

# ADVANCES IN HUMAN CRYOPRESERVATION

An innovative event  
at the Sheraton Fort Lauderdale  
Airport Hotel, Florida

**May 18th to May 20th, 2007**  
Sponsored by Suspended Animation



Suspended Animation will be hosting a special meeting at the end of May, 2007 to disseminate important new information about cryonics research & development, and services.

Under the broad title "Advances in Human Cryopreservation," we will present progress reports from a wide range of sources including 21st Century Medicine, Critical Care Research, Suspended Animation, Alcor Foundation, The Cryonics Institute, and the American Cryonics Society. The presentations will be entirely new—not derived from speeches that have been delivered elsewhere.

We will provide information about the most ambitious research plan in the history of cryobiology, describing stage one of an unprecedented effort to achieve reversible whole-body vitrification without the need for cell repair via nanotechnology.

In addition we will be offering tours of the Suspended Animation facility, a closeup look at the work we are doing, and ample time to discuss your interests with our three directors and our staff of seven employees.

For early registrants, "Advances in Human Cryopreservation" will be heavily discounted at only \$95. This fee will include all three days of the conference; transportation to the hotel, to the Suspended Animation facility, and to Ft. Lauderdale Airport from the facility; a welcome session at the conference suite; a banquet on Saturday night; a buffet lunch at the Suspended Animation facility; and refreshments throughout the weekend.

The conference hotel is located conveniently close to Fort Lauderdale airport, to which flights are available nonstop from many locations in the United States, Canada, and Europe. Since our May meeting date is just after the Florida tourist season, we have secured a room rate of only \$129/night.

Anyone who is seriously interested in the future of human cryopreservation will find this event of significant interest.

## About Suspended Animation



Our company has been following a three-phase development plan.

In the first phase, we resolved regulatory issues, established a core group of qualified employees, and equipped a new 6,000-square-foot facility that required an extended buildout costing more than \$200,000.

During the second phase we began to develop full response capability, including newly designed equipment, new vehicles, and a complete rethink of many aspects of standby, stabilization, and transport capability. We trained team members and retained the services of paramedics, nurses, and surgeons. Since this was primarily a development phase, we devoted very little effort to disseminating news or maintaining a web site.

We are now ready to enter the third phase of our history, in which we present ourselves to the cryonics community. A series of newsletters will describe the work that we have completed so far and the new goals that we hope to achieve in the near future. Our conference will allow members of all organizations to visit our facility, ask questions, and evaluate our work first-hand.

We look forward to seeing you in Florida!

—Charles Platt  
*Director, Suspended Animation*

# PROGRAM

All events take place at the Sheraton Fort Lauderdale Airport Hotel, except where otherwise noted.

*Photo right:*  
 The entrance lobby with its skylight and bar-lounge.



## Friday, May 18th, 2007

7:00pm–10:00pm

### Welcome Reception

We invite you to an informal reception in our hotel suite. Conference registration will be available. Those who have pre-registered can collect their credentials.



## Saturday, May 19th, 2007

8:00am–9:00am

### Conference Registration

Those who have pre-registered can collect their credentials. Registration will be available until 3pm.

9:00am–9:30am

### A presentation by Charles Platt

Director  
Suspended Animation



### The Value of Rapid Intervention for Cryopreservation Patients

This short general introduction will provide a basic foundation of concepts for those conference members who may not be entirely familiar with standby-stabilization-transport procedures. The presentation will explain why rapid intervention after cardiac arrest is critically important for patients who have made arrangements to be cryopreserved. We will consider the possible negative impact that ischemic injury may have on the chances for cell repair and revival in the future. Photographs will show equipment developed at Suspended Animation.

