[Letter of Intent for Master of Science in Cell Biology](http://www.palanski.com/2011/06/letter-of-intent-for-master-of-science.html" \o "Permanent Link to Letter of Intent for Master of Science in Cell Biology)

*It is with great pleasure that I submit my application for a position as a master’s student with the Department of [personal detail] at the University of [personal detail]. Having completed my undergraduate degree in honours biological sciences at the University of [personal detail], I now seek to gain a more thorough understanding of the skills and knowledge necessary to be successful in a research-oriented environment. Through my continued work with Dr. [personal detail], I am convinced that his guidance and support will ensure that I achieve these pursuits.*

*Graduate school became an earnest consideration after upper-level undergraduate courses ignited my curiosity in the dynamic area of systems biology. The appeal was born out of the discipline’s emphasis on integration of different scientific fields, with the express goal of understanding biological systems as more than the sum of individual parts. My undergraduate education has exposed me to the reductionist and static approach of understanding biological elements and processes; I now wish to understand how these parts work in concert as elements of a greater system.*

*I am primarily interested in applying the methods and techniques of biophysics and genetics to elucidate the relationship between sensory behavioural phenotype and genotype. My previous volunteer experience with the maintenance of Caenorhabditis stocks has shown me first-hand that these deceptively simple organisms have complex behavioural characteristics. My current work as a research assistant at Dr. [personal detail]'s laboratory involves the analysis of these behaviours through novel methods devised in-house at the instrumentation, imaging and analysis level. I have combined two passions in one place in this environment: my love of the study of nature at the biological level, and the innate inclination I have toward the technical. This research aims, generally, to answer questions about what it is, genetically and neurobiologically, that makes animals move and behave the way they do. This research is engaging, challenging and fulfilling to a degree previously unknown to me. I feel there is a great wealth of knowledge to be obtained from this fusion of technology and biology, and wish to be a part of the research that centers about it under the supervision of Dr. [personal detail].*

*Apart from my experiences at the [personal detail] Lab, my recent role as a lab technician at the University of [personal detail]'s [personal detail] Lab has underscored the versatility of the skills I have acquired thus far, and my propensity for acquiring new ones. In the [personal detail] Lab, I was responsible for the continued organization, recovery and systematic freezing of a large backlog of nematode strains, and for the optimization and troubleshooting of procedures associated with automated robotic equipment. These skills earned me the reference to Dr. [personal detail], who has since hired me. Additionally, my experience as a research assistant at the [personal detail], which involved using degraded DNA to construct phylogenetic trees of a model organism, made clear that my patience, tenacity and initiative are an excellent fit in the lab environment. I have also conducted research completely of my own design, at the organism level, by studying the behavioural effects of varying auditory stimuli on the Passer domesticus species. The stimuli were studied as they related to the birds’ feeding habits, with the guidance and final commendation of the ornithology department head, Dr. [personal detail]. These experiences, coupled with the upper-level courses I have taken, ultimately convinced me of my desire to pursue graduate studies to fulfill my interests in conducting novel research.*

*Having now worked alongside graduate students in several laboratories, I am aware of the heavy workload and demanding schedule that graduate studies entail. As an undergraduate, I worked a job 25 hours a week while studying full time for my BSc degree, which has taught me the art of prioritizing my time; a skill that will no doubt help me face the rigours of graduate school. The reasoning abilities I have developed through my coursework—in particular the ability to think logically and critically fostered by my minor in philosophy—will also be an asset.*

*I am convinced that the University of [personal detail] is the most appropriate venue for my studies, and that I can rise to meet the challenges that this will involve. I appreciate your consideration of my application, and I look forward to hearing back from you.*

*Best regards,*

*Konstantine Palanski*