Advanced Tissue Biofabrication Center Re-opens. The ATBC in Room 642 of the Basic Science Building serves as a hub for education and research training for all SC Project institutions, and provides outreach opportunities to K-12 schools. The Center operates a laboratory that serves as a test bed for assembly of tubular constructs for collaborative research. In August, Dr. Bill Mondy (Claflin Univ.) helped install the Center's first bioprinter, an Izumi Spheroid Positioner & Cell/Gel Sprayer (shown at left). Dr. Mondy recently completed beta-testing the Izumi Bioprinter at the Renato Archer Center for Information Technology in Campinas, Brazil, and will continue research into development of a CAD blueprint for an authentic intra-organ branched vascular tree, an important thrust of the SC Project.

RECENT PUBLICATIONS OF MEMBERS OF OUR DEPARTMENT:


**IMAGE of the MONTH**

Oxidized LDL immune complexes induce macrophage release of sphingosine kinase in lupus mouse model. The transformation of macrophages into foam cells is a critical event in the development of atherosclerosis. Macrophages internalize oxidized LDL (oxLDL) and oxLDL immune complexes (oxLDL-IC) and transform into activated foam cells. Nodule-like lesions develop in the adventitia of aortas in a lupus mouse model (MRL/lpr). These lesions are infiltrated with macrophages, and stain positive for both oxLDL (red) and for IgG (green). Note in the right image that SK1 (brown) is present around the lipid-laden macrophages in the nodule-like lesions (black arrow). In the left image, the large white arrow denotes sites where oxLDL immune complex accumulates around macrophages inside nodule-like lesion (yellow); e, endothelium; m, tunica media.

**UPCOMING EVENTS:**

- **New Technology Awareness Series** - *Open Array Platform,* Life Technologies, Conference Room, BSB611, Sept 29th, 10am-Noon