hepc.bull

Canada's Hepatitis C News Bulletin

www.hepcbc.org

HUMAN RIGHTS COMPLAINT

Source: Anne Kyle, The Leader-Post, Hepatitis C victims file class-action complaint, www.canada.com, September 11, 2001

A class-action discrimination complaint was filed on August 1 by Vikki Boddy, husband Allan, and several others representing all Canadians affected by hepatitis C through tainted blood. The complaint alleges that the federal government, 8 provinces and 3 territories are treating victims unfairly.

In an interview with the *Leader-Post*, Boddy expressed her hopes that the case go to a human rights tribunal, so the normally long process will be fast-tracked, and there will be a decision within three years, since victims are so sick.

Boddy, president of the Canadian Hepatitis C Health Consortium, contracted hepatitis C through multiple transfusions in 1984. "Hepatitis C victims who were infected as a result of Canada's tainted blood supply, the same blood supply that infected thousands of Canadians with HIV/AIDS virus, are being treated differently than HIV/AIDS victims," she said. She pointed out that compensation differs according to dates of infection with hepatitis C.

"Everyone should be treated the same. There shouldn't be a distinction when it comes to hepatitis C and HIV/AIDS—both these diseases are killers," Boddy points out that HIV/AIDS victims are receiving around a quarter of a million dollars in compensation. Their drug costs are cov-

(Continued on page 6)

HepCBC AGM:

HepCBC will be holding its annual general meeting on Monday, November 12, 2001, at the Woodward Room in the Begbie Building at the Royal Jubilee Hospital in Victoria, from 7-9 pm.

The purpose of this meeting is to elect or re-elect officers to the Board, and to bring the members up to date on our activities both past and present. All paid up members of HepCBC are eligible to vote and to run for the Board. Voting may be done in person, by email, or by snail mail.

Members of HepCBC will find enclosed in this month's mailing a nomination ballot which should be returned no later than October 10, 2001.

The current Board consists of:

Alex Olson: Alex is a bass player with the Victoria Symphony. It is he who is largely responsible for the success of our musical fundraisers.

Kate Rhodes: Kate is a violinist with the Victoria Symphony, and, along with Alex, has been a great help with our fundraisers.

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INSIDE THIS ISSUE:

VACCINES

By Joan King

There is no vaccine for hepatitis C… yet. Ideal would be a vaccine that would prevent initial infection (prophylactic vaccine), but a vaccine that would prevent the infection from becoming chronic would be sufficient (therapeutic vaccine). The problem is that the virus has so many strains and mutates so easily. An effective vaccine would have to work against at least one genotype of the virus, preferably genotype 1, which is the most common. The other problem is developing a vaccine that confers lasting protection. Types of possible vaccines:

Passive Immunization: One would think that having HCV antibodies would cure the disease and protect a person against re-infection, but it doesn't work that way with the hepatitis C virus. Attempts at using this method on chimpanzees have seemingly failed. HCV hyperimmune globulin has worked, but doesn't last and doesn't protect against re-infection.

Envelope Glycoprotein Vaccines: This is the most encouraging vaccine possibility at this time. The vaccine makes antibodies to parts of the virus' outer coating, called E1 and E2. This vaccine seems to be showing promise in chimpanzees. Examples are InnoVac-C and XTL-002.

Epitope Based Vaccines: This type of computer-generated vaccine is designed to make the body produce a strong immune response (CD4+ and CD8+) using T-cell epitopes. It is hoped that this technology won't allow mutations to escape, and that it will cover several genotypes, not just one. The disadvantages are that the technology requires large computer

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SUBSCRIPTION/ MEMBERSHIP FORM

Please fill out & include a cheque made out to **HepCBC -** Send to:

HepCBC
2741 Richmond Road
Victoria BC
V8R 4T3

Name: _____

Address: _____

City: _____ **Prov**. ___ **PC**_____

Home(____)_____**Work**(____)_____

Email: _____

☐Membership + Subscription (1 year): **$20.00**

☐Membership Only **$10.00**
(for those already receiving the bulletin):

☐Subscription Only **$10.00**
(for those already members of HepCBC):

☐"I cannot afford to subscribe at this time, but I would like to receive the bulletin."

☐"I enclose a donation of $_____so that others may receive the bulletin."

SUBMISSIONS: *The deadline for any contributions to the* **hepc.bull**© *is the 15th of each month. Please contact the editors at info@hepcbc.org, (250) 361- 4808. The editors reserve the right to edit and cut articles in the interest of space.*

ADVERTISING: *The deadline for placing advertisements in the* **hepc.bull** *is the 12th of each month. Rates are as follows:*

Newsletter Ads:
$20 for business card size ad, per issue.
There will be a maximum of 4 ads in each issue, and the ads will be published if space allows. Payments will be refunded if the ad is not published. Ads are also posted to the Web.

HOW TO REACH US:

PHONE: *TEL: (250) 361-4808*
FAX: *(250) 414-5102*
EMAIL: *info@hepcbc.org*
WEBSITE: *www.hepcbc.org*
HepCAN List *www.egroups.com/list/hepcan/*

HepCBC
2741 Richmond Road
Victoria BC V8R 4T3

REPRINTS

Past articles are available at a low cost in hard copy and on CD ROM. For a list of articles and prices, write to HepCBC.

Peppermint Patti's FAQ Version 4.5 Available NOW!!

Peppermint Patti's FAQ Version 4.5 is now available. The new version includes an HIV co-infection section as well as updated Canadian Links and the latest TREATMENT INFORMATION. Place your orders now. Over 100 pages of information for only $5 each plus S&H—but if you can afford more we'll take it. Contact HepCBC.

HepCBC Resource CD: The CD contains back issues of the *hepc.bull* from 1997-2001; the FAQ V4.5; the Advocate's Guide and the Slide Presentations developed by Alan Franciscus. The Resource CD costs $10, including shipping and handling. Please send cheque or money order to the address on the subscription form on this page.

THANKS!!

HepCBC would like to thank the following institutions and individuals for their generosity: Lexmark, David Klein, J.J. Camp, Bruce Lemer, Elsevier Science, Blackwell Science, Massachusetts Medical Association, Health Canada, The Legal Services Society of BC, Pacific Coast Net, BC Transit, Margison Bros Printers, Carousel Computers, Island Collateral, David Lang, Alan Franciscus, Arlene & Frank Darlington and Karolyn Sweeting. Special thanks to John Hasell and Gordon Mastine for their wisdom and time.

CUPID'S CORNER

This column is a response to requests for a personal classified section in our news bulletin. Here is how it works:

To place an ad: Write it up! Max. 50 words. Deadline is the 15th of each month and the ad will run for two months. We'd like a $10 donation, if you can afford it. Send cheques payable to **HepCBC,** and mail to **HepCBC, Attn. Squeeky, 2741 Richmond Road Victoria BC V8R 4T3.** Give us your name, tel. no., and address.

To respond to an ad: Place your written response in a separate, sealed envelope with nothing on it but the number from the top left corner of the ad to which you are responding. Put that envelope inside a second one, along with your cheque for a donation of $2, if you can afford it. Mail to the address above.

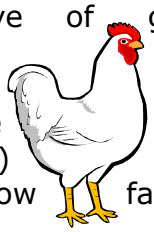
Disclaimer: The hepc.bull and/or HepCBC cannot be held responsible for any interaction between parties brought about by this column.

Got Hep C?... Single?
...Visit
http://clubs.yahoo.com/clubs/ontariohepcsingles

Carolina's Chicken

This Mexican recipe is quick, easy, and good for you.

