

THE CIRCUMPOLAR HEALTH MOVEMENT COMES FULL CIRCLE

Part I: Historical relevance of the proceedings of the international congresses on circumpolar health

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ABSTRACT

Objectives. Evaluate the course of the International Congress on Circumpolar Health (ICCH) Proceedings in the context of the concomitant historical events. Make recommendations for future circumpolar health research.

Study Design. Medline search and historical archive search of International Congress on Circumpolar Health Proceedings.

Methods. Search of all PubMed resources from 1966 concerning the circumpolar health movement. Two University of Alaska, Anchorage Archive Collections were searched: the C. E. Albrecht and Frank Pauls Archive Collections.

Results. Eleven sets of Proceedings manuscripts and one set of Proceedings Abstracts were evaluated. There was a trend toward consistent use of existing journals with indexing in Index Medicus; shorter intervals between the Congress and Proceedings manuscript publication; and increased online availability of either the Table of Contents, or Proceedings citations.

Recent additions include online publication of full-length manuscripts and two instances of full peer review evaluations of the Proceedings manuscripts. These trends in Proceedings publication are described within the course of significant events in the circumpolar health movement.

Conclusions. There has been a trend toward more rapid dissemination of scientific content, more analytic documentation of epidemiologic study design, and a trend toward wider dissemination of scientific content through the Internet. Significant progress in each of those areas is still possible and desirable. (*Int J Circumpolar Health* 2005;64(3):269-280.)

Key words: circumpolar health, history, congress proceedings, health research

INTRODUCTION

In 1957 – 1958 the International Geophysical Year focused the rest of the planet's attention on the many resources and ambiguities of the Polar Regions. There have been a number of major international science initiatives in Polar Regions since the first International Polar Year in 1882-

83 and all have had a major influence in overhauling our understanding of global processes in these important areas. These initiatives have involved an intense period of interdisciplinary research, collecting a broad range of measurements that provide a snapshot in time of the state of the Polar Regions. <http://www.ipy.org/>
Now, fifty years since the last International

Geophysical Year, the circumpolar health community is approaching the first International Polar Year (IPY) that will include an emphasis on human health. Though the 1957-58 International Geophysical Year involved 80,000 scientists from 67 countries, human health was not a major area of study. The addition of human health to the 2007 – 2008 IPY research agenda is in large part a result of the movement of scientists/health workers who have gathered every three years since 1967 to improve human health in the circumpolar areas. The Proceedings from those triennial meetings offer a snapshot into the forces at work behind the scenes that have witnessed the circumpolar health movement complete its first full circle.

The ICCH Proceedings initially chronicled studies on the difficulties of cold, darkness, isolation, distance, biologic adaptation and permafrost. Later Proceedings added the studies of the onslaught of chronic illnesses associated with socio-economic effects and cultural change. The circumpolar health movement began in the coldest era of the Cold War. The increased interaction of circumpolar scientists and health workers temporally coincided with a process of thawing distrust and conflict.

Background

This is the first part of a two-part series examining the history and progression of the Proceedings of the International Congresses on Circumpolar Health (ICCH). Taken in combination, the two articles will offer insight into the current international circumpolar health movement, and help reflect on that movement's future.

Part I is based largely on a presentation at the 'Populations in Transition: The Circumpolar Health Symposium, Toronto, February 2004. That presentation was a bibliographic

evaluation of the ICCH Proceedings within their historic milieu.

Part II will be a post hoc analysis of the most recent ICCH Proceedings from ICCH 12 in Nuuk, Greenland, from September 2003. The combination of these two evaluations will allow the reader to consider recommendations for the future.

As the ICCH Proceedings reflect the tenor of their times. Part I of this series will examine the ICCH Proceedings in their long term chronologic milieu. Part II will evaluate the immediate past Proceedings and allow one to explore recommendations for the future.

