Grasping the Nettle:

Time for the Rebirth of Cryonics in Britain

By Mike Darwin

"Tenderly you stroke a Nettle, and it stings you for your pains. Grasp it like a man of mettle, and it soft as silk remains." – Old English proverb

Nearly 20 years ago Alan Sinclair successfully undertook to establish a cryonics facility in the UK. The Alcor UK facility in Eastbourne was a superb facility which, at that time, was far superior to the facilities Alcor then occupied in the U.S. The Eastbourne facility opened in 1990 and culminated efforts which had begun only 4 years before to establish a cryonics beachhead in the UK. I have intimate knowledge of these efforts because I was instrumental in facilitating them. The nucleus of the Alcor UK group consisted of Garret Smyth, Mike Price, Max More (née Max O'Connor) and Luigi Warren. These four young men joined Alcor as suspension members and began working towards promoting cryonics in Britain with an eye towards positioning Alcor UK as the regional service provider for Western Europe as well as the rest of the UK. A least to me, the Eastbourne facility seemed *the* enabling event that would make that dream a reality. The major reason Alan gave at the time for providing the initial funding for the facility was his desire to have quality cryopreservation services for himself and his family; something that was unarguably not possible absent both a facility and an organization of committed and competent people to perform cryopreservations.

Unfortunately, not only didn't the dream of a solid and enduring cryonics beachhead in the UK and Europe materialize, the Alcor UK facility itself "vanished" into the sands of time.

Now, 18+ years later, Alan is on the same quest, but far from making progress, finds himself in the sorry position of telling British cryonicists “we will have a straight freeze in the UK.” As I sit here in London writing these words I feel a mixture of disbelief and horror at the way things have turned out for UK cryonics. How did things go so wrong and is there anything that can be done to remedy the situation?

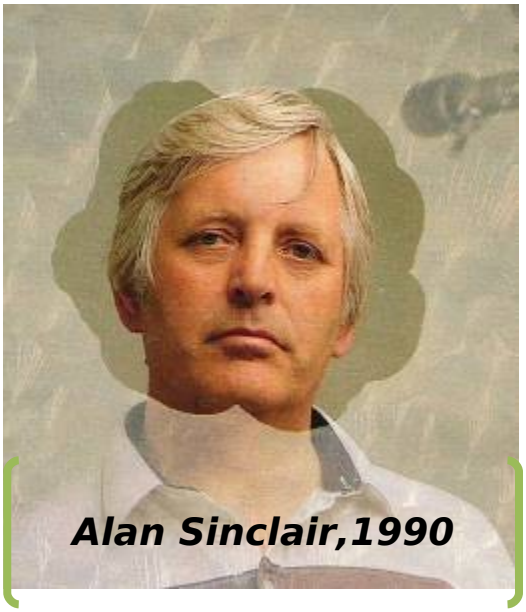
To answer the first part of that question it is necessary to understand the paradigm that was in play in the late 1980s when cryonics was taking shape in Britain with the founding of Mizar. Certainly, Garret Smyth and I had a clear vision of how cryonics in the UK should be pursued and that vision was that the UK cryonics group becomes functionally autonomous and capable of delivering the full range of services including long-term cryogenic storage. This may seem strange given that storage was a “mature” technology in the US and was just starting to experience substantial economic benefit from the economies of scale which come from having more than a handful of patients, principally lower costs for custodial labor, liquid nitrogen (which drops in price dramatically with larger quantity purchases), per-patient back-up dewar costs (one back-up dewar is needed whether there is 1 patient in storage or 50 patients), and of course lower per-patient floor-space charges. Given these tough economic realities why try to do storage outside of the US?

The most powerful answers to this question are the least obvious and the most indirect. More than any other thing, caring for patients in storage acts to both validate and stabilize a cryonics organization. Storage being undertaken “close to home,” without the enormous financial, logistic, and psychological barrier of UK patients being cared for half-a-world away in another country, creates a powerful sense of immediacy and reality, especially for the relatives of patients getting cryogenic care. It dramatically decreases the sense of unreality and otherworldliness that attaches itself to patients being sent to the US which is not only geographically distant, but culturally distant as well.