9:30am–10:15am

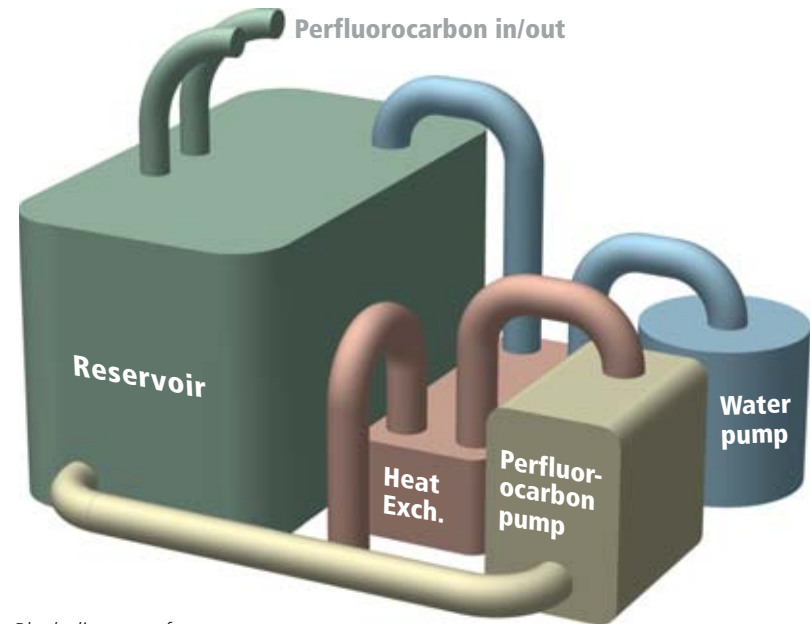
### A presentation by Steve Harris MD

Scientific Director  
Critical Care Research



### New Breakthrough in Rapid Cooling of Cryopreservation Patients after Cardiac Arrest

Dr. Harris has been actively involved in cryonics for almost twenty years, and has advised and participated in numerous cryonics cases. His experiments with primary inventor Michael Darwin and co-inventor Sandra Russell at Critical Care Research in Southern California have resulted in the development of a new method of liquid ventilation, a system for cooling the patient rapidly by ventilating the lungs with a chilled breathable liquid. This technology has the potential



*Block diagram of liquid ventilation cooling system. These components are immersed in a bath of icewater. Perfluorocarbons are a breathable liquid, conveyed to the lungs by a separate set of peristaltic pumps.*

to save tens of thousands of heart-attack and stroke victims annually. Although the conventional medical applications lie years in the future, liquid ventilation can minimize brain injury in cryonics patients today. A new portable system developed at Suspended Animation will be remotely deployable during stabilization procedures, to achieve cooling rates that until now have only been possible through cardiopulmonary bypass operations performed by highly-trained medical teams in major hospitals. Depending on the specific circumstances of a case, liquid ventilation promises to prevent most or all of the ischemic brain damage that otherwise tends to occur.

**Saturday, May 19th, 2007** *(continued)*

**10:15am–11:15am**

**A panel discussion moderated by Charles Platt**



**Tanya Jones**  
*COO, Alcor Foundation*



**Aschwin de Wolf**  
*Cryopreservation Protocol Director  
Suspended Animation*

**Also**  
**Steve Harris MD**  
*Scientific Director  
Critical Care Research*

**Advances in Standby, Stabilization, and Transport Procedures**

This group session will discuss results of large animal research conducted at Critical Care Research, comparing several washout solutions for safety, efficacy, and ease of administration; the latest findings about appropriate medications for cryopreservation patients, to prevent ischemic brain damage and other types of cellular injury; and new equipment to facilitate better transport of stabilized and cooled cryonics patients. Questions will be invited.



*Air-transportable perfusion equipment designed around a hard-shell reservoir by perfusionist Melody Maxim for Suspended Animation.*

**11:15am–11:30am**

**Mid-Morning Break**  
*(Complimentary coffee, tea, and soft drinks)*

**11:30am–12:30pm**

**A presentation by Gregory M. Fahy, PhD**  
*Chief Scientific Officer  
21st Century Medicine*



**Recent Research Advances in Vitrification**

During the last decade, revolutionary advances have been made in cryopreservation through vitrification at 21st Century Medicine, a biotech company in Southern California. Dr. Fahy is the foremost pioneer in the development of vitrification, which he has been researching as an alternative to freezing for the preservation of large biological systems for the past 25 years. Vitrification makes it possible to cool human patients to cryogenic temperatures without the formation of ice crystals, which are the major cause of damage during deep cooling and rewarming. Vitrification shows enormous promise as a means of long-term preservation of organs such as kidneys, hearts and livers for transplantation; and for the preservation of the brains and whole bodies of humans for the purpose of revival by advanced future technologies. In his talk, Dr. Fahy will focus on recent advances in the vitrification of kidneys, brains, and whole bodies in animals. He will provide scientific evidence that these advances are leading to the eventual achievement of perfected human suspended animation.