The seminal leaders

In the same year as the 1957-1958 International Geophysical Year, the Nordic Council appointed a committee for arctic medical research, which began a process that culminated with the Nordic Council for Arctic Medical Research Report. The first exploratory human health conference was sponsored by the World Health Organization (WHO) in Geneva from August 28 – September 1, 1962 (1). The WHO Conference on Medicine and Public Health in the Arctic and Antarctic had representatives from 11 countries, including Canada, Denmark, Finland, Norway, Sweden and the USA. The conference concluded that there was an urgent need to stimulate high latitude research, especially on health problems. The areas discussed included the organization of health services, environmental health, mental health, physiology and cultural studies. Members of future Circumpolar Health Symposia delegations present at the Geneva meeting included J. A. Hildes (Canada), A.B. Coylar (USA) and E.M. Scott (USA).

Another impetus that inspired the circumpolar health movement was the Human Adapt-

ability Section of the International Biologic Programme (1964-1974) (2). Fred Milan was the coordinator of the studies on the biology of circumpolar peoples and the publication of a monograph that documented the many existing studies at the time. Fred Milan was then a Human Research Physiologist with the Arctic Aeromedical Laboratory for the United States Air Force in Fairbanks. As a result of these combined processes, the organization of regular symposia on circumpolar health was agreed upon (3).

We will explore how the Circumpolar Health movement started in the 1950s and 1960s from the inspiration of circumpolar researchers and health professionals like J. A. Hildes and Otto Schaefer from Canada, Henrik Forsius and Ole Wasz-Hockert from Finland, C. Earl Albrecht and Fred Milan from U.S.A., as well as V.P. Kaznacheev from U.S.S.R.

The first international symposium

The first to organize an international circumpolar health symposium was C. Earl Albrecht in Fairbanks, Alaska, in 1967. C. Earl Albrecht had been commissioner of Health for the State of Alaska from 1945 to 1956. He envisioned an International Union for Circumpolar Health for over a decade before the first international meeting became a reality.

With the help of the Arctic Institute of the North America, of which C. Earl Albrecht was President in 1966 and 1967, and the University of Alaska, under President William R. Wood, the first international symposium for circumpolar health was held at the University of Fairbanks in 1967. The meeting was entitled the 1967 Symposium on Circumpolar Health Related Problems. Participants came from the U.S.S.R., Canada, Norway, Denmark, Sweden,

Greenland, Iceland and Finland. It was at this symposium that an informal international affiliation was formed.

At the 1967 meeting, the decision was made to hold a symposium every three years, each in a different country. The basic purpose of the symposia was to bring together the medical scientists, health-care delivery specialists, health administrators and health consumers, to discuss the state of the art in their respective fields; to allow national and international participants to observe and discuss the health situations in their own country; and to relate solutions to health problems in other parts of the world to the unique health problems of the circumpolar regions. Twenty years later, these symposia were reorganized to 'Congress'(s), to reflect the formation of the International Union for Circumpolar Health (IUCH).

At the 1967 Fairbanks meeting, an informal organization of the future American Society for Circumpolar Health was formed. C. Earl Albrecht, with the assistance of Fred Milan and other Alaskan scientists, held this organization together primarily to participate in future international symposia. This informal group joined the Nordic Council for Arctic Medical Research (NCAMR, or NoSAMF in Scandinavian languages), which was established in 1966, and the already well-established Russian Academy of Medical Sciences, Siberian Branch. The future Canadian Society for Circumpolar Health was yet to be organized.

Early proceedings of the international symposia for circumpolar health

There were approximately 100 scientists present at the first symposia held in Fairbanks, Alaska, July 23-28, 1967. There were 54 formal scientific presentations and 39 manuscripts were

published in the first volume of the Proceedings and eight in the second volume (4) (See Table I).

The topics included the land and the people, pulmonary diseases, viral diseases, environmental stresses on human behavior, physiology, zoonoses, current and potential hazardous contamination of the environment, and a look to the future. One of the participants was the distinguished Soviet virologist from Leningrad, Academician Smirodintsev, who had developed a live polio vaccine.

The 2nd International Symposium for Circumpolar Health was held June 21-24, 1971, in Oulu, Finland. The President of the Symposium was Ole Wasz-Hockert and the chairman of the scientific committee was Henrik Forsius.

Participation from all countries, including the U.S.S.R., increased. Eight Soviet scientists, mainly experts on Antarctic / South Pole research, were among those attending. The topics included: geographic environment, community planning and development, public health in the arctic, human adaptability, genetics, nutrition, infectious disease, and effects of cold (5) (See Table II).

