



PSBMB NEWSLETTER

Philippine Society for Biochemistry and Molecular Biology

December 2005

PSBMB Goes to Dumaguete City: The Official Report on the 31st Annual Convention of the Philippine Society for Biochemistry and Molecular Biology

James A. Villanueva, Over-all Chair

The PSBMB 31st Annual Convention was held last 3-4 December 2004 at the Bethel Guest House in Dumaguete City, Negros Oriental with the theme 'Biosciences as Catalyst for Bioindustries'. The host of the convention was the Department of Chemistry of Silliman University. The convention drew 125 participants mostly coming from Luzon. A day before the convention, the first Review and Updates (RevUp) Workshop was successfully held at the Silliman University campus.

The over-all Chair of the 31st convention was Dr. James A. Villanueva with Dr. Mafel C. Ysrael as the over-all Co-Chair. Dr. Gisela P. Concepcion prepared an excellent scientific program. Her committee included Dr. Ameurфина D. Santos and Dr. Virginia D. Monje. Dr. Mafel C. Ysrael, Prof. Leslie M. Dalmacio and Prof. Grace B. Yu took care of the Secretariat and Registration. Dr. Virginia D. Monje was in-charge of the awards as well as the RevUp Workshop. Dr. Gloria D. Bernas made sure that the convention was loaded with sponsors and exhibitors. Dr. Nina Rosario L. Rojas and Dr. Marilou G. Nicolas with Mr. Edumar Madlangbayan designed and posted necessary information about the convention on a website. Dr. Rojas also prepared a beautiful newsletter while Prof. Peter C. Torres headed the physical arrangement. The extremely hospitable and efficient local organizing committee, led by Prof. Melchor Cerdania, did a good job.



PSBMB Board Members with the Local Organizing Committee and Dr. Evereth L. Mendoza, Vice President for Academic Affairs of Silliman University

Quick Facts and Figures

Total number of participants : 125 (including the PSBMB board members)

Plenary Speakers : 8 invited, 7 came

- Dr. Charles A. Pasternak (Nobel Laureate) - *Oxford International Biomedical Center*
 - Dr. Takashi Okamoto - *Department of Molecular and Cellular Biology, Nagoya University*
 - Dr. Naoko Takahashi - *Department of Molecular and Cellular Biology, Nagoya University*
 - Dr. Ma. Patricia V. Azanza - *College of Home Economics, UP Diliman*
 - Dr. Ilda G. Borlongan - *SEAFDEC, Iloilo and Central Philippine University*
 - Dr. Ramon R. Miranda - *Philippine Science High School System*
 - Dr. Marco Nemesio E. Montaño - *Marine Science Institute, UP Diliman*
- Missed : Dr. Chung-Shi Yang, Taiwan, due to bad weather

Dr. Clara Y. Lim-Sylianco Lecture : Dr. Irene M. Villaseñor, Institute of Chemistry, UP Diliman

Key Lectures : 15 key lectures

YSF : 5 participants all from UP Diliman (judges: Dr. Pasternak, Dr. Okamoto and Dr. Takahashi)

Number of parallel sessions : 3 at a time ; 9 sessions in all (6-first day; 3-second day)

Number of Oral Papers: 12

Number of Posters: 34

Number of Trade Exhibitors : 7

Major sponsor : PCASTRD

Number of Ads: 14

Souvenir Program :

70 pages, 7 major sections

Messages given by : Governor of Negros Oriental, Mayor of Dumaguete City, President of Silliman University, PSBMB President, 31st PSBMB National Organizing Committee Chair

PSBMB Behind the Scenes

The Making of the 3rd RevUp Workshop

Virginia D. Monje

Chair, PSBMB RevUp Workshop Program

RevUp is a **RE**view and **UP**date workshop series in continuing education in Biochemistry and Molecular Biology, a program of PSBMB. The news account of the RevUps is on the back page of this newsletter.