Boiled chicken, in pieces or shredded
Sliced onion
Green pepper or chile cut in strips
1 clove of garlic, minced
1 t. salt
1 cup chicken broth (can be from boiled chicken)
1 cup low fat cream



Fry the onion, then the peppers, in a little oil until they are soft. Add broth and cream, then the chicken, and heat through. This is good with a green salad, rice and tortillas.

THE SQUEEKY WHEEL

HEPCBC TO RECEIVE SUBSTANTIAL PROJECT FUNDING

We are very pleased to announce that HepCBC will receive substantial funding in order to carry out two important projects.

The first grant is from the Legal Services Society of British Columbia. This grant is a follow up on another LSS grant which focussed on "Hepatitis C and Your Rights." This second grant will allow us to develop an educational program to train community workers on how to assist those with hepatitis C to obtain additional health benefits from government programs to which they may be entitled. Currently we are trying to gain access to what are termed "Schedule C Benefits" in British Columbia. These benefits are reserved for those disabled by a chronic life threatening illness. While many individuals with other illnesses are eligible for these benefits, currently, those with HCV who are equally or more ill are not. We hope to rectify this situation.

The training program is being carried out in partnership with TAPS (Together Against Poverty Society) in Victoria, as well as with the local Legal Services Society. Much thanks to Tim Richards, Ken Thomson, Brad Cummings, Garth Greatheart, Carol Romanow and Alana for their help. Alana had told me that the training manuals are almost done, and once they are ready, we shall be bringing this project to various centres around the province. We expect to hold training sessions in Vancouver, Nelson, Cranbrook, Kelowna, Prince George and Terrace in the next 8 months.

The second grant is from Health Canada, and is a three year grant to set up the BC/Yukon Hep C Collaborative Circle, or the HepC Circle for short. The Circle is modelled in large part on PAN (the Pacific AIDS Network), whose administrator, Erik Ages, will be central to the success of our project.

With this funding we will be able to hold two educational weekend workshops for each of the three years in various areas of the province. These workshops will focus on skills building, administrative tools, hepatitis C education, advocacy, and so forth. Each of these weekend workshops will have speakers from the medical, legal, and peer communities. Alan Franciscus had already committed himself to coming to one of these, and we have been talking to various doctors and hepatology nurses, as well, about conducting workshops.

So far, the following groups have thrown in their support for the Circle's success: ARC, ANKORS, Positive Lives, Positive Living NorthWest, Mid Island HepC Society, HepCBC, VPWAS, Princeton Support Group, HepCURE, Mission Liver Support Group, Trail Support Group, Coast Garibaldi Health Unit, Northern Interior Health Unit, the Prince George Support Group and HepHive in Vancouver.

The purpose of the Circle is to ensure the continued existence of independent local hepatitis C support organizations, by establishing a network that will enable us to continue to help ourselves.

All organizations dealing with hepatitis C in the province of BC are invited to join the Circle

CONFERENCE RECORDINGS NOW ON THE WEB

Did you miss the 1st Canadian Conference on Hepatitis C in Montreal last May? Now you can hear many of the talks free on the internet:
http://www.hepc1conf.ca/htmlen/fr_3.htm

If you don't have an audio player, you can download a free one at
http://scopes.real.com/real/player/player.html?src=downloadr,010810rpchoice

(HEPCBC AGM—Continued from page 1)

Pat Winram: Pat is a teacher who develops programs for special needs schools.

Barbara Pedrick: Barbara is an internationally-respected photographer who has done battle with HCV. She is currently in remission. Barbara has a strong political vision and great community ties. Her resources are indispensable.

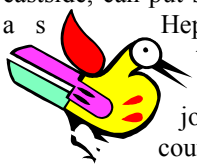
Dr. Denis Petrunia, MD. Denis is the Head of Gastroenterology for the Capital Health Region in Victoria.

Joan King: Joan is the founder and editor-in-chief of the *hepc.bull*. She is also a founding member of HepCAN, an editor of the FAQ, and author of many of our pamphlets. Joan is a member of the Victoria Symphony, the Victoria Conservatory of Music, The Palm Court Orchestra, the Argenta String Quartet, the mother of two delightful children, and the grandmother of a bundle of joy named Pranav. Sometimes, but not often, she has time for Squeeky.

HEPATITIS C AWARENESS FAIR

HEPHIVE, the Hepatitis and HIV Education and Outreach Program at Vancouver Native Health in Vancouver's downtown eastside, in association with The Carnegie Centre, presented a Hepatitis C Awareness Fair on Friday, September 21, 2001, in the theatre at the Carnegie Community Centre, 401 Main Street.

The often hard and cruel reality of those stuck in the street life of the downtown eastside, can put serious health issues such as Hep C, requiring timely treatment, on the back burner. HEPHIVE, a joint project between Vancouver Native Health Society and BC Persons With AIDS Society tries to reach those marginalized by society.



The Hepatitis C Awareness Fair featured relevant speakers ranging from those who are personally affected, and a variety of specialist who treat those infected, and policy makers. There were info tables from various organizations which provide community services to those affected. This was a great source of information for people who have or want to understand hepatitis C and co-infection. Speakers included Leona Baker (Aboriginal Elder), Dr. Patricia Daly, MD (VRHB), Gail Butt, RN (BC Hepatitis Services), Lisa Skerritt (Vancouver Native Health Society), Warren Lewis (HEPHIVE Aboriginal Advisor), Glen Hillson (Chair, BC PWA), Dr. Chester Morris (Medical Director HIV/AIDS, Vancouver Hospital), Dr. John Farley (Viridae Clinic), and Lori Lee Walston, (Clinical Research Hepatology Nurse) The fair was open to all and admission was free.

Among those organizations with information tables were HEPHIVE, Vancouver Native Health, BC Persons With AIDS Society, The Consumers' Board, Canadian Liver Foundation, Healing Our Spirit, and the Street Nurses who provided the excellent opportunity for testing and vaccinations.

JOURNAL SCAN
by C.D. Mazoff, PhD

American Journal of Gastroenterology, Vol 96 (8), August, 2001-09-16

Chew on this one:

This month's lead editorial is about a derivative of licorice, known as glycyrrhizin, which is sold in Japan under the name, "Stronger neo-minophagen C." The article is in the form of a fictional debate between R.U. Kiddingme and C. R. Brochure, and comes out rather sarcastically against the use of glcyrrhizin as a treatment for HCV.

Glycyrrhizin has been used for many years in Japan and has been reported to reduce the cumulative risk of hepatocellular carcinoma by more than half, from 25% to 12% at 15 yrs, and to act in a cytoprotective manner, possibly by its ability to inhibit tumour necrosis, factor-mediated apoptosis, and/or via inhibition of anti-Fas antibody-induced hepatitis. Unfortunately, it is only available in a parenteral formulation that is given by a 15 to 20-min *i.v.* infusion

In Japan up to half of patients either improved or sometimes normalized their ALT values, depending on the frequency of dosing..

When combined with ursodeoxycholic acid, γ-glutamyltransferase levels also improved. However, the effect on ALT is lost as soon as Glycyrrhizin therapy is stopped, and as far as hepatitis C virus RNA levels are concerned, it does not have any significant effect on viral clearance.

The article concludes that glycyrrhizin, an *i.v.* formulation of a licorice derivative, does not clear the hepatitis C virus, rarely leads to normalization of ALT levels when given up to several times a week by a short *i.v.* infusion, has potential serious adverse effects on the renin-angiotensin axis, and that there may not be any benefit seen for 10 to 15 years.