For nearly the whole two years leading up to the 2nd Symposium, the entire activities of the NCAMR concentrated on the upcoming Symposium (6). The organizing committee was composed of members of the NCAMR and the Arctic Institute of North America.

The 3rd International Symposium for Circumpolar Health was held July 8 – 11, 1974 in

Table I. International congresses on circumpolar health, organizational characteristics.

Order	Date Month, Days, Year	Venue	Organizers			Structure	
			President	General Secretary	Scientific Chair(s) or Committee	Symposium	Congress
I	July 23-28, 1967	Fairbanks, Alaska USA	Earl Albrecht	-	A.B. Coylar, F.C. Faylor, A.T. Hansen, H.A. Procter, K. M. Rae, J. C. Reed	X	
II	June 21-24, 1971	Oulu, Finland	Ole Wasz-Hockert	Jorma Hirvonen	Henrik Forsius	X	
III	July 8-11, 1974	Yellowknife, NWT, Canada	Walter MacKenzie	Otto Schaefer	Jack A. Hildes	X	
IV	October 2-7, 1978	Novosibirsk, Siberia, USSR	V.P. Kaznacheev	V.I. Turchinsky	A.P. Avtsyn, N.P. Bochkov, K.R. Sedov, A.P. Shitskova	X	
V	August 9-13, 1981	Copenhagen, Denmark	Bent Harvald	Jens Peder Hart Hansen	H.O. Berg, J. Dyerberg, J. Jakobsen, L. Vanggaard	X	
VI	May 17-21, 1984	Anchorage, Alaska, USA	Fred Milan	Helen Beirne, Wayne Meyers	Edward M. Scott	X	
VII	June 8-12, 1987	Umea, Sweden	Håkan Linderholm	Christer Backman	B. Beckman, P.J. Blind, N. Broadbent, T. Ericson, I. Joelsson, F. Stenback		X
VIII	May 21-25, 1990	Whitehorse, Yukon, Canada	Brian Postl	Doug Bell	Kue Young		X
IX	June 20-25, 1993	Reykjavik, Iceland	Johann Axelson	Gudrun Petursdottir	Mikael M. Karlsson		X
X	May 19-24, 1996	Anchorage, Alaska, USA	John Middaugh	Frank Pauls	George Conway, Grace Egeland		X
XI	June 4-9, 2000	Harstad, Norway	Borge Ytterstad	Bendiks Norman	G. Lysaa, G. Sorensen		X
XII	September 1-14, 2003	Nuuk, Greenland	Thomas Steensgaard	-	Peter Bjerregaard, Anders Koch, Gert Mulvad		X

Yellowknife, Canada (7). The symposium was organized by Otto Schaefer and Jack Hildes was the Chairman of the Scientific Program. This was the first symposium to feature a specific nutrition section, and nutrition topics were also included in nearly every section, e. g., cardiovascular, blood lipids, and dietary habits of children. Other topics included biochemical mechanisms of human adaptation to the extreme factors of the north, social change and health of northern people, as well as social medicine and mental health (8).

The 4th Symposium was held in Novosibirsk, U.S.S.R., October 2 - 7, 1978 with V.P. Kaznacheev, Academician of the U.S.S.R Academy of Medical Science, Novosibirsk, as Chairman (9). The symposium was sponsored by the Regional Office for Europe of the World Health Organization (WHO).

The 412 Soviet scientists from 42 Soviet cities were joined by 115 scientists from 11

other countries. In order of the size of the delegations, the foreign attendees came from Canada, Finland, USA, Sweden, Denmark, Japan, Norway, Czechoslovakia, East Germany, France and Iceland. There were 330 reports on current circumpolar health problems. Most of the papers (181) and posters (128) were presented by the Soviet participants. Two volumes of Abstracts were published, in English and Russian, i.e. no full-length manuscripts.

The topics included: organization of medico-sanitary insurance of the population of the north; coordination and cooperation in medico-biological research programs; adaptable mechanisms of Native and newcomer; pathologic and morbidity peculiarities of the north; clinics, diagnostics and therapy; and environmental hygiene and human ecology.

In this context the Finnish-Russian relationships proved of great use. During the prepara-

Table II. International congresses on circumpolar health (ICCH), publishing characteristics.