Aside from these psychosocial advantages local storage has the advantages of generating sustained, and above all serious, media coverage for cryonics in both the UK and Europe. It validates cryonics as a British (and potentially as a European) undertaking as opposed to some “alien” activity centered in the US – where most of the Homo sapiens varieties of nuts and fruits were presumed to have migrated long ago. Even more practically (and more selfishly from my perspective as the President of Alcor at that time), a UK storage capability would constitute a lifeboat, a safe haven to which US cryopatients could be transferred in the event storage operations in the US became problematic or impossible. Redundancy and diversification are, if anything, more important in cryonics than they are in prudent investing. The UK held the promise as the place where a reliable, respectable, and fully independent cryonics operation could take shape.

I consider Alan Sinclair a good and dear friend. He and his wife Sylvia have extended enormous hospitality and kindness to me at times of extreme need. For this, and for his tireless actions on behalf of cryonics, I am and I will remain forever grateful. However, as is the case with most of us who have pioneered cryonics, Alan has made his share of mistakes. (Having made far more than my own share of mistakes I am in a good position to sympathize.) By far the

most serious of these mistakes was Alan's unrelenting opposition to cryopatient storage in the UK. Since Alan had initially provided virtually all of the funds for the Eastbourne facility his position on this matter became the de facto policy for cryonics in Britain and thus, indirectly, for cryonics in all of Western Europe. While few patients were cryopreserved in the UK, this was not the case for Western Europe or for the Near East, and a steady stream of patients either relocated to the US when terminal (invariably at great personal financial expense and often at the cost of psychological torment for themselves and their loved ones). Patients who arrested in Europe and Russia suffered grievous ischemic insults (both cold and warm); no patient reached the US for cryoprotective perfusion in less than 24-hours and most have suffered delays of 48 hours and in some cases of 5 days!



In 2001 Alan moved that the Eastbourne facility be sold and this is exactly what happened. A short while later Alan changed his mind about the wisdom of this move and purchased another building in what proved to be an unsuccessful attempt to open a replacement UK facility. Late in 2003 Alan announced that he believed the Cryonics Institute (CI) offered superior services for vastly less money and he joined CI as both a suspension member and as a member of CI's Board of Directors. Early in 2006 Alan left CI to re-join Alcor because, as he stated at the time, "Alcor will be offering whole body vitrification in the near future." Now, less than 2 years later, he writes (sic):

"I am always asked who uk members should have as there service provider, I am always very reluctant because the whole issue is very complicated and I do my best to keep impartial but I can say without the ability to transport at -196 we can forget vitrification from Alcor they have said we will have a straight freeze in the UK, CI seem to be better so those who were thinking of changing think again."

I know for a fact that these changes in direction have been financially and emotionally costly for both Alan and his wife Sylvia. What is perhaps a less appreciated fact is that these abrupt alterations in course have repeatedly whipsawed the UK cryonics community causing confusion, fragmentation, and no small measure of hard feelings. A number of good quality people with a long history of commitment and activism in British cryonics have walked away in disgust and are now deeply alienated and burned out. As my recent travels have demonstrated (at least to me), a far worse result has been the failure of UK cryonics to attract the next wave of recruits and to make their message in any way appealing to or relevant for young people – the people who must necessarily be attracted to provide not only new ideas and new energy, but also to provide the continuity of care required to carry existing cryonics members and patients into the future for rescue.

Cryonicists in Europe and in Russia have reacted to the moribund and lifeless state of cryonics in Britain by doing (wisely) what they must in order to survive: strike out on their own and reinvent the wheel. In particular, in Russia, they have taken the extraordinary step of storing their own patients at great cost and hardship and now, in less than 2-years from the start of their efforts, there are 5 patients in liquid nitrogen storage in Russia. This is not to imply that this is a good situation; in many ways things have begun to play out as they did for cryonics in the late 1960s in the US (read Arlene Sheskin's excellent analysis: Cryonics: A Sociology of Death and Bereavement for the sorry details). While there is great risk for cryonics in Russia there is also great reason for optimism. However, the point is that things needn't have turned out the way they have and the European and Russian cryopatients and their respective communities needn't have suffered as they have.

