



JANUARY 29, 2015

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PLEXON GREW 30%, A NEW LAB EVERY 2 DAYS, WORKSHOP REGISTRATION, OFS AND MORE

PLEXON GREW 30% TO RECORD SALES

Plexon is thrilled to announce that not only did revenue grow an amazing 30% in 2014, but that it also yielded our strongest year ever! We are thrilled because that means we are doing more to serve neuroscience researchers than in any of our previous 30 years.

As many of you know, Plexon is completely dedicated to research labs. We are without distractions. We are all about you and your needs. Thank you for the opportunity to continue serving you with such laser focused intensity from year to year.

It is our goal to do even better in 2015. With the launch late last year of the OmniPlex® D Neural Data Acquisition System's DHP subsystem supporting up to 512 recording channels, biopotential headstages and the newest version of NeuroExplorer® to analyze the data, we expect we are off to a good start.

Just wait and see what else we have planned for you in the coming months!

EVERY OTHER DAY A NEW LAB TURNS TO PLEXON

~200 New Customers and Four New Countries Served

Last January we announced more than 120 new neuroscience labs turned to Plexon for the first time. We could not have been happier knowing that so many more researchers around the world trusted us with their most important experiments.

This January, you can only imagine how exciting it is to learn that in 2014, nearly 200 additional new labs chose Plexon. We can hardly contain ourselves! That is an average of more than one new lab every two days!

Although many come from right here in the U.S. as you might expect, the remainder spans an additional 25 countries of which – four of those are even new for us in 2014. Now actively serving more than 40 nations, our products – and customers – continue to benefit from our ever growing exposure to research needs around the world.

We are grateful to all of the new labs that are giving us a chance, and we appreciate those labs who have allowed us to serve them time and time again over the years. We will continue to be here for you as your most trusted research partner.

THE 2015 PLEXON WORKSHOP – REGISTRATION IS OPEN!

April 27-30, 2015

Just three months away, Plexon's 6th Annual Neurophysiology and Behavior Workshop is not far off. Event details and the Registration Form are now posted online on the 2015 Workshop web page.

Registration is easier than ever. Once the form has been completed, all you need to do is click the "Submit" button in the upper right corner. That's it. Clicking Submit automatically sends the document allowing us to instantly populate our spreadsheet. No need to send an email or do anything else.

We will confirm your registration in 24 business hours by email.

In addition to teaching the expected fundamentals of neural recording, spike sorting, video recording and analysis and optogenetics, this year's program contains a wealth of NEW information including:

- Digital Headstage Processor (DHP) subsystem up to 512 channels with multiplexing, digital headstages;
- CineCorder™, CineTracker™ and CineLyzer™ for research labs focused on running many behavioral trials with several animals within an experiment;
- Integration with Lafayette operant chambers;
- Biopotential headstages for PNS, EKG, EEG and EMG recordings;
- NeuroExplorer v5; and
- Anything else that gets launched between now and then!

For those wanting to minimize hotel costs we are happy to help arrange room sharing. Invitations for visa applications and/or an invoice for the charges can also be provided. If you have any questions, please email workshop@plexon.com. We hope to see you there!

OFFLINE SORTER™ V3.3.4 IS AVAILABLE

Offline Sorter™ v3.3.4 is now released and available on the website. The previous version posted last September contained a few bugs regarding the Timeline view and exporting that we felt needed addressed. For details about the specific bugs, please reference the *Offline Sorter Change Log* posted online at www.plexon.com/software-downloads under the Offline Sorter header.

It is notable that beginning with this version, only Windows® 7 64-bit is supported as we transition off of Windows XP completely (see "Did you know . . ." section below for more information about computer support). As always, contact support@plexon.com with any questions or assistance.

DID YOU KNOW . . . PLEXON SUPPORT FOR WINDOWS XP IS ENDING?

Plexon is no longer releasing Windows XP installers for the new versions of Offline Sorter and CinePlex®. Now that Microsoft has discontinued support for Windows XP, many university administrators are removing XP computers from their networks. Plus, it is more difficult to obtain XP software and XP computers.

Other Plexon software, such as OmniPlex and Radiant™, will discontinue Windows XP support when they are next released. We plan on keeping the last versions of the software that have Windows XP installers on the Plexon website for users that still have Windows XP PCs, but these Windows XP versions will not have bug fixes or additional features added to them.

If you have questions or want to know how to update your Windows XP-based system to Windows 7, please contact Plexon Support at support@plexon.com.