ICCH	Publisher		Publishing interval ICCH to Publication or interval	Format Hard /Soft	Peer review	Index Medicus	Online Status		
	Private	Journal					Citation only	TOC	Articles
I	-	X	1st Vol. 15 months 2nd Vol. 18 months	Hard-bound (2 vol. combined)	-	X	-	-	-
II	-	X	1971 - 1972*	Hard-bound	-	-	-	-	-
III	X	-	1974 - 1976*	Hard-bound	-	-	-	-	-
IV	X	-	1978: Abstracts only*	Soft-bound, 2 vol.	-	-	-	-	-
V	-	X	1981 - 1982*	Hard-bound	-	-	-	X	-
VI	X	-	1984 - 1985*	Hard-bound	-	-	-	-	-
VII	-	X	1987 - 1988*	Hard-bound	-	X	X	-	-
VIII	-	X	1990 - 1991*	Hard-bound	-	X	X	-	-
IX	-	X	1993 - 1994*	Hard-bound	-	-	-	X	-
X	-	X	1996 - 1998*	Hard-bound	X	X	-	X	-
XI	-	X	1st Vol. 10 months 2nd Vol. 17 months	Soft-bound 2 volume	X X	X	-	X	-
XII	-	X	12 months	Hard-bound	-	X	-	X	X

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*Month of publication not specified

tion for the 4th Symposium, Professor Ole Wasz-Hockert paid several visits to Russia (10).

Denmark hosted the 5th International Symposium for Circumpolar Health, August 9 -13, 1981, in Copenhagen, with over 300 participants formally registered from 17 countries. Bent Harvald was President and Jens Peder Hart Hansen was the General Secretary (11). Scientists came from as far as Argentina and Australia to share Antarctic activities (12). This Symposium exposed the practical difficulties, and especially the financial obstacles, in organizing a conference of that size without a financially responsible organization. This was the direct motivation for the formation of a collaborative structure and ultimately resulted in the formation of the International Union for Circumpolar Health.

**The circumpolar health movement:
the maturation process**

In 1982, C. Earl Albrecht announced progress in the formation of a future International Union for Circumpolar Health (13). Four adhering bodies had formed for the purpose of guaranteeing quality representation at the International Symposia. The four adhering bodies included: the newly formed American Society for Circumpolar Health and the Canadian Society for Circumpolar Health, plus the previously existing Organization of Nordic Council for Artic Medical Research and Siberian Branch of the U.S.S.R Academy of Medical Science (14).

The 6th International Symposium on Circumpolar Health was hosted by the American Society for Circumpolar Health (ASCH) and was held in Anchorage, Alaska May 17-21, 1984. It was co-sponsored by the University of Alaska and the Alaska Department of Health and Social Services (15).

The Regional Office for Europe of the World Health Organization, the organization responsible for WHO programs in the arctic, convened two working groups in conjunction with this meeting. The Alaska Public Health Association held its annual meeting as part of the Congress and invited speakers, composed of internationally recognized foreign medical specialists, to meet with the U.S. scientists to discuss an Arctic Health Policy. The American Public Health Association eventually produced "The National Arctic Health Science Policy" as a result (16).

**The International Union for
Circumpolar Health**

The concept of an International Union for Circumpolar Health was agreed upon at the Copenhagen Symposium in 1981. C. Earl Albrecht took on the task of drafting the initial statutes. The main principles were agreed upon at the Anchorage symposium in 1984, and NoSAMF was tasked with finalizing the principles (3).

The International Union for Circumpolar Health's first official organizational meeting was held in Stockholm, Sweden, in March 18-19, 1986 (17). At this meeting, the IUCH Constitution was signed and the IUCH established. The interim Board elected at the Constitutional Assembly consisted of Bent Harvald (Denmark), President, Brian Postl (Canada), Vice President, and Ted Mala (USA), Secretary General and Treasurer. The four adhering bodies were all represented.

As the official meeting of the fledgling International Union for Circumpolar Health, the next international gathering was entitled a Congress, instead of a Symposium, per se. The 7th International Congress on Circumpolar Health (ICCH) was held in Umea, Sweden, June 8-12,

1987 (18). During the 7th ICCH, the first IUCH General Assembly was convened on June 11, 1987. The General Assembly elected Jens Peder Hart Hansen the first President of the IUCH.

