

REPORT ON INTERNATIONAL EXCHANGE EXPERIENCE AT UNIVERSITY OF APPLIED SCIENCES (FACHHOCHSCHULE MAGDEBURG), GERMANY

**To: Office of International Programs
International Student Center Annex, MC 5102**

From: Dr. Richard M. Gersberg, Professor, Graduate School of Public Health

Date: July 31, 2000

Introduction

Since 1994, there has existed an Intercollegiate Agreement for Cooperation between the School of Public Health at San Diego State University and the Department of Social and Health Services at the University of Applied Sciences (formerly called Fachhochschule Magdeburg) in Magdeburg, Germany. The University of Applied Sciences (UAS) now offers 4-year degree courses and will soon offer a Masters degree in selected programs in applied sciences. The existing agreement between the two Universities has been very successful in promoting international understanding and developing both academic and cultural ties. However, to date the faculty and student exchanges have been restricted to the fields of health promotion and social work. Consequently, a major objective of this exchange visit was to support activities by Dr. Gersberg at UAS Magdeburg, Germany in order to generate new exchange programs with the Department of Water and Waste Management at UAS Magdeburg, as well as develop international internships and participate in international team teaching in the new Masters program at UAS Magdeburg.

Specific Objectives

The specific objectives of my involvement in this international educational and research exchange project were the following:

- 1. To expand the initial Intercollegiate Agreement for Cooperation, which was initially executed by the GSPH with the Department of Social Welfare and Health at UAS Magdeburg to include the Department of Water and Waste Management at UAS.**
- 2. To develop programs and financial support at UAS Magdeburg in the Department of Water and Waste Management, that will facilitate SDSU students (from GSPH or other Departments such as Environmental Engineering or the Ecology Program in the Department of Biology) in participating in internships/field placement experiences in Germany.**
- 3. To participate in team teaching and curricular development of a new Masters Program that is currently starting at UAS Magdeburg. This program within the Department of Water and Waste Management will be in the field of Ecological Engineering and include one and a half years of didactic instruction plus a Masters dissertation. This**

Masters Program involves international team teaching by a number of visiting faculty as a formal part of this new program.

The following narrative will describe my activities and accomplishments on the international exchange visit that I made (from May 26, 2000 through June 11, 2000) in each of the above objective areas.

Objective 1. The aim of this objective was to expand the old Cooperative Agreement with the Fachhochschule Magdeburg (FM) to include the Department of Water and Waste Management at UAS Magdeburg. In this regard, soon after my arrival in Magdeburg on Monday, May 29, I arranged a meeting with both Dr. Volker Luederitz, the coordinator with the Masters Program for the Department of Water and Waste Management (DWWM), as well as Professor Bretchshneider, the Dean of DWWM. On Tuesday May 30, I met with Dean Bretchshneider to discuss the possibilities of future collaborative efforts in both student exchange and research. In order to better inform his faculty on the nature of the program here at SDSU, as well as on specific research projects that are ongoing here at SDSU, Dean Bretchshneider invited me to present a Departmental Colloquium on Wednesday, June 7th.

On Tuesday, May 30, I met with Professor Gunther Wendt of the Department of Social Welfare and Health at UAS Magdeburg. It is with this department that majority of past exchange with SDSU for both students and faculty has occurred. Dr. Wendt indicated a high degree of interest and excitement about expanding the program with SDSU. He was particularly sanguine about the future of student exchange possibilities for SDSU students as the level of English language preparation increases at UAS Magdeburg.

On Wednesday, May 31, I met with Dr. Luederitz to review my lecture schedule for the coming two weeks, as well as discuss two joint research papers that we are co-authoring. Dr. Luederitz at this time, updated me on the progress of the new Masters degree to be offered by the Department of Water and Waste Management at UAS Magdeburg. According to current plans, this new program will officially start in Fall semester 2001, and include visiting professorships for 2-3 week periods by international scholars (which according to Dr. Luederitz is planned to include SDSU faculty from a number of Departments with Public Health, Biology, and the College of Engineering as most prominent).

