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LAS Wins Prime UC Award



LAS founders (from left to right) Tyler Rice, Sean White and Bruce Yang.

Laser Associated Sciences, Inc. (LAS), an early-stage start-up developing optical biometric sensors for wearable and medical devices, won \$50,000 as runner-up at the Prime UC competition held at UC San Francisco on December 2, 2015.

Working together at the Beckman Laser Institute (BLI), UCI doctoral alumni Sean White, Bruce Yang and Tyler Rice invented FlowMet, a clip-on device that continuously measures blood flow in a patient's fingers and toes. The product is aimed at improving outcomes in patients with peripheral artery disease in which blockages in the arteries result in restricted blood flow to the legs. The condition is treated most often with angioplasty (insertion of a balloon on a catheter) to open up the blockage, but doctors often have to guess at whether enough blood flow is restored to a limb. FlowMet's real-time surgical monitoring capability takes the guesswork out of the surgery. Product testing has shown it can

simplify disease detection, provide real-time surgical feedback, and reduce unnecessary follow-up visits through at-home monitoring.

LAS moved into the BLI Photonic Incubator in August 2015 to further develop their business and medical technology.

"The competition was not only valuable because we were exposed to a number of investors in non-invasive medical devices," said Sean White, LAS co-founder and CEO, "but we connected with a number of Bay Area colleagues who were involved with the competition." Connecting with potential investors is becoming a priority of LAS as the company makes the transition into product regulation and commercialization, which will require addi-

tional funding. LAS has accomplished a great deal with limited expenditures by participating in BLI's incubator program, and operating as thoughtfully and efficiently as possible. LAS is currently working with multiple hospitals in California to investigate the value of continuous blood flow monitoring in diagnosis and real-time surgical feedback for vascular disease.

The competition was part of UC President Janet Napolitano's Innovation and Entrepreneurship Initiative, which aims to help early stage companies affiliated with the university. Prime UC collaborated with Johnson & Johnson Innovation to award one winning start-up \$150,000 and three runners-up \$50,000 each. The winners were selected from more than 260 teams by a panel of 50 judges who included angel investors, venture capitalists and corporate executives. To be eligible for the competition, each start-up needed to have raised less than \$1 million in private funding and had to be founded by a university faculty or staff member, or be managed or founded by a university student, alumnus or postdoctoral fellow. ■

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An Uncommon Path

by Michael W. Berns, Ph.D.

Arnold and Mabel Beckman Professor
Co-Founder, Beckman Laser Institute

How did the Beckman Laser Institute and Medical Clinic (BLIMC) get started, and how did it get to where it is today? It's a unique and different academic path for a program that began in a professor's lab in Steinhaus Hall, the Biological Science building on the UCI campus in 1972.

The seed from the BLIMC was sown when Dr. Arnold O. Beckman, Founder and Chairman of Beckman Instruments, Inc., visited my lab in December of 1980 at a special open house for community technology leaders. We wanted to showcase the prototype laser microscope for subcellular surgery that was built with funding from the National Institutes of Health (NIH). We called it the LAsEr Microbeam Program (LAMP)—the second "M" in LAMMP for "medical" would be added in 1994. This important

NIH grant has been at the core of the BLIMC and has been continuously funded since 1980.

That seed of initial interest grew, and two years later Dr. Beckman and I founded a non-profit charitable corporation named the Beckman Laser Institute and Medical Clinic, Inc. This non-profit was formed to raise funds to construct a building that housed the UCI LAMP program as well as basic and clinical research (and patient treatment) primarily using lasers. Today, the focus of the BLIMC clinic is treating dermatological problems and developing diagnostic uses of light for a myriad of diseases (including cancer). Also, since 1986, the year the BLIMC opened, the U.S. Department of Defense (DoD) has been providing core support for many BLIMC faculty to conduct research as part of the U.S. Wounded Warrior Program under the title: "Advanced optical technologies for defense trauma and critical care." These two continually funded programs

(Wounded Warrior and LAMP) have provided the BLIMC with the resources to expand and grow into one of the world's leading centers in its field.

The overall BLIMC program concept was very different from anything proposed elsewhere: first, the integration of basic and applied research with patient treatment under the same roof; and second, a separate non-profit corporation that raised money for construction of the building and, although not part of its charter, provided for significant operating expenses over the past thirty years.