Who's winning the race:

Another editorial focuses on HCV and **race**. In certain ethnic groups in the US, such as African-Americans and Hispanics, the prevalence of HCV infection is 1.5- to 2.0-fold greater, but surprisingly the rates of progression of fibrosis are not. This month's issue contains a study which shows that the histological progression of HCV disease is faster in Hispanics than in whites or African-Americans. Surprisingly, it also shows that the rate of progression in Blacks is slower that in Whites—surprising, because the public is more likely to associate HCV with drug addiction, and drug addiction and alcoholism with the ethnic minorities.

Did you know?

- A study done in Toronto concluded that patients with refractory **ascites** (that is, ascites that is difficult to manage), tend to suffer from malnutrition, which in turn leads to infection and muscle wasting and mortality. In this study several patients had shunts put in (TIPS) and the researchers found that not only did the ascites disappear, but nutritional parameters also improved, leaving the patient's with more energy and body mass.
- **Triglycerides** and cholesterol can climb to dangerous levels during interferon therapy. Hypertriglyceridemia is often associated with acute pancreatitis. According to Dr. Di Bisceglie, a noted authority on HCV, the levels soon normalize during treatment, and return to normal after treatment ends.
- In a recent clinical trial of **Interleukin-12** on interferon non-responders. Although some patients did clear the virus, all patients relapsed within 3 months of the end of treatment. The few patients who did clear the virus temporarily were those who took the highest doses of IL-12. IL-12 has similar side effects to interferon, so I wonder what the point is.
- Liver failure or liver cancer are not the only causes of death from HCV. A recent report in this month's AJG points out that several patients without cirrhosis have died from extrahepatic complications of HCV: cryoglobulinemia and cutaneous **vasculitis**. One patient, a 36-year-old man with mild hepatitis died from the complications of necrotizing vasculitis in the bowels. Basically, his blood vessels all fell apart, and then his gut, and he died of infection and kidney and liver failure. If you have unexplained gastrointestinal pain, please get checked for intestinal vasculitis! Furthermore, men beware: A 35-year-old man developed necrotizing vaculitis on his penis (it rotted away) as a result of HCV. He did not respond to treatment, and died of a heart attack—*Ouch!* The doctors concluded thus: "Our experience underscores the high morbidity and mortality associated with hepatitis C infection."
- Do you take Paxil? This month's issue contains a report of severe acute liver disease caused by paroxetine, also know as Paxil. The patient recovered fully after he stopped taking this medication.

Hepatology, Sep 2001 Vol 34 Number 3

Something to think about:

Under the current constraints of limited organ availability and long waiting periods, few, if any, patients are transplanted while still in a well-compensated state (United Network for Organ Sharing [UNOS] status 3). Some physicians feel that **transplanting individuals over the age of 60** is unwise, although other studies suggest that age is not the issue, and that the decision on whether or not to transplant should be based on predictors of outcome. "We could face the situation in which patients over the age of 60 reach the top of the waiting list, but are then rejected because of age criteria. Furthermore, as waiting times increase, many patients who are placed on the list while in their 50s will reach the age of 60 with deteriorating health, still awaiting an organ."

An article in *Liver Transplantation* 2001 Sep; 7(9):811-815 states that, "for the majority of hepatic causes of death in those who have received a liver transplant, chronic rejection and recurrent HCV infection were responsible." So, it would seem that instead of focussing on age and transplantation, we should be trying to find a cure for the virus. How much money have our governments NOT committed to HCV research this year?

NEWS

ROCHE & SCHERING

Source: PRNewswire, Aug. 13, 2001, Roche and Schering-Plough Resolve Peginterferon Patent Disputes

Schering and Roche, producers of PegIntron and Pegasys, respectively, have entered into an agreement settling all patent disputes related to their peginterferon products. Each company will license to the other its patents for peginterferon as combination therapy with ribavirin, so each company may manufacture and market its separate peginterferon products worldwide without infringing on the other's existing patent rights. This will allow both companies to market their own products as well as to have them manufactured by others.

WHO GETS LIVERS?

Source: Reuters Health, Jul. 2, 2001 UNOS Endorses Further Development of New Liver Allocation System, and May 23, 2001, Merits of MELD System For Liver Organ Debated.

In July, the United Network for Organ Sharing (UNOS) in the U.S. approved further development of a new way to distribute livers to transplant recipients, called the Model for End-Stage Liver Disease (MELD). This system replaces the old, subjective Child Turcotte Pugh scale, which considers only the presence of encephalopathy (brain fog), and the presence and intractability of ascites (fluid retention). MELD judges patients on three objective counts: the international normalized ratio, bilirubin level, and creatinine level. The system is being studied and refined, and could be approved in November. [Editors: We hope UNOS takes into consideration that a transplant can be more effective in a healthier patient, than in one who may be too sick to recover, or to withstand a transplant.]

SHOULD IVDU's BE TREATED?

Source: HEPATOLOGY 2001;34:188-193.

Hepatitis C infects a great number of IV drug users, but since these patient are believed to be unreliable in sticking to treatment requirements, liver specialists recommend treatment only of those who have been "clean" for 6 - 12 months. This study investigated treatment of 50 active IVDUs with interferon (IFN) and/or the combo (with ribavirin) during detoxification treatment. They were treated and supervised by specialists in both the liver, and in addictions. At 6 months after treatment, sustained virologic response (SVR) was 36%. There were no cases detected of reinfection, even among those who continued using heroin.

PROOF: HCV AFFECTS THE BRAIN

Source: Lancet 2001; 358: 38-9 July 10, 2001, Evidence for a cerebral affect of the hepatitis C virus

Choline/creatine ratios are elevated in regions of the brain of patients with hepatitis C, according to this study, done in London, England.

Hep C patients frequently complain of symptoms similar to chronic fatigue syndrome, and score poorly on quality of life exams. This study, examining 30 patients with mild Hep C, suggests that the symptoms may be the result of a biological process. The results, unrelated to hepatic encephalopathy or a history of IVDU, were compared with those done on 29 healthy patients and 12 patients with Hep B.

WARNING: SERZONE

Source: Victoria Times-Colonist, July 10, 2001 Drug linked to liver damage

Health Canada has issued a warning for the anti-depressand Nefazodone, also known as Serzone, Lin-Nefazodone and Apo-Nefazodone. The drug has now been connected to cases of jaundice, hepatitis and liver failure. Those taking the drug should monitor possible liver damage. The drug has been on the Canadian market since 1994, since the clinical trials showed no problems. About 650,000 people have taken the drug in Canada, and of these, there have been 4 cases of liver failure two of which required transplantation.

(VACCINES—Continued from page 1)

databases, and an effective vaccine would probably have to include some protein from actual HCV. One example is the Epimmune Vaccine.

Naked DNA Vaccines: "Naked" DNA means DNA that isn't associated with a virus. Therapeutic DNA is introduced into a virus to deliver it to the body. The "C" gene of the hepatitis C gene is often used in these experiments, because it is similar in all the genotypes. Side effects of a vaccine of this type may be a problem, and safety may be an issue, although some researchers say there are no viral components to cause unwanted immune responses, infections, or permanent changes in the cell's genetic makeup. DNA vaccines for hepatitis C, such as Vical, are still in pre-clinical stages of development, and they show great potential, even for therapeutic treatment.

