



**DEPARTMENT OF BIOLOGY  
COLLEGE OF SCIENCES  
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October 1, 2000

Al Sweedler  
Acting Assistant VP  
Office of International Programs  
International Student Center Annex  
San Diego State University  
MC 5102

Dear Al,

As you know, I accompanied two SDSU students to Italy in June 2000. This work was supported, in part, by a travel grant from your office in addition to funds I raised from National Institutes of Health Minority International Research Training Program (Fogarty International Center). My international travel has been quite rewarding for the students who accompanied me this year to Italy. In my own case, it has allowed me to cement collaborations with colleagues at international institutions at which my students worked under MIRT sponsorship. As you can see the enclosed report, several papers and meeting presentations have resulted from the collaborations that were made.

Again, I appreciate the support and look forward to discussing the details with you in person

Sincerely,

Dr. Roger A. Sabbadini  
Professor of Biology and  
Heart Institute  
San Diego State University  
San Diego, CA 92182 USA

## *Report by Roger Sabbadini*

### *International Student Experience 2000*

Support in part by an international travel award from the International Student Center (to Roger Sabbadini) and by student travel funds from the National Institutes of Health Minority International Research Training Program (Fogarty International Center, B. Pozos, PI). Dr. Sabbadini accompanied two SDSU students to Italy in June 2000. The students conducted a collaborative research project at the University of Padova Medical School. Dr. Sabbadini was an invited speaker at an international conference that was held in Italy during this period on topic related to the work done by the students. The students who participated in the MIRT program in 2000 were Ernesto Castro (an undergraduate student) and Amy Cavalli (a graduate student). They spent one month conducting experiments in collaboration with Dr. Romeo Betto and others at the University of Padova. They presented their work at the Second International Conference on Apoptosis in Skeletal and Cardiac Muscles, Abano Italy, June 4-8, 2000. Some of this work has recently been published or submitted (see below). Importantly, my involvement in the MIRT program gives valuable opportunities for my students to work abroad in collaborating laboratories and, thus, allows the students to gain valuable international research experience in a productive manner.

#### **Papers**

Nakajima, N.J. A. Ligutti, A. L. Cavalli, D. Biral, C.C. Glembotski, P. M. McDonough, P. D. Ho, R. Betto, D. Sandona, P. T. Palade, C. A. Dettbarn, R. E. Klepper and R. A. Sabbadini. Expression and characterization of Edg-1 receptors in rat cardiomyocytes: Calcium deregulation in response to sphingosine-1-phosphate. *Eur. J. Biochem.* 267: 5679-5686. 2000.

Cavalli, A.L., J. A. Ligutti, E. N. Castro, M. T. Page, Wm. J. McNutt, R. E. Klepper, N. Nakajima, C. C. Glembotski and R. A. Sabbadini. The role of TNF $\alpha$  and sphingolipid signaling in cardiac hypoxia: Evidence that cardiomyocytes release TNF $\alpha$  and sphingosine. *Circulation* (MS#3749).

#### **Meeting presentations**

Liguti, J., N. Nakajima, A. Cavalli, R. Betto, D. Biral and Sabbadini, R. G protein-coupled receptors, calcium deregulation and apoptosis in the heart. *Basic Appl. Myol.* 10: 75-76. 2000

Nakajima, N.J. A. Ligutti, A. L. Cavalli, D. Biral, C.C. Glembotski, P. M. McDonough, P. D. Ho, R. Betto, D. Sandona, P. T. Palade, C. A. Dettbarn, R. E. Klepper and R. A. Sabbadini. Expression of EDG receptors in rat cardiomyocytes and their role in mediating sphingosine-1-phosphate calcium deregulation. 73<sup>rd</sup> Annual meeting of the American Heart Assoc. New Orleans, LA Nov. 14, 2000. *Circulation* (in press).

Carstens, J.S., R. L. Klepper, D. H. Deutschman, W. S. Smith, M. T. Page, T. R. Young, H. D. Chastain, N. Nakajima and R. A. Sabbadini. The MIRT Trial: Predicting the incidence and severity of coronary artery disease using serum sphingosine-1-phosphate. 73<sup>rd</sup> Annual meeting of the American Heart Assoc. New Orleans, LA Nov. 14, *Circulation* (in press).