The atrial fibrillation population is growing rapidly and is already challenging for both patients and health care. Because many patients with atrial fibrillation are symptomatic, a large proportion of them are subject to treatment aiming for normal sinus rhythm in order to control symptoms pharmacologically. The pharmacological treatment of atrial fibrillation is problematic due to limited efficacy and potential side effects, raising questions with regards to risk versus benefit. Thus, information about safety of available anti-arrhythmic medication in clinical practice is warranted, as well as new, alternative pharmacological approaches to target atrial fibrillation and these patients. Hopefully, this thesis will add some information about these issues and increase the available knowledge on atrial fibrillation.

Henrik Almroth was born on a sunny day in August 1970, parented by a psychologist and a teacher as their first offspring. Already at the age of fifteen, he was described as "swift and willing" by Valdemar Andersson, Korsanäs Handelsrättgården, first employer.

In 1995, life became more serious, and studies of medicine began. After some 5 years in Linköping, he was awarded with a medical degree and a debt of 200,000 SEK. A friend (Erik Ahlstrand), got Henrik’s attention and offered internship in Örebro in exchange for some company, and a season card at Eyravallen (never received). Henrik started his training in Cardiology 2002, where he also met his tutor and very good friend, Associate Professor Anders Englund.