Viral Vector Vaccines: These vaccines, like naked DNA vaccines, are designed to place foreign DNA into a cell to stimulate the immune system. Viral vector vaccines have an advantage because they allow specific host cells to be targeted, so that the vector will not enter the genetic material of the cell. Few vaccines like this have been tried, so little is known about how effective they are.

Some promising research is going on:

Epimmune uses their epitope identification system (EIS) to identify epitopes that belong only to the hepatitis C virus. The Epimmune vaccine uses a variety of T-cell epitopes, designed to elicit a strong CD4+ and CD8+ cellular response. The company recently announced Phase I and II trials of its vaccine.

InnoVac-C by Innogenetics is a vaccine using HCV E1 and E2 envelope protein sequences to produce immunity. Phase I clinical trials involving 20 healthy males have been completed. The product was well tolerated and induced an immune response in 19 of the subjects, antibodies in 17, and cellular immunity in 18. In January 2001, Phase II studies began in patients with chronic Hep C.

XTL-002 is an artificially produced antibody, which binds to one unique marker on a virus's surface. Its target is the HCV envelope protein. It recognizes many different

(Continued on page 6)

VACCINE SOONER?

Source: www.japantoday.com/ June 26, 2001, NEC speeds up life saving drug development

The company NEC has new computer technology that will speed the development of new drugs, helping to match results, analyze and correlate data. In the case of trying to develop a vaccine for Hep C, for example, 200 experiments to find the best combination of 9 amino acids have been required to come up with few results, since there are 20 amino acids, and about 500 billion bindings to analyze. Without this technology, several hundred experiments would take a year. This technology has generated 70-80% of the Major Histocompatibility Complex (MHC) molecule in peptide binding, resulting in results 3 years before they were expected.

XTL and DONG-WHA PARTNERING

Source: www.dong-wha.co.kr/English/news/news02.htm, July 18, 2001, XTL and Dong-Wha Enter Agreement to Evaluate Small Molecule Compounds for Hepatitis C

XTL Biopharmaceuticals Ltd. and Dong-Wha Pharmaceuticals, a leading Korean company, have agreed to work together on a new small molecule compound for the treatment of hepatitis C. Dong Wha will give XTL access to its library of candidates already screened for efficacy in test tubes. XTL will contribute by using its *in vivo* disease model (the Trimera mouse, with human tissue grafted on.) Dong Wha is happy to be able to test its drugs before starting human studies. The agreement gives XTL direct ownership of product candidates.

Dong Wha: www.dong-wha.co.kr
XTL: www.xtlbio.com

LAD LIVER ASSIST DEVICE

Source: www.infinitypoint.com/Articles/Farsight/974410430, and www.intercardia.com/prprogen.htm

Hepatocyte (liver cell) precursors, including liver stem cells, can grow and mature into functioning liver tissue. One that can develop specifically into a liver cell has been found and patented November of last year by Incara Pharmaceuticals. (Research by Dr. Lola M. Reid, of the University of North Carolina.) A further patent was granted this last June. The precursor cells can come from livers that are not appropriate for whole organ transplantation, since they can be purified. The cells are introduced into or near the liver by IV infusion, hopefully reducing the need for whole organ transplants. Other doctors outside of Incara have transplanted liver cells and found them to be beneficial in some patients, but these cells may have greater growth potential, longer life, and need fewer amounts of cells. There is some problem obtaining enough cells. Human trials are expected to begin late this year.

FROZEN LIVER

Source: http://uk.news.yahoo.com/010904/103/c2xp8.html, "Frozen" organs breakthrough for transplant patients

Dr Helen Grant and her colleagues, University of Strathclyde, have developed a way to freeze liver cells, so that single layers, attached to a membrane, may be stored at -70°C, possibly allowing for a regular supply of cells for artificial livers. There has been a lack of cells up to now, since artificial organs need a new cell culture each time the device is used. Artificial livers can allow some livers to heal, and for other patients, they can provide a bridge until transplantation.

MYRIAD: NEW HCV TARGET

Source: www.myriad.com/pr/20010906.html, Sept. 6, 2001, Myriad Genetics Discovers Novel Hepatitis 'C' Target

Myriad Genetics, Inc. has discovered a new drug target for the HCV, and has begun screening with its ProTrap technology. The company's ProNet(R) proteomics technology was used to investigate interactions between virus and human that let the virus replicate. The drug target is a protein that is thought to be unexplored previously for drug development. The Company has established strategic alliances with Bayer, Eli Lilly, Hitachi, Novartis, Oracle, Pharmacia, Roche, Schering AG, Schering- Plough and Syngenta.

(HUMAN RIGHTS—*Continued from page 1)*

ered and they get disability insurance under CPP, but Hep C victims get very little compensation, are denied drug coverage and can't get disability pensions, while their stories are just as horrifying. "This disease has changed every aspect of my life, at least my life as I used to know it," said Boddy. She described the effects the disease has had on her health, financial security, family and friends.

(**VACCINES**—*Continued from page 5)*

genotypes. XTL has begun phase I trials in HCV infected patients as of July 2001.

Chiron is developing a genetically engineered HCV vaccine. A small clinical trial with humans is now being conducted. The company is studying two possible vaccines, including a recombinant vaccine and a second-generation DNA vaccine to induce a cellular immune response.

Iscoprep 703, produced by CSL Pharmaceuticals, given along with HCV vaccines, may improve the immune response to HCV. ISCOM is made from saponins, from the bark of the Quillaia saponaria molina tree, mixed with lipids. Non-human primate studies are in progress in collaboration with Chiron Corp.

Nabi-Civacir, by XTL Biopharmaceuticals, is being tested in its Trimera mouse system. It has also tested in chimpanzees with encouraging results, but has not yet been tested in humans.

ChimeriVax vaccine by Peptide Therapeutics, is made by replacing yellow fever genes with the corresponding genes for the Hep C virus, hopefully creating immunity to several different strains of the virus.

Therapore, produced by Avant Immunotherapeutics, uses a protein delivery system to carry viral proteins into human cells to generate a specific immune response, not only to the Hep C virus, but other viruses, as well. Therapore is also able to deliver large peptides and proteins to the cell for processing, possibly creating a broad range of immunity.

Vical is using patented technology to develop gene therapies that involve only the desired DNA ("Naked DNA"), thereby avoiding the complications of using a virus. Similar vaccines are now in early clinical trials for treatment of AIDS. Vical technology is licensed by Merck & Co.

Sources: www.brown.edu/Courses/Bio_160/Projects2000/HepatitisC/hcvvaccines.html, www.nabi.com, www.innogenetics.com, www.xtlbio.com, www.epimmune.com, www.peptide.co.uk, www.acambis.com, www.chiron.com, www.csl.com.au, www/avantimmune.com

TRANSMISSION WARNINGS

HEP C & SALINE VIALS

Source: www.pulmonaryreviews.com/jun00/pr_jun00_cnu.html and J Clin Microbiol 2001 Aug;39(8):2860-2863

The use of multidose saline vials in a Miami, Florida hospital in November 1988, and more recently in a hospital in Reggio Emilia, Italy, led to hepatitis C infections in several patients. In Miami, the nurses reported changing syringes between patients, and researchers at both hospitals, who studied the previously non-infected patients and compared HCV gene sequences, believe that the vials were contaminated with an infected patient's blood, "possibly by accidental reinsertion of a syringe or needle." They emphasize **the necessity of using single-dose vials or prefilled syringes** to avoid this kind of transmission. Insist on this if you are being given an IV drip of any sort.

