

Report on Symposium Proceedings

The
Scientist
and
the **Media**
Symposium

QUALITY INFORMATION FOR HEALTH & SAFETY*

*In collaboration with the CIHR National
Research Forum for Young Investigators in
Circulatory and Respiratory Health.



2005



Amis des instituts de recherche
en santé du Canada

FCIHR/AIRSC

Friends of Canadian Institutes
of Health Research

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FOREWORD

The Friends of Canadian Institutes of Health Research (FCIHR) is a national organization composed of individuals and corporate members, dedicated to supporting the goals and ideals of the Canadian Institutes of Health research (CIHR). One of the principle activities of the FCIHR is to promote the understanding of science in the community through annual symposia and educational forums. It is important to facilitate the transfer of new knowledge that is rooted in high quality, evidenced-based research. The ultimate expectation is that this will help to improve the health of Canadians by strengthening the Canadian health care system.

This year we highlight the importance of communicating new knowledge to the public and the responsibilities we have as scientists to provide solid information in a timely and understandable way. Conflicts arise when individuals promote their work or themselves inappropriately or for personal gain. Furthermore, the research community cannot effectively communicate to the public directly and depends on health reporters and journalists schooled in biology and the human condition. Journalists for their part must be skeptical and probing in order to discern the “wheat from the chaff”. Human-interest stories sell papers but if the premise is based on junk science, everyone suffers. The theme of this year’s symposium “The Scientist and the Media” looks at the challenges and opportunities that guide the interdependencies of both professions as they work to transfer new knowledge from the laboratory to the community that funds our research.

FCIHR would like to thank our principal sponsors particularly the Canadian Institutes of Health Research and the University of Manitoba, Department of Internal Medicine for their support of Symposium 2005.



Aubie Angel, M.D.
President FCIHR / AIRSC

SPONSORS



**Centre for the
Advancement of Medicine,
University of Manitoba**



The Scientist and the Media Symposium

QUALITY INFORMATION FOR HEALTH & SAFETY

2005

Opening Remarks:

Dr. Aubie Angel, Co-Chair, President FCIHR / AIRSC

Welcoming Remarks:

Dr. Bruce McManus, Co-Chair, Scientific Director CIHR Institute of Circulatory and Respiratory Health

Dr. Dean Sandham, Dean of Medicine, University of Manitoba

Speakers:

André Picard, Public Health Reporter for The Globe and Mail: *"Science and the 6 o'clock News"*

Dr. Pavel Hamet, Professor of Medicine, Université de Montréal: *"The Press Conference: Accountability in Communicating Health Research to the Public"*

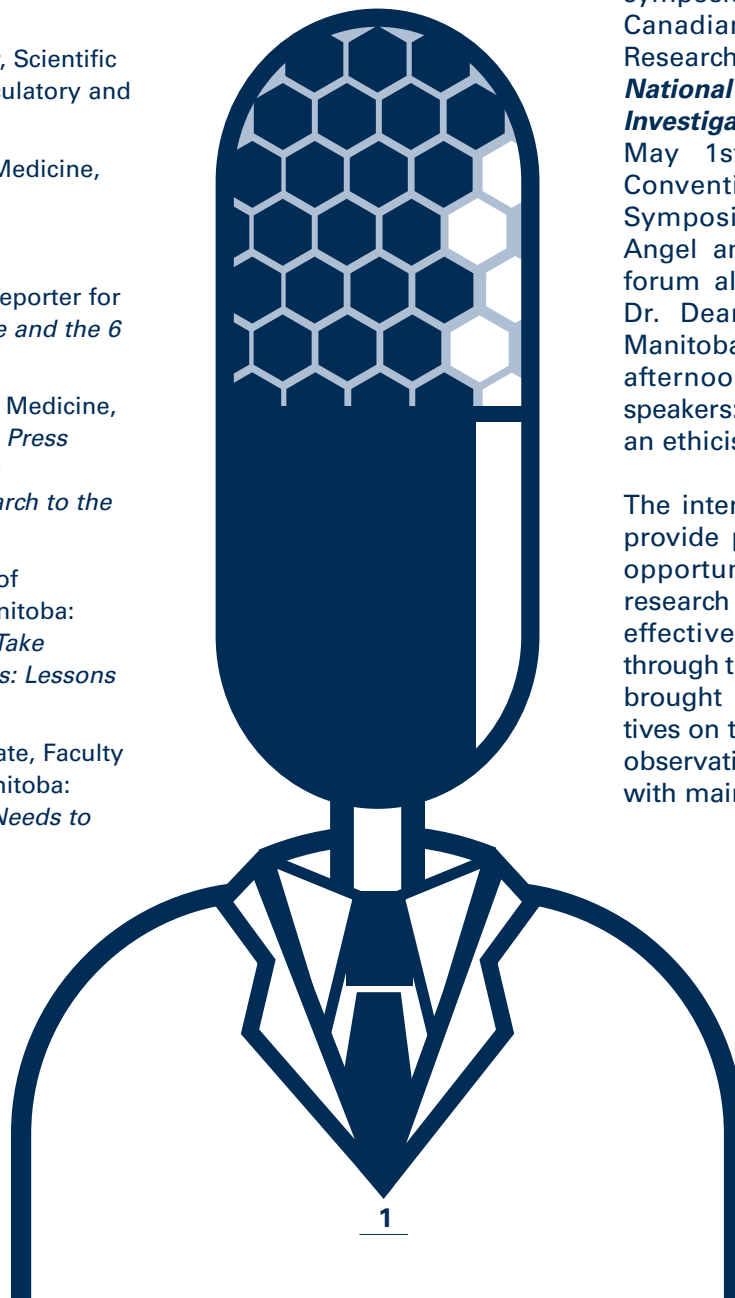
Dr. Arthur Schafer, Professor of Philosophy, University of Manitoba: *"How Sophisticated Doctors Take Advantage of Naïve Reporters: Lessons from the Vioxx Saga"*