*Frozen kidney (left) is filled with damaging ice. Vitrified kidney is ice-free and natural looking.*



Saturday, May 19th, 2007 (continued)

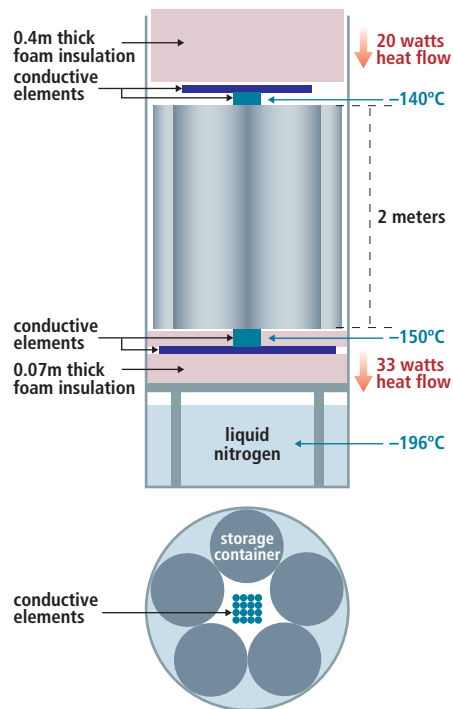
12:30pm–1:15pm

A presentation by  
**Brian Wowk, PhD**  
Senior Scientist  
21st Century Medicine



### Reducing Structural Damage to Cryopreservation Patients

In recent years there has been a trend in cryobiology to store cryopreserved cells and tissues in freezers or liquid nitrogen vapor rather than in liquid nitrogen itself, to avoid cross contamination by disease causing organisms. For complex tissues and cryopreservation patients, an even more important reason to store at temperatures warmer than liquid nitrogen is reduction of large-scale cracking or fracturing. Dr. Wowk will discuss his collaboration with a cryogenic engineer to create new designs for cryogenic dewars permitting storage of biological materials at elevated temperatures



with unprecedented control and safety. Such systems are a prerequisite for developing methods to eventually eliminate fracturing in cryonics, which will fundamentally change the nature of technologies required for the revival of patients, and improve prospects for achieving reversible suspended animation.

Plans derived from a patent application show a possible configuration for intermediate temperature storage of human patients.

1:15pm–2:45pm

### Lunch Break

2:45pm–3:15pm

A presentation by  
**Charles Platt**  
Director  
Suspended Animation

### Introduction to Suspended Animation

Suspended Animation was established in South Florida to conduct research and development in advanced techniques and technologies for minimizing brain injury prior to human cryopreservation, and to deploy these advances for the benefit of members of cryonics organizations such as the Alcor Foundation, the Cryonics Institute, and the American Cryonics Society. This presentation will describe advances achieved at SA during the past two years. Tours of the facility will be provided to conference registrants on Sunday, May 20th.

*Kelly Kingston unpacks Suspended Animation's stainless-steel portable ice bath, which is used for rapid cooling of cryonics patients. The unique design is unprecedentedly compact and easy to deploy.*



Saturday, May 19th, 2007 (continued)

3:15pm–4:15pm

A panel discussion moderated by **Saul Kent**

CEO & Director  
Suspended Animation



Recent Developments at Three Cryonics Organizations

Leaders of the three active cryonics organizations will have the opportunity to illustrate and describe the services that they offer. They will discuss the personnel, capabilities, equipment, procedures, and facilities possessed by each of these organizations. They will also discuss the requirements for membership of each organization, the long-term care facilities available for each organization's members, the size and scope of their memberships, the number of patients they have cryopreserved, and any other features they want to communicate to the audience. Questions will be invited.



