

# Compumedics **Xegis** EMG/EP/IOM expands neurology product portfolio

Compumedics Limited is excited to announce the expansion of our product range into the multi-million dollar global electromyography (EMG), nerve conduction studies (NCS), evoked potential (EP), and intra-operative monitoring (IOM) medical-device markets through completion of an Original

Equipment Manufacturer (OEM) Agreement with a company headquartered in Austria. Compumedics will distribute the products under the "Xegis" trade mark around the world as pending certifications and approvals are received for each country.



EMG systems are used to diagnose a wide variety of neuromuscular and neuropathological disorders. There is also a growing market for use of EMG in treatment protocols, an example being the EMG-guided application of Botox<sup>™</sup> (Botulinum toxin) in the treatment of spasticity. EMG instruments are utilized principally by specialist physicians (neurologists, neurophysiologists, physiatrists etc.). They are also acquired by institutions for use in out-patient departments, pre-surgical screening, and IOM.

For IOM, there is a high degree of overlap between the new  $Xegis^{TM}$  line and the Compumedics current products, as the

same departments purchasing EMG instrumentation also often purchase EEG systems, epilepsy monitoring systems, and polysomnography systems. Increasingly, these departments require a single source solution to tie everything together and interface with their own Institutional

IT infrastructure – the same vision Compumedics had in the development of our NeXus<sup>™</sup> product - a single common database for all of our systems with seamless integration into institutional IT systems. "We are very pleased to have entered into

this strategic alliance as we feel that our superior technology and the strength of the global distribution channels of Compumedics make an unbeatable combination", David Burton, CEO of Compumedics, commented about the transaction. "This strategic move provides a jump-start for the Company to build on its past successes in the sleep and neurodiagnostics markets around the world. Compumedics has not had comprehensive product offerings in these areas to date. The Company's board took the decision to expand and complement the current and in-development product range immediately as this opportunity presented.

Adapted from Compumedics website article: www.compumedics.com

# Of SLEEP DIAGNOSTICS EXCELLENCE

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#### **PRODUCT NEWS**

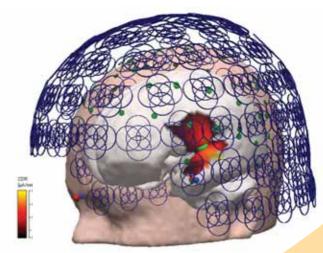
The world's most powerful Multi-Modal Neuroimaging solution:

Now even more powerful

#### **Multi-Modal Neuroimaging**

CURRY integrates multiple complementary functional and image modalities (EEG, ECoG, MEG; MRI, fMRI, PET, SPECT and CT) in a single software package for the purpose of obtaining the maximum accuracy of electrical source analysis. CURRY uses the full physical anatomy from MR and CT to provide three-dimensional models of the skull and brain allowing the neural generators of the topographic EEG to be computed.

CURRY was developed for mapping and identification of the neural generators of EEG and MEG recordings. However, the functionality offered and the revolutionary changes in this latest version CURRY also make it suitable for wider application, including clinical applications in neurology, epilepsy and radiology.

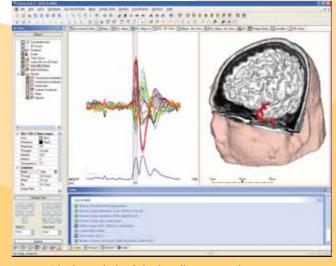


Simultaneous analysis of EEG and MEG data

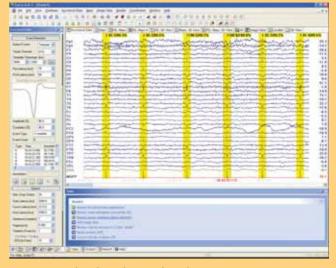
# CURRY 6

#### **Highlights**

- Integration of EEG, MEG, ECoG, ECG, MCG, with MRI, fMRI, CT, PET, SPECT.
- Complete data processing from filtering to source analysis.
- Event support, template-based event detection.
- Principal and Independent Component Analysis (PCA, ICA) and filtering.
- Individual realistic head models using the Boundary Element Method (BEM).
- Pre-computed BEM and Finite Element Method (FEM) head models.
- Dipole fits. Dipole confidence ellipsoids are computed.
- Dipole scans, extended source (patch) scans, and MUSIC scans.
- Beamforming based on dipolar or extended sources.
- Current density analysis, extended sources, Lp norms, sLORETA, SWARM.
- Export of results in Excel, MATLAB, and SPM formats.
- Report generator.
- Windows multi-document user interface.
- Data import wizards for functional and image data.
- Multi-core support using thread-based multitasking and parallelization.
- Hardware accelerated real-time rendering of 3D scenarios.
- Context-sensitive HTML help system.
- Online updates.



