



Swiss Institute of
Bioinformatics



On 24th of June, during the 9th [BC]2 Computational Biology Conference in Basel, SIB announced the two winners of the SIB Awards 2011. Both winners are SIB members of the Computational Systems Biology Lab Group led by Felix Naef at the EPFL (Swiss Federal Institute of Technology in Lausanne).

● SIB Young Bioinformatician Award 2011

The winner of the 2011 SIB Young Bioinformatician Award is **Nacho Molina (EPFL)**. This 32 year-old scientist was rewarded for his contribution to a research study on gene expression. The computational methodology he invented significantly contributed to revealing that genes are expressed during “bursts” which last a few minutes and are highly gene-specific in mammals. Such a finding implies that every gene can be identified according to its unique temporal expression pattern. The results of the study, entitled “Mammalian genes are transcribed with widely different bursting kinetics”, were published in the journal Science last March. Such findings will bring new insights to medical research. Indeed, they could shed light on why antibiotics are never able to eradicate all bacteria and thus help to optimise existing treatments. The Young Bioinformatician Award is given once a year by SIB. It rewards a graduate student or young researcher who has carried out a research project centred on the in silico analysis of biological sequences, structures and processes. The award is given competitively by a jury of experts and comes with a cash prize of CHF 10,000.

● SIB Best Graduate Paper Award 2011

The winner of the 2011 SIB Best Graduate Paper Award is **Guillaume Rey (EPFL)**. This 29 year-old PhD student was rewarded for his paper entitled “Genome-Wide and Phase-Specific DNA-Binding Rhythm of BMAL1 Control Circadian Output Functions in Mouse Liver”. His research focuses on the role of an organism’s internal clock, also called the circadian clock. In particular, he studies the role circadian clocks play in controlling liver function. His work reveals that physiological processes are directly controlled by the liver circadian clock. It also shows that this particular clock modulates the temporal regulation of various metabolic functions that are active at different times of the day, such as glycogen synthesis and degradation. This study thus offers the first comprehensive picture of the way the liver circadian clock relays temporal information to metabolic functions. It will also help scientists understand metabolic diseases which are linked to circadian clockwork malfunction as well as optimise medical treatments by adapting them to the time of day when our body is most receptive. The Best Graduate Paper Award is given once a year by SIB. It recognises outstanding contributions to the fields of bioinformatics and computational biology made by young researchers who have not yet completed their PhD. The award is given competitively by a jury of experts and carries a cash prize of CHF 5,000.