



The International Society for Antiviral Research:

The First Decade


1987-1997

Second and Final Announcement

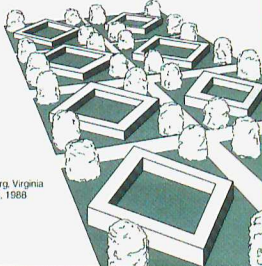
First International TNO Conference on
ANTIVIRAL RESEARCH

30 April - 3 May, 1985
Doelen Congress Centre
Rotterdam, The Netherlands


Netherlands Organization for Applied Scientific Research (TNO)

 Program, Profiles, and Agenda

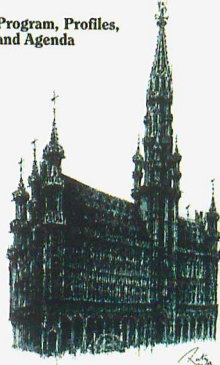
The Second International Conference on Antiviral Research



Williamsburg, Virginia
April 10-14, 1988


 Program, Profiles, and Agenda

Brussels, Belgium
April 22 - 27, 1990




The Third International Conference on Antiviral Research

Program, Profiles and Agenda
New Orleans, Louisiana
April 21-26, 1991




The Fourth International Conference on Antiviral Research


5th International Conference on Antiviral Research



International Society for Antiviral Research


 SIXTH INTERNATIONAL CONFERENCE ON ANTIVIRAL RESEARCH

Program




Palazzo Del Cinema
Venice, Italy
April 25 - 30, 1993


International Society For Antiviral Research

 SEVENTH INTERNATIONAL CONFERENCE ON ANTIVIRAL RESEARCH

Preliminary Program
Abstract Form
Registration Form
Hotel Reservation Form




The Omni Hotel at Charleston Place
Charleston, South Carolina, U.S.A.
February 27 - March 4, 1994



EIGHTH INTERNATIONAL CONFERENCE ON ANTIVIRAL RESEARCH


April 21 - 26, 1995

Second Announcement
Abstract, Registration, Hotel Reservation Forms

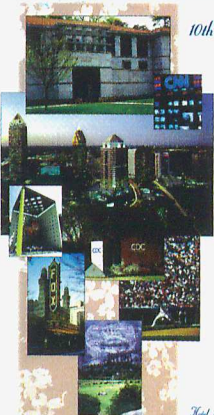


NINTH INTERNATIONAL CONFERENCE ON ANTIVIRAL RESEARCH

Urabandai Nekoma 1106-1, Urabandai, Fukushima, Japan
May 19-24, 1996

 Final Program

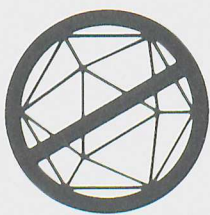
10th International Conference on Antiviral Research



International Society for Antiviral Research

Final Program

April 6-11, 1997
Held Hill • Atlanta, Georgia



The International
Society for
Antiviral Research:

The First Decade
1987-1997



Figure 1. Presidents of the International Society for Antiviral Research; left to right: Earl R. Kern, ('96-'98); Hugh J. Field, ('94-'96); George J. Galasso, ('92-'94); Erik DeClercq, ('90-'92); Richard J. Whitley, ('88-'90).

SECTION ONE—A New Scientific Discipline Is Born

Conceived in 1985 at what has come to be known as the First International Conference on Antiviral Research and born shortly thereafter in 1987 at the time of its incorporation in Birmingham, Alabama, the International Society for Antiviral Research has had an unusually significant impact on biomedical research in its brief history.

In reality, the seeds for the Society were sown in the late 1960s when several visionary biomedical scientists began to realize that it might be possible to develop safe and effective compounds to combat viral infections. This belief resulted in sporadic informal communication and collaboration among these scientists, who were working in a variety of biomedical disciplines at locations throughout the world.

At that time, this disparate group of researchers were fighting an uphill battle against the prevailing conventional wisdom among the scientific opinion-leaders of the day, most of whom thought that it would be impossible to develop selective antiviral drugs. This is because viruses are intracellular organisms which utilize cellular components in their replication and it was generally believed to be impossible to block replication of the virus without interfering with normal cellular functions, thereby killing the cell.

Because of the existing skepticism regarding their ideas, this original group of antiviral researchers received little encouragement from the scientific community and, even more importantly, virtually no direct funding for their activities.

This skepticism continued to mount because of the biomedical research community's experience with interferon. Following its discovery in 1957 by Isaacs and Lindemann, antiviral investigators had high hopes for interferon as a broad-spectrum viral inhibitor because it appeared to inhibit a wide range of viruses *in vitro*. While interferon eventually was found useful against certain forms of cancer and viral hepatitis, most early attempts to document clinical benefit from its antiviral effects *in vivo* proved disappointing. This resulting disappointment only increased the skepticism of the biomedical research community regarding antiviral compounds.

Therefore, during this time, the initial antiviral compounds usually were discovered serendipitously. For instance, screening programs searching for anticancer agents on occasion would yield compounds with potential antiviral action.

Some of the early successes that occurred in the field went almost unrecognized by the vast majority of research professionals. In fact, the importance of some of these early discoveries wasn't even apparent to many of the early antiviral researchers.

In 1959, a research team headed by antiviral research pioneer Bill Prusoff at the Yale University School of Medicine developed idoxuridine, which in 1962 was shown by Herbert Kaufman to be effective in treating eye infections resulting from herpes simplex virus. But because the eye is an isolated organ, it could circumvent systemic toxicity and, therefore, many believed this development to be an isolated and unusual circumstance instead of the genuine scientific breakthrough that it ultimately was proven to be. The development of this compound eventually resulted in a certain level of renown for Prusoff and helped catapult him into a level of prominence not before enjoyed by an antiviral researcher. Today, Bill Prusoff is considered by many in the antiviral research field as the grandfather of antiviral research. As one of the original ISAR members, Prusoff still remains an active member of the Society and the recipient of the organization's first Award of Excellence in 1988.