Originally the 2nd RevUp Workshop was scheduled for July 1st 2005. With the flyers coming out only in April 2005, we got numerous requests from teacher-would-be-participants to move it to the semestral break. We said, "Yes, it's reset to 22 Oct 2005." We had to change the 2nd RevUp to 3rd because by October, it would have been overtaken by the RevUp scheduled Sept. 30. Thus, the RevUp at Angeles University Foundation became the 3rd. Our saying "yes" to their requests meant new set of flyers and posters – unbudgeted expense. To start a project by 'overspending' is a NO NO in good management. But, as early as June, it lifted our spirits to receive our first donation of 100 CDs from an anonymous donor. Thanks to Dr. James Villanueva, VP of PSBMB and our 'solicitor general', who was in charge of soliciting donations, both in kind and in cash. The pack of CDs was *buena mano* for a continuous stream of donations, including publicity funds for posters and flyers from Biotech Coalition of the Philippines, plus clear books for the kit, gift packs and cash from other donors. Thus, Adri, our computer graphics talent, redesigned the flyers and posters. Vir and Allan, our secretariat, immediately sent out the new flyers by email and snail mail, and posted the new announcements in our website, www.psbmb.org, which is ably manned by Dr. Nina Rojas and Einstein Gan of Ateneo de Manila. .

The postponement gave us a chance to try the hands-on exercises in the GE classes of MBB 1 offered by NIMBB, UP Diliman. Based on the MBB 1 comments, the UP Movers, also the authors of the exercises, refined the exercises, making them more user-friendly. Meanwhile the Movers were continuously chasing the mentors, gathering materials for the clear book: lecture slides, teaching references and animations for the CD. As early as June, we wrote to W. H. Freeman & Co. and Howard Hughes Medical Institute requesting permission to burn some of their bioscience animation files onto the companion CD.



The 3rd RevUp Workshop on Genomics mentors, movers, facilitators and participants.

Last August 2005, Dr. Ruben Umaly, VP of AUF and co-chair of the 3rd RevUp, attended a meeting of head of schools in central and northern Luzon; there were presidents, VPs and VIPs of universities and colleges. That meeting was a perfect occasion for disseminating announcements and circulars. Ruben noticed that among the brochures for pick up at the front desk, our RevUp flyers announcing "*RevUp Workshop on Genomics*" had no takers. When he asked the VIPs why they were not picking up our flyer, most replied "What's Genomics! " – way above their heads! When they heard "that means genes and DNA", they then got the flyers. Ruben immediately called me, thanks to cell phones, to relate the "What's-genomics"-story. Luckily we were just about to have the new posters printed, and Adri was still able to add 'genes/DNA' to 'genomics' and simplify the lecture topics, and elicit the "OK 'to'" response even from the novice.

Nothing really beats a face-to-face meeting, not texting nor emailing. So as early as May 19th, the UP Movers, together with 7 PSBMB Officers and Board members, headed by the president, Dr. Glo Bernas, met with the AUF Movers, on-location to iron out some details of then proposed workshop. Again, on Oct 18th, both Movers had a final meeting at AUF, checking details and hoping for a fine weather. Meanwhile, the AUF movers and facilitators, all of whom are AUF faculty members and headed by their Dean, Dr. Bella Panlilio, had to spur up the venue, equipment, food catering and try out the hands-on exercises to check for possible glitches.

By mid-October, a week before the workshop, all materials for the clear book were ready – about 40 sets of printed stuff. But it was final exam week and the UP Movers were reviewing for their final exams in their graduate classes. Who then was to do the painstaking job of paginating the 200 clear books and compiling the printed stuff, and do finishing touches on the certificates, name tags, etc.? Three staff members from the UP Janitorial Services came to the rescue.

(continued on page 3)

The Making of...*(continued from page 2)*

Now the big day, 22 October: The bus left UP Diliman at 6 AM – right on schedule! Who among the riders could ever be late with Aisa's text at 5 AM: "Gud AM. this s ur RevUp wake-up col!". All in all, 196 attended the workshop, about half from Metro Manila and the other half from 13 provinces in Regions 1 –4, some from as far as Isabela, and here are some of their comments:

"So exciting!"