AVOID MASS VACCINATIONS

Source: Vaccine 2001;19(28-29):4020-4027

Needleless jet injectors, ideal for mass immunization programs, may transmit blood-borne infections such as hepatitis C, according to this article. The injectors penetrate the skin with high-pressure fluid. Four types were tested: two with reusable heads and direct contact with skin, one with a single-use head, and one with a head that injected from a distance. **All four contained enough blood to transmit hepatitis, making a new design necessary.** Some pressurized liquid, together with blood, can spray out after injection, and contaminate the device.

TATTOOING MAJOR ROUTE OF TRANSMISSION

Source: Haley, R, et al, Medicine, March 2001.

Dr. Robert Haley, researcher at UT Southwestern Medical Center, Dallas, says that tattooing could be one of the major risk factors for contracting hepatitis C, and may account for a good part of the 40% of cases of unknown cause of transmission. He believes this source of infection has been minimized, and the article says those who received a tattoo from a commercial tattoo parlor were infected 9 times more that those without a tattoo.

Contamination may occur due to the reuse of needles or dye, insufficient sterilization of needles between customers, or to the artist's pricking the back of his or her hand to test the needle's sharpness. Even if hygienic regulations exist, which often don't, they are rarely, if ever, monitored and enforced. These studies were done in 1991-92, and nothing has been done to address the issue, according to the article, while tattooing is becoming more and more popular

BLINDNESS AFTER INTERFERON

Source: Suzuki T, et al, Progressive renal failure and blindness due to retinal hemorrhage after interferon therapy for hepatitis C virus-associated membranoproliferative Glomerulonephritis, Maruyama Hospital, Hamamatsu. Intern Med. 2001 Aug;40 (8):708-12.

A 67-year-old HCV+ Japanese woman was given 6 MU IFN alpha-2b daily for 2 weeks, and then 3 times a week. The patient tested undetectable after 2 weeks. Treatment was discontinued due to severe headache and fever. Five weeks later, the patient experienced the sudden onset retinal bleeding and visual loss. The lady's kidney problems worsened, as well. The authors point out the need for careful monitoring of eyes and kidneys, even after discontinuing IFN. ***Note from editors: If at any time you have a sudden change in vision, we suggest you get to an eye specialist or emergency room as soon as possible. Treatment may prevent further damage in the case of a retinal tear. Follow up an ER visit with a visit to a specialist.***.

ON THE ROAD

This summer Joan and I took the mother of all road trips. This is because Joan is always insisting that I would drive her to Desperation, so we packed up the car and headed out.

Ordinarily we would have gone to Seattle first to visit Uncle Dave, but he is no longer with us. It was a sad detour.

Our first stop was in Pasco, Washington, where we met with Cindy Purdin from the Frontline network. It was great meeting her and her family. Cindy introduced us to her local Hep C clinic and we were quite impressed with how up-to-scratch they were.

From there we went through Idaho, Montana and Wyoming. Joan was looking for buffalo and I was trying to drive her to Desperation, and for a while it didn't look like we were getting anywhere, when, lo and behold, we finally spotted some buffalo in Yellowstone. I was disappointed, though, because I couldn't find Yogi and Booboo.

Next were South Dakota, Nebraska, Iowa and Missoura, where we met Joan's cousin Frank, and picked up a hitchhiker. A teeny weency frog decided to hop on board and live in the front doorwell for a day or two. I tried my best to stop Joan from kissing him, but she said I was driving her to Desperation and wished there were a way out.

Anyhoo: I think it's easier to list where we didn't go, but we made it to the East coast of the US and Cape Cod, etc., and then up to Canada via the Cat Ferry from Bar Harbour to Yarmouth. What was really funny was that, although it was really calm, I came closest to getting sea sick on that trip than I ever did crossing from Victoria to Vancouver in much rougher seas. Must have been the frog, I guess.

We never did make it to Desperation, but we passed through the Badlands, where there were more buffalo, and the town of Intercourse in Pennsylvania. We stopped in to visit our dear dear friend Sybil, who is recovering from her bleed and is now on the transplant list.

I have to confess that I wasn't a very good boy. One of the things Joan and I did was sample the local cuisine in just about every place we were. And boy, did we sample! I particularly liked the lobster samples on the coast, and the pastry samples in Montreal, and the chocolate, and the smoked meat, and the chopped liver and the ……

We visited friends and family. And we managed to get to finally meet Rudy Lang, Carolyn Caveney, Jan Lukas (see page 9), who are holding down the fort in the Kitchener-Waterloo area, as well as another well-known dragon slayer, who prefers to remain unanimous.

One of our best stops was Mackinac Island in the middle of Lake Huron, and it was absolutely amazing. After that we had no excuse not to visit Pat and Helen from Liverhope in Minneapolis. What a bunch of amazing ladies. And if you email me, I'll tell you the truth about the rumours.

All in all, it was a long drive, and unfortunately, I developed pneumonia along the way. I think it was from driving with my head out the window as we searched in vain for moose in Manitoba, Saskatchewan, Alberta and BC. The road was covered with signs warning about moose, but we never saw any. We saw some elk and a couple of coyotes, but no moose. And, believe it or not, as we were driving out of Jasper, there was a car parked by the side of the road and a Japanese tourist in the middle of the road taking a picture of the moose signs. He figured this was as good as it was gonna get, and he was right.

We got back safe and sound—the computers still worked and the cats have survived. Now it's back into the fray. I've only got one thing to say though; no matter what you heard, I never did drive Joan to Desperation. And that's that. *(PS: Joan says she doesn't agree.)*

squeek

TREATMENT OF ENCEPHALOPATHY

Source: http://www.medscape.com/adis/DTP/2001/v17.n05/dtp1715.03/dtp1715.03.html, Drug & Ther Perspect 17(15):8-11, 2001. Hepatic Encephalopathy - Effective Treatments Available Once Acute Precipitants Have Been Eliminated

The diagnosis of hepatic encephalopathy (HE) [AKA "brain fog"] is used when a liver disease patient has symptoms that cannot be blamed on anything else. It can result from a variety of liver disorders, fluctuates, and is reversible. The goal is the elimination of known causes.

It is thought that high ammonia levels may be to blame, since the liver loses its ability to metabolize that substance, but 10% of patients with HE have normal ammonia levels. Other neurotoxins possibly at fault are mercaptans, phenols, and short- and medium-chain fatty acids, possibly due to a change in the blood-brain barrier, observed in patients with liver disease, which can result in more neutral amino acids, and less glucose, ketone bodies and basic amino acids being absorbed by the brain.

Other changes include elevated gamma-aminobutyric acid (GABA) activity and increased cerebral formation of serotonin. HE often has no symptoms, and can vary from clinically undetectable, acute remitting, chronic remitting, chronic persisting or chronic progressive. Its symptoms can range anywhere from simple sleep disturbances and mood fluctuations all the way to coma.

Minimal HE can only be diagnosed by psychometric/neuropsychological testing: psychomotor speed, visual-spatial orientation and visual-constructive ability. There may be EEG abnormalities, but not necessarily. "Measurement of visual and auditory event-related cerebral potentials may prove more sensitive than psychometric tests."