In the mid 1960s, a group of researchers at duPont developed a compound they called amantadine that studies demonstrated was safe and effective for the prevention and treatment of influenza. While few in the scientific community had any inkling of the importance of this new compound and many refused to acknowledge its usefulness, amantadine became the first antiviral to be approved by the Food and Drug Administration for systemic use and is used, albeit occasionally, to this day to treat influenza A.

In the early 1970s, antiviral research once again walked onto the center stage of science when a University of Alabama at Birmingham research team headed by Charles Alford and Richard Whitley demonstrated the clinical efficacy of vidarabine, a Parke

eral meeting registrants from the United States traveled from Amsterdam to Rotterdam to register for the meeting. They found the doors to the meeting venue, The Doelen Congress Centre, locked up tight. With concern mounting that they were in the wrong location or had arrived on the wrong date, they inquired of someone nearby why the Congress Centre was not open. They were informed that April 30 was the Queen's Birthday, making the day a national holiday and resulting in the Congress Centre being closed. Nobody had bothered to inform the non-Dutch contingent of this fact.

The Americans quickly regrouped and headed back to Amsterdam, where several of them spent the day at the national tulip gardens, which were in full bloom, returning to Rotterdam later for the Conference on the next day.

The First International Conference on Antiviral Research was a scientific success, but not a commercial one. While most registrants thought the program content was excellent, less than 100 people actually registered for the conference. That turnout disappointed some members of the U. S. contingent in attendance because they were hoping the forum would provide an opportunity to exchange information with many more of their colleagues from throughout the world.

At the Rotterdam conference, several leaders in the field, including George Galasso, Earl Kern, and Erik DeClercq, held an impromptu meeting to discuss the possibility of a second conference. The consensus was a resounding yes, but everyone agreed that efforts had to be undertaken to get more people to attend the meeting. To most people involved in the discussion, that meant holding the next meeting in the United States. Once again, it was anticipated that TNO would organize and coordinate the meeting. Leaders in the field left Rotterdam with the consensus that a second conference should be held in the United States in 1988.

Years later, Earl Kern recalled that when he complained once about the lack of antiviral research at the meetings he was attending someone said to him, "Earl, if you don't like these meetings, organize one of your own." Looking back, he says with a smile, "I guess that's just what we decided to do."

The seed for the establishment of an international society also was planted at the meeting in Rotterdam. George Galasso approached Erik DeClercq and Fons Billiau, the co-editors of the journal *Antiviral Research*, and suggested that they initiate such a society. DeClercq indicated that if such a society was to succeed, it should be truly international and preferentially based in the United States, where most of the antiviral research was being carried out. As a

government employee, Galasso felt he could not spearhead the effort without considerable assistance. He immediately brought Earl Kern into the discussion and asked him to explore how such a society could be created. Kern agreed to do the necessary planning research.

Kern returned home to Utah and began pulling together information about organizing a new professional scientific society. Late in 1986, at a meeting held at the National Institutes of Health to discuss program planning for the Second International Conference for Antiviral Research—attended by George Galasso, Earl Kern, Bill Shannon, Kirk Field, and Rich Whitley—the formation of a Society for Antiviral Research was discussed at great length.

The group decided to proceed with the formation of the Society and asked Rich Whitley and Bill Shannon to draw up the by-laws with the help of legal counsel at Southern Research Institute. Earl Kern wrote the initial articles of Incorporation and provided the information he had been collecting on the incorporation of non-profit societies and the development of by-laws for similar organizations. It was decided that Bill Shannon would work with legal counsel at Southern Research Institute to incorporate the Society. Once the incorporation process was initiated, the founders would begin contacting their many acquaintances at pharmaceutical companies that were most heavily involved in the development of antivirals and ask them to serve as charter sponsors of the Society. It was thought that this funding would provide the necessary startup capital to sustain the Society until membership dues began to come in. Kern also would maintain the Society "office" at his University of Utah address.

At this meeting, it also was decided that the new Society would be run by the organizing committee until the Second International Conference for Antiviral Research, at which time officers would be elected and committees established.

Rich Whitley, Bill Shannon, and Earl Kern quickly went to work. The articles of incorporation listed Bill Shannon as the incorporator, and the Society filed for incorporation in the State of Alabama, effective May 14, 1987. Named as members of the original Board of Directors in those articles are Fons Billiau of the University of Leuven, Erik DeClercq of the University of Leuven, Kirk Field of the Squibb Institute of Medical Research, George Galasso of the National Institutes of Health, Earl Kern of the University of Utah School of Medicine, Bill Shannon of Southern Research Institute, and Rich Whitley of the University of Alabama at Birmingham. Incorporated as the International Society for Antiviral Research, the Articles of incorporation state

that the Society is organized for “the promotion and advancement of scientific knowledge in the area of antiviral scientific research through (a) initiation of, sponsoring of and/or participation in seminars and other programs and activities relating to antiviral research and (b) development of, preparation of and/or dissemination of reports and publications related to antiviral research.”

When the Articles of Incorporation were registered on May 14, 1987, the International Society for Antiviral Research was officially born. Simultaneous with these activities, plans were still moving ahead for the Second International Conference on Antiviral Research. Although originally indicating that it would organize and run the Conference, TNO decided that it was not in its best interest to take the lead on coordinating a meeting in the United States because of the expense of frequent international travel necessary to oversee conference planning. This left the responsibility for organizing the conference program to the local arrangements and program planning committee consisting of George Galasso, Earl Kern, Rich Whitley, Kirk Field, and Bill Shannon. The conference was planned for the Spring of 1988 in Williamsburg, Virginia.