"The companion CD is awesome!"

"I enjoyed this activity. I learned a lot! To all the speakers, thank you!"

"More of those fun and challenging exercises."

"Lecture topics very interesting!"

"Excellent facilities of AUF."

"I like the pen & paper exercises...will surely use them in my classes"

"Keep up the good work, more of this kind of workshop!"

"Pls send us invitation to the next RevUp Workshops"

"Over-all rating – EXCELLENT!"

Picture how swans glide on a stream looking so cool and calm but vigorously paddling underneath the water. Likewise, the RevUp Movers and Facilitators were so cool on the big day of the workshop. That's because they've been vigorously paddling long before.

Thanks to the 3rd RevUp Movers and Facilitators! •

<u>UP Movers:</u>	<u>AUF Movers</u>	<u>AUF Facilitators</u>
Vir Banzon	Merlyn Cruz	Reynaldo Bundalian
Aisa Cantalejo	Denise Joyce de Jesus	Corine Lei Gonzales
Adri Constantino	Ruth Libag	Crizelda Liwanag
Aiko Diaz	Allan Lopez	Zenaida Mergal
Tina Espiritu	Ryan Mergal	Dioned Munoz
Kutch Inting	Maynard Orence	Minette Sampang
	Bella Panlilio	Marlon Suba
		Patty Victoria
		Minette Sampang
		Marlon Suba
		Patty Victoria
<u>3rd RevUp Workshop Lectures: Genomics: Genes/DNA</u>		
What's in a Gene	Dr. Celia Torres-Villanueva, NIMBB, UP Diliman	
Power Tools in DNA Analysis	Dr. Virginia D. Monje, NIMBB, UP Diliman	
Human DNA	Dr. Cynthia P. Saloma, NIMBB, UP Diliman	
Rice DNA	Dr. Leocadio Sebastian, PhilRice, Nueva Ecija	
Bioinformatics	Dr. Nina Rojas, Ateneo de Manila University	

PSBMB Goes to Dumaguete City *(continued from page 1)*

Dr. Evereth L. Mendoza, Vice-President for Academic Affairs of Silliman University gave the welcome remarks. Dr. Angel C. Alcalá, University Professor and Director for Research and



Dr. Angel C. Alcalá delivering the keynote address on the first day of the convention.

Environmental Management of Silliman University emphasized the importance of biodiversity in his keynote address. Seven plenary lectures (four local and three foreign) were given by renowned scientists in their fields. One plenary lecturer (Dr. Chung Shi-Yang) did not make it due to inclement weather. Dr. Irene Villaseñor, who talked about bioactive constituents from medicinal plants, gave the Dr. Clara Sylianco Lecture. Fifteen invited lectures and 12 oral presentations during the parallel sessions were also delivered. Five students from the University of the Philippines vied for the best paper in the Young Scientists Forum. Mr. Kurt Ellyson Fang of UP-NIMBB and Ms. Kathrina D. Castillo of UP-IC won the award. The posters (34) and trade exhibit (7) were as interesting as the lectures. The group of Dr. Tony Laurena of the University of the Philippines-Los Baños dominated the awards for best poster, winning both the health and the agriculture categories. •

PHOTO GALLERY

31st PSBMB Annual Convention



PSBMB President Dr. Gloria de Castro-Bernas and Silliman University officials Dr. Evereth L. Mendoza and Dr. Angel L. Alcalá open the exhibits of the 31st Annual Convention at the Bethel Guest House, Dumaguete City.



Participants of the 2005 Young Scientists Forum pose with the Chair of the Awards Committee, Dr. Virginia D. Monje.

RevUp 1: Silliman University, Dumaguete City



The RevUp pioneers try out the virtual lab exercises on molecular fingerprinting with Dr. Virginia Monje's encouragement.



RevUp 1 quiz contest winners receive prizes from Dr. Gloria de Castro-Bernas, PSBMB President.