PLEXON WORKSHOP ALUMNI SPEAK OUT: FARRAN BRIGGS

"I am a relatively new PI and Plexon user and I attended the Plexon Workshop along with two of my lab members. The workshop is a hands-on training experience where attendees not only receive a wide range of valuable information about Plexon hardware and software, they also learn how to actually use the systems. For us, a week of intense hands-on training was well spent and probably saved us countless lab hours that would otherwise have been devoted to learning the systems on our own. I would therefore highly recommend the Plexon Workshop to anyone starting out with a Plexon system or thinking of upgrading to Plexon components."

Farran Briggs, PhD

Department of Physiology, Geisel School of Medicine at Dartmouth

SAVE THE DATE – CHINA WORKSHOP

The China Regional Neurophysiology Workshop sponsored by Hong Kong Plexon has confirmed its dates as June 20-24, 2015. Contact jerry@plexon.com.hk for more information.

PLEXON IS HIRING AGAIN!

We are growing again and are seeking outstanding, neuroscience-loving candidates for the following roles:

- Sales Engineer for Electrophysiology
- Sales Engineer for Behavioral Neuroscience
- Support Engineer for Neuroscience
- Senior Windows Software Engineer

If you are interested, send your resume to jobs@plexon.com.

½ PRICED WORKSHOP REGISTRATIONS

When you purchase a PlexBright® System with a 4 Channel Optogenetic Controller, any OmniPlex System or any CineLAB™ System, you are eligible for unlimited half-priced Workshop registrations for the upcoming Plexon Workshop. Ask your sales engineer or email workshop@plexon.com with any questions.

UPCOMING EVENTS

- **Computational and Systems Neuroscience (Cosyne) 2015**,
March 5-8; Salt Lake City, Utah, USA
- **11th Göttingen Meeting of the German Neuroscience Society**,
March 18-21; Göttingen, Germany
- **Experimental Biology 2015**,
March 28-April 1; Boston, Massachusetts, USA

RESEARCH SPOTLIGHT

Let us know about your 2015 publication citing Plexon and our equipment and we will send you a thank you award with a mug and a T-shirt! Send notices, address and T-shirt size to publications@plexon.com

All articles listed are alphabetical based on first author within two categories: articles published online in electronic-only journals or ahead of print, and articles published in full print.

Recent articles published online in electronic-only journals or ahead of print:

- Cooke, Sam F., Robert W. Komorowski, Eitan S. Kaplan, Jeffrey P. Gavornik, and Mark F. Bear. "Visual recognition memory, manifested as long-term habituation, requires synaptic plasticity in V1." *Nature Neuroscience* (2015).
- Do-Monte, Fabricio H., Kelvin Quiñones-Laracuente, and Gregory J. Quirk. "A temporal shift in the circuits mediating retrieval of fear memory." *Nature* (2015).
- Donahue, Christopher H., and Daeyeol Lee. "Dynamic routing of task-relevant signals for decision making in dorsolateral prefrontal cortex." *Nature Neuroscience* (2015).
- Fitzgerald, P. J., C. R. Pinard, M. C. Camp, M. Feyder, A. Sah, H. C. Bergstrom, C. Graybeal et al. "Durable fear memories require PSD-95." *Molecular Psychiatry* (2014).
- Gunasekera, Bhagya, Tarun Saxena, Ravi Bellamkonda, and Lohitash Karumbaiah. "Intracortical Recording Interfaces: Current Challenges to Chronic Recording Function." *ACS Chemical Neuroscience* (2015).
- Kuang, Shenbing, Pierre Morel, and Alexander Gail. "Planning Movements in Visual and Physical Space in Monkey Posterior Parietal Cortex." *Cerebral Cortex* (2015).
- Kuki, T., K. Fujihara, H. Miwa, N. Tamamaki, Y. Yanagawa, and H. Mushiaki. "Contribution of parvalbumin and somatostatin-expressing GABAergic neurons to slow oscillations and the balance in beta-gamma oscillations across cortical layers." *Frontiers in Neural Circuits* 9, no. 6 (2015).
- Kusumoto-Yoshida, Ikue, Haixin Liu, Billy T. Chen, Alfredo Fontanini, and Antonello Bonci. "Central role for the insular cortex in mediating conditioned responses to anticipatory cues." *Proceedings of the National Academy of Sciences* (2015): 201416573.
- Morishita, Soichiro, Keita Sato, Hidenori Watanabe, Yukio Nishimura, Tadashi Isa, Ryu Kato, Tatsuhiro Nakamura, and Hiroshi Yokoi. "Brain-machine interface to control a prosthetic arm with monkey ECoGs during periodic movements." *Frontiers in Neuroscience* 8 (2014): 417.
- Nakamoto, Kyle Tokuchi, Trevor M. Shackleton, David Amooti Magezi, and Alan Richard Palmer. "A function for binaural integration in auditory grouping and segregation in the inferior colliculus." *Journal of Neurophysiology* (2014): jn-00472.
- Nieto-Posadas, Andrés, Ernesto Flores-Martínez, Jonathan-Julio Lorea-Hernández, Ana-Julia Rivera-Angulo, Jesús-Esteban Pérez-Ortega, José Bargas, and Fernando Peña-Ortega. "Change in network connectivity during fictive-gasping generation in hypoxia: prevention by a metabolic intermediate." *Frontiers in Physiology* 5 (2014).
- Resnik, Jennifer, and Rony Paz. "Fear generalization in the primate amygdala." *Nature Neuroscience* (2014).