The group now planning the meeting did so with the realization that the new International Society for Antiviral Research would be judged by the quality of the conference. The success of the Society would hinge on the success of the Williamsburg Conference.

Southern Research Institute presented a proposal to undertake the organization and coordination of the Second International Conference for Antiviral Research. In addition, Southern Research agreed to financially underwrite the fiscal management of the Second International Conference. In effect, Southern Research provided the Society with a no interest loan. The loan would be paid back with anticipated funds that the Society would generate through conference registration fees, membership dues, and other corporate and government fundraising. Whether the conference or the Society would actually make any money was a big unknown at the time.

The organizing committee voted unanimously to accept the Southern Research Institute proposal at that December, 1986 meeting at NIH. They asked the Southern Research representatives who attended the planning meeting to prepare a budget for the conference so that the committee would have an idea of how much funding they would need to raise in order to pay back Southern Research for meeting expenses.

The Conference planning committee decided that

the meeting program would be made up of several three-hour plenary sessions, with each session consisting of a review lecture followed by short oral presentations. These presentations would be supplemented with poster sessions.

Funding to pay for the conference expenses took on a new urgency. Potential sources for funding were identified and discussed, including registration fees; United States pharmaceutical firms, European pharmaceutical firms, Japanese pharmaceutical firms, the National Institutes of Health, TNO, the selling of exhibit space, and the selling of advertising space in the conference program. Tasks for contacting potential sources of funding were divided up among the individuals attending the planning meeting.

Earl Kern recalls those heady times, “We began running the society without any formal structure at all. We had no official board. We issued few reports. And we had no money. We just rolled up our sleeves and went to work.”

Actually, although they may appear to be two separate events that occurred simultaneously by happenstance, the International Society for Antiviral Research really was formed to plan and run the International Conferences on Antiviral Research and possibly other research forums that would concentrate on antiviral research. The forming of the Society and the planning for the Second International conference were joined at the hip. One couldn't have existed without the other. Anything else that the Society could accomplish would be frosting on the cake. But the cake was the concept of future international conferences.

So the ad-hoc Society Board of Directors and other interested and supportive individuals went about organizing the best antiviral research meeting they could and, at the same time, build a membership organization from the ground up.

Right from the formative stages of the Society, *Antiviral Research*, a journal published since 1981 by Elsevier and edited by Erik DeClercq and Fons Billiau, was offered at a discounted subscription rate to Society members. Quickly, *Antiviral Research* would become an official publication of the Society, with Society members making up a majority of the editorial board. In future years, two additional journals also would become affiliated with the Society.

In the meantime, Society founders were busy fundraising and building a mailing list of potential members from among their personal contacts in the field, the authors of journal articles about antiviral research, and the recipients of grants for antiviral research.

The timing for creating the Society couldn't have



Figure 2. Organizing Committee meeting at the Williamsburg Conference '88, left to right, Bill Shannon, George Galasso, Rich Whitley, Earl Kern and Erik DeClercq.

been more perfect. The field of antiviral research was blossoming. Antiviral research projects were being funded and antiviral drugs were being tested, approved, and brought to market. And the many scientists involved in the field representing a wide range of scientific disciplines were looking for a place to call home. The International Society for Antiviral Research would prove to be that place.

In mid-1987, two membership solicitation letters were sent out on Society letterhead over Earl Kern's name. The second letter also served as an announcement for the Second International Conference on Antiviral Research. In that letter, after informing recipients about the 1988 Conference scheduled for Williamsburg, it went on to state "At the Rotterdam meeting it was proposed that there be an International Society for Antiviral Research that would aid promotion and advancement of scientific knowledge among international investigators working in the field. We invite you to join the society by filling out the enclosed membership application and sending it along with the first year's dues to me."

The response was an overwhelming vote of confidence for Society organizers. Membership applications and Conference registrations began coming in at a steady pace. Members of the organizing committee breathed a collective sigh of relief. People were joining the Society and were going to attend the Williamsburg Conference.

In November, 1987, a fundraising mailing went out, once again in Earl Kern's name. The letter explained to potential donors that "In recent years there has been a marked increase in research and drug development for antiviral agents, however, there is currently no regularly scheduled conference devoted to antivirals. To provide a forum where in-

vestigators in all areas of antiviral research from the academic, government and pharmaceutical communities can meet to discuss new advances in the development of antivirals, the International Society for Antiviral Research has been organized and one of its primary functions will be to sponsor a meeting that will be held every other year."

The letter then got to the heart of the matter when it continued "As with any new organization, especially one that sponsors meetings, additional funds have to be raised beyond those generated by membership dues and registration fees. We are asking for your corporation's assistance in helping us financially by supporting the Society and the scientific meetings. As a mechanism for doing this, the Society would like to establish a long-term relationship with your company through a Corporate Sponsor-Sustaining Member type of agreement. The advantage of this kind of arrangement to the Society is that it would provide a consistent source of meeting support and would allow us to budget for travel awards and meeting assistance well in advance of the meeting. This arrangement would also allow your company to budget their contribution on an annual basis..."

The letter then went on to list three options for financial support: Charter Sponsor for \$2,500, Sustaining Member for \$1,500, and Contributor for \$1,000.

The effort resulted in 10 Charter sponsors, 4 sustaining sponsors, and 16 contributing sponsors. (See list of original sponsors on page 20.)