Even more unique was the fact that the building ownership stayed with the non-profit for thirty years, after which time it would be gifted to the university. That time has come, and by the time you read this, the deed to the BLIMC building will be signed over to the university ending a thirty-year success story that will continue to grow and flourish. ■

Newsbriefs

Newly Elected SPIE Fellow

Professor Bernard Choi was elected as a Fellow of SPIE, the international society for optics and photonics, for achievements in biophotonics and biomedical optics of skin and microvascular therapy. His election was announced at the annual SPIE Photonics West meeting held in San Francisco, CA, February 13-18, 2016. Thirty-two new SPIE Fellows were elected this year. They were honored for their technical achievement, their service to the general optics community and to



Bernard Choi

SPIE in particular. More than 1,000 SPIE members have become Fellows since the Society's inception in 1955.

ASLMS Laser Aesthetics Course

The American Society for Laser Medicine and Surgery (ASLMS) held its Laser Aesthetics course at the Beckman Laser Institute on November 14 & 15, 2015. The course was designed for physicians, other clinicians, scientists, and individuals in industry who currently use or are investigating the use of lasers in their practice. A variety of topics provided a deeper understanding of how lasers work in order to apply that knowledge to achieve optimum clinical outcomes. The faculty included: Dr. J. Stuart

Nelson, Medical Director, Beckman Laser Institute and Medical Clinic; Dr. Emil Tanghetti, Center for Dermatology and Laser Surgery, Sacramento, CA; Dr. E. Victor Ross, Scripps Clinic, San Diego, CA; and Dr. Gerald Goldberg, Pima Dermatology, Tucson, AZ.

Justin Adams of AlertWatch Delivers LAMMP Seminar

Justin Adams, CEO of AlertWatch, participated as a LAMMP Seminar speaker on January 28, 2016. Using his compa-

(Newsbriefs continued on p. 4)

BLI Newsletter Staff

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Faculty Spotlight: Thair Takesh, D.D.S., Ph.D.

Dr. Thair Takesh joined the Beckman Laser Institute faculty last year, where he is testing the effectiveness of a new bioengineered dental gel, Livionex, on patients with gum disease. BLI Dental Director Petra Wilder-Smith notes that the addition of Dr. Takesh to her team brings much-needed expertise on gums, tooth replacement and implants as well as on dental materials.

Periodontal disease is the major cause of 70% of adult tooth loss and is potentially linked to coronary heart disease, stroke, diabetes, and breast cancer. In Dr. Takesh's pilot study, he is collecting biomarker-containing fluids from pockets around the teeth from patients with gum disease before, during, and after use of the novel dental gel.

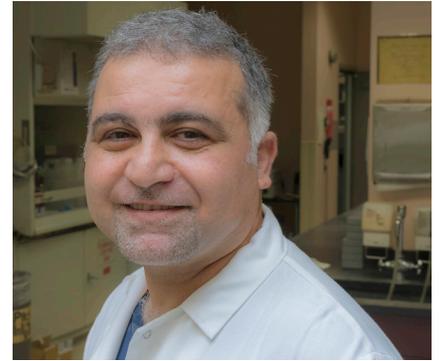
As a result of this study, Dr. Takesh has identified and validated the six most important biomarkers for gingival health. Considered the most accurate indicators of gingival health, biomarker assays are currently expensive and laborious, and previously, a very large number of assays were necessary for accurate

assessment. By narrowing the biomarkers down to six, Dr. Takesh's pioneering work provides the basis for inexpensive, targeted, accurate measurements of gingival health.

Ultimately, this will give clinicians the ability not only to assess gingival health but also to measure the effectiveness of specific gum treatments more quickly and more accurately than current methods. The use of light and optics for this study has prompted Dr. Takesh to consider ways to optically monitor the integrity of crowns, bridges and implants.

Dr. Takesh's journey to Irvine, however, has not been an easy one.