By September 24, 1987 the International Union for Circumpolar Health had been further organized with Bylaws. The Bylaws, which C. Earl Albrecht drafted from discussions at the 5th ICCH in Copenhagen, were finalized. The four adhering bodies to the new Union became the ASCH, the Nordic Council for Arctic Medical Research, the Canadian Society for Circumpolar Health, and the Siberian Branch of the U.S.S.R., Academy of Science, Medical Section. There was also a representative from the Scientific Committee for Antarctic Research. <http://www.iuch.org/>

Recognition of circumpolar movement commitment

The Canadian Society for Circumpolar Health, with the help of a Donner Foundation (19) grant and government support, struck medals in honor of J.A. Hildes, a revered former Canadian health researcher and a mentor to many. Dr. Hildes was originally from Manitoba and died in 1984. The medals were to be given to an outstanding representative from each of the four adhering bodies of the IUCH. These are considered the highest award in Circumpolar Health. The first Hildes Medals were awarded in Umea in 1987.

The 8th ICCH was held in Whitehorse, Canada, from May 21- 25, 1990. Approximately 750 delegates from 20 countries attended. There were 240 articles published, which is the largest number of individual articles published in an IUCH Proceedings to date (20).

In November 1991, the Nordic Society for Arctic Medicine was founded at an inaugural

meeting in Stockholm, Sweden. At that time, the governmental grants to the NCAMR would be depleted and were not expected to be renewed. This would spell the end of the NCAMR and hasten the need for a future non-governmental Nordic adhering body of the IUCH.

The 9th ICCH was held in Reykjavik, Iceland from June 20 - 25, 1993. One main topic was the transfer of responsibility for health and health services to indigenous peoples (21).

The 10th ICCH was held in Anchorage, Alaska, from May 19 – 24, 1996, and was the first ICCH to utilize the Internet for online dissemination of Congress information (22).

At the end of 1996, the Nordic Council of Ministers decided to discontinue funding for the NCAMR. This event signaled the end of the close governmental support for the circumpolar health movement. Thus began an era with a need for strategies to continue the work of improving the health status in the circumpolar region through partnerships with other funding agencies.

The 11th ICCH was held in Harstad, Norway, from June 4 – 9, 2000. The Millennium Congress included Internet access. The 11th ICCH utilized the Internet for modified online and facsimile Congress registration (23).

The electronic era speeds up

While the use of the Internet for ICCH registration opened up new horizons, the hard-bound Proceedings publication process continued to be expensive and time-consuming. Despite a dedicated local editorial staff, some Proceedings were not available for 2 years after the Congress. The publication of the 11th ICCH Proceedings began a major shift to more rapid access to the Proceedings material, with a goal of publishing within 12 months of the Congress.

The 12th ICCH was held in Nuuk, Greenland, from September 11 -14, 2003, with pre-Congress meetings on September 8 – 10, 2003. The Congress was entitled Nuna Med 2003 and was the first to offer complete Internet registration access.

The 12th ICCH Proceedings continued the trend toward rapid dissemination of the material by publishing the Proceedings in the *International Journal of Circumpolar Health* within 12 months of the Congress (24). The publication of the 12th ICCH Proceedings moved the dissemination of circumpolar health information one major step further by publishing the actual Proceedings full articles, both online and hard copy, e.g., not just an online Table of Contents.

This was the first Proceedings that included “Study Design” in the manuscripts’ Abstracts along with Objectives, Methods and Results, and Conclusions. The designation of ‘Study Design’ required the researcher and editor to analyze and document the exact nature of the epidemiologic investigation.

At the 12th ICCH in Nuuk, Greenland, Bjerregaard, Young and Curtis provided documentation of a shift of focus from biologic to the sociology of health (25). In addition, they presented trends in country of manuscript origin, research content between countries, research concerned with indigenous peoples, and percentage of the abstracts subsequently published in the Proceedings.