With the forming of the International Society for Antiviral Research, several key organizers of the new society found it necessary to extract themselves from a conflicting professional obligation. For six years, George Galasso, Bill Shannon, and Bob Sidwell were a part of the leadership of a new Virology Section formed within the Inter-American Society for Chemotherapy. In February, these three individuals withdrew from the section. In their joint resignation letter, they explained that "after nearly six years of work and four meetings, interest has not been strong. At the opening plenary sessions of the 1988 meeting, there were only approximately 70 people from all the sections in attendance with 22 in the final session. In some of the simultaneous sessions there were more speakers than audience. The attendance by virologists had gone down steadily.

"During 1987, an International Society for Antiviral Research was established. We do not believe the antiviral research community can support two organizations."

That bit of difficult business behind them, the Society's leadership put together a slate of candi-

dates for the organization. They believed that it was extremely important to have *elected* officers in place as quickly as possible. Nominated for president and vice president were Erik DeClercq, Bo Oberg, P. Shaeffer, Rich Whitley; for secretary Earl Kern and Graham Darby; and for Treasurer, Bill Shannon and Hans Eggers. It was agreed that the candidate with the most votes for president would assume that office and the candidate with the second highest total would be vice president and president elect.

Meanwhile, plans continued for the Second International Conference on Antiviral Research in Williamsburg—the make-or-break event for the fragile new Society. The local arrangements and program planning committee was putting together a solid plenary program. Abstracts were flowing in. Corporate sponsors were being lined up. The Fogarty International Center at NIH and the National Institute of Allergy and Infectious Diseases provided the Society with grants for the meeting, and TNO was going to provide additional money as a co-sponsor. Conference registration forms were coming in accompanied by registration fees. A printed Conference program was in process. Most promising was the response being garnered by Earl Kern's membership solicitation letters. The fledgling organization found itself with membership rolls that rapidly surpassed the 500 mark.

As 1987 came to an end, the organizers of this new venture continued to hold their collective breaths. Would the meeting be well received by those in attendance? Could members be retained? Could the Society pay its bills for the Conference expenses?

The days of reckoning for the Society were fast approaching.

April 10, 1988 arrived and everything fell into place for the Society. More than 400 scientists registered for the Second International Conference on

Antiviral Research—far more than Conference planners had anticipated and more than four times the number that had attended the Rotterdam Conference. In addition, the Society's membership rolls were approaching 700. And corporate sponsors had contributed approximately \$50,000 to the Society's coffers.

But most importantly, the vast majority of Conference registrants felt it was the best meeting they had ever attended on antiviral research. Suddenly, the International Society for Antiviral Research had credibility.

At the business meeting, the Society membership elected its first officers. The original officers were Rich Whitley, president; Erik DeClercq, president-elect; Earl Kern, secretary; and Bill Shannon, treasurer.

In addition to the quality of the meeting program, a highlight of the 1988 Conference was the presentation of the Society's first Award of Excellence to Bill Prusoff for his pioneering work in the field of antiviral research.

The success of the Williamsburg Conference pulled the antiviral research community together. The exchange of scientific information at that meeting led to long-term professional and social relationships that resulted in productive scientific collaboration. Some of the researchers at that meeting recall that for the first time they felt that antiviral researchers weren't lost in the crowd at a research meeting.

The Society had no trouble paying the bills for the Williamsburg meeting and had a surplus left over for its operating budget.

Everything worked out far better than the Society's founders had ever envisioned. Now, could that momentum be sustained?

SECTION THREE—The ISAR'S First Decade

Flushed with success from the Second International Conference on Antiviral Research (the first sponsored by the Society), the International Society for Antiviral Research looked to its future. The Williamsburg Conference had been so well received that sentiment built to have the Society organize a meeting annually instead of every two years. At this stage in its history, caution prevailed and it was decided that the Third International Conference would take place in 1990. But the idea of an annual meeting would not go away.

Society leadership decided to take the bold step of holding the Third International Conference on Antiviral Research outside the United States in Brussels, Belgium. Erik DeClercq was named chair of the local organizing and program committees.

Now, the Society got down to the routine and sometimes mundane tasks of running an organization.

In 1988, Earl Kern joined the faculty at the University of Alabama at Birmingham, moving from Salt Lake City. The Society office moved along with him.

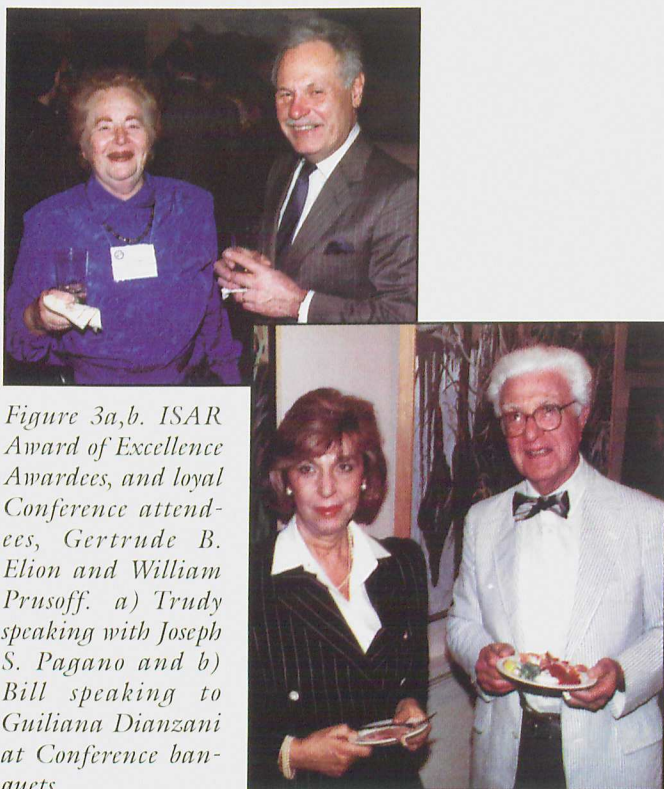


Figure 3a,b. ISAR Award of Excellence Awardees, and loyal Conference attendees, Gertrude B. Elion and William Prusoff. a) Trudy speaking with Joseph S. Pagano and b) Bill speaking to Guiliana Dianzani at Conference banquets.