1st Philippine Biotechnology Venture Summit



Investors and inventors meet at the 1st PBVS, held at Mapua Institute of Technology.



A participant checks out one of the inventions.

RevUp 2: University of the Philippines – Manila



Metro Manila high school teachers get REVIEWED and UPdated.



Arts and Sciences Dean Marilou Nicolas gives a historical tour of molecular biology.



Dr. Joel Nevado, RevUp 2 project head, makes a point during the forum.

RevUp 3: Angeles University Foundation



Participants puzzle over molecular phylogeny.



Mr. Viryan Banzon guides the participants through the computer exercises.



Participants excitedly present their answers during the quiz contest.

Photos contributed by PSBMB, Hybridigm Consulting, University of the Philippines-Manila College of Medicine's Department of Biochemistry and Molecular Biology, and Angeles University Foundation.

PSBMB co-sponsors the First Philippine Biotechnology Venture Summit: A Milestone in Building the Filipino Biotechnology Industry

Kurt Ellyson C. Fang

Hybridigm Consulting Inc., the country's first and only biotechnology consulting firm was established by its CEO and President Ma. Antonia "Maoi" Arroyo in April 2004 with the vision of fostering the growth of the country's biotechnology industry. Hybridigm has since provided consultancy and intellectual property advice to biotechnology practitioners and scientists looking to get their inventions commercialized and investment advice to businessmen looking to jump on the biotech bandwagon. It has also supported entrepreneurial education and scientific communication to bridge the gap between scientists, businessmen, and the laypeople.

In order to further promote its goal of cultivating biotechnology entrepreneurship in the country, Hybridigm, together with BusinessMaker Academy (BMA), held the first Philippine Biotechnology Venture Summit (PBVS) in the country last January 26 to 29, 2005. The 4-day summit put together the people with the inventions (scientists), the people with the cash (businessmen) and the people who make the laws (policy-makers) for them to know what each has been up to. Various speakers from here and abroad talked about topics pertinent to a growing biotech industry such as intellectual property rights, biotech laws and regulations, entrepreneurial finance, health economics and the other challenges involved in starting up a biotech

company. On the last day of the summit, spotlight speakers were given the chance to pitch their inventions and technologies to interested investors. The summit was successful in that a number of deals and partnerships were borne out of the proximity that the various stakeholders were subjected to. In a way, the summit catalyzed collaboration between groups of people who normally wouldn't give each other the time of day.

The summit would not have been possible without the unwavering support of its sponsors and organizational partners, namely the **Philippine Society for Biochemistry and Molecular Biology (PSBMB)**, the Department of Health (DOH), and
(continued on page 7)

RevUp 2 *(continued from page 8)*

Resource speakers from both PSBMB and DBMB gave interesting 40-minute lectures. The seminar started with a lecture on the "Molecules of Life" by Dr. James A. Villanueva (Vice-President, PSBMB and Assistant Professor, Institute of Chemistry, UP Diliman), followed by a lecture on "Genetic Mechanisms of Molecular Biology" by Dr. Marilou G. Nicolas (Member, PSBMB Board of Directors and Dean, College of Arts and Sciences, UP Manila). Succeeding lectures include "Comparative Genomics" by Dr. Bernadette L. Ramirez (Immediate Past President, PSBMB and Associate Professor, College of Medicine, UP Manila), "What is Biotechnology" by Dr. Virginia D. Monje (Member, PSBMB Board of Directors and Professor, National Institute of Molecular Biology and Biotechnology, UP Diliman), and "Genetic Basis of Human Diseases" by Dr. Nemencio A. Nicodemus (Associate Professor, College of Medicine, UP Manila). Pen and paper exercises were conducted by Dr. Jose B. Nevado (Associate Professor, College of Medicine, UP Manila). He also gave an orientation on the use of the instructional CDs provided in the kit.