Dr. Linda West, Health Advocate, Faculty of Nursing, University of Manitoba: *"What and When the Public Needs to Know"*

General Discussion

The Scientist and the Media: Quality Information for Health and Safety symposium was hosted by Friends of Canadian Institutes of Health Research in collaboration with the ***National Research Forum for Young Investigators***, held April 28th through May 1st, 2005 at the Winnipeg Convention Centre. Introduced by Symposium Co-Chairs Dr. Aubie Angel and Dr. Bruce McManus, the forum also offered a welcome from Dr. Dean Sandham, University of Manitoba Dean of Medicine. The full afternoon session featured four speakers: a scientist, a health advocate, an ethicist, and a media specialist.

The intent of the Symposium was to provide practical information and an opportunity for discussion among research professionals, on the topic of effective public communications through the media. Each of the speakers brought forward their own perspectives on the subject, based on personal observations and experiences in and with mainstream media.



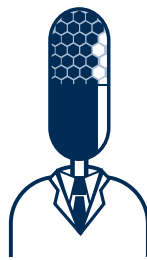
IN HIS INTRODUCTION, Dr. Aubie Angel, President of FCIHR, stressed the importance of facilitating the transfer of new knowledge as a means to strengthening the Canadian health care system. For his part, **Dr. Bruce McManus**, Scientific Director, CIHR Institute of Circulatory and Respiratory Health, highlighted some of the responsibilities of scientists today: broad ethical issues, quality of work, and communication. He pointed out the special relationship that exists between scientists and members of the media and how each must rely on the other if the public is to receive quality information. He asserted that scientists have as much responsibility to inform the public as they do to communicate with their peers and those in other health and scientific disciplines.

McManus also discussed the role of the Internet in our instant-access society. In his view, uncontrolled public access to a proliferation of information, both accurate and inaccurate, compounds the challenge of sharing appropriate material with the masses. He sees the role of the media as vitally important to shaping public understanding, and views their task as an onerous one: ensuring science is represented in a balanced, objective and understandable manner, while still conveying the excitement of discovery and advancement. In this context, McManus regards the function of media as the peer review process for scientists communicating with the public, as a parallel to the actual peer review process that exists through publication in scientific journals. McManus noted that the ethical standards for research and its conduct are constantly under scrutiny, and concluded his introduction by underscoring the critical importance of effective communications to the CIHR and all health research funding organizations.

In his welcome to the group, **Dr. Dean Sandham** approached the topic of communications in more general terms, with a focus on the primary healthcare consumer: the patient. He illustrated the relationship of general

writer for the Globe and Mail, provided the inspiration for the symposium. Picard had brought to the organizing committee's attention the work of one Gary Schwitzer, published in the British Medical Journal. Schwitzer had identified a number of challenges that exist between scientists and media and had commented on the difficulty reporters have in identifying quality information, noting their responsibility to ensure that information provided was high grade and credible.