Beyond the harm these people have suffered due to lack of a viable, full-service cryonics capability in the UK and Western Europe, there is the unquestionably far greater harm that has befallen the people who did not get cryopreserved at all because they didn't sign up, or their families chose not to take action because of the substantial logistic hurdles, long ischemic intervals, and psychological distance that were and are the consequence of US-only cryonics. During my past few months here in Britain I have met quite a number of bright, motivated and often highly professional people who have specifically *not* made cryonics arrangements because it is their perception that absent high quality and comprehensive local services they would be wasting their money. While it can certainly be argued that this is specious reasoning given the alternative, and that the best is ever the enemy of the good, the fact remains that this *is* the case and this is a major barrier to recruitment and growth for cryonics outside of the US.

Undoubtedly, one reason this is so is because of technological advances that have been occurring both inside and outside of cryonics. The forward march of stem cell, cloning and regenerative medicine technologies have acted to make cryonics more credible to the serious, knowledgeable professional. At the same time, the vastly improved preservation which is theoretically (though not yet practically) available as a result of advances in cryoprotection (i.e., vitrification or near vitrification of the brain) have made cryonics more credible by divorcing it from the need for super-sophisticated, highly theoretical and wholly unproved nanotechnology. I have had extensive conversations with several medical professionals active in Transhumanist and related forward-looking communities here in London and I have repeatedly heard the same message: "Not only would I sign up for cryonics, I would actually be professionally involved, but only if there were services here in the UK and only if these services were of a high quality and at least offered the opportunity for people who "die" under good circumstances to get excellent treatment."

To a great extent this change in attitude and the accompanying potential to recruit a new class of cryonicist has been due the work of the Transhumanists and to Aubrey de Grey and the potent nucleus of superbly educated, talented, highly motivated, and (perhaps most importantly) young people he has attracted and assembled with the Methuselah Foundation and his SENS program. These people (and many others like them yet to be recruited) are focused on progress and technological excellence. They are professionals in their own disciplines and they are not interested in a cryonics service which has the stench of days-long ischemic intervals and

very suboptimum cryoprotection associated with it. There is the clear potential for the rebirth of a vigorous, technically competent and above all autonomous cryonics movement in the UK (and by extension in Western Europe as well). The success or failure of such an effort hinges on the people involved realizing that cryonics is first and foremost *their* problem and that no one in the US (or anywhere else), no matter how well intentioned, can solve it for them. American cryonics organizations are thousands of miles away and their members and staff live and work in a different world; it is unrealistic and unfair to expect them to be able to appreciate the unique problems of UK and Western European cryonicists. (And by the same token, Russian cryonicists cannot expect European Union cryonics, should it develop, to meet their needs given the vast linguistic, cultural, legal, and geographical hurdles unique to their situation: they are right to pursue their own program at this point in time.)

The sane and solid understanding of the people who launched the cryonics societies was that even within the US, the development of local groups with substantial autonomy to act in their own best interests based on their unique local circumstances, was of the utmost importance. Indeed, the imperative for local groups and ultimately for regional full-service cryonics facilities was the raison d'être for the creation of the Cryonics Society of New York and the Cryonics Societies of America and was the proximate cause of the split from the Life Extension Society (LES) and thus, ultimately, LES's demise. In the case of nation-states with different laws and different cultures it was presumed from the beginning that the needs of their cryonicists could only be met by those selfsame cryonicists.

