#### Ars Electronica 99

Festival for Art, Technology and Society

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LifeScience

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Gerfried Stocker und Christine Schöpf

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LifeScience Symposium in cooperation with:



New Skills in the Science of Life



Stadt Linz



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Bundeskanzleramt/Kunstsektion



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# Franz Janda CEO Compaq Computer Austria GesmbH

The Ars Electronica Festival confronts the theme LifeScience this year, and thus comes to grips with a special form of information processing that will assume considerably increased importance in the near future. The capability of decoding information storage media like genes will bring about lasting changes to our way of life and our environment, just as recent developments in information technology—above all the Internet and e-commerce—are fundamentally revising the way we do business. Congratulations and best wishes for success in pursuing this new dimension!

## Dr. Erich Hampel President Creditanstalt

Life science will have a decisive impact on important areas of our life during the coming years and decades. A great many innovative firms are already active in this sector—and doing business in an innovative way demands innovative forms of financing. For this reason alone, it is also appropriate for us to confront in a timely manner the current developments in this field and its outlook for the future—in order to continue to be The Bank For Success for our clients and associates.

## DI Wolfgang Gruber CEO Hewlett-Packard Österreich

As a key technology, life science will co-determine our future. In its manifestations as genetic engineering and biotechnology, though, it is also one of mankind's most controversial areas of research. For years, the Ars Electronica Festival has focused attention on potential zones of conflict in the field of tension and interplay of technology and society. We believe that public discourse and purposeful confrontation with the future are the best ways to successfully manage this process.

Mag. Markus Felmayer Country Manager SGI Silicon Graphics Österreich

SGI has had a long and highly successful relationship with the life sciences. The development of a whole host of new products and successful procedures in fields such as medicine, chemistry and biology would have been impossible without the help of SGI technology. We are certainly proud of these achievements, and we will continue to intensively focus on these fast-growing fields in the future. Our position will remain where it has always been: on the leading edge of technology. Unfortunately, the concept of life sciences and related issues are

unfamiliar to most Austrians, and I therefore welcome Ars Electronica's initiative to promote a discussion of them.

#### Mag. Alexander Stüger Country Manager Microsoft Österreich

A topic of intense current interest, in which brilliant scientific research interfaces with faith in progress and technology, deep-seated cultural boundaries, and hard-ball bottom-line thinking. The general public seems to be largely uninformed or, rather, to have been polarized by various different opinion leaders, and to have, for the most part, given in to the quite understandable aversion toward manipulation of humanity's genetic make-up. I regard this as an important task for scientists and the media to explain this intricate complex of issues to this country's citizens, who will ultimately have to reach a political decision in this regard. In the final analysis, this is a matter of the timely creation of appropriate framework conditions to allow for technological progress and the proper evaluation of risks. After all, even nuclear fission is not damnable per se—but we must avoid parallels to the '50s, when American soldiers in sunglasses stood around watching mushroom clouds above the Nevada desert, and were then dispatched to clean up the debris on the test range. A timely process of consideration surely can make possible a constructive confrontation with controversial, emotionally-charged issues.

## Erich Höllweger Member of the Management Board Quelle Österreich AG

Life and science, two concepts inseparably linked to each other. Where does one begin and the other end? Do such boundaries even exist? This seems to be precisely the essence of the discussion now going on around the world: just how far is scientific research permitted to infringe upon human life? State-of-the-art technologies enable us to advance into domains that, just a few years ago, were considered impossible to explore. But what about ethical limitations? Traversing them is certainly a much easier matter–but only at first glance, to be sure. With the LifeScience theme, the Ars Electronica Festival 1999 has a tremendous opportunity to acquaint the general public with this problematic issue of such a sensitive nature and of such great importance to the future. And if anyone has the artistic competence to undertake this effort, then it is Ars Electronica. Quelle Österreich wishes you success in this demanding task.

# Ing. Hermann Oberlehner CEO SplusS/Gericom

The spirit of human inventiveness has been creating new technologies for thousands of years. Now, we are about to enter a new millennium, and with this step into the future we arrive at the Archimedean point of the sciences of life. Today, the life sciences are opening up new opportunities that have only been dreamed of until now, and raising questions for which there are no answers yet. As a modern high-tech enterprise, Gericom is focused on enriching our lives through modern technology, and it is with earnestness as well as enthusiasm that we take part in positively designing a modern world. This should also be evidenced by out support of the Ars Electronica Festival, an event that is internationally unique in providing a framework for artistic and scientific confrontation as well as for personal encounter.