Figure 4. Jean-Louis Imbach "sitting in" with Dixieland band entertainers at the New Orleans Conference banquet.

The Society hosted a March, 1989 Board of Directors meeting in Birmingham to discuss a host of issues in addition to the upcoming Third International Conference. These topics included: the Society by-laws; the roles of the Executive Council and the International Council; the need to establish new committees; the establishment of travel awards for the Third International Conference; soliciting new members; membership renewals; firming up continuing industry sponsorship; and publication of a membership directory.

At the meeting, the Society initiated a travel awards program in order to help finance the travel of selected antiviral researchers who do not have the funds to attend the International Conference. Over the years, these awards have helped numerous researchers, many of them young investigators or trainees, attend the International Conference. The awards also have benefited antiviral researchers working in financially stressed parts of the world. For instance, the antiviral research community in the Eastern European block of countries has benefited enormously from these awards, as well as other periodic support from the Society.

Led by an irrepressible medical scientist, A. S. Galabov, antiviral researchers in this part of the world actually formed their own organization—the Regional Association for Antiviral Research or RAAR. Galabov lobbied ISAR leaders tirelessly on behalf of the RAAR colleagues, seeking whatever financial support and encouragement the Society could provide—particularly since foreign currency

to pay annual dues was unavailable to Eastern European countries during the Soviet regime.

As the political stability in Eastern Europe declined during the 1990s and whatever meager funding that existed for biomedical research dried up completely, most scientists, including antiviral researchers, left for other parts of the world. Many came to the United States. It is a testimony to the support provided by the Society for these former RAAR members that many have been able to find jobs in the antiviral research field at United States institutions and organizations.

By the time the 1990 meeting in Brussels rolled around, Society membership had climbed to 750. Some of the Society's founders were somewhat disappointed by this number, given how quickly the Society gained its 700 original members. Looking at the membership numbers in perspective, several Society founders believe that the organization was a victim of its own initial success because its first membership solicitation was so thorough and effective. Much of the universe of antiviral researchers may have been captured early on. In retrospect, more attention should have focused on membership retention.

Attendance at the Third International Conference on Antiviral Research, held April 22-27, 1990, in Brussels, dropped slightly to 325 registrants, as expected, because of its location outside the United States. Abstract submissions held steady in the 160 area. The meeting was declared a success on two key levels—registrants once again declared the program to be of excellent scientific merit and it broke even financially.

Now, the Society faced a major dilemma. Fol-

lowing the unqualified success of the Williamsburg meeting in 1988, many Conference registrants, led by George Galasso, continued to clamor for an annual antiviral research meeting. After the Society repeated its original success with another well received meeting in 1990, the ground-swell grew for an annual meeting. After the 1990 conference, the Society leadership acquiesced, settling on New Orleans for the Fourth International Conference, which was scheduled for April 21-26, 1991.

With the meeting back in the United States, attendance soared to 550 registrants. Abstract presentations also hit an all-time high of 210. Two highlights of the New Orleans meeting seem to stick in every attendee's mind. One was the presentation of the Society's second Award of Excellence to Nobel Laureate Gertrude Elion, who was cited for her outstanding achievements in the field of antiviral chemotherapy over a long period of time, especially the major role she played in the development of acyclovir. The other image of the Conference burned into the memory of almost everyone there is ISAR Board member Jean-Louis Imbach jumping up on the stage with his clarinet and joining in with one of New Orleans' famous dixieland bands. His performance brought down the house.

By this time, the Society had six active committees to assist the Board of Directors, the Executive Committee, and the International Council—the Conference Program Committee, the Meeting Site Selection Committee, the Awards Committee, the Finance Committee, the Nomination Committee, and the Publications Committee. Still, many of the loose ends of society structure had not yet been neatly tied up. That was about to be addressed.

In 1991, the Society took another major step forward for its members with the development and publication of a twice-a-year membership newsletter—*ISAR News*. Volume 1, Number 1 appeared in July, 1991. Bob Sidwell, who edited the first edition, remains the editor to this day.

The Fifth International Conference on Antiviral Research moved on to Vancouver, British for



Figure 5. New Orleans Conference Session '91 Ken Soike, local organizer, front and center.

Columbia in 1992. It was another successful meeting, with more than 220 abstract presentations (a record), attendance at almost 450, and another highly praised program.

The major action at this meeting took place during the business meeting when a spirited discussion was held concerning a suggested revision of the Society by-laws that would clarify the relationship between the Board of Directors and the Executive Committee. Those Society members who actively participated in the organization's policy issues were confused about which of these two bodies superseded the other in the organization's decision-making process. These active members, actually a distinct minority of the total membership, asked that the Society's by-laws be re-drafted during the next 12 months and submitted to the membership for consideration at the Sixth International Conference in 1993. These members indicated that they wanted the Board to be the superior body and that the by-laws should state that the Board be made up of the president, president-elect, secretary, treasurer, immediate past president, and six other individuals from among the membership. They also indicated that they wanted members of the Board to serve defined periods of time, with a maximum three terms of office. Many members expressed the hope that such wording in the by-laws would result in a leadership turnover. A major force in revising the by-laws was Hugh Field. He worked into the wee hours of the morning redrafting the by-laws for the entire Board to review at their meeting the next day. Upon returning to Cambridge, he quickly re-drafted them based on feedback from the Board members.