The seminar was intended for 100 teachers from different public high schools around Metro Manila. Participants were limited to 1-3 teachers per school, who were accepted through early slot reservation. A total of 89 teachers from 59 different public high schools were able to attend the seminar. A pre-test and post-test were given to determine the effectiveness of the seminar in imparting knowledge to the participants. The mean pre-test score was 66%, while the mean post-test score was 80%, with the Pearson correlation ($p=0.026$) indicating that the average increase in score is significant and can be attributed to the seminar.

The seminar was commended by the participants, with a number of requests for follow-up seminars. The teachers also very much appreciated the seminar kit/materials and instructional CDs.

The seminar would not have been possible without the support of donors whose contribution covered the registration fees, food and kit materials. These were Metrobank Foundation's Outstanding Teacher awardee, Dr. Rafael Bundoc; Dr. Rodney Dofitas; and Dr. Orlino Talens, both from the UP College of Medicine, UP Manila.▪

Biochemistry and Molecular Biology Promoted During the Celebration of UP College of Medicine's Centennial Year

Bernadette L. Ramirez

Department of Biochemistry and Molecular Biology, College of Medicine, UP Manila

The UP College of Medicine (UPCM) is currently undertaking a year-long celebration of its Centennial. Founded in 1905, UPCM's celebration is marked by different activities spearheaded by the Dean and Chairs of the various Departments.

The Department of Biochemistry and Molecular Biology had been very active in promoting Biochemistry and Molecular Biology. Among its activities include the blessing of the Solita Camara-Besa Biochemistry Library, conducting the RevUp2 on Molecular Biology for Public High School Teachers, promoting biochemistry education for medical students through the Integrative and Innovative Learning Exercises (IILE), and construction of the Genomics Laboratory, Tissue Culture Laboratory and Animal Holding Facility. DBMB wishes to acknowledge the generous contributions of its donors for their unwavering support.▪

1st PBVS (continued from page 6)

the Mapua Institute of Technology which generously provided the venue for the summit.

The success of the first PBVS has led Hybridigm and BMA to decide to hold the summit on an annual basis. The next summit on January 2006 will focus more on industrial and medical biotechnology, two areas which have yet to see development in our country. Keynote speaker Yali Freedman, one of the most successful industry experts in the US, has agreed to give an overview of the global biotech scenario and how the Philippines could possibly profit from it. John Hebert, business development manager of Vertex Pharmaceuticals, co-founder of SmartCells, and a graduate of the MIT Sloan

Announcing: Course on Molecular Biology for Medical Doctors

Bernadette L. Ramirez

Department of Biochemistry and Molecular Biology, College of Medicine, UP Manila

The Department of Biochemistry and Molecular Biology (**DBMB**) of the College of Medicine, UP Manila is inviting interested medical doctors to register and participate in the first of a series of courses on Molecular Biology for Medical Doctors. The first course is planned for May 2006 with the College of Medicine at UP Manila as the Venue. Future courses are planned in different venues in the Visayas and Mindanao areas.

The First Course will cover topics important and relevant to the current practice of medicine. Specific topics will include *New Insights into the Human Genome*, *The Future of Genomics in Medicine*, *Molecular Biology of Cancer*, *Molecular Medicine*, *Bioinformatics*, etc. Faculty for the Course will be experts in the field of biochemistry and molecular biology from the UP College of Medicine. Proceeds from the course (registration fees from participants) will be used to support joint projects of the **DBMB** and **PSBMB** such as the Review and Updates on Molecular Biology for Public High School Teachers. For more details and inquiries, please contact Prof. Mito Leañó, Chair, DBMB, College of Medicine, UP Manila, tel. no. +632 5264197. ▪

School of Management, will talk about private equity in the biotechnology industry. Other invited speakers include Larry Ilag, PhD, JD who will talk about building a biotech enterprise, and Ben de Lumen, PhD, who will talk about the development and success of his anti-cancer drug Lunasin. The 2nd PBVS, to be held at the Unilab Bayanihan Conference Center on 17-20 January 2005, promises to be bigger, better, and provide more value for its participants. Contact Hybridigm Consulting Inc. at tel. nos. 8138412 and 8108639 or e-mail j.mariano@hybridigm-consulting.com for reservations and other inquiries. Hybridigm Consulting can also be found on the web at <http://www.hybridigm-consulting.com>.▪

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Visit us at www.psbmb.org.