Dipole analysis of single-spike temporal lobe epilepsy data



Template-based event detection used for EKG artifact detection and removal.

# The *new* Scheduler for Compumedics ProFusion neXus



#### Planning for time and staff

Maximize the power of Profusion neXus with the addition of Scheduler for neXus. Scheduler provides a user-friendly interface allowing patient and physician scheduling from one location. Developed for optimum management of your resources and workflow in mind, Scheduler features user-configurable, multi-site and intuitive search capabilities. Intuitive Search quickly locates the next available time, date or location available for the type of study requested, helping to save time and efficiently manage resources.

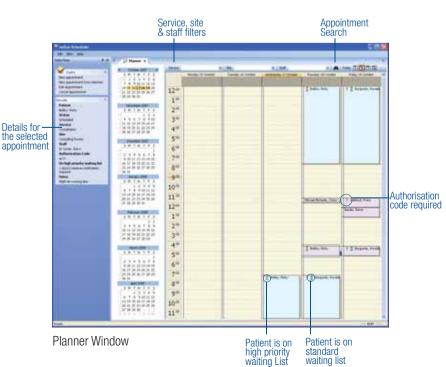
#### The Scheduler module is an enhancement to your ProFusion neXus suite:

- Increase your productivity and throughput with Scheduler for neXus.
- Reduce paperwork and redundancy with one tool for all patient data entry.
- Dramatically improve laboratory efficiency with the combination of ProFusion neXus lab management system and enhanced Scheduler appointment planning capabilities.

## Scheduler for neXus optimizes procedure scheduling activities whether at a single site or in multi-site environments.

- Familiar drag and drop functionality
- Schedule all available services for a patient initial diagnostic services, follow up consultations and more
- Specify a site for the scheduled service in a multi-site environment
- Smart scheduling with presentation of available alternative appointment times (Intuitive Search)
- Select appointment times for specified criteria such as type of service, diagnostic location, and even preferred consultant or physician
- Wait list with easily accessible patient contact details
- Easily identify High Priority patients
- Appointments pending insurance clearance are highlighted
- Multiple-views to quickly view appointments based on user-specified criteria
- Scheduled appointments automatically populate the prepared study list
- Launch the neXus Patient Details and Service Details applications directly from the scheduled appointments



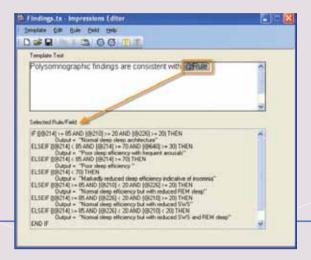


## **Sleep Physicians**

## - Check out the Impressions Editor

The Impressions Editor can be used to automatically produce many of the statistics-based comments within a report. Rules can be created to output different text depending on the value of statistics. Any of the numerical statistics available from Profusion PSG 3 can be used in a rule, and rules can be as complex as you want. The Impressions Editor allows rules to be placed within standard text, and there is no limit to how many rules can be included. In the example shown, the output text from the rule depends on the Sleep Efficiency, Arousals per hour and the amount of SWS and REM.

Contact your local sleep product representative for more information.



#### **CHOICE** EEG PAPERS

- Plummer, Harvey, and Cook (Epilepsia:1-18 2007)
  EEG source localization in focal epilepsy: Where are we now?
- Plummer, Litewka, Farish, Harvey, and Cook (Clinical Neurophsyiology 118(2007) 2344-2361)
   Clinical utility of current-generation dipole modelling of scalp EEG
- Espay, Schmithorst, and Szaflarski (Elservier Epilepsy and behavior 5 October 2007)
   Chronic Isolated Hemifacial Spasm as a manifestation of Epilepsia Partialis Continua

## QUICK Tips & Shortcuts

#### for Profusion PSG 3 users

Don't be afraid to try the new, completely re-written online help for Profusion PSG3. It is an easy to follow step by step process outlined for your convenience. Select /Help > Contents/ from the menu, or simply press F1 for context-sensitive help.