**Ben Best**  
CEO, Cryonics Institute



**Steve Van Sickle**  
Executive Director  
Alcor Foundation



**Jim Yount**  
CEO,  
American Cryonics Society

4:15pm–4:30pm

Mid-Afternoon Break

(Complimentary coffee, tea, and soft drinks)

4:30pm–5:30pm

A panel discussion moderated by **Saul Kent**



**Michael Riskin**  
CPA, Chairman of  
the Board of Directors  
Alcor Foundation



**Rudi Hoffman**  
CFP, Life Insurance  
& Investment Advisor

Also  
**Ben Best**  
CEO, Cryonics Institute

Funding for Cryonics, Revival, and Wealth Preservation

Cryopreservation may be funded by methods including life insurance, trusts, real estate, and stocks and bonds. The funding of last-minute cases presents special problems related to the criteria for acceptance of such cases and the risks of accepting them. We will describe the Personal Revival Trust, a new concept in patient advocacy; financial protection for cryopreserved patients; financial issues affecting cryonics organizations; funding the revival of cryopreserved patients; and funding research aimed at reviving specific patients. Panelists will explain asset preservation trusts and foundations to enable you to take your money with you. Questions will be invited.



**Saturday, May 19th, 2007** *(continued)*

**7:00pm-10:00pm**

**Banquet**

*Complimentary for all conference attendees*

Speakers:

**Saul Kent**

*Founder and Director  
Life Extension Foundation*

**Gregory M. Fahy, PhD**

*Chief Scientific Officer  
21st Century Medicine*

The speakers will discuss a major grant provided by the Life Extension Foundation to 21st Century Medicine, financing three years of research to improve methods of whole-body vitrification in animals. This grant is for Part I of a multi-part, long-term project aimed at the perfection of human suspended animation. Among the subjects to be discussed by the speakers will be the major obstacles that will have to be overcome to achieve perfected suspended animation; the experiments, equipment, and staff to be used in conducting the research to attempt to overcome these obstacles; and the need for substantial additional funding from wealthy cryonicists to accelerate this type of research.



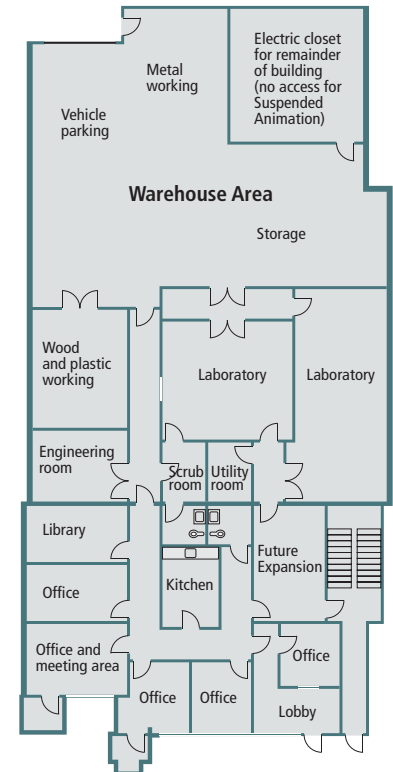
**Sunday, May 20th, 2007**

**9:00am onward Shuttle buses to Suspended Animation**

Buses will run at frequent intervals. For those who prefer to drive themselves, a map and directions will be provided.

**9:30am-5:00pm Suspended Animation Facility Tours**

Guests will form small groups to tour the 6,000-square-foot facility. We will provide descriptions and demonstrations of equipment to improve standby, stabilization, vitrification, and transport procedures for cryopreservation patients.



**12:00 noon**

**Buffet Luncheon**

*(Complimentary at Suspended Animation)*

The Suspended Animation facility will remain open until 8:00pm for any visitors who wish to talk informally with representatives of Suspended Animation, other cryonics organizations, and guests.