As an 18 year veteran public health and science writer with the Globe, Picard addressed these and other issues from the reporter's perspective.



He asserted that scientists cannot afford to ignore the mainstream media, and suggested that while peer recognition and publication in science journals were certainly important, greater success was achievable if good media coverage is added to the mix. He challenged the audience to better understand the role of media in promoting research work.

Picard maintained that media coverage of science stories is important for several reasons, but the first of these is

Political and public interest in science has shifted...

that the popular media is the main source of information for the public. He pointed out that competition for the public's

attention is fierce. As well, individuals have a limited attention span for information. Most do not have access to, or an interest in, scientific journals and it is unreasonable to expect extensive sharing of medical information on a variety of topics during brief annual check-ups with the family doctor - the only available face-to-face source. The reality, according to Picard, is that television, newspapers, and the Internet are the primary public information sources.

"I think it's important too, to be in the public, in the main stream media, because the public pays your bills" said Picard. "That's essentially who's funding your research, one way or another. Funders, both private and public," he continued, "also rely on main stream media to tell them where to direct their money." For those reasons, he suggests that the media can directly influence careers - for better or worse.

Picard invited the audience to learn how the media functions and how to meet their needs, in order to garner better coverage. To fully explain his process of covering a health story, he began with a brief review of newspaper operations. He revealed that the Globe invests as many as four or five reporters to the health and science beat, in addition to other writers who cover food, pharmaceutical and biotech stories. These are popular topics; they sell papers; and newspapers are a for-profit business.

About a year ago, the Globe introduced a daily health page - an entire page dedicated strictly to health news. For the most part, Picard covers non-medical health stories: infectious disease, home care, chronic disease management, and health promotion. He has noted a profound shift in health coverage over the past two decades. In the 1980s, health items might be tucked behind the classifieds, near the back of the paper, relegated to the "women's" or "lifestyle" pages. Today those same articles have muscled their way in to the forward news, sometimes even dominating the headlines, as was demonstrated during the SARS outbreak. He also pointed out that stories now include more consumer input, more critical coverage, and more analysis.

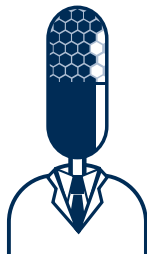
Writing for the British Medical Journal, Gary Schwitzer noted several issues that result in a weakened public understanding of science and medicine as it relates to health:

- exposure to TV determines any community's understanding of science and medicine, and television content is presented too briefly
- there are few full time health journalists
- sensational claims are not supported by sufficient data
- commercialism
- references are made to a single information source
- baseless predictions are made from basic science
- FDA approval is presented as an accomplished fact
- there is limited coverage of health policy,
- little or no time is available for investigative journalism

public health knowledge to the process of informed consent at the bedside, noting the challenge of providing individual patients with information that is contextual, relevant, understandable, balanced, and informs of any potential harm as well as potential good, in a way that doesn't frighten. Such a bedside discussion provides the professional with opportunity to gauge response and continue dialogue. As Sandham noted however, that same opportunity does not occur in the public media. There is little opportunity for assessment, feedback and the correction of assumptions.

THE CAPACITY AUDIENCE of 280 science professionals was introduced to the first of the four speakers, **André Picard**, who as Health and Science

Picard indicated there are a number of factors driving news judgement these days. One trend with important implications for researchers is the increased interest governments and politicians are taking in science and their willingness to support research. He observed that as a direct result of political interest, funding for research has grown more than any other program in the past decade or more. This year, he noted the Health Canada spending estimates have earmarked \$777 million for the Canadian Institutes of Health Research - up a half billion dollars over the \$250 million allocated in 2000, before the CIHR was established. He predicted that increasingly, we will hear politicians talking about education, knowledge transfer and a new "knowledge economy".



Most stories are a 500-word snapshot...

THE OTHER TREND Picard has noted is a distinct shift in the public's view of science, particularly over the past five years. He has recognized an audience of science readers who follow items with a fervour and passion, and suggested that science is becoming akin to a new religion among a growing minority of the population.

Picard maintained the media shares responsibility for both trends but contended these are great times to be a scientist. "You're in a very privileged position at a very privileged time" said Picard. In his opinion, the scientific community is doing pretty well. The question, of course, is, will it continue? Picard was clear in his assertion that public money comes with a responsibility for transparency and full and honest disclosure, no matter the amount. He also reminded his listeners that with increased opportunity and funding come greater expectations. Frequently, those expectations are expressed within the four-year blocks of time that rule politicians but fly in the face of the scientific process.