In 2000, Dr. Thair Takesh temporarily closed his twenty-year-old dental practice in Aleppo City, Syria, to complete further specialty training in implantology and prosthodontics in the United Kingdom where his wife was pursuing her Ph.D. Returning to Aleppo, Dr. Takesh reestablished his practice specializing in periodontology, oral implantology, temporomandibular joint (TMJ) dis-



Thair Takesh

orders, and prosthodontics. He pursued an additional master's degree in biomechanical engineering, which provided Dr. Takesh with a biomechanistic understanding of many oral dysfunctions.

In 2010, Dr. Takesh again followed his wife, Amal Alachkar, to the United States when she was awarded a Hubert H. Humphrey Fellowship to study in Pennsylvania. With the outbreak of war in Syria, they were unable to return home, and in 2011, the family moved to California, where Dr. Alachkar is a Visiting Associate Professor in the department of Pharmacology at the UC Irvine School of Medicine. ■

Honors and Awards

Michael W. Berns, Ph.D.



Michael Berns

BLI co-founder Michael W. Berns has been elected Fellow of the Royal Society of Biology (FRSB) in Great Britain. Only one percent of the members are from outside Great Britain,

and Queen Elizabeth approved the designation "Royal" based on the impact and influence the members have on government policies related to biological sciences in Great Britain.

Zhongping Chen, Ph.D.

Professor Zhongping Chen has been awarded a four-year grant from the National Eye Institute, National Institutes of Health (NIH), for "High

resolution elastography of retina under prosthetic electrical stimulation."

Co-Principal Investigator with Dr. Qifa Zhou of the USC Viterbi School of Engineering, their goal is to develop and characterize novel tools for imaging the elastic properties of the retina under prosthetic electrical stimulation, a treatment used for individuals with photoreceptor degenerative diseases including retinitis pigmentosa. The imaging technique will generate images depicting local displacements with nanometer resolution, providing details about the elastic properties of the retina that cannot be obtained with current imaging methods. Development of this method may help clinicians to recognize and ultimately avoid retinal damage, a complication caused by prolonged retinal electrical stimulation.



Zhongping Chen

Resolution elastography of retina under prosthetic electrical stimulation." Co-Principal Investigator with Dr. Qifa Zhou of the USC Viterbi School of Engineering, their goal is to develop and characterize novel tools for imaging the elastic properties of the retina under prosthetic electrical stimulation, a treatment used for individuals with photoreceptor degenerative diseases including retinitis pigmentosa. The imaging technique will generate images depicting local displacements with nanometer resolution, providing details about the elastic properties of the retina that cannot be obtained with current imaging methods. Development of this method may help clinicians to recognize and ultimately avoid retinal damage, a complication caused by prolonged retinal electrical stimulation.

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Ben Lertsakdadet, B.S.



Ben Lertsakdadet

Biomedical Engineering graduate student Ben Lertsakdadet has been awarded a one-year pre-doctoral fellowship from the ICTS for "Noninvasive, point-of-care monitoring of neonatal intestinal blood flow." Mr. Lertsakdadet works in the lab of Professor Bernard Choi and collaborates with Dr. Mustafa Kabear, a surgeon with a pediatric and critical care specialty at the Children's Hospital of Orange County (CHOC).

Biomedical Engineering graduate student Ben Lertsakdadet has been awarded a one-year pre-doctoral fellowship from the ICTS for "Noninvasive, point-of-care monitoring of neonatal intestinal blood flow." Mr. Lertsakdadet works in the lab of Professor Bernard Choi and collaborates with Dr. Mustafa Kabear, a surgeon with a pediatric and critical care specialty at the Children's Hospital of Orange County (CHOC).

(Honors and Awards continued on p. 6)

Newsbriefs *(cont'd from p. 2)*

ny's operating room patient monitoring system as a starting point, he described the challenges of penetrating hospital markets with new data analysis tools in the current economic and regulatory environment. AlertWatch is a secondary OR monitoring system that aggregates real-time inputs from multiple systems and devices to create an easily-digestible interface for nurses, anesthesiologists, and surgeons in an effort to drive down incidents of negative interactions and speed patient post-op recovery. AlertWatch is currently in use at UCI Medical Center, as well as other teaching hospitals; the company is working on similar displays targeted to the ICU, obstetrics, and ER environments.