The society membership, which now totaled 900, was beginning to assert itself.

In Vancouver, the Society lost money on the International Conference for the first time. It was not a huge loss and nobody seemed seriously concerned. In retrospect, they should have been.

During 1992, the Society began to realize that it needed to document its history. Since John Drach always seemed to be taking pictures at the International Conferences, President George Galasso appointed him official ISAR archivist. As the society created the post of archivist to document its short, but extremely successful past, no one realized that some difficult days were just around the corner.

The Sixth International Conference on Antiviral Research was held in Venice, Italy on April 25-30, 1993. Another excellent program was developed that provided informative, state-of-the-art information about antiviral research that fully met the needs of Society members. However, as a result of

a lack of coordination between society financial officials in the United States and the local organizing committee in Venice, spending got out of hand. The increased financial outflow was exacerbated by financial problems in Italy's pharmaceutical industry, resulting in several financial commitments to the meeting not being honored. This left the society holding a bag filled with a huge deficit that not only drained its bank account, but put ISAR in a precarious financial situation. Suddenly, the International Society for Antiviral Research found itself very short on reserves.

The ISAR Board decided in Venice that the organization needed to become more aggressive in raising funds. Earl Kern had carried out annual fundraising efforts on behalf of the Society by informally contacting many of his friends and colleagues in the pharmaceutical industry, but he indicated to the Board that he was reluctant to become more aggressive in his efforts and to spend the additional time that would be required. The board then turned to Kirk Field to take over Society fundraising activities, and appointed him chairman of the Finance Committee.

Finally, the Society leadership decided it was time to bring its membership dues more in line with reality. The annual dues were doubled from an almost insignificant \$25 to a more realistic \$50, and the Society also decided to take a more serious attitude about making sure that individuals on the membership rolls actually paid their dues.

Since 1990, the Society had been awarding travel grants for its meeting. These grants fell into two broad categories—awards to pay the travel expenses of young researchers to attend the International Conference and “hardship” awards to pay the expenses of researchers who could not otherwise attend the meeting because of special circumstances as described earlier. Most of these “hardship” awards went to antiviral investigators located in formerly Soviet bloc countries, primarily Bulgaria and the USSR. At the Venice meeting, Society leaders for the first time began to express concern about the amount of money it was spending on travel awards. They charged the Awards Committee to be more conservative in their review and final decisions.

At this meeting, the Board reviewed and considered several requests for the co-sponsorship of antiviral research forums beyond the International Conference. This review resulted in the Board developing and adopting guidelines for the co-sponsorship of such meetings. Some of the key points in these guidelines included:

- The scientific merit of the meeting must allow ISAR to preserve its unbiased status and not,



Figure 6. Conference banquet in Venice '93.

example, overtly relate to a company or one of its products.

- ISAR must not incur financial obligations.
- At least one member of ISAR should be appointed to the meeting program committee.
- The meeting organizers should be encouraged to promote the interests of ISAR during the program and associated publicity.
- ISAR members should receive a reduced registration fee.

The adoption of these guidelines led to the Society working with several organizations, such as the National Institute of Allergy and Infectious Diseases, to develop and coordinate several important meetings that helped advance the science of antiviral research.

The efforts initiated in Italy to help the Society regain control of its finances began to pay off. Necessary controls were put on spending. Corporate fundraising became more formalized and created a reliable source of income. The increase in membership dues from \$25 to \$50 and a more serious attitude concerning payment of these dues may have resulted in some lost members, but increased revenue.

It took a couple of years, but the Society's financial health bounced back stronger than ever. After instituting strict cost control measures for future activities and seeking out additional income streams, the Society reported \$112,000 in operating reserves by its 1995 conference and \$210,000 at the 1996 meeting. The financial crisis was scary, but short-lived, thanks to the quick action taken by the leadership.

Successful International Conferences were held

in Charleston, South Carolina in 1994 and Santa Fe, New Mexico in 1995. At the 1994 Seventh International Conference in Charleston, the Society expanded its meeting format by introducing an intensive earlybird satellite workshop providing a clinical update on new antiviral agents. The earlybird satellite program continues to this day. The workshop is an attempt to make the conference more appealing to clinicians, and medically translate the new findings in antiviral research. While these special programs have been well attended, many of the clinicians who attend still do not stick around for much of the regular conference.

The Conference programs continued to receive rave reviews from those in attendance.

In Charleston, the society closely examined and then rejected the concept of hiring an executive officer to handle ISAR administrative duties. Since its inception, Earl Kern had been serving as the Secretary and Society administrator, with much of the work being done by his secretarial staff at the University of Alabama at Birmingham. The Society provided some reimbursement to UAB for time expended on ISAR business by Kern's secretary, but everyone associated with ISAR knew that the money provided didn't come close to covering the value of the time actually put in on ISAR business by Kern and his support personnel.

In tabling discussion about hiring a full-time executive secretary for the Society, the Board once again looked to Earl Kern to continue handling ISAR administrative activities. Also at the 1994 International Conference in Charleston, the Society took additional steps to make sure it never again lost financial control over its annual meeting activities. Earl Kern suggested that the Society form a Conference Organizing Committee that would oversee all aspects of the International Conference. He recommended that the committee include a chair who would coordinate all aspects of the annual meeting; the ISAR secretary, who would be responsible for membership lists and mailing labels; the ISAR treasurer, who would be responsible for preparation of the budget for the meeting; the program coordinator, who would be responsible for the International Conference's scientific program and any NIH grant support; the chair of the Finance committee, who would be responsible for coordinating all fundraising for the Conference; the chair of the Awards Committee, who would be re-

sponsible for managing travel awards; the chair of the Publications Committee, who would be responsible for printing announcements and programs; and the local organizer, who would be responsible for all local arrangements, as well as assisting in fundraising and coordinating with the meeting planner.

