MyoTak Marketing Blitz

With the patenting of a new bioadhesive MyoTak (see BioMET NOW, Vol. 14 No. 4 and Vol. 14 No. 5), Dr. Lederer and his co-discoverers, Dr. Benjamin Prosser and School of Nursing’s Dr. Chris Ward, are finding their work being highlighted in a marketing campaign by both Ionoptix and SI Heidelberg just in time for the annual Biophysical Society Meeting (see page 2). Both companies have licensed MyoTak, to be used with their own version of an apparatus to stretch individual muscle cells. The illustrations of stretching cells in both ads (Ionoptix’s left and SI Heidelberg’s page 3) come from the Lederer laboratory.

The work, published last fall in Science, is rapidly gaining momentum. A movie of the process of stretching a cell can be found on YouTube (http://www.youtube.com/watch?v=scRoh3chzJU and http://www.youtube.com/watch?v=WddHi5tbLPc&context=C4eb9455ADvjVQa1PpcFO4HK4wdxLVUlb6xSFge15mG31fwDOE=), uploaded by World Precision Instruments (WPI), the parent company of SI Heidelberg.

SI Heidelberg also sent ads out before the Biophysical Society Meeting, including a Maryland appropriate blue crab stretching a cardiac myocyte (page 3, bottom right)!

The work has also been picked up in the European science literature.
BioMET Summer Internship Program

The relationship between BioMET and the Fischell Department of Bioengineering is still developing. In an effort to strengthen those ties, BioMET began to formally recruit summer interns from the department. Beginning in January, a flyer was sent announcing the availability of internships. It had been clear from BioMET's visit to the Fischell Festival (BioMET NOW Vol. No. ) that internships were an integral part of the bioengineering program. In February, a more detailed list of available internships was sent to College Park, including three paid internships and 4 unpaid positions. The response was heartening. As of the end of February, nearly 20 applications had been received. Because of the timing of NIH grant submissions (February 5 and March 5), decisions for some faculty members will be delayed. However, all positions should be filled by the end of March.

To date, faculty members have been very pleased with the quality of the applications. It will be up to each faculty member to select and interview potential candidates, while Pamela Wright is coordinating the application process.

While there has been other College Park undergraduates here, as well as a number of Towson students, this will be the first time that a formal internship program has been advertised targeting bioengineering students. BioMET, in its mandate to connect with the Fischell Department, is committed to increasing the number of programs involving both faculties. This program is expected to continue and grow as the two campuses begin implementing the Strategic Alliance.
with an article in Le Recherche in February (left). Other honors include a Faculty of 1000 rating of FFa12 for the Science article, giving it an exceptional rating.

This is really the first time that any faculty member has had a product marketed so heavily. BioMET faculty members have a number of patents and some licensed materials, but nothing has been marketed like this. It will be very interesting to see how MyoTak does in the marketplace, as well as how the publication is cited. Dr. Lederer has had other highly cited publications (1000+ citations), and this publication has the potential to reach that level as well. The work has already generated multiple speaking engagements for Dr. Lederer, and at least half a dozen more are scheduled. The work also resulted in a highly probable K99 grant for Dr. Prosser, who received a perfect score on his NIH proposal; however, the award has not been formally made.

While MyoTak is unlikely to be a cash cow, it is hoped that sufficient revenue is generated to support more research.

When BioMET was the Medical Biotechnology Center and part of UMBI, we had three sister centers: the Center for Marine Biotechnology at the Columbus Center (COMB), the Center for Biosystems Research (CBR) at College Park and the Center for Advanced Research in Biotechnology (CARB) at Shady Grove. In the process of disbanding UMBI, each UMBI center was handled separately with different outcomes. BioMET was actually the first formed and the easiest to finalize. We came into the University of Maryland, the Founding Campus in Baltimore as is, with only a name change and a new focus on bioengineering. COMB was split, with some faculty coming to the School of Medicine, some going to departments in UMBC and the rest going to the new Institute of Marine and Environmental Technology, operated jointly by UMBC and the University of Maryland Center for Environmental Science (UMCES). However, the Columbus Center facility is run primarily by UMBC, with input from the Founding Campus and UMCES. Former COMB Associate Director, Russell Hill, is Interim Director of IMET.

CBR, while centered at College Park, had faculty located in Shady Grove. Both CARB faculty and CBR faculty were merged into one entity called the Institute for Bioscience and Biotechnology Research (IBBR). However, IBBR is considered a partnership between College Park (particularly the Fischell Department of Bioengineering), the Founding Campus and the National Institute of Standards and Technology, originally a partner with CARB. Former CBR director, Donald Nuss, heads IBBR.

Despite the realignments, the name changes and the administrative shifts, the quality of research and the collaborative ethos of UMBI continues to thrive. Some things just work.
**Did you know...**

Just as you can donated to your alma mater, you can also donate to BioMET. BioMET has three foundation accounts already, one in support of Dr. Lederer’s laboratory, one in support of Dr. Kao’s and one for accepting donations via the Maryland Charities Campaign. By next year, we will show up in the Maryland Charity Campaign booklet. Donating to BioMET helps us attract other donors. After all, if we do not think enough of our Center to donate to it, why should anyone else? Many foundations actually use the percentage of internal donations as a gauge to make decisions as to where to donate. Next year consider donating to BioMET when the Maryland Charities Campaign comes around.

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**Power of Ten**

The Annual Biophysical Society meeting, held in San Diego, is always the one scientific meeting that members of the Lederer laboratory attend en masse. This means that the number of presentations is substantial. This year again saw 10 presentations from the Lederer laboratory, four of which were oral, a new record. Generally, only one or two Lederer abstracts are selected for an oral presentation. This year three of the four were by UM researchers, while the fourth (Wagner et al.) was presented by German collaborators as part of a European Commission funded project in which Dr. Lederer has a part. This is the fourth year in a row that Dr. Lederer has had 10 or more abstracts at the Biophysical Society annual meeting.

**Oral Presentations:**


**Poster Presentations**