Article Published in SPIE Newsroom

"Ultrasonic irradiation to enhance chemotherapy" by BLI Research Professor Henry Hirschberg, Jonathan Gonzales, Rohit Kuman Nair and Steen Madsen was published September 12, 2015. The authors found that focused ultrasound combined with sensitizing agents used in photodynamic therapy increases the ability of anti-cancer drugs to inhibit tumor growth. See www.spie.org/newsroom

Top Doctors in Orange County



Kristen Kelly

Brian Wong

Matthew Brenner

Three Beckman Laser Institute & Medical Clinic physicians have been named among the Top Doctors in Orange County in the January 2016 issue of Orange Coast magazine: Kristen Kelly (Dermatology), Brian Wong (Otolaryngology) and Matthew Brenner (Pulmonary Disease).

Bruce Tromberg Elected Fellow of OSA

BLI Director Bruce Tromberg has been elected a Fellow of The Optical Society (OSA), a nearly 100-year-old international association of optics and photonics scientists, engineers and business leaders.

Dr. Tromberg is one of 77 newly elected 2016 Fellows and was recognized for "serving as an advocate for and a leader of the biophotonics community as well as for pioneering the development and clinical application of spatially and temporally modulated light imaging."

Only 10 percent of the organization's total membership is honored with this fellowship which is based on members' contributions to the field, optics-related publications and patents, leadership, and service.

BLI Participates in the Festival of Discovery

To celebrate the University's golden anniversary, UC Irvine held a day-long Festival of Discovery on Saturday, October 3, 2015, at Aldrich Park. The festival featured interactive explorations of how UCI students, faculty and UC Irvine Health are impacting the world.

The Beckman Laser Institute (BLI) staffed a booth entitled "Engineering the Clinic of the Future," located in the "Ingenuity and Innovation" pavilion, where BLI technology was shared with the community. The booth, crowded all day, featured live demonstrations of BLI technologies, including

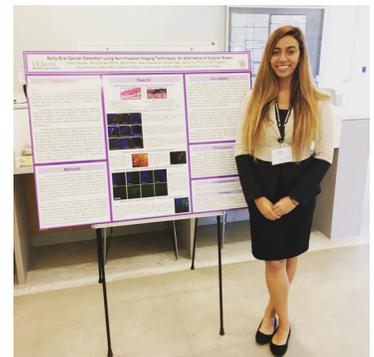
diffuse optical spectroscopic imaging (DOSI), which was performed on attendees by BLI Director Bruce Tromberg, DOSI Lab Director Tom O'Sullivan, and Biomedical Engineering graduate student Robert Warren. A line of enthusiastic people waited to try out the technology including most of the UCI men's volleyball team who stopped by to look at



BLI Director Bruce Tromberg (center, in turquoise T-shirt) demonstrates noninvasive optical sensing to captivated onlookers at Festival of Discovery.

their oxygenated hemoglobin, water, and fat content information. The BLI booth also featured companies from the BLI Photonic Incubator, including Laser Associated Sciences, Praxis, and OCT Medical. In addition, a video of the CBS news story about Dental Director Petra Wilder-Smith's research involvement with Livionex dental gel played on a continuous loop the entire day.

Undergraduate Presents Poster at ASDA



Valery Saikaly

Valery Saikaly, an undergraduate researcher in Dr. Petra Wilder-Smith's lab, was selected as the only pre-dental student to present her research among a handful of dental students at the American Student Dental Association (ASDA) District 11 Research Poster Session on October 10, 2015. She presented the lab's findings on the "Early detection of oral cancer using non-invasive imaging modalities: an alternative to

(Newsbriefs continued on p. 6)

Recent Publications

“Measurement of ciliary beat frequency using Doppler optical coherence tomography” by B. T. Lemieux, J. J. Chen, J. Jing, Z. Chen and B. J. Wong in *International Forum of Allergy & Rhinology* 5: 1048-1054, 2015.

“Ultrafast optical-ultrasonic system and miniaturized catheter for imaging and characterizing atherosclerotic plaques in vivo” by J. Li, T. Ma, D. Mohar, E. Steward, M. Yu, Z. Piao, Y. He, K. K. Shung, Q. Zhou, P. M. Patel and Z. Chen in *Scientific Reports* 5: 18406, 2015.