After lengthy discussion, the Board voted to form the Conference Organizing Committee, that would run the logistics for the International Conference (while the Program Committee would continue to be responsible for the scientific aspects), for a trial period of two years. Earl Kern was appointed chair of this new committee and Rich Whitley would continue to chair the Program Committee.

The concept worked so well, that the committee has become a permanent part of the ISAR committee structure, and Earl Kern continues to chair the committee.

At the 1995 International Conference in Santa Fe, a vigorous discussion took place regarding dissolution of a longtime ISAR body—the International Council. The International Council included members from the various countries represented among the Society membership. Its responsibility was to help ISAR relate to the international antiviral research community. At one time, it was one of the more important bodies within the Society; however, it gradually failed to provide input to the Society or function according to the by-laws. As discussion in Santa Fe put the Council on the brink of extinction, European members sought to save the body, arguing that ISAR was an international organization and, therefore, needed a standing committee to deal with international matters. After all discussion ended, the Board decided to retain the International Council for a trial period of two years. In 1997, the International Council was officially disbanded and the International Membership and Advisory Committee was established which more appropriately represented the purposes of the ISAR.

Antiviral Research became the official journal of the Society at its founding in 1987. In 1995, the journal *Antiviral Chemistry and Chemotherapy* became affiliated with the Society, with at least 50 percent of the editorial board made up of ISAR members. One year later, another journal, *International Antiviral News*, also became an official ISAR journal.

The 1996 International Conference on Antiviral Research was held in Japan. Once again, a distant foreign site caused problems for the Society. The leadership felt it was important to hold a meeting in Asia realizing that it would prove too expensive for Americans and many Europeans to attend. This proved to be the case, but the low turnout of

Americans and Europeans was made up by solid attendance by Japanese antiviral researchers. As usual, those attending the Conference thought the program was superb.

At the Board of Directors meeting, the need for a professional conference organizer received considerable discussion. Although Earl Kern and the conference organizing committee maintained firm reins on the program and financial arrangements of the meeting, the Society had employed several different professional conference organizers to handle the meeting logistics, usually using locally-based meeting management companies. Having a different organizer each year made continuity difficult and also meant that a certain amount of education had to be provided for each new meeting organizer, taking up time and resources. The Board decided it was time to develop a contract with a firm which would run the meetings in any locale for multiple years. The current president asked George Galasso to look into the matter and develop a mechanism for the search and selection of an appropriate contractor.

At this Conference, great concern also was expressed about an apparent precipitous decline in membership. At the time of the meeting, the membership rolls counted 507 individuals, down from 665 only one year before and approximately 800 in the Society's early years. It was reported that the society was awaiting 206 membership renewals at the time, and increased emphasis was put on gaining these renewals, including a telephone contact follow-up program. Also, an emeritus membership category was established.

Immediately after the meeting, George Galasso developed a workscope for a meeting management proposal contract. The intent to develop a contract was made known to all the meeting management firms used in the past for the International Conferences.

Galasso arranged for an impartial committee of administrative officers from NIH, experienced in similar contracts, to review the proposals.

Seven proposals were received. After review, the top contender was asked for additional information. Galasso prepared a report of the proceeding with his recommendation for the Board.

In 1996, for the first time, the Board met independent of the International Conference during a winter meeting in conjunction with the 1997 Conference Program Committee meeting. Relief was expressed that the strategies initiated for gaining membership renewals were proving successful, with records showing that the current ISAR membership totals stood at 632.

Galasso presented his report on the conference management firm to the Board at this meeting. The Board expressed its appreciation for the comprehensive solicitation process with its impartial review procedures and supported the recommendation unanimously. The Board then empowered the Society to enter into formal agreement with Courtesy Associates of Washington, D.C..

By the time the 10th International Conference on Antiviral Research took place in Atlanta, April 6–11, 1997, ISAR membership was back up to approximately 700. The society also had a substantial amount in cash reserves, giving a sense of financial security that did not exist just four short years earlier. Still, some concerns existed. The most press-

ing problem appeared to be the proliferating number of scientific meetings devoted exclusively to antiviral research in specialized fields. While imitation often is considered the sincerest form of flattery, 10 years earlier the society had a monopoly on scientific meetings with programs designed exclusively for antiviral researchers. Now, there was competition with the proliferation of specialized antiviral research meetings. And the Society leadership felt the competition might be siphoning off registrants for its meeting and even resulting in lost membership. Concern especially was expressed about the fact that some of the leading Society members were lending their names and expertise to forums not affiliated with ISAR.

SECTION FOUR—The Second Decade Begins

As the International Society for Antiviral Research enters its second decade, its leaders and members can look back on its first 10 years in which it established itself as a professional organization that had played a major role in advancing the science of antiviral research. Its annual conferences have become instrumental in bringing together people from around the world involved in antiviral research. The conferences proved to be not only important for providing those in attendance with state-of-the-art updates on antiviral research, but also in disseminating new research data in the field. But even more importantly, the Conferences gave antiviral researchers from a wide variety of geographic locations, scientific disciplines, and work settings opportunities to interact with each other. These interactions resulted in numerous research collaborations leading to numerous new funded projects. And many of these funded collaborative projects have meant new antiviral compounds in the marketplace.

