January 20, 2004

Dr. Rob de Ruyter van Steveninck
Chair, Biocomplexity Search Committee
Indiana University Bloomington
Department of Physics
Swain West 165

RE: Dr. Clemens Wagner

Dear Dr. van Steveninck:

It is a pleasure for me to write on behalf of Dr. Clemens Wagner, who is applying for a position in Biocomplexity at Indiana University. I have known Clemens for seven years, first in my capacity as supervisor of his postdoctoral fellowship and, more recently, as a collaborator.

Dr. Wagner spent one year (1996-1997) in my laboratory as a postdoctoral fellow funded by the Swiss National Science and Ciba-Geigy Foundations. His project was to develop a biomathematical model for the genesis of the ultradian rhythm of growth hormone (GH) secretion. The model he derived, based on the two major hypothalamic GH-regulatory peptides, somatostatin and GHRH, resolved experimental results that had thus far eluded explanation, and was widely recognized by the neuroendocrine research community. More recently, Dr. Wagner and I have embarked on a collaborative project to construct a refined model of the GH neuroendocrine axis taking into account the wealth of new information that has resulted in recent years following the discovery of a third peptide, ghrelin, involved in GH regulation. It is expected that biomathematical modeling of the ensemble interactions will provide a valuable tool to unravel the role of the new player, ghrelin, in the complex, but regulated physiology, of the dynamic GH neuroendocrine axis.

Clemens is a bright, hard-working individual who exhibits intellectual curiosity in a wide range of interests. From the beginning, he proved to be a quick learner. He was very quick to learn not only matters involving techniques, but showed facility in grasping the concepts behind the work in a field that was entirely new to him. The clarity of his thinking and the carefulness with which he performed his studies were readily apparent. In

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addition to this high level of industry, motivation and diligence, I found Clemens to be innovative and intuitive. He synthesized information quickly and efficiently, and integrated it into a useable framework. It is to his credit that he functioned totally independently. His oral and written presentations were of high quality.

Beyond his obvious research skills, Clemens demonstrated himself to be an amiable person who got along well with the technicians and other trainees in my laboratory, and with faculty. Indeed, he generously provided his expertise in computational biology to another fellow in the laboratory, Dr. Marinella Tzanela, and assisted her in the analysis of complex data obtained in her studies of the GH-binding protein. I do believe that he would be an excellent and reliable colleague.

In summary, I have been exceptionally pleased with Clemens Wagner. He has a broad-based background in computational biology and should continue to make significant contributions to the field. There is every reason to believe that his best research accomplishments are still ahead of him. Therefore, I strongly support his application for this position. Please feel free to contact me if you need further information.

Yours sincerely,

Gloria S. Tannenbaum, Ph.D.
Professor
Departments of Pediatrics and Neurology & Neurosurgery
McGill University