Causes can be bleeding, infection and the use of sedatives or diuretics, among others. "Protein restriction/abstinence is no longer advocated as a long term treatment of hepatic encephalopathy because it counter productively leads to increased formation of ammonia (as a result of protein catabolism) and increased susceptibility to infection." Patients with cirrhosis need between 0.8 and 1.2 g/kg of protein a day, except when they have acute HE episodes, when they should restrict protein to about 20 g/day temporarily. The protein should be increased by 10g every 3 to 5 days once the HE has improved. Carbohydrates should be increased when proteins are restricted to ensure enough intake of calories. Vegetable proteins are preferred. In patients who cannot tolerate proteins, orally administered branched-chain amino acids (up to 0.25 g/kg bodyweight) have improved psychometric test results. Laxatives and enemas remove nitrogen-containing substances, a possible source of ammonia. Lactulose and lactilol are among the most popular. Severe diarrhea must be avoided.

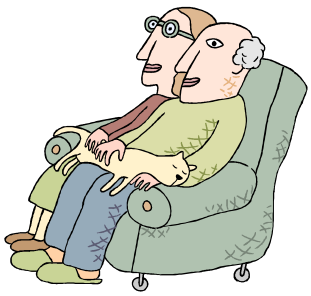
Antibiotics (e.g., neomycin and paromomycin) are as effective as laxatives, killing ammonia-producing intestinal flora, but treatment should not continued for more than 1 month, and should be used carefully in those with kidney problems. Alternatives include metronidazole, aminopenicillins, and vancomycin. When there is a strong suspicion of benzodiapine intake, flumazenil can prove effective with cirrhotic patients. Ornitine, bezoate and zinc (the latter inconsistently) can improve ammonia metabolism.

Successful liver transplantation has been shown to improve hepatic encephalopathy on psychometric testing.

LIVER TRANSPLANTS IN OLDER PATIENTS

Source: Garcia, E. et al, Transplantation 2001;72:679-684 Liver transplantation in patients over sixty years of age

In this study, analyses were done on 875 adults who received liver transplants between 1990-1999. Group I were patients under age 60 and group II were patients over age 60. Survival of the transplanted liver at 1, 3, and 5 years was 78%, 74%, and 69% for those in group I and 78%, 73%, and 66% for those in group II. Survival tended to be better in the younger patients, mortality increasing between 45 and 60 years. The same analysis shows the risk of death is between 1.5 and 2 times greater in Child C patients (sicker patients). "Conclusion. There is no statistically significant difference in patient or graft survival in patients aged over 60 compared to younger recipients. However, when age is assessed as a continuous variable, an adverse effect of older age is seen on outcome and this effect is more marked in sicker patients."



LIVER TUMOURS OUTSIDE THE LIVER

Source: Hauschildt, Elda, European Journal of Gastroenterology and Hepatology, 2001; 13: 873-875. "Ectopic hepatocellular carcinoma arising in the left chest wall: a long-term follow-up"

In this article, researchers explain that liver tissue can be found in other parts of the body, such as the gallbladder, liver ligaments, omentum, retroperitoneum and thorax, and can be the site of liver cancer, as well. They go on to cite the example of a 66 year-old man in France with hepatitis C and his treatment, which began with removal of HCC (liver cancer) in ectopic (out of place) tissue in his chest wall. This operation took place two years after the patient pointed out the mass to the doctors. The doctors did not suspect a chest-wall HCC because the patient had little fibrosis, no rib involvement, and had no liver tumour, at diagnosis, or at follow up 3 years later. The doctors originally believed that the tumour was a metastasis, and would not respond to treatment as such, but two years later, the they found that the tumour was still operable---*Amazing.*

COFFEE AND ALT/AST

Source: Honjo S, et al, J Clin Epidemiol 2001 Aug;54 (8):823-9 Coffee consumption and serum aminotransferases in middle-aged Japanese men. PMID: 11470392

The researchers studied the effects of coffee drinking on levels of AST and ALT. 7313 Japanese men participated, those with liver disease or alcohol problems having been eliminated. AST and/or ALT over 40 U/L was considered abnormal. Among the 6898 that had no liver inflammation, findings seem to indicate that the more coffee that was consumed, ranging from 0 to ≥5 cups a day, the less liver inflammation was found. They suggest more studies be done. *(Personally, I'm not running out to buy stock in Starbuck's yet.)*

"A heemo-WHAT??!!"

By Joan King

"You have a hemangioma."

(Well, whatever that is, it sure sounds awful, doesn't it? Why doesn't the doctor look worried? What is it? Is it dangerous? Isn't anything that ends with "–oma" a tumour? Is it cancer?)

Actually, the doctor usually says, "Oh, it's JUST a hemangioma." Yes, in fact, it is a tumour. It is a tangle of blood vessels that appear to invade surrounding tissue. A hemangioma, by definition, is not cancerous. Three out of one hundred people even without hepatitis have one. Usually hemangiomas need no treatment and cause no problems. The difficulty is for the doctor to decide if what appears on the ultrasound is, indeed, a hemangioma, and not something else. One way to do this is to wait and see. If it grows, it's not a hemangioma. Usually the diagnosis is quite obvious to the doctor. Sometimes it's not, and then more steps should be taken, such as

1. An alpha-fetoprotein test.
2. A CAT scan
3. An ultrasound-guided biopsy

Some studies have shown that *up to 50% of supposed hemangiomas in people with cirrhosis are, in fact, liver cancers*, and researchers suggest further studies on all hemangiomas in patients with cirrhosis. If your doctor won't do further studies, basing the opinion only on an ultrasound without a contrasting agent (an IV dye), a second opinion might be warranted, especially in patients with hepatitis C, and more especially if you have cirrhosis.

Sources:
Nippon Shokakibyo Gakkai Zasshi 1995 Jan;92(1):41-46 PMID: 7861625
Radiology 2000 Jan;214(1):167-172 PMID: 10644118
Caturelli E, et al, Ospedale Casa Sollievo della Sofferenza, Foggia, Italy, Hemangioma-like lesions in chronic liver disease: diagnostic evaluation in patients. PMID: 11477234
Eur Radiol 2001;11(9):1578-1593 PMID: 11511877

From left to right: Rudy Lang, Joan King, Jan Lukas, Carolyn Caveney, C.D. Mazoff

LIVING WITH HEP C & LIVER DISEASE WORKSHOPS

Sept. 25 Viral Hepatitis and Liver Health -Dr. John Farley
Oct. 2 Diet and Nutrition- Lori Fortier
Oct. 9 Co-Infection HCV/HIV - Dr. Chester Morris
Oct. 16 Cooking for Wellness
Oct. 23 Resources & Relaxation- Marlaina Vanering
Oct. 30 Milk Thistle and More! -Dr. David Bayley
Nov. 6 HepC Treatment Information- Dr. Frank Anderson

All are held at the **Coal Harbour Community Centre,** Vancouver. Call to register with the CLF 1-800-856-7266

THUNDER BAY HIV/HCV CONFERENCE

What?: "Opening More Doors" Northwestern Ontario Regional HIV/AIDS Counselling Conference & Hepatitis C Forum

When?: October 25-26, 2001

For further information contact:
Darlene Taylor, Hepatitis C Coordinator, Thunder Bay District Health Unit,
Victoriaville Clinic, 125 S. Syndicate Ave.,
Thunder Bay, ON, CA P7E 6H8.
Tel (807)624-2002 Fax (807)622-6195

HEPATITIS C CARE, TREATMENT, PREVENTION: IMPLICATIONS FOR CAREGIVERS NIAGARA-ON-THE-LAKE

Where?: White Oaks Inn (General Conference Room) Niagara-on-the-Lake, Ontario

When?: Oct.15, 2001, 1:30 p.m. to 5 p.m.