The 12th ICCH Proceedings were being published just as the *International Journal of Circumpolar Health* negotiated to incorporate new academic publishing partners by joining the University of Alaska, Anchorage, and the University of Manitoba to the team of publishers that had previously consisted of the

International Union of Circumpolar Health, the Nordic Society for Arctic Medicine and the University of Oulu. Other academic publishing partners and sponsoring members are expected in the near future to join the recently established International Association of Circumpolar Health Publishers (IACHP). <http://ijch.oulu.fi>.

Mentoring future circumpolar health leaders

The 7th ICCH was the first to recognize the established scientific leaders with the Hildes medals. In order to keep the circumpolar health movement vibrant in these rapidly changing times, the 12th ICCH began the tradition of formally recognizing the talents of emerging scientists, researchers and health workers.

In the tradition of the simple, but persuasive mentoring methods that were the hallmark of Jens Peder Hart Hansen, the IUCH Council awarded the Jens Peder Hart Hansen Fellow Award to emerging scientists, researchers and health workers.

Just as the General Assembly elected Jens Peder Hart Hansen the first President of the IUCH in 1987, the IUCH Council recognized the Jens Peder Fellows’ accomplishments at the ICCH and through the *International Journal of Circumpolar Health*. The JPHH Fellows’ Abstracts and biographic information were published in the *International Journal of Circumpolar Health*. The JPHH Fellows were also recognized at the ICCH and presented with a monetary award to further their scientific endeavors.

The successes

The chronological analysis of the ICCH Proceedings publication process documents major steps forward that should be applauded. There has

been a trend toward more rapid dissemination of scientific content, more analytic documentation of epidemiologic study design, and a trend toward wider dissemination of scientific content.

Key benchmarks of the transition include:

Indexing of manuscripts

All but one of the Proceedings since ICCH 7 have been indexed in Index Medicus.

Peer review

The ICCH 10 and ICCH 11 Proceedings received a full peer review evaluation.

Online publication

The ICCH 12 published full manuscripts online within 12 months of the Congress. The Health Sciences Information Service of the University of Alaska Anchorage's Consortium Library is in the process of obtaining copyright permission to scan and publish all the prior ICCH Proceedings online at www.arctichealth.org

Scientific method

The ICCH Proceedings included an attempt to delineate manuscript content with structured abstracts including the designation of 'Study Design'. The latter requires the researcher and editor to analyze and document the exact nature of the epidemiologic investigation.

Economy of scale

ICCH 11 and ICCH 12 utilized existing resources at the International Journal of Circumpolar Health with its 'economy of scale' and editorial expertise.

These trends will allow local ICCH organizing committees to concentrate on the Congress,

Scientific Program, logistics and follow-up. If this trend continues, it may also lead to more uniformity in scientific and editorial practices. On the other hand, at this time, the original scientific methods still rely largely on descriptive reviews with rare international collaborative studies.

The circumpolar health movement completes a full circle

In many respects, the circumpolar movement has completed its first full circle. In 1957, the Nordic Council appointed a committee for arctic medical research, which began a process that culminated with the Nordic Council for Arctic Medical Research Report. In that same year the world celebrated the International Geophysical Year. The process produced unprecedented exploration and discoveries in many fields of research and fundamentally changed how science was conducted in the Polar Regions.

Now, nearly 50 years later, we are preparing for the next International Polar Year, just as the circumpolar movement enters a new phase of collaboration and an emphasis on human health through the Arctic Council's Arctic Human Health Initiative (AHHI). The AHHI will advance the joint research agenda of the Arctic Council, an eight-nation intergovernmental forum for sustainable development and environmental protection, in the areas of infectious disease, the effects of anthropogenic pollution, UV radiation, and climate variability on human health, and telehealth innovations. <http://www.iuch.org/ipy.html>

Significant recent changes are: the IPY coordinated campaign of research; increased university participation with the Int J Circumpolar Health; the inception of the International

Network for Circumpolar Health Research; and mentoring of emerging health workers with the Jens Peder Hart Hansen Fellow Award.

