AFRD newsletter *February 2014*

Wim Leemans Appointed as Division Director

As announced in the AFRD all-hands meeting on January 28th, Steve Gourlay has stepped down as Division Director after leading AFRD since 2006. In this period the Division had several major achievements. They included important Advanced Light Source upgrades; construction of the Berkeley Lab Laser Accelerator (BELLA) and the Neutralized Drift Compression Experiment NDCX-II; and record-breaking superconducting magnet development for the LHC Accelerator Research Program. Steve will be returning to research.

Wim Leemans has been named as the new Division Director. Wim's extraordinary scientific achievements and broad vision for the future of accelerator physics and its applications make him an excellent person to lead AFRD.

Wim joined the Laboratory in 1991. He is currently a Senior Scientist and heads the LOASIS (Laser Optical Accelerator Integrated Studies) Program. Concurrently, he has for the past five years been Director of BELLA, the Berkeley Lab Laser Accelerator. The facilities and teams of LOASIS and BELLA have made LBNL a world leader in the field of laser plasma acceleration.

Wim has held various leadership roles in AFRD, LBNL and the science community. He has served on a number of important scientific panels and is presently a member of the Particle Physics Project Prioritization Panel (P5), which is preparing a new strategic plan for particle physics in the United States.

A Message From Outgoing Division Director Steve Gourlay

Dear colleagues,

I want to take another opportunity to let you know what an honor and pleasure it has been serving as Director of AFRD for the past 8 years. It gave me a unique opportunity and perspective to learn more about the things you do so well. I had a great support team, whose help was indispensable, but I want to especially thank Sam Vanecek – for many things really, but let me just say, "she's awesome!"

I wish you all much success.

Steve

Director's Corner

Let me start by first thanking Paul Alivisatos and James Symons for giving me the opportunity to lead our division. I have been at the Lab for more than 22 years. It has been an amazing experience that continues to this day and I hope well into the future. I am grateful for all the support I have been given over the years that have allowed me to pursue my dreams here at LBNL. Initially some folks characterized those dreams as having a large component on the imaginary axis and only a small component on the real axis. Although there is a great deal left to do, I am very happy that, with the Lab's support and our funding agencies (primarily HEP), with our great team that has been built up over the years, and with our state-of-the-art tools, that the component on the real axis is growing year by year.

I also want to join Paul and James in thanking Steve for his nearly 8 years of service as division director. As chair of the American Physics Society's Division of Physics of Beams, which is the governing body within the APS for all beam related physics, he will be able to advocate for our field on a broad and influential stage. The APS-DPB is fortunate to have someone like Steve at the helm to continue to strengthen the role of accelerators and beams across scientific fields, industry and education.

It is the unity and cohesion of all employees, scientists, techs, admins and support staff that results in the greatest progress and benefits. My view of course is not new. It is after all the view that Lawrence embraced when he started the Lab. Lawrence's legacy lives on in this lab and is embraced by all Lab directors who succeeded him. As division director I will also work hard on bringing all strengths to bear on the big challenges and new opportunities that lay ahead.

As we look forward, AFRD has the potential of continuing to reshape the future of accelerators, the science that is done with accelerators and associated technologies and instrumentation, and to broaden the scientific impact of these essential instruments of discovery and innovation. This is one of the core missions I will work on with all of you so that we can secure a future for accelerators and accelerator related science,

and for the use of accelerators here at LBNL. Magnets of all kinds, beam dynamics and advanced modeling and computation will continue to be cornerstones as well as the new generation of laser driven accelerators. In addition, I want to grow a new program for the development of lasers. Lasers have been and continue to be essential and ever more important at LBNL and in science in general. With new ideas and concepts, lasers will be developed with unprecedented performance in both peak and average power. This will in turn enable new science and applications for many decades to come.

It will require lots of ingenuity, energy (people energy and real energy) and funding to carry out our shared goal of strengthening the division and creating new opportunities. We will need to deeply understand the needs of the funding agencies as proxies for the needs of the nation and, through strategic choices and partnerships within the lab and outside of the lab, be advocates for ourselves and thereby secure a continued and expanding role.

In the weeks to come I want to meet with the division leadership and the Lab's upper management to better understand the resources we have, the strengths that make us unique, the challenges we face, and the goals we all aspire to. I want to meet with scientists, techs and students to explore what we can (and cannot) do, and I want to meet with support staff (budgets, administrative and human resources) to understand the immediate issues and to plan for the future. I am excited about being given the chance to lead the division and will do my utmost to seek and capitalize on new opportunities. It will take everyone's ideas and dedication and I hope to have your support.

Get to Know Your Colleague: Joe Riley

What is your current position and what are you working on right now?

Starting at the Lab as a Laser Engineer last April, I'm working for Wim Leemans in AFRD.

What is your professional background? Where did you work before coming to the Lab?

Before coming to the lab I worked in manufacturing for 12 years at Coherent. They are a laser company in Santa Clara and I was in the Ultra Fast / Regenerative Amplifier department. Before that I worked for UT Southwestern Medical Center in the laser department.

Where are you from originally? Where did you go to college or university?

I am originally from the South Texas city of Corpus Christi. It's not a very big city. It only has a population of around 250,000, which means it still has somewhat of a small town feel. It was a good place to grow up since it was a culturally diverse community. I then went to college in Waco, TX at TSTC and my degree is in Laser Electro Optics.

What was the most amazing or coolest thing you got to do for work? Or the most amazing place you visited as part of your job?

One of the most amazing things I've been associated with in my career is working right here with the AFRD group. It's really amazing to work with dedicated scientists that love their work. Plus setting the world record with BELLA three times since I've been here doesn't hurt. I've worked with a lot of amazing people over the last 25 years including Nobel laureates in medicine and now in science and I consider myself lucky to be here.

Is there something interesting about you that most people at the Lab don't know that you would like to share with the Division?

One of my favorite things to do with friends is play disc golf. If you've never heard of it or played disc golf, it's a fun game with plenty of challenges. It's usually in a park setting where you walk around with friends and try to get a disc (frisbee) into a mounted basket. And let me tell you that it is just as frustrating as regular golf. It's really not that bad though; as a lot of disc golfers say, "It's just a walk in the park."

Link of the Month: LHC in Google Streetview

Did you know that with Google's Street View, you can explore way more than just the neighborhood? Try this link: `https://maps.google.com/?mid=1392330706` or just enter CERN in a search in `http://maps.google.com`. It allows you to explore several different levels of the LHC tunnel.

Thanks to Joe Riley for "Get to Know Your Colleague" and to Ian Pong for the suggestion for the link of the month. Thanks to Joe Chew and Sam Vanecek for editing/proofreading.

Please send suggestions for news items, links or "get to know your colleague" to Ina Reichel (`IReichel@lbl.gov`).