



The University of British Columbia  
Vancouver, Canada

The Chancellor of The University of British Columbia  
with the approval of the Senate upon the recommendation of  
The Faculty of Graduate Studies

has conferred the degree of  
Doctor of Philosophy

on

Marcia Ann Braundy

In Witness Whereof and by the authority duly committed  
to us we have hereunto set our hand and seal

May 2005



*[Signature]*  
Chancellor

*[Signature]*  
President

*[Signature]*  
Dean

*[Signature]*  
Registrar