It is envisioned that the International Polar Year (IPY) 2007-2008 will be an intense, internationally coordinated campaign of research that will initiate a new era in polar science. IPY 2007-2008 will include research in both Polar Regions and recognize the strong links these regions have with the rest of the globe. It will involve a wide range of research disciplines, including the social sciences, but the emphasis will be interdisciplinary in its approach and truly international in participation. It aims to educate and involve the public, and to help train the next generation of engineers, scientists and leaders

The journal that first started as the Nordic Council for Arctic Medical Research Report and later became the *Int J Circumpolar Health* has successfully incorporated new publishing partners by adding the University of Alaska and the University of Manitoba in 2004. These two organizations have joined the International Association of Circumpolar Health Publishers (IACHP). With the hope to incorporate new partners in the near future, the International Journal of Circumpolar Health will broaden international collaboration.

The recent inception of the International Network for Circumpolar Health Research will promote researcher-to-researcher relationships to increase collaboration. The International Network for Circumpolar Health Research seeks to conduct, sponsor and promote re-search programs and projects investigating the patterns, determinants and impact of health conditions among circumpolar peoples and the strategies for improving their health. <http://www.inchr.org/>

The International Network for Circumpolar Health Research focus will maximize the researcher-to-researcher relationships to support research training at all levels. This will increase the capacity for circumpolar health research in communities, service delivery agencies and higher educational institutions; facilitate exchange, communication and dissemination of research data; and strengthen the health information system in the circumpolar region.

It is hoped that the International Network for Circumpolar Health Research will help improve the scientific methods used by increasing the number of international cohort studies that apply similar methodologies across circumpolar borders. Only two such studies were reported in the most recent Proceedings (26, 27).

Lastly, the acknowledgement of excellence among emerging researchers and health workers will mentor a future of committed circumpolar scientists and health workers. The Jens Peder Hart Hansen Fellow Award and the collaborative efforts of the International Network for Circumpolar Health Research will encourage innovative approaches to circumpolar health research and health-care (28).

Recommendations for the future

- In this increasingly electronic age, the ICCH Abstracts should be made electronically available on the Internet in real time, e.g., published online at the opening of the ICCH.
- Online publication of the ICCH Proceedings within 6 months. This should be possible with careful pre-ICCH planning. With further refinement, the ICCH Proceedings could be published online in decreasing intervals.
- The use of the existing expertise of the Inter-

national Journal of Circumpolar Health should continue and increase.

- Encourage a shift from uni-dimensional descriptive studies to

1. Coordinated circumpolar cohort studies
2. Interventional studies
3. Randomized controlled trials.

Part II of this series will further discuss the epidemiologic methods in the evolution of circumpolar health.

Summary

One may now appreciate just how the history of the ICCH Proceedings offers a lens into the circumpolar health movement that began in the 1950s and 1960's and continues as a vibrant endeavor in the new millennium.

The circumpolar movement began as a vision of a few talented individuals, who took the time and energy to pursue international collaboration and cooperation to further the knowledge and pursuit of improved circumpolar health. That same movement is continuing as dedicated scientists and health workers strive to improve our understanding and health practices in an ever changing circumpolar environment.

The circumpolar region may be warming due to a global climate change, but the issues of cold, darkness, isolation, distance, adaptation and permafrost still need study to help human inhabitants adapt. One can only hope that the knowledge generated by the International Congresses on Circumpolar Health and their Proceedings will help stem the onslaught of chronic illnesses associated with socioeconomic effects and cultural change.

Simply put, if one takes a broad view of what effects our health as human inhabitants of the circumpolar regions, we are profoundly impacted by both the physical and social envi-

ronments. Many in the circumpolar health movement believe that those two aspects are not mutually exclusive. Indeed, in circumpolar regions, those two aspects may be even more interdependent than elsewhere on this planet.

We should celebrate the successes that have been accomplished in circumpolar health to date. Those include the maturation of the circumpolar health movement and the more rapid and wider dissemination of scientific content. We should now strive for increasingly rapid dissemination of scientific content, more rigorous scientific methods, and increased international collaborative studies. The latter will succeed only with increased community-to-researcher communication, as well as increased researcher-to-researcher communication.

Acknowledgements

Many thanks to Peter Bjerregaard, George Conway, Robert Fortune, Anne Girling, Carl Hild, Angela Liston, Ted Mala, Tiina Mäkinen, Thomas Stensgaard, University of Alaska Archives Staff, Kue Young, Børge Ytterstad, for their counsel in this manuscript's creation and review (in alphabetical order).

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