- Sidor, M. M., S. M. Spencer, K. Dzirasa, P. K. Parekh, K. M. Tye, M. R. Warden, R. N. Arey et al. "Daytime spikes in dopaminergic activity drive rapid mood-cycling in mice." *Molecular Psychiatry* (2015).
- Srinivasan, Akhil, Mayank Tahiramani, John T. Bentley, Russell K. Gore, Daniel C. Millard, Vivek J. Mukhatyar, Anish Joseph et al. "Microchannel-based regenerative scaffold for chronic peripheral nerve interfacing in amputees." *Biomaterials* 41 (2015): 151-165.
- Tsuboi, Y., K. Honda, Y. C. Bae, M. Shinoda, M. Kondo, A. Katagiri, S. Echizenya, S. Kamakura, J. Lee, and K. Iwata. "Morphological and functional changes in regenerated primary afferent fibres following mental and inferior alveolar nerve transection." *European Journal of Pain* (2015).
- Vighneshvel, T., and Sripati P. Arun. "Coding of relative size in monkey inferotemporal cortex." *Journal of Neurophysiology* (2015): jn-00907.
- Wang, Na, Xiujuan Mi, Baobing Gao, Juan Gu, Wei Wang, Yanke Zhang, and Xuefeng Wang. "Minocycline inhibits brain inflammation and attenuates spontaneous recurrent seizures following pilocarpine-induced status epilepticus." *Neuroscience* (2014).
- Wei, J., W. Bai, T. Liu, and X. Tian. "Functional connectivity changes during a Working memory task in rat via NMF analysis." *Frontiers in Behavioral Neuroscience* 9, no. 2 (2015).
- Zanos, Theodoros P., Patrick J. Mineault, Konstantinos T. Nasiotis, Daniel Guitton, and Christopher C. Pack. "A Sensorimotor Role for Traveling Waves in Primate Visual Cortex." *Neuron* (2015).
- Zhang, Yujiao, Jing Liu, Guoming Luan, and Xuefeng Wang. "Inhibition of the small GTPase Cdc42 in regulation of epileptic-seizure in rat." *Neuroscience* (2015).

Recent articles published in full print:

- Gilbert, Heather J., Trevor M. Shackleton, Katrin Krumbholz, and Alan R. Palmer. "The Neural Substrate for Binaural Masking Level Differences in the Auditory Cortex." *The Journal of Neuroscience* 35, no. 1 (2015): 209-220.
- Kok, Melanie A., Daniel Stolzberg, Trecia A. Brown, and Stephen G. Lomber. "Dissociable influences of primary auditory cortex and the posterior auditory field on neuronal responses in the dorsal zone of auditory cortex." *Journal of Neurophysiology* 113, no. 2 (2015): 475-486.
- Perrodin, Catherine, Christoph Kayser, Nikos K. Logothetis, and Christopher I. Petkov. "Natural asynchronies in audiovisual communication signals regulate neuronal multisensory interactions in voice-sensitive cortex." *Proceedings of the National Academy of Sciences* 112, no. 1 (2015): 273-278.
- Siegle, Joshua H., Gregory J. Hale, Jonathan P. Newman, and Jakob Voigts. "Neural ensemble communities: open-source approaches to hardware for large-scale electrophysiology." *Current Opinion in Neurobiology* 32 (2015): Pages 53-59.