Organizational expectations may also run high. Picard pointed out that many institutions quantify their media coverage, measuring how research work bolsters the visibility of the institution and supports the pursuit of funding through sponsors and grant programs.

Picard offered practical advice as well: if science is to be high profile, the cameras and reporters must feel welcome in the labs. The public needs to see and understand what researchers do and why it's important. Media can tell that story but to do it successfully, reporters need to achieve a basic level of understanding on the topic. Picard advised establishing a relationship with the media in advance of breaking a major story. This allows time for learning to occur and interest to develop.

Moreover, if a writer is somewhat familiar with the project and there is a space to fill on the page, there is always the possibility for some general interest or progress coverage.

To get research covered by the media Picard recommends several things: having research results published in a reputable journal, ensuring the institution circulates a well written media release, preparing to back up claims with simply stated facts, and responding to media enquiries as quickly as possible. The media, he explained, has a duty to be doubtful and questioning and reporters have a role as translators, interpreting complicated issues into a language the public can understand.

ACCORDING TO PICARD, the selection of stories is neither logical nor scientific. Each day, the paper has an allotment of space to fill with material that will attract the attention of their million or so readers. This information must be interesting enough to compete with news in other sections of the paper. It is not possible to do a definitive health research story and media presents snapshots on topics of known continuing interest to readers and introduces new items of potential interest. Most stories are compiled quickly, usually within a couple of hours, and generally run about 500 words, with some features as much as double that size at 800 to 1000 words. Those space constrictions require that ideas be narrowly focussed. Most often writers seek practical content that readers can remember and talk about on their coffee break. Frequently they draw upon previous stories, adding new information.

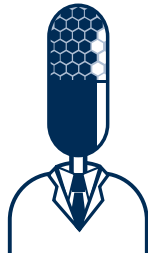
Returning to the role of media specialists as translators, Picard explained the media's process of taking detailed information (in this case scientific) and summarizing and simplifying it for a public with limited time and short attention span. The old "21 word" rule, a holdover from teletype days, remains alive and well in the media today according to Picard, and while writers will do their best to avoid the hazard of oversimplification, there is still pressure to ensure the lead of a story is never more than 21 words. Once written, a story is edited according to the space available and another

PICARD'S RULES:

- Have one clear, concentrated and concise message.
- Present information in a comprehensible manner easy to understand manner.
- Drop the jargon.
- Be honest and straight forward. Use common sense.
- Be passionate - it will come through in your message.
- Be a media consumer. Follow the good examples of others who you see have communicated successfully.
- Do your part to educate reporters. Take time to demonstrate and explain. It will pay off. Health writers shouldn't have to get sick to learn about the health care system.
- Make sure your story is news. Don't waste reporters' time on something of limited import or public interest.
- Remember: the reality of the medium is that you're far more likely to get in the paper for some spectacular failure than for a spectacular success.
- Be pro-active. Experience has proven that ESP meets with limited success. • Journalists rely on contact for information: e-mails, faxes, press releases, and press conferences.
- Be prompt. Reporters are all working to deadlines. Return their calls as quickly as possible or your story simply won't make the deadline. And you don't get a second chance.

editor assigns a four-word headline. Clearly, by the time the consumer receives the information, it has been highly processed.

“Science begins when people understand you” stated Picard. “If I do my job well, I make science understandable. In French, we have a great word: vulgariser, which means quite literally to make vulgar” he added. “Except that in French, vulgar doesn’t have the negative connotation it has in English. It means to make the complex comprehensible, to simplify and make things understandable. That’s what I do”



“...the medical community must communicate openly, or the most important resource to medical scientists – the trust of patients – will be lost.”

Picard suggested a number of simple rules scientists could follow to assist in receiving good media coverage. He began with what he called “The Rule of Mom”: presenting information in a simple and straightforward way that your mother, family and friends can follow and will understand why it is important. It was clear from his comments that common sense and respect for reporters’ deadlines were key to successful relations with the media.

In closing, Picard again stressed the importance of the media as a primary source for public consumption of health information. “It really shapes public views about health, and shapes public policy, even to a perverse degree in the way that it influences policy makers. So love us or hate us you can’t ignore us” he concluded.