## DI Wilfried Schöfer CEO Oracle GmbH

Life science—the science of life—applies to Oracle in two respects. On one hand, Oracle regards itself as the Internet firm of the future, producing a wide range of information technology for the next millennium. On the other hand, we are fully cognizant of how important it is to invest in the future today in order to be able to profit tomorrow. For us, that means supporting a variety of initiatives for the benefit of young people

#### KR Johann Sulzberger Member of the Managing Board Brau Union Österreich

As we approach the next millennium, the LifeScience theme assumes ever-greater importance in our work. The science of life has a very special significance in our field: acknowledging and living up to an obligation seen completely as a matter of course to care for our environment and maintain our natural resources. We live and work in harmony with nature, since the treasures it provides to us are the basis for the purity of our beer.

## Mag. Josef Wiener Country Manager Telekom Austria AG

New technologies determine our life. The impact that information and communication technologies will have on our society is already clearly evident. The number of Internet users increases daily; soon, networks and services will grow together and become interwoven. The technological possibilities seem unlimited. Ultimate control is in the hands of human beings, who thus have the ability to decide on the path that development ought to take. The question is how to deal with these new technologies, how to integrate them into our lives. If we know what technologies can do and if we are aware of the consequences we can count on facing, then we can make a choice. The sooner we confront and deal with new technological developments, the more knowledge we will be able to amass in order to come to this decision. LifeScience in conjunction with this year's Ars Electronica Festival will help us to acquire new insights into these key technologies in the field of biology.

## DI Kurt Martinek CEO Datakom Austria GmbH

The future and the controversies it brings with it have been the driving forces behind all of Ars Electronica's confrontations. But this year's theme LifeScience—a term subsuming genetic engineering and biotechnology—takes up an issue of particular social relevance and of a highly disputed nature. There is a tremendous field of tension at the nexus of natural life and the life sciences, and the emotions brought to bear on this confrontation are intense. No sooner do we experience the Digital Revolution and learn to implement the innovations in computer and information technology as tools for use in everyday life than we are faced with the next—even greater—challenge.

Openly encountering this challenge, recognizing the potential—both the dangers as well as the opportunities—inherent in it, critically confronting the issues and weighing the alternatives—this is the next stage, for which we must be prepared. Ars Electronica has taken up this theme

at an opportune time; the initiators and participants have engaged in a real confrontation with the life sciences. DATAKOM, as one of the chief sponsors, is pleased to be able to help make possible this candid discussion and this fascinating event. We wish the organizers, artists, and visitors a successful Ars Electronica 99.

# Mag. Max Kothbauer President P.S.K Österreichische Postsparkasse

For the second year now, P.S.K. has the pleasure of acting as chief sponsor of "cybergeneration—u19 freestyle computing," the Prix Ars Electronica's category for young people. Following its sensational success in the year it was launched, the interest in this competition for young people in computer art and new media has continued to grow. Over 600 individual and group works were submitted for judging this year, and a Golden Nica will, in turn, be awarded in this youth category. What particularly fascinates me is the free and easy, matter-of-fact way that young people deal with computer technology and its potential applications. At the same time, one cannot help but be impressed by these young artists' high level of professionalism and creativity, and their innovative approach to their materials. Of course, the many seemingly negative potential influences of information technology in all facets of a young person's life are matters with which we are all no doubt aware.

Nevertheless, as is plainly evident here, inherent in the enormous quantity and range of information that modern media make available is a tremendous potential for creativity which young people are glad to have at their disposal and know how to take advantage of.

# Dr. Peter Strahammer CEO VOEST Alpine Stahl AG

In contrast to the optimism and faith in science that prevailed at the last turn of the century, skepticism toward technological progress and science is increasingly the rule nowadays, and not only in intellectual circles. And it is particularly biotechnology and genetic engineering that prompt many people to conjure up thoughts of horror scenarios becoming reality - visions that go as far as manipulative interventions in the genetic make-up of human beings. Precisely in this case, what is doubtlessly needed is a cautious, ethically mediated means of coming to terms with these questions. At the same time, we also have to take care not to throw out the baby with the bath water. It is my hope that the artistic efforts in conjunction with Ars Electronica 99 will shed light upon this highly controversial complex of issues.