FEBS 24562 FEBS Letters 490 (2001) 109

Editorial

Making decisions in G1

Gianni Cesareni*

Department of Biology, Universita 'Tor Vergata', 00173 Rome, Italy

First published online 19 January 2001

The molecular events that regulate entry into the S phase were the subject of a workshop held at Villa Mondragone, in the hills south of Rome. This 16th century villa was recently restored by the University of Tor Vergata to be utilized as a congress center. The lectures were delivered in the 'Sala degli Svizzeri' (Swiss Hall). In this same room, on February 13th, 1582, Pope Gregorius XIII ratified the reform of the calendar to correct a wrong estimate of year length, as assessed by the calendarium Iulianum. After consulting the mathematicians and the astronomers of the time, he ordered the suppression of 10 days in that year, from October 4th to October 15th, so that the spring equinox would again coincide with March 21st, as established during the concilium of Nicea. Timing of events, in the cell cycle, was also an important issue during the workshop 'Making decisions in G1' and the speakers seemed to be inspired by the historical settings.

Since I was only marginally involved in the organization of the workshop, I feel I can say that the workshop turned out to be a success with many American and European leaders in the field openly presenting their latest results and discussing the implications of their findings.

I am not the right person to sum up in only a few words the many issues discussed at the workshop. I was left with two contrasting feelings. On the one hand, I felt that things are getting complicated and the intricacies of the interactions between the different pathways and molecular players often go beyond the interpretation capability of the non-specialist. We are probably close to the point where we cannot do without

electronic databases to store interaction data, and artificial intelligence to make correct use of these data. It is becoming increasingly more difficult to predict the physiological outcome of, for instance, raising the concentration of any given protein or preventing its interaction with a partner.

On the other hand, some of the speakers were able to show that conceptually very simple, hypothesis driven, experiments can still yield basic information and have a profound impact on our understanding of cell cycle control. In other words, we are still far from a comprehensive picture and progress is likely to come from high throughput technology and bioinformatics as well as from the ingenuity of well thought, apparently simple, experiments.

All the speakers were asked to present their views on cell cycle control in a review to be published in a FEBS Letters special issue dedicated to this workshop. Many of them responded enthousiastically and were able to deliver a contribution on time. While editing this issue, two research manuscripts, dealing with p53 and the related protein p73, were submitted to FEBS Letters. After the standard reviewing process, it was decided, with the consent of the authors, to include them in this collection of reviews.

I hope that the readers of FEBS Letters will sense the same stimulating experience from reading these contributions that I had from attending the workshop.

Gianni Cesareni

*Fax: (39)-6-2023500.

E-mail: cesareni@uniroma2.it