Hamet’s Tips for Giving Good Media:

- Ensure the story is current and newsworthy.
- Host a media conference and have the source of the story available to relay details.
- Arrange interviews with key people who can support the story.
- Allow for questions and be prepared with answers.
- Provide a media release that confirms necessary details in writing. Include a fact sheet and add important related information.
- Include photographs to illustrate the work and the results. Good visuals help to tell the story and aid in understanding. Even if they aren’t used in the media, pictures will assist reporters.
- Time the release of information carefully so it can be used to best advantage for the media AND the project.
- There is no such thing as “off the record”. Never comment beyond what can easily and comfortably be supported by fact.

The second speaker, **Dr. Pavel Hamet**, Director of the Research Institute at Centre Hospitalier, de l’Université de Montréal took the perspective of the scientist. In his comments, he drew upon his many experiences as an inventor and co-author of more than 400 scientific publications. He began by pointing out that for most scientists, media is something used to culture cells, and that there is little training or access to information provided to scientists about communications media. He also noted that while researchers are constantly evaluating their own work, all too

frequently too little is given to how effectively information is transmitted to the public.

Hamet fully agreed with Picard’s assertion that for the majority of the public, the main stream media is the single most important source of health and science information, adding that news reporters, science writers, the daily and print and broadcast media, magazines, and trade publications, all have a role to play in informing the public. He reiterated Picard’s

comments regarding the immense impact of science and technology in public health today. Drawing upon his personal experiences, Hamet reminded us that the reporters who conduct the interviews and write the story are not those who write the headlines. He provided personal examples illustrating how sometimes headlines can dramatically change the intent of the story.

While Hamet concurred with Picard’s “Rule of Mom” in principle, he was careful to point out “your mother supports you, and will tell you she understands. More importantly, whether she truly understands or not, what you tell her won’t be printed out of context in the papers the next day, forcing you to explain misrepresentations to your superiors, funders, and other program partners.”

LIKE PICARD, HAMET underscored the necessity to ensure information is clearly stated, so that, if taken out of context, misleading or erroneous messages are not created. Journalists must be able to clearly read and understand information provided. He stressed that it is critical that facts are provided and not opinions. He further agreed that good advance preparation is required to attract positive media attention and went on to itemize a number of actions that will help to ensure messages are covered by the media.

Hamet suggested that when investigative reporters call, a careful approach is needed, particularly if the story is adverse. Enquiry regarding the “angle” of the story is always wise and he again affirmed that scientists should always express knowledge but never opinion.

In his concluding remarks, Dr. Hamet expressed the ethical obligation to communicate science, for the stewardship of public funds. He recommended a publication prepared and distributed by The National Association of Science Writers. *Communicating Science News: A Guide for Public Information Officers, Scientists and Physicians* is now out of print but is available on the Internet at www.nqasw.org/csn/ This publication covers communications with the media in a logical and practical fashion under headings such as: *Why Communicate Science?; Who Are the Media?; Telling Your Story*; and *Pitfalls in Reporting Science News*, among others.

Next, **Professor Arthur Schafer**, Director of the Centre for Professional and Applied Ethics at the University of Manitoba, contended that medical researchers today are often quite sophisticated while, by contrast, media journalists tend to be scientifically naïve and thus in danger of being manipulated.

Schafer claimed that some scientists, in their pursuit of additional research funding and career self-promotion, are inclined to advance inflated claims for the drugs or devices that they are testing. Reporters, hungry for a story and faced with tight deadlines, seldom ask sceptical questions. Instead, the media uncritically repeat the claims, neglecting also to mention the important fact that the researchers have been industry funded.

SCHAFFER POINTED OUT that contemporary medical research floats on a sea of drug industry funding, which has several serious implications. Often the research is aimed to produce a me-too drug for a product that is coming off patent. In other words, some research could be more accurately described as “marketing” than as “science.” Research that is unfavourable to the industry’s products is often analyzed in such a way that it appears favourable or, worse, it is outright suppressed.

He also remarked upon the huge advertising and marketing campaigns launched by the pharmaceutical industry, aimed at both patients (primarily in the USA, where direct-to-consumer advertising is permitted) and physicians (via gifts, large and small, funding for conferences, etc.). These marketing techniques lead to explosive sales [“Blockbuster drugs”], which in turn means that millions of patients end up taking new drugs long before anyone can be confident about the risk-benefit ratio for those patients – because the adverse effects are scarcely visible in short trials with a comparatively small sample of patients.