The PSBMB Gets Revved Up!

Virgina Dia-Monje, Chair, PSBMB RevUp Workshop Program

RevUp is a **RE**view and **UP**date workshop series in continuing education in Biochemistry and Molecular Biology, a program of the Philippine Society for Biochemistry and Molecular biology (PSBMB). PSBMB is a 32 year-old nationwide organization, actively involved in the promotion of the biosciences. For more about PSBMB, please visit www.psbmb.org. PSBMB organized the RevUps to help address the need for improving and updating the teaching of biosciences in the primary, secondary and tertiary levels.

The most popular attractions in the RevUp menu are the updated lectures with handouts and reference materials, and the pen & paper as well as computer hands-on exercises. The participants also relish the companion CD which is loaded with teaching references, cool links to websites with free bioscience materials, and lots of animation files about key bioscience topics that the teachers can use in their classrooms. Another wow-factor of the RevUp workshops is the fun quiz on the lectures, with a shower of gift packs for the winners. Each workshop is such an enjoyable learning experience, that each participant inevitably looks forward to the next RevUp Workshop.

PSBMB aims to bring the RevUp nationwide. Thus, the 1st RevUp was launched in Silliman University in Dumaguete City last Dec.2, 2004. Thanks to the evaluation and suggestions of 36 participants, we have significantly improved the succeeding RevUps. The 2nd RevUp was last Sept. 30, 2005 at

the UP College of Medicine, organized by the PSBMB members who are also faculty members of the UP Manila Biochemistry Department. In celebration of the centennial anniversary of the UP College of Medicine, this RevUp was a gift-to-public-high-school-teachers-workshop – everything free for about a hundred public school teachers. An account of this exciting 2nd RevUp is in the article below.

The latest one, the 3rd RevUp, was held at Angeles University Foundation (AUF) in Angeles City last Oct. 22, 2005, heralding “Genomics: Genes/DNA.” It was a hit! There’s more in “*The Making of the 3rd RevUp Workshop*” in our PSBMB Behind the Scenes section on page 2.

This summer 2006, PSBMB hopes to bring the 4th RevUp to Bicol with the theme: Man – Biotech – Environment. Please visit us at www.psbmb.org for more about the RevUps.▪

Review and Updates 2 (RevUp2) on Molecular Biology for Public High School Teachers

*Jose B. Nevado, Jr., Leslie M. Dalmacio, Karen V. Evangelista, and Bernadette L. Ramirez
Department of Biochemistry and Molecular Biology, UP College of Medicine, Manila*

A 2nd Review and Updates (**RevUp2**) on Molecular Biology, this time for Public High School teachers, was conducted on September 30, 2005 at the Calderon Hall of the UP College of Medicine. This was a joint activity of the Philippine Society for Biochemistry and Molecular Biology (PSBMB) and the Department of Biochemistry and Molecular Biology (DBMB) of the UP College of Medicine. The 1-day seminar served as the culminating activity of DBMB’s month-long celebration of the UP College of Medicine’s Centennial Year. The event promotes the advocacy of PSBMB and DBMB in continuously educating the public in the fast-growing field of molecular biology.

Three months prior to the seminar, a validated survey was done to determine the perceived needs among biology teachers in public high schools in the National Capital Region (NCR). This was coordinated through the Department of Education. One hundred ninety-eight respondents from 10 cities and municipalities indicated the importance of basic molecular biology topics in secondary education. The topics that the teachers deemed

important include biomolecules, the central dogma of molecular biology, basic mechanisms of cloning, biotechnology and GMOs, and the genetic basis of diseases. However, most of the teachers assessed themselves to lack adequate knowledge in molecular biology to teach high school students. The said survey served as the basis for the selection of the topics which were presented in the seminar. *(continued on page 6)*