In the Society's first year in 1986-87, membership quickly shot up to 750 members. Society founders were not only ecstatic; they were astounded. Since that initial spurt, the membership rolls have remained static during the last decade, staying in a narrow range between 700 and 950 members. While some Society leaders have expressed concern about the lack of increase in membership, most point out that almost everyone involved in antiviral research joined the society when it started. Since then, the Society seems to gain and lose about 200 members each year as some scientists leave the field and others enter the discipline. In addition, the size of the membership rolls have been impacted each year by how stringently each treasurer enforced membership policies. If the current treasurer strictly adhered to Society by-laws by purging out those members who did not pay their dues, the membership totals declined. If the treasurer had a more forgiving attitude, membership held steady or increased slightly.

Most ISAR members carry out their research activities in one of three settings—academic, industry, or the government. From the beginning, people conducting antiviral research at academic medical centers have set the agenda for

the Society. But corporate researchers and government officials have played major roles in shaping the organization. One only needs to go back to the initial Board of Directors for the Society to gain insight into the organization's membership mix that has maintained itself over the years—two scientists from a European academic medical center; two scientists from United States academic medical institutions; a scientist from a nonprofit research organization in the United States; a scientist with a United States pharmaceutical company; and a scientist-administrator with the U.S. government.

The greatest fluidity in Society membership has been found among corporate scientists. Originally, most of the society's members who worked in a corporate setting came from a handful of large pharmaceutical companies. By the mid-1990s, many of these larger traditional pharmaceutical companies have left the antiviral research scene to be replaced by some of the fast-growing biotechnology companies, which now supply corporate scientist members to the Society and help to financially support the Society's activities.

Membership also has been dominated by North American antiviral researchers, with about 70 percent of members coming from the United States. However, European scientists have been part of the Society's leadership right from the start and they continue to be an active and influential contingent. During the past decade, antiviral research has increased dramatically in Japan, leading to the founding of an antiviral research society in that country. However, the number of Society members from Japan always has been disappointing, and, as the society was ending its first decade, the Australian members were about to surpass their Japanese counterparts.

During its first decade, the typical ISAR member was initially a bench scientist in the United States conducting antiviral research at a major academic medical center with funding from the National Institutes of Health. Over the years, Society membership evolved into a good blend of bench scientists and clinicians with funding from the government and pharmaceutical companies.

Through the Society's first decade, the consensus of ISAR leaders has been very much in favor of expanding membership rolls. One of the secrets of the success of the annual International Conference on Antiviral Research has been its limited scope and size. Each year, about 500 people attend the conference, a size that encourages frequent contact among those in attendance. This size has permitted the Program Committee to limit the program to one track of meeting sessions, avoiding concurrent sessions that could fragment those attending.

One of the major challenges faced by the ISAR after its first 10 years is how to bring new members into the Society without changing the flavor of the International Conference. The forum enjoys a reputation throughout the scientific community as the meeting of choice for scientists involved in antiviral research. It provides a comprehensive program that meets the needs of antiviral researchers around the world and, at the same time, gives them a chance

to informally discuss antiviral research issues among themselves, get new ideas, and, in many instances, set up collaborative studies.

As the Society looks to the future, many of the individuals who have devoted so much time and effort in seeing ISAR through its first 10 years are hoping that new leadership steps forward to bring increased energy and different perspectives to the organization. Although the Society leadership has attempted to avoid becoming a "good old boy" network, many of the same names keep popping up in various ISAR leadership positions. It is not that these individuals did not want to relinquish their leadership roles in the Society (as a matter of fact, new faces willing to devote time and energy to the Society are constantly being sought), but few new faces have stepped forward indicating a willingness to take over the responsibilities of running the organization.

Those new faces will have very large shoes to fill.

CONFERENCES OF THE SOCIETY

	Date	Location	Local Organizers
I.	April 30-May 3, 1985	Rotterdam, The Netherlands	Huub Schellekens George Galasso Erik DeClercq
II.	April 10-14, 1988	Williamsburg, VA	Earl Kern George Galasso Rich Whitley Bill Shannon
III.	April 22-27, 1990	Brussels, Belgium	Erik DeClercq
IV.	April 21-26, 1991	New Orleans, LA	Ken Soike
V.	March 8-13, 1992	Vancouver, Canada	Steve Sacks
VI.	April 25-30, 1993	Venice, Italy	Giorgio Palu
VII.	Feb. 27-Mar. 4, 1994	Charleston, SC	David Gangemi
VIII.	April 23-28, 1995	Santa Fe, NM	Gregory Mertz
IX.	May 19-24, 1996	Urabandai, Japan	Shiro Shigeta
X.	April 6-11, 1997	Atlanta, GA	Raymond Schinazi
XI.	April 5-10, 1998	San Diego, CA	Karl Hostetler Douglas Richman
XII.	March 21-26, 1999	Jerusalem, Israel	Ehud Katz
XIII.	April 16-21, 2000	Baltimore, MD	George Galasso Paul Lietman Charles Flexner

PRESIDENTS OF THE SOCIETY

1988-1990	Richard J. Whitley	University of Alabama at Birmingham, USA
1990-1992	Erik DeClercq	Rega Institute, University of Leuven, Belgium
1992-1994	George J. Galasso	National Institutes of Health, Bethesda, MD, USA
1994-1996	Hugh J. Field	Cambridge University, UK
1996-1998	Earl R. Kern	University of Alabama at Birmingham, USA
1998-2000	John C. Martin	Gilead Sciences, Inc., Foster City, CA, USA

ISAR AWARD for OUTSTANDING CONTRIBUTION TO ANTIVIRAL RESEARCH

William Prusoff Presented in 1988
Gertrude B. Elion Presented in 1991

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