“Automatic airway wall segmentation and thickness measurement for long-range optical coherence tomography images” by L. Qi, S. Huang, A. E. Heidari, C. Dai, J. Zhu, X. Zhang and Z. Chen in *Optics Express* 23: 33992, 2015.

“Visualizing biofilm formation in endotracheal tubes using endoscopic three-dimensional optical coherence tomography” by A. E. Heidari, S. Moghaddam, K. K. Truong, L. Chou,

C. Genberg, M. Brenner and Z. Chen in *Journal of Biomedical Optics* 20: 126010, 2015.

“Targeted narrowband intense pulsed light on cutaneous vasculature” by W. J. Moy, J. D. Yakel, O. C. Osorio, J. Salvador, C. Hayakawa, K. M. Kelly and B. Choi in *Lasers in Surgery and Medicine* (published online July 31, 2015) 47: 651-657, 2015.

“Spatiotemporal correlation of optical coherence tomography in-vivo images of rabbit airway for the diagnosis of edema” by D. Kang, A. Wang, V. Volgger, Z. Chen and B. J. F. Wong in *Journal of Biomedical Optics* 20: 076015, 2015.

“Detection and proportion of very early dental caries in independent living older adults” by J. S. Holtzman, D. Kohanchi, J. Biren-Fetz, M. Fontana, M. Ramchandani, K. Osann, L. Hallajian, S. Mansour, T. Nabelsi, N. E. Chung and P. Wilder-Smith in *Lasers in Surgery and Medicine* 47: 683-688 2015.

“Escape forces and trajectories in optical tweezers and their effect on calibration” by A. A. M. Bui, A. B. Stilgoe, N. Khatibzadeh, T. A. Nieminen, M. W. Berns and H. Rubinsztein-Dunlop in *Optics Express* 23: 24317-24330, 2015.

“Enzymatically activated near infrared nanoprobes based on amphiphilic block copolymers for optical detection of cancer” by T. Ozel, S. White, E. Nguyen, A. Moy, N. Brenes, B. Choi and T. Betancourt in *Lasers in Surgery and Medicine* (published online July 17, 2015).

“High speed intravascular photoacoustic imaging with fast optical parametric oscillator with fast optical parametric oscillator laser at 1.7 μm ” by Z. Piao, T. Ma, J. Li, M. T. Wiedmann, S. Huang, M. Yu, K. K. Shung, Q. Zhou, C.-S. Kim and Z. Chen in *Applied Physics Letters* 107: 083701, 2015.

For a complete listing of publications, see pubs.bli.uci.edu.

VBF Conference Held at BLI

The Beckman Laser Institute and the Vascular Birthmarks Foundation (VBF) co-sponsored the 2015 Vascular Birthmarks Conference and Clinic on October 10, 2015. Families heard from vascular birthmark experts about the latest diagnoses and treatments for vascular malformations and related syndromes. Later, families met at the BLI with the experts to receive a diagnosis and treatment plan for their specific conditions. More than 300 individuals from the United States, Canada, Ecuador, India, and New Zealand attended the all-day conference, which consisted of 18 informative presentations, 130 clinic appointments and over 50 medical procedures scheduled as a result of the conference.

Dr. Paula North, Professor and Chief of Pediatric Pathology at the Medical College of Wisconsin, received the 2015 Physician of the Year Award, and Dr.

Anne Comi, Director of the Hunter Nelson Sturge-Weber Center at Kennedy Krieger Institute, Baltimore, MD, was awarded the Michael W. Berns Achievement Award for helping discover the genetic cause of Sturge-Weber Syndrome and port wine stains.

Donations to VBF helped provide conference admission, lodging for over 50 families, breakfast and lunch for 300 at the Island Hotel in Newport Beach, and an opportunity for families to receive an accurate diagnosis and appropriate treatment plan (many for the first time). VBF is an international charitable organization that connects families affected by a vascular birthmark (i.e., port wine stain and hemangiomas), tumor, or syndrome (Sturge-Weber and Klippel-Trenaunay) to the appropriate medical professionals



Dr. Anton Hasso (left) and VBF Founder Dr. Linda Rozell-Shannon with conference attendees Zahnnee Campbell, her mom Jade Riley, and brother Zandon Campbell.

for evaluation and treatment. VBF also provides informational resources, sponsors physician education, mobilizes medical mission trips, and supports research and programs that promote acceptance for individuals with birthmarks.