Drug companies are often reluctant to fund studies that would reveal the long-term adverse side effects of their products. Thus, even though there were serious concerns about the safety of the Cox-2 inhibitor drugs for arthritic pain, the companies did not launch studies to investigate their contribution to cardio-vascular disease, and were not required to do so by licensing authorities. The thousands of deaths that resulted were only detected when the companies attempted to show that their drugs had other important uses – revealing, incidentally, that they were implicated in tens of thousands of excess deaths from heart failure and stroke.

Schafer cited, as well, the fact that companies often fund so-called research, which is really a thinly disguised marketing attempt. For example, executives of one company were furious that a recent study – intended to show new benefits of Vioxx – instead exposed the serious dangers of the drug it was intended to promote.

In a recent article on Cox-2 inhibitors, published in Forbes magazine, a business journal, the journalist cited the views of many authors but then, at the end of the story, disclosed to readers that every doctor cited in the article had financial ties to the companies discussed in the story. This kind of disclosure is all-too-infrequent among journalists. Thus, one would hope that in future many more journalists would follow the Forbes lead and alert their readers to the financial ties which bind medical experts to the drug industry whose products are being evaluated.

In wrapping up, Schafer again advised journalists to be far more sceptical in their approach to information provided by medical researchers about new drugs. Schafer also warned “...the medical community must communicate in a more open way, or the public will cotton on, and the most important resource to medical scientists – the trust of patients – will be lost.”

The final speaker of the day, **Dr. Linda West**, Health Advocate with the University of Manitoba Faculty of Nursing, brought attention to the broader role of communications in shaping Canada’s health care system. She provided facts and several overhead slides of comparative data from other countries on life expectancy, morbidity, mortality, length of waiting periods for surgery, and other factors, to illustrate where improvements in the Canadian experience should be pursued, particularly highlighting some positive aspects of the system in France.

WEST ASSERTED that consumers could and should be empowered to demand better health care, and that if better informed, individuals would be capable of making better decisions, thereby maximizing utility within the system. Informed publics lead to higher quality discussions between doctors and their patients. She encouraged health professionals to exercise self-regulatory behaviour to recognize and fix deficiencies in health care quality.

Like the other panel members, she too stressed the importance of doctors and institutions remaining alert to what is reported in the media. “Companies are now producing products they claim are better for us” said West. “But are they really?” she questioned. “How do we know?” She agreed with Dr. Schafer that the media needs to probe deeper into the outcomes from comparisons on the use of one product, be it a food, drug or service, over the use of another, or next best, product.

In her view, practical measures that would assist the public could be as simple as using common language and more direct terms, like “good” and “bad” to ensure consumer comprehension. She also sees an increased level of health information in restaurants and on consumer products as being beneficial and generally advocates a focus on healthier lifestyles, such as that promoted in Japan. She feels this would move Canada from a ‘sick care’ system to a true ‘health care’ system.

West also noted that Canada is one of a very few single-tiered health systems in the world (with Cuba and North Korea). While countries around the globe seek to emulate the results of the experience in France, which is recognized as employing the best health care model, none commend the unfair, and expensive, US system.



“The most appropriate time for health consumer education is well before crisis even appears on the horizon.”

THE SESSION WAS OPENED for questions and comments from the floor. First to the microphone was Dr. Arnold Naimark, Director of the Centre for the Advancement of Medicine at the University of Manitoba. Dr. Naimark commented that many drug industry stories run as business stories and human interest and patient experience stories are more likely to be used by television broadcast media. He observed that there is more enquiry now than there was a few years ago and while exposés can be effective, he noted they are too often done retrospectively.

Next, a scientist from Ottawa referenced Dr. Schafer’s comments regarding the suppression of research data and challenged him to indicate how the system could be improved and made more ethical. In response, Schafer proposed that medical professionals take full responsibility for anything in

which they participate, or anything that can be suggested they endorse. He went on to add that drug company subsidies and gifts should be banned, ensuring public research is funded only by governments.

In response to a query regarding health education, Dr. West used the example of informed consent, expressing the concern that it was more often an uninformed consent - offering too little, too late: too much information at a bad time that often serves to stress patients further. In her view, the time for such education is well before any crisis situation occurs.

