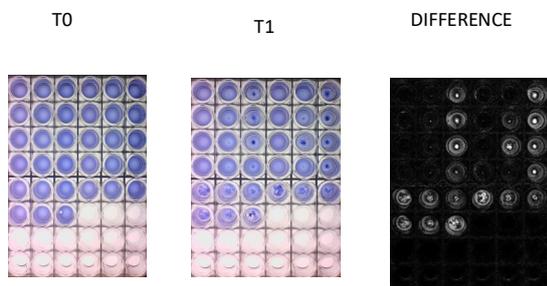
**Widal test, Widal's test**- a test for detecting typhoid fever and other salmonella infections

**blood test** - a serologic analysis of a sample of blood" (agglutination, 2017)

The system can analyze any agglutination event within a normal 96-well microplate. The first important feature of the system is the low cost (LC). LC is possible thanks to other aspects, i.e. the high technology (HT) of management and control software. From the hardware point of view, the instrument is composed of a microplate chamber that can be mixed for the presence of a motor step. There is also a lighting system and two CMOS sensor camera. The instrument is controlled by a micro computer with touch screen based on the Raspberry Pi technology. Nothing more! As accessories, can be supplied: a small Bluetooth printer, a barcode reader and a backlit plate holder for easy preparation. After adding a sample quantity and reagent to the inside of the microwells, the microplate is inserted inside the instrument. The analytical cycle, which normally does not exceed total 20 minutes, performs a pre-mixing, an acquisition of images to memorize the time 0. At this first stage, according to the methods, the mixtures are more bland and longer, interspersed with further acquisitions of images. The HT function is delegated to

a cross platform software that through sophisticated computer vision (CV) techniques can handle image processing. Other important functions are user interface, connectivity to LIS (laboratory information system) and tele-assistance. The feature that allows to have a LC of the tool stems from the fact that the absence of hardware sensors is supported by the software that through CV techniques monitors in real time due to the mechanical functions. The feature that makes AUTO\_DAT unique is that it is able to provide semi-quantitative (expressed as dilution) results directly related to the agglutination phenomenon. Software through the application of complex CV algorithms manages to transform the internal modification to each well in a continuous scale of signals. These signals are then compared to curves of calibrations and transformed into results.

In the images an example of pre-processing:



To conclude the AUTO\_DAT project was a good example of rationalisation of costs without penalising the performances, rather introducing unique features in this area.

References:

Based on WordNet 3.0, Farlex clipart collection. © 2003-2012 Princeton University, Farlex Inc. agglutination (2017). July 12 ,2017 retrieved from : <http://www.thefreedictionary.com/agglutination+test>

## AN OVERVIEW ON VALUE CHAIN

*Agostino Noviello, Export Area Manager*

Sales of medical devices have grown annually constantly worldwide. The number and complexity of the devices on the market have risen significantly, too. This rapid evolution has delivered life-enhancing innovations, including combination products, fully automation, and new technology.

Meanwhile, the industry has experienced increasing pressures, including cost competitiveness, globalization, and supply chain; a company today may deal with various suppliers and sub-suppliers, each of which can impact product quality and performance.

Quality issues rightly concern in the medical device value chain, from manufacturers and regulators to payors, doctors, and patients. The medical device industry is approaching a tipping point where the increasing likelihood of a quality event, the rising costs of such events, and the public nature of quality performance will force companies to focus on quality and reliability throughout product design, manufacturing, and marketing.

Companies have developed approaches and build quality into processes at every step of the value chain—from design and manufacturing to sales and service—, we are focused to keep our standard of quality in high standards.



## The evolution still goes on...

Carlo Carletti, Product Manager and Export Area Manager

On the occasion of San Diego AACC exhibition, we will be proud to showcase the evolution in our ESR instrumentation line:  
The new **CUBE 30 touch** instrument, featuring:

- Automatical Internal bar-code reader
- Internal mixing of samples
- 10 inches color touch screen
- 3 working modes: batch, continuous loading, mixed
- 30 ESR results in less than 25 minutes

All with an innovative graphic interface. Come and discover the future of the ESR.

### 30 years DIESSE experience in ESR... focused on a CUBE



Welcome to the sixth issue of the section expressly created to give voice to our Distributors. Just a few questions and answers, as if we were having coffee together!