BLI Medical Director, J. Stuart Nelson is an honorary Co-Chair of VBF's Research and Scientific Advisory Committee. ■

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surgical biopsies.” This project focused on finding a better tool for early cancer detection and for identifying risk in potentially pre-malignant lesions due to delayed detection of malignant change to oral cancer. Valery’s presentation discussed the use of multiphoton, second harmonic generation, and third harmonic generation fluorescence microscopy to detect changes in vasculature and the extracellular matrix during the different stages of oral carcinogenesis. Reflecting on this event and her research, Ms. Saikaly remarked, “Presenting at the District 11 poster session was such a wonderful experience. It was a really great opportunity to contribute to recent advances in the dental field and share those advances with dental students and dental school faculty members.”

New BLI Research Coordinator



Ata Sharif

Project Scientist Ata Sharif, M.D., M.B.A., has been appointed the new research coordinator at the Beckman Laser Institute and Medical Clinic (BLIMC), succeeding Montana Compton. Dr. Sharif will oversee clinical research protocols and clinical trials conducted at BLIMC.

MI Open House

Modulated Imaging, Inc. (MI), a company that began at the BLI Photonic Incubator, held an open house on December 2, 2015. More than 75 guests visited the 5,877 sq. ft. facility in Irvine to learn more about the company and to celebrate this impressive milestone.

Vice Chancellor for Health Affairs and Provost/Exec. Vice Chancellor Visit BLI

The Beckman Laser Institute was pleased to have hosted both Vice Chancellor for Health Affairs, Dr. Howard Federoff, and Provost & Executive Vice Chancellor, Dr. Enrique Lavernia, for tours of the clinic and labs in December and January, respectively. Both men left BLI with a greater understanding of the research and clinical work at BLI, as well as an appreciation for the cross-campus and industry collaborations necessary to foster our successes. BLI physicians and researchers featured innovations at the Advanced Technology Suites, in which patients can volunteer to participate in one of BLI’s more than 40 clinical protocols using our unique biophotonic imaging technologies. Dr. Federoff has recently been appointed CEO of UC Irvine Health. He



Richard Oberreiter (far right), COO of MI, Inc., welcomes (from left to right) BLI staff Hanna Kim and Christine Fantone with Alvin Viray, Senior Licensing Officer, UCI Invention Transfer Group.

was also Dean of UCI’s School of Medicine. Chancellor Gillman appointed Dr. Lavernia as Provost in April 2015.

Oral Cancer Research Picked up by Two Websites

An article written by UCI’s Tom Vasich for UCI News, August 31, 2015, entitled “Better than biopsies: UCI’s Dr. Petra Wilder-Smith has pioneered the use of laser technology to non-invasively detect and treat oral cancers” was picked up by the websites Medical Design Technology, September 9, 2015 (“Laser technology aims to stem India’s oral cancer problem”) and Dr. Bicuspid Online Newsletter, September 24, 2015 (“Can a laser detect oral cancer?”). ■

Honors and Awards *(cont'd from p. 3)*

Robert Warren, B.S.

Biomedical Engineering graduate student Robert Warren has been awarded a one-year pre-doctoral fellowship from the UCI Institute for Clinical and Translational Science (ICTS) for “Development of non-invasive, functional, optical imaging for monitoring and detecting cardiovascular disease.” Mr. Warren works in the DOSI lab under the



Robert Warren

supervision of Professor Bruce Tromberg and with Dr. Shaista Malik, Assistant Professor of Cardiology and Program Director of the Cardiovascular Disease Fellowship, Division of Cardiology in UCI’s Department of Medicine.

Robert Wilson, Ph.D.