There is now available an external DC input module for Somté PSG – part number 7500-0074-00, Ethernet data logger, model DI-710-EH.

#### To improve your automatic analysis results, manually analyse a study with a good variety of events.

Create a new Data Set (Edit > Score Data Set > New), and run the Automatic Analysis modules. Then use the Scoring Comparison tool to compare the results of the Automatic Analysis with your manual analysis. Adjust the Automatic Analysis parameters, run the Automatic Analysis again and compare the results. Continue to tweak the Automatic Analysis parameters until you have good agreement.

Once you have optimised the Automatic Analysis parameters, apply these settings to your study configurations in PSG Config. The settings will now be applied to all studies recorded with that configuration.

#### ROPE UPDATE

For over 10 years, MPV-TRUMA has been a successful distributor and manufacturer of medical products for the German market. Focusing on respiratory care the company offers products such as home care inhalation, sleep apnea diagnosis and therapy, ultrasonic nebulisation, and home care ventilation.

Earlier this year, Compumedics completed an agreement with MPV-TRUMA to facilitate the distribution of Compumedics products in Germany. Products MPV-TRUMA will represent include: Compumedics Somte. Somnea. Siesta. Safiro. E-Series and the Profusion PSG range.

# Compumedics client profile - **MPVTRUMA**

MPV-TRUMA has an impressive track record and a history of working with a number of global medical device companies, which is why Compumedics is confident of a successful partnership.

Compumedics CEO David Burton welcomed the new distributor on board stating: "We are delighted to have the opportunity to work with MPV-TRUMA as a strong, dynamic and talented team".

Excerpt from Compumedics ASX announcement. MPV - TRUMA website - www.mpv.truma.de/

#### Down to business (and pleasure) in Barcelona, Spain. Compumedics European Business Meeting 2007.















# **Compumedics** presents a new look at **Medica 2007** - celebrating 20 years of diagnostic sleep excellence.













### EVENTS UPDATE

| JANUARY - 08                                | DATE             | AREA | PLACE                  | WEBSITE                                 |
|---|------------------|------|------------------------|---|
| American Society for Neuroimaging           | 17 - 20 Jan      | D    | Tucson, Arizona        | www.asnweb.org                          |
| Arab Health                                 | 28 - 31 Jan      | G    | Dubai, UAE             | www.arabhealthonline.com                |
| FEBRUARY - 08                               | DATE             | AREA | PLACE                  | WEBSITE                                 |
| International Stroke                        | 20 - 22 Feb      | D    | New Orleans, Louisiana | www.strokeconference.americanheart.org/ |
| MARCH - 08                                  | DATE             | AREA | PLACE                  | WEBSITE                                 |
| Thoracic Society of Australia & New Zealand | 30 Mar - 2 April | S    | Melbourne, Australia   | www.thoracic.org.au/asm2008.html        |

#### **USA ProFusion Proficiency Workshops:** Sleep Diagnostic Systems Training Opportunities

**2008 Dates: Location:** 

Compumedics USA, Corporate Headquarters • February: 26, 27, 28, & 29

Charlotte, North Carolina Mav: 6, 7, 8 & 9

19, 20, 21 & 22 • August: For more information, please visit:

• October: 21, 22, 23, 24 http://www.compumedics.com.au/exhibit.asp?p=67

#### To Russia... with Compumedics

Compumedics at Zdravookhraneniye 2007

The 17th International Exhibition of Health Care, Medical Engineering & Pharmaceuticals, with our local business partner EUROTECH presenting the complete Compumedics product portfolio.









Compumedics wishes you the very best for the Holiday Season and thanks you for your valued support throughout the year.

We couldn't have done it without you!



#### THE COMPUMEDICS DIVISIONS Defining Life's Signals

operations consist of five divisionseach with its own



Compumedics Sleep





**Compumedics Neuroscar** 





Compumedics DWL

#### www.compumedics.com

If you would like to receive the Compumedics Vista Update via Email, please send your details and email address to Marketing@compumedics.com.au

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