The last word went to André Picard who recalled his earlier comments regarding the exponential growth in the amount of public information available, competition for public attention and interest, the requirement for accuracy of key messages and the gradient of educational understanding within the demography of those who obtain health information through the media. His final reminders were to identify the audience - the various publics who will receive the message - and to employ clear, understandable language.

The intent of this panel discussion was to highlight the importance of communicating new knowledge to the public, and the responsibilities scientists bear in providing credible information in a timely and understandable manner. There was also a strong desire to offer practical tools to those who engage the media or may do so in the future. The speakers, from their varying perspectives, addressed the opportunities and challenges faced by both media and science professionals as they endeavour to inform the public of the advancement of health science in the community.

The goals of the session were clearly met, with the organizing body receiving many compliments for their selection of a relevant and purposeful topic and a panel of knowledgeable, instructive, and inspiring speakers.

Marilyn E. A. Williams

For the DRTC

S P E A K E R B I O G R A P H I E S :

André Picard is the public health reporter at the Globe and Mail where he has been a staff writer since 1987. While he claims to have "the most boring CV in the world," he has, in fact, received much acclaim for his writing, including the *Michener Award for Meritorious Public Service Journalism*, the *Canadian Policy Research Award*, the *Science and Society Prize* of the Canadian Nurses' Association Award of Excellence for Health Care Reporting. Picard is the author of three best-selling books: *CRITICAL CARE: Canadian Nurses Speak For Change*, *THE GIFT OF DEATH: Confronting Canada's Tainted Blood Tragedy*, and *A CALL TO ALMS: The New Face of Charity in Canada*. In 2002 he received the Centennial Prize of the Pan American Health Organization as a top public health reporter in the Americas. Picard lives in Montreal.

Dr. Pavel Hamet is Director of Research at the Centre Hospitalier de l'Université de Montréal (CHUM); Chief, Gene Medicine Services (CHUM); Member, Endocrinology Services (CHUM); and Director of the Laboratory of Molecular Medicine (CHUM). Dr. Hamet is author and co-author of over 425 scientific publications and holds several international patents related to his work. He serves on many national and international boards and was former General-Secretary of the International Society of Hypertension. He was presented the *Harry Goldblatt Award* from the American Heart Association in 1990 for his achievements in the field of hypertension. In 1996, Dr. Hamet received the *Distinguished Scientist Award* of The Canadian Society for Clinical Investigation and the *Achievement Award* of the Canadian Cardiovascular Society. In January 2000, Dr. Hamet was awarded the *Physician of Merit Medal* for the 20th Anniversary of the Journal *L'Actualité médicale* and in 2001, he received the prestigious *Wilder-Penfield Award* from the Government of Québec.

Professor Arthur Schafer is Director of the University of Manitoba's Centre for Professional and Applied Ethics, and is an Ethics Consultant at the Health Sciences Centre in Winnipeg. He is a Canadian Commonwealth Scholar, Honorary Woodrow Wilson Scholar, and a Canada Council Fellow. He has received the *Stanton Teaching Excellence Award*, the *Campbell Award for University Outreach*, and the *University Teaching Service Award* for Teaching Excellence. Author of *The Buck Stops Here: Reflections on moral responsibility, democratic accountability and military values* and more than 70 scholarly articles and book chapters, Schafer has written dozens of articles for the Globe and Mail, Toronto Star, Winnipeg Free Press, The Medical Post, and the Sunday Times (London). A popular conference presenter in Canada and abroad, he has been a frequent guest on CBC—radio and television, and has often discussed ethical and value aspects of medicine, science and technology on The Discovery Channel, CTV, WTN, Global and other television networks.

Dr. Linda West's 25-year career in health care has included roles as a nurse, health care administrator, provincial civil servant, and university teacher. As Chairperson of the James Bay General Hospital she was instrumental in the development of Nursing Policies and procedures, obtaining the funding for an ambulance service, improving physician services for vastly under serviced coastal communities, and construction of a much needed Health Centre. She shepherded Manitoba's health system through a difficult period, negotiating a complex agreement between the Manitoba Nurses Union and the Manitoba Medical Association. West organized and funded the lecture series *Election Readiness for Women* and stood as a candidate in a provincial election. Her book, *Trends and Issues in Health Care*, published in 2000, is on the University of Manitoba curriculum. West's healthcare commentary and articles have appeared in the Winnipeg Free Press. A recipient of the 2004 *Woman of Distinction Award*, she has also received the *Manitoba Order of Sports Excellence*.