Mr. Alberto Calvo is Marketing Manager of GANBARO, our Exclusive Distributor of Chorus Line in the Dominican Republic & Haiti

#### What do you like most in working with Diesse?

Diesse is an excellent commercial partner, its multidisciplinary teams of commercial people, application specialist, engineers and technicians bring together an exceptional amount of complementary knowledge and expertise, always willing to collaborate and establish strategies together with us to achieve greater presence in the Dominican market. The respond to our needs are always quick and timely allowing us to answer efficiently to our customers. On the other hand **CHORUS TRIO** tests menu and its presentations, represents a differential characteristic in the immunology market that allows the incorporation into the routine of clinical laboratories.

#### Which new products would you like to have on your market?

Being Dominican Republic a tropical country, products for diagnosis of infectious diseases such as Dengue and Zika would be important in our market. The addition of new parameters in the menu is always an added value that will allow us to promote the CHORUS TRIO extensive available menu.

#### Which will be the next appointments (exhibitions, congresses..) where you will promote Diesse products?

Ganbaro will be attending XVIII "Congreso Nacional de Profesionales de Laboratorio Clínico" organized by the professional laboratory association from Dominican Republic (CODOBIO) on October 26th to 29th 2017 at Punta Cana. This event is held every 2 years and will be an excellent opportunity to promote the Diesse platform line for the first time, as well as establish relationships with important representation of clinical laboratory professionals in the country.

#### Which are the factors which lead your company to gain its position in the market?

Our company began as an exclusive distributor of Diesse in Dominican Republic a year ago. Being a new line in the country we were in the need to design a **strategy oriented to launch CHORUS TRIO in a highly competitive market** such as Dominican Republic. The main differential features that we promote and has allowed us to install 8 instruments in less than 1 year are: reagents quality, safe and user friendly instrument, extensive tests menu and complete autoimmunity menu and packing presentation (**12 or 32 test**) which has allowed us get into large laboratories for specific niche markets (low volume test). On the other hand, the platform represent an excellent choice to automate tests normally performed by ELISA.

#### Your country: how would you describe it to someone who never visited?

Dominican Republic is a country with cheerful and friendly people, always ready to welcome visitors. Beautiful beaches, excellent hotel infrastructure to gratify the tourist (Punta Cana, La Romana, Puerto Plata etc.), traditions, gastronomy, music, but above all its people will make all who visit us always run with the desire to return. Dominican Republic is definitely the ideal destination for your holidays.

## NEWS FROM THE WORLD

SAN DIEGO CONVENTION CENTER

California, USA

VISIT US and SEE WHAT'S NEW

1-3 AUGUST 2017

BOOTH NR. 5214



69TH AACC  
ANNUAL SCIENTIFIC MEETING  
& CLINICAL LAB EXPO  
JULY 30 - AUGUST 3, 2017 • SAN DIEGO, CA



EVENTS

## AFRICA HEALTH

JOHANNESBURG, SOUTH AFRICA

7/9 JUNE 2017



In its continuous effort to deeply penetrate all foreign markets, Dieppe participated for the first time to the Africa Health exhibition held in Gallagher Convention Center. That has been the right occasion to showcase:

- ▶ MINICUBE
- ▶ VES MATIC EASY
- ▶ CHORUS

The presence of highly qualified distributors from many African countries contributed to the success of our show.



WELCOME

We are proud to inform about our  
NEWLY ACQUIRED DISTRIBUTORS

From Croatia... LABENA

From Kenya... MICROVISION ENTERPRISES

From Nepal... SEROLAB NEPAL TRADERS

From Yemen... YEMEN DIAGNOSTICS

From Zimbabwe... SEREMED

ROME

20/7/2017

Hotel Barcelò  
Aran Mantegna

DIESS  
DOMESTIC  
SALES  
VENDOR  
MEETING



DIESS Diagnostica Senese SPA

Head Office: Via A. Solari 19, 20144 Milano, Italy

Secondary Seat: Via delle Rose 10, Loc. La Tognazza, 53035 Monteriggioni (SI), Italy,

website : [www.diesse.it](http://www.diesse.it)