Who?:

Dr. W. Richard Bond
Chairman of the Board of Directors, Hepatitis C Society of Canada

Dr. David Wong, M.D. (FRCPC)
Assistant Professor, Dept of Medicine at McMaster University.

Dr. Helga Witt-Sullivan, M.D.
Assistant Professor, Dept of Medicine at McMaster University.

"Hepatitis C, Epidemiolgy, Transmission Natural History of the Hepatitis C Virus"

Jamie Wiebe Ph.D.
Canadian Centre on Substance Abuse, HCV and Injection Drug Use
"The Management and Treatment of Hepatitis C"

Hosted by The Hepatitis C Society of Canada Niagara Chapter.

Everyone Welcome
Refreshments provided
RSVP by phone or fax (905) 682-6194

COMPENSATION

BRITISH COLUMBIA

1986-1990
Bruce Lemer/Grant Kovacs Norell
Vancouver, BC
Phone: (604) 609-6699 Fax: (604) 609-6688

Before August 1, 1986 or 1990-1991
David A Klein/ Klein Lyons
Legal Assistants: Carol Anton or Jeanette Cheung
Vancouver, BC (604) 874-7171, 1-(800) 468-4466, Fax (604) 874-7180

also:

William Dermody/Dempster, Dermody, Riley and Buntain
Hamilton, Ontario L8N 3Z1
(905) 572-6688

The toll free number to get you in touch with the **Hepatitis C Counsel** is 1-(800) 229-LEAD (5323).

ONTARIO AND OTHER PROVINCES

Pre 1986/post 1990
Mr. David Harvey/ Goodman & Carr
Toronto, Ontario
Phone: (416) 595-2300, Fax: (416) 595-0527

TRACEBACK PROCEDURES:

INQUIRIES-CONTACT:

The Canadian Blood Services
Vancouver, BC
1-(888) 332-5663 (local 207)

This information is for anyone who has received blood transfusions in Canada, if they wish to find out if their donors were Hep C positive.

RCMP Task Force TIPS Hotline
(Toll free) 1-(888) 530-1111 or 1 (905) 953-7388
Mon-Fri 7 AM-10 PM EST

CLASS ACTION/COMPENSATION

THIS SERVICE, USUALLY PROVIDED 24 HOURS A DAY FREE OF CHARGE BY LESLIE GIBBENHUCK, HAS BEEN SUSPENDED DUE TO NON-RENEWAL OF HEALTH CANADA-FUNDING.

National Compensation Hotline: 1-(888) 726- 2656

ADMINISTRATOR

To receive a compensation claims form package, please call the Administrator at 1(888) 726-2656 or 1 (877) 434-0944.
www.hepc8690.com info@hepc8690.com

***Should you have any questions about the status of your claim (86-90), please contact the administrator. They should answer all of your questions. If, however, they do not, then please contact Bruce Lemer who has promised me that he would answer your questions at no charge.—C.D. Mazoff*

COMING UP IN BC/YUKON:

Armstrong HepCure Office and library, by appointment. Contact: Marjorie, 546-2953, amberose@sunwave.net, www.junction.net/hepcure

Castlegar Contact: Robin, 365-6137

Chilliwack BC HepTalk Contact: 856-6880.

Comox Valley HeCSC Meetings: 3rd Tues. monthly, 7-9 PM, St. George's United Church on Fitzgerald. Next meeting Oct. 16th Contact: Jayne, 336-2485 or Dan, 338-0913, Rhagen@mars.ark.com

Cowichan Valley Hepatitis C Support Contact: Leah, 748-3432.

Cranbrook HeCSC-EK: Meetings: 1st & 3rd Tues. monthly, 2-4 PM, #39 13th Ave South, Lower Level. Next meetings Oct. 2nd & 16th. Contact: 426-5277 or 1-866-619-6111 hepc@cmha-ek.org, www.cyberlink.bc.ca/~hecsc-ek/

Creston/Golden/Invermere Educational presentation and appointments: Contact Katerina 426-5277

Grand Forks Hep C Support Centre Each Mon, 3:30-5:30 PM, & 1st Mon. monthly, 6:30 PM, 7215 2nd St. (Boundary Women's Resource Centre) Contact Ken, 1-800-421-2437

HepCBC INFO Line. Free medical articles & other info. Contact: David, (250) 361-4808, info@hepcbc.org, www.hepcbc.org

Kelowna HeCSC Meetings: 1st Sat. monthly, 2-4 PM, Rose Avenue Education Room, Kelowna General Hospital. (Please call to confirm.) Next Meeting: Oct. 6th. Contact Elaine Risely (250) 768-3573 or Merv, 862-2437.

Kimberley Support Group Meetings: 1st Mon. monthly, 1-3 PM. Next meeting Oct. 1st. Contact Katerina 426-5277

Kootenay Boundary Meetings: 2nd & 4th Tues. monthly, 7 PM, 1159 Pine Ave, Trail. Next meetings: Oct. 9th & 23rd For individual support, info & materials, contact: Brian, 368-1141, k-9@direct.ca.

Maple Ridge New group starting. Contact Peter or Laura-Lea 604-463-0223 or madclark@telus.net

Mid Island Hepatitis C Society

- **Ladysmith** Friendship and Support Group. Meetings: Every Wednesday except the 4th, 2 PM, Ladysmith Resource Centre. Contact Sue 245-7635.
- **Nanaimo** Friendship and Support Group Meetings: Weekly Friday afternoons, 2 PM, Nanaimo Community Building, 285 Prideau Street, Nanaimo. Contact Barb 756-9631 bwreggitt@home.com

Mission Hepatitis C and Liver Disease Support Group Meetings: 3rd Wed. monthly, 7 PM, Springs Restaurant, 7160 Oliver St. Next meeting Oct. 17th. Contact Gina, 826-6582 or Patrick, 820-5576. missionsupport@eudoramail.com

Nakusp Support Group Meetings: 3rd Tues. monthly, 7 PM, Nakusp Hospital Boardroom. Next meeting: Oct. 16th. Contact: Ken, 1-800-421-2437

Nelson Hepatitis C Support Group Meetings: 1st Thurs. monthly. ANKORS Offices, 101 Baker St., Next meeting: Oct. 4h. Topic: Traditional Chinese Medicine and Hep C....Can it Help?, Warren Fischer TCMD. Contact: Ken Thomson, 1-800-421-2437, 505-5506, info@ankors.bc.ca, or Ken Forsythe 355-2732, keen@netidea.com

New Westminster Support Group Meetings: 2nd Mon. monthly, 7-8:30 PM, First Nations' Urban Community Society, Suite 301-668 Carnarvon Street, New Westminster. Next meeting Oct. 8th. Contact: Dianne Morrissettie, 525-3790.

Parksville Support Group Contact Ria, 248-6072

Parksville/Qualicum 102a-156 Morison Avenue, PO Box 157, Parksville, BC V9P 2G4. Open daily from 9AM to 4 PM, M-F. Contact: 248-5551, sasg@island.net

Penticton Hep C Family Support Group Contact: Leslie, 490-9054, bchepc@telus.net

Powell River Hep C Support Group: Contact: Cheryl at 483-3804, or the Health Unit at 485-8850.