Postdoctoral fellow Robert Wilson has been awarded a one-year post-doctoral fellowship from the Institute for Clinical and Translational Science (ICTS) for



Robert Wilson

“Clinically translatable multimodal optical imaging platform for quantitative assessment of cerebral hemodynamic response to cardiac arrest and resuscitation.” Dr. Wilson works in the Wide Field Functional Imaging Laboratory at BLI under the supervision of Professors Bruce Tromberg and Anthony Durkin. The lab employs multi-spectral spatial frequency domain optical imaging techniques to quantify biophysical tissue properties related to the absorption and scattering of light by tissue. He will be collaborating with the lab of Professor Yama Akbari in the department of Neurology at the UCI School of Medicine. ■

New Arrivals

Yan Li, M.S., is an Optical Engineer from the Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences. She joined BLI as an Assistant Specialist to work in the lab of Dr. Zhongping Chen.



Yan Li

Stephen Siegel, M.B.A., has joined the BLI team as Director of Development working on all fundraising and external relations initiatives at the Institute. He



Stephen Siegel

served most recently as Senior Development Officer and founding director of the Silicon Valley Program at Claremont McKenna College.

Tomas Stromberg, Ph.D., Professor of Biomedical Engineering, Linköping University, Sweden, is a Visiting Researcher in 2016.



Tomas Stromberg

His project, entitled “Pointwise and imaging optical spectroscopy for functional characterization of superficial tissue: method development, validation and clinical studies,” is being funded by a Fulbright Swedish Visiting Research Scholar grant and a European Commission and VINNOVA (Sweden’s innovation agency) grant as a Marie Curie and VINNMER Fellow. Dr.

Stromberg will be working with the labs of Drs. Bruce Tromberg and Anthony Durkin to study laser Doppler flowmetry and white light diffuse reflectance spectroscopy as well as development of a hyperspectral or multispectral imaging spectroscopy system.

Qiang Yang, Ph.D., is a postdoctoral fellow who will be working on optical coherence tomography in the lab of Dr. Zhongping Chen. Dr. Yang earned his Ph.D.



Qiang Yang

from Beijing University of Posts and Telecommunications in Beijing, China. He recently completed a postdoctoral fellowship in the Department of Precision Instruments at Tsinghua University, also in Beijing. ■

Fond Farewell: Montana Compton, R.N., M.B.A.

On Thursday, December 17, 2015, Beckman Laser Institute (BLI) faculty, staff and friends gathered in the BLI library to wish Montana Compton well on her retirement and on the next chapter of her life. Montana started at BLI in April 2001 as an Administrative Nurse to oversee clinical research being conducted at the BLI and the University of California Irvine Medical Center. Over the next 15 years, she served as a research-resource person assigned to work with the laser research programs involved in breast cancer, Ob-Gyn, ENT, dermatology, ophthalmology and muscle disease.

Albert Cerussi, Ph.D., Director of the Diffuse Optical Spectroscopy & Imaging (DOSI) Lab from 1999-2014, worked closely with Montana on breast cancer research. He expressed the impact of Montana’s involvement with BLI for her retirement celebration:

Montana saved me. When I was starting at BLI, we were actively trying to measure as many breast patients as we could. Quickly, we realized that we needed help because I was overwhelmed. We didn’t just need a warm body, but we needed a particular and rather unique skill set. We needed someone skilled in management to help organize our growing clinical studies. We needed someone skilled in nursing with a good heart to take care of our patients.

Montana gets A’s in each category. She was the perfect fit and exactly what our young program needed at the time. I can’t see how we could have grown the way we did (all of the clinical programs this entailed) without her support and dedication. She was a great balance of getting things done yet always reminding us that the “subjects” were special people who needed love and care as much as they needed medicine and surgery.



Montana and Lloyd Compton

Montana came to the BLI from Kaiser Permanente where she was responsible for all clinical trial protocols in the Dermatology and Allergy Clinic and also served as a pediatric research nurse at the UCI and UCLA Child Development Centers.

Although she has retired, Montana’s life will be full. She plans to play a great deal of golf with her husband, Lloyd, travel, and enjoy her 5 grandchildren, including a set of triplets. ■



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The Beckman Laser Institute & Medical Clinic has enjoyed a lengthy history of private philanthropic contributions. You can join a long line of contributors who appreciate the convergent technologies BLI researchers create to solve some of the most complex medical challenges in significant ways. To make your secure gift, use the “donations” link on our website: www.bli.uci.edu. To include BLI in your estate plans or to talk about supporting specific initiatives, contact Steve Siegel, Director of Development, at steve.siegel@uci.edu or 949-824-8859.