On Friday, June 2, I met with Dr. Andreas Geiger, the Rektor of the University of Applied Sciences Magdeburg. Dr. Geiger was pleased that I was here in Magdeburg to extend the activities of the Collaborative Agreement that he himself had initiated as Dean of the Department of Social Welfare and Health. He outlined plans for some expansion of his University of Applied Sciences in the area of health and the environment. We then toured the new campus site of the University (moving was completed in the Spring of 2000). Dr. Geiger was certainly excited about the new campus, and the possibilities that this physical expansion, as well as new Masters degree programs, has for future collaboration and exchange with SDSU.

Objective 2. The aim of this objective was to develop programs and financial support at UAS Magdeburg in the Department of Water and Waste Management, that will facilitate SDSU student participation in internships/field placement experiences in Germany. I was very successful in accomplishing this aim. On June 8, I was accompanied by Dr. Luederitz to a field site approximately 100 miles from Magdeburg. Here, Dr. Luederitz has a long-term monitoring program on an historical wetlands area called the "Dromling." This area has been drained for agricultural activities, and Dr. Luederitz's project will aim to renaturalize a number of stream courses in this area, and follow the change in water chemistry and aquatic biology as this renaturalization progresses. For this project, Dr. Luederitz expressed his willingness to invite several SDSU students to join his project, starting May, 2001. He was also kind enough to offer a financial support package of 500-600 DM (\$300 US) per month. The particular expertise that SDSU students can offer to his project is in the area of aquatic chemistry, while the SDSU students will undoubtedly gain valuable knowledge and experience in aquatic biology, in the particular fields of stream benthos and physical methods in renaturalization. In this regard, I have already identified at least one graduate student here in the school of Public Health, by the name of Daryl Yorkey, who intends to do this international field placement in Germany in May, 2001. .

On Monday 29th at the start of my visit to Magdeburg, I met with Tino Rusche, a student from UAS Magdeburg that had spent the Fall semester, 1999 on an internship exchange with the GSPH at SDSU. As part of this international field placement experience, Tino worked on my research project on the Tijuana River. He did sampling of the river at various sites in both the U.S. and Mexico for benthic invertebrates and water chemistry parameters. To our knowledge, this was the first time such data had been gathered for this international river . On this same day, I also met with another student from UAS Magdeburg Stephan Rimkus, who would soon be leaving for San Diego to start another field placement for the Fall 2000 semester with the GSPH at SDSU. Stephan plans to follow-up on the studies of Tino with regard to the water quality and distribution of benthic invertebrates in the Tijuana River. As a result of this collaboration and field placement exchange, we have drafted a research paper entitled " Water Quality and Diversity of Aquatic Invertebrates in the Tijuana River." by the international collaborating authors Rusche, T (UAS), Luederitz, V. (UAS), Gersberg, R.M. (SDSU), and Rimkus, S. (UAS). This paper will be submitted to the Journal of the California Academy of Sciences.

Objective 3. The aim of this objective was to participate in team teaching and curricular development of a new Masters Program that is currently starting at UAS Magdeburg (proposed start date is October, 2000) . In regard to this effort, I gave three lectures during my visit to UAS, Magdeburg. My first lecture, on Wednesday , June 7, was to a class in Water Engineering. The topic of my 1.5 hr. lecture was "Infectious Waterborne Disease". That same day, on June 7, I delivered the Department Colloquium for the Water and Waste Management Department at UAS Magdeburg. The title of my colloquium was " Watershed Modeling of Metal Loading in the Tijuana River Watershed". This seminar was very well received, with an audience of faculty and students of over 40

persons. Then, on Friday June 9th, I gave a 1.5 hour lecture to the class of Engineering Professor Robert Juppner on the topic of Hydrological and Water Quality Modeling”.

Significance of Exchange Visit

In conclusion, this exchange visit more than met the objectives originally stated. The exchange served to expand the cooperative agreement between SDSU and UAS, Magdeburg, to include collaboration with the Department of Water and Waste Management at UAS, Magdeburg. More importantly, I was able to identify both a field placement experience and financial support for 1-2 students from SDSU who will do their field practice in Magdeburg, Germany in the spring-summer of 2001. Additionally, there will be ongoing participation of faculty from SDSU in the newly developed Masters Program at UAS, Magdeburg that is just starting in October, 2000. .