Prince George Hep C Support Group Meetings: 2nd Tues. monthly, 7-9 PM, Health Unit Auditorium. Next meeting Oct. 9th. Contact: Gina, 963-9756, gwrickaby@telus.net or Ilse, ikuepper@nirhb.bc.ca

Princeton Meetings: 2nd Sat. monthly, 2 PM, Health Unit, 47 Harold St. Next meeting Oct. 13th. Contact: Brad, 295-6510, citizenk@nethop.net

Queen Charlotte Islands/Haida Gwaii: Phone support. Contact Wendy: 557-9362, e-mail: wmm@island.net, www.island.net/~wmm/

Quesnel: Meetings last Mon. evening every other month. Contact Elaine Barry, 992-3640, ebarry@goldcity.net

Richmond: Lulu Island AIDS/Hepatitis Network: Meetings/drop-in dinner each Mon. 7-9 PM. Contact Phil or Joe, 276-9273.

Slocan Valley Support Group Meetings: Contact: Ken, 355-2732, keen@netidea.com

Smithers: Positive Living North West Meetings: 2nd Wed. monthly, 7-9 PM, 3731 1st Avenue, Upstairs. Next meeting: Oct. 10th. Contact: Deb. 877-0042, 1-866-877-0042, or Doreen, 847-2132, plnw_hepc@bulkley.net

Sunshine Coast—Sechelt: Contact: Kathy, 886-3211, kathy_rietze@uniserve.com—**Gibsons**: Contact Bill, pager 740-9042

Vancouver HepHIVE: Contact: 254.9950 hephive@mdi.ca **Meetings:**

- **Carnegie Centre** Hep C & HIV/HCV Meetings: Each Mon., except holidays, 4:30-6 PM, 3rd floor, room. 2.
- **HepHIVE and HepC VSG** Hep C & HIV/HCV Meetings: Last Wed. monthly, 10:30-12:30, BCCDC Building, 655 West 12th Tom Cox Boardroom 2nd floor. Next meeting Aug. 29th.

VANDU Vancouver Area Network of Drug Users Meetings each Mon., 1 PM, #350 - 163 West Hastings St., (Cambie & Hastings) Bus fare and snack. Contact: Ed or Ann, 683-8595, vandu@vandu.org, annlive@direct.ca, www.vandu.ca

Vernon HeCSC HEPLIFE Meetings: 2nd & 4th Wed. monthly, 10 AM-1 PM, The People Place, 3402-27th Ave. Next meetings Oct. 10th & 24th. Contact: Sharon, 542-3092, sggrant@netcom.ca

Victoria HeCSC Meetings: 1st Mon. monthly, 6:30-9 PM, CHR 1947 Cook St. Multi-Purpose Room and last Wed., St. John's, 1-3 PM. Contact: 388-4311, hepcvic@coastnet.com

Victoria Support and Discussion Group Meetings: 1st Wed. monthly, 7-9 PM, Next meeting Oct. 3rd. Contact Hermione, Street Outreach Services 384-1345, hermione@avi.org

Victoria HepCBC Support Groups Small support groups for men or women. Men, contact David at 361-4808, cdm@hepcbc.org Women, contact Joan at 595-3882, or jking@hepcbc.org

Yukon Positive Lives Meetings: 3rd Wed. monthly , Whitehorse. Next meeting Oct. 17th. Contact 456-2017, positivelives@yknet.yk.ca or Heather, fromme@marshlake.polarcom.com, www.positivelives.yk.ca

OTHER PROVINCES

ATLANTIC PROVINCES:

Atlantic Hepatitis C Coalition, QEII Health Sciences Centre, Bethune Building, Rm 223, 1278 Tower Road, Halifax, TEL: 420-1767 or 1-800-521-0572, r.ahcc@ns.sympatico.ca, www.ahcc.ca **Meetings:**

- **Antigonish:** 2nd Wed. monthly, 7 PM, St. Martha's Health Centre, 25 Bay St, Level 1 Conference Room
- **Bridgewater:** Last Wed. monthly, 7 PM, South Shore Regional Hospital, 90 Glen Allen Dr., Private Dining Room
- **Halifax:** 3rd Tues. monthly, 7 PM, QEII Health Sciences Centre, 1278 Tower Rd, Dickson Bldg, Rm 5110
- **Kentville:** 2nd Tues. monthly, 6:30 PM, KingsTech Campus, 236 Belcher St, Rm 214
- **Truro:** Last Tues. monthly, 7 PM, Colchester Regional Hospital, 25 Willow St, Conference Room
- **Yarmouth**: 1st Tues. monthly, 7 PM, Yarmouth Regional Hospital, 60 Vancouver St, Lecture Room 1—Main level

Fredericton, NB HeCSC Meetings: 7 PM Odell Park Lodge. Contact: Sandi, 452-1982 sandik@learnstream.com

Greater Moncton, N.B. HeCSC Contact Debi, 1-888-461-4372 or 858-8519, monchepc@nbnet.nb.ca

Saint John & Area/HeCSC: 3rd Thurs. monthly, 7 PM, Community Health Centre, 116 Coburg Street. Contact Esmonde, 653-5637, hepcsj@nb.aibn.com, www.isaintjohn.com/hepc/

ONTARIO:

Durham Hepatitis C Support Group Meetings: 2nd Thurs. monthly, 7 PM, St. Mark's United Church, 201 Centre St. South, Whitby. Contact: Smilin Sandi, smking@home.com http://members.home.net/smking/index.htm, Ken Ng , (905) 723-8521, Jim, (905) 743-0319 or 1-800-841-2729 (Ext. 2170)

Hep C Niagara Falls Support Group Meetings: Last Thurs. monthly, 7 PM, Niagara Regional Municipal Environmental Bldg., 2201 St. David's Road, Thurold. Contact: Rhonda, (905)295-4260 , Joe (905) 682-6194 or hepcnf@becon.org

HepSEE Barrie Chapter Meetings: 3rd Tues. monthly, 7-9 PM, AIDS Committee of Simcoe County, 80 Bradford Street, Suite 336 Contact: Jeanie, 735-8153 hepseebarrie@home.com

Kitchener Area Chapter Meetings: 3rd Wed. monthly, 7:30 PM, Cape Breton Club, 124 Sydney St. S., Kitchener. Contact: Carolyn, 893-9136 lollipop@golden.net

Windsor Support Group Meetings: Each Thurs.., 7 PM, 1100 University Ave. W. Contact 739-0301 or Ruth or Janice (Hep-C), 258-8954, truds99@hotmail.com

PRAIRIE PROVINCES:

Edmonton, AB Hepatitis C Informal Support Group Meetings: 3rd Thurs. monthly, 6 PM, 10230-111 Avenue, Conference Room "A" (basement) Contact: Jackie Neufeld, 939-3379

Edmonton, AB Contact Fox, 488-5773, 473-7600, or fox@kihewcarvings.com

HepSEE WPG Winnipeg Meetings: Each Wed.., 7:30 PM, Sunhine House, 342 Maryland St., Main Floor. Contact David: 774-8123, jmoritz12@home.com

Hepatitis C Resource Centre, Inc., Winnipeg. Meetings: 1st Tues. monthly 7-9PM, RM# 203, 825 Sherbrook St. (south entrance—parking at rear) Contact: (204) 975-3279 Oct. speaker: Bill McKeen, (program director), Provincial compensation

QUEBEC:

Hepatitis C Foundation of Quebec Meetings: 4th Tues. monthly, 7-9 PM, Montreal General Hospital, room A1.109, 1650 Cedar Ave. 7-9 PM., and 3rd Wed. monthly, 2-4 PM, 4341 Verdun Ave. Contact Eileen to reserve (limited seating): 769-9040 or fhcq@qc.aibn.com