In hindsight, it has become clear that the critical error that was made by those of us in the US who had made cryonics our full-time vocation, indeed our *profession,* was to treat well intentioned and highly motivated individuals like Alan Sinclair as colleagues instead of as customers. That was a devastating error for which I must assume my share of responsibility. There *have* been a few cryonics professionals and I am proud to count myself among them. In failing to both realize and assert this fact, those of us who have become professionals in this field have done a great disservice to ourselves and to the cryonics community at large.

Patients are not well served by practicing medicine on themselves and if a doctor is a fool who has himself for a patient, then how much more a fool is a patient who has himself for brain surgeon, or vastly much worse as a cryonics patient? In all fairness and honesty, cryonicists had no choice in this matter early on and, depending upon their location and resources, many will have little choice for years to come. Absent competent scientific, technical and medical support we have had no alternative but to be not only our own physicians, but also all too often our own lawyers, accountants, industrial designers, equipment fabricators, and even cryogenic engineers. In the absence of broad support from the professional communities (or large amounts of money to buy it) it was, literally, do or die (and in many areas of the world remains so to this day).

When a serious effort to create a cryonics capability in England began 1986 the situation was somewhat different from what it was from 1964 to 1984 in the US. By that time there were full-time professionals doing cryonics and there were well established and documented procedures and protocols for administering the treatment. Twenty years of effort had gone

before and had resulted in workable solutions to problems in most of the administrative and technical areas of cryonics. Sound, medically based models of perfusion using reasonably safe equipment were in use, reliable cryogenic storage vessels were proved-out and available, and the basic legal, financial and administrative infrastructure of operating a cryonics organization were more or less validated. Procedures for ante- and peri-arrest counseling, standby and transport, cryoprotective perfusion and storage also had been developed and proved out as at least practical to implement in the real world on a sustained basis.

What should have been a blessing arguably proved to be a curse.

Inherent in cryonics is a peculiar vulnerability to what I have variously called the “big fix,” “the one simple solution,” and what Curtis Henderson called the “our friends of the future” syndrome.” Because cryonics absolutely depends upon people and technology that do not yet exist to carry out repair and reanimation there is the understandably human tendency to shift as much of the burdensome work of doing cryonics onto these “others.” In this case it is an especially enticing prospect since the limitations of those “others” can conveniently be assumed to approach the infinite, and, even more conveniently, those “others” are not yet born, so they cannot possibly object! Precisely because cryonics professionals had begun to emerge in the US it became possible to add another responsibility shifting behavior to the cryonicists’ repertoire: what Garret Smyth calls the “our friends across the ocean” syndrome.

Max More (nee’ Max O’Conner) ~1985

When Mizar/Alcor UK began to establish capability in Britain there were clear and oft-repeated injunctions from the professionals in the US (chief amongst them me) that you must become autonomous and self-reliant. Yes, we could and would provide you with help of every sort, but ultimately the problem of quality cryonics services in the UK, and by extension Europe, was yours and yours alone. In looking over my letters to various people in the UK group from 1986 onward I see again and again the *commands* which I have extracted and assembled below, mostly from communications to Max More (nee’ O’Conner) who was President of Mizar, Ltd., the UK cryonics group at the time.

24 MARCH, 1986:

“Your first step, however, should probably be to call a meeting together of all interested parties and do the following:

1) Find out how much they are willing to commit to this endeavour in dollars and cents and in terms of time commitments.

2) Form an organization and elect responsible people. Keep it simple, don't get grandiose. Initially you might be just an association or club, or you might want to go ahead and do the British equivalent of incorporating

(I'll provide you with a copy of our Articles of Incorporation and of our Bylaws). If you do incorporate, you will probably find you can do so with minimal expense without the help of a lawyer. Find out if "self-help" or "how-to" books on incorporation are available. If not, shop around for the cheapest lawyer and get it done. Incorporating or otherwise limiting your liability is probably not a bad idea from the start, since you will, from practically day 1, be handling money and acquiring equipment.

3) Pick someone to work with you, someone who is reliable and will get things done. This person should be Secretary or Secretary/Treasurer. Try to get someone with a proven track history of communication skills—i.e., someone who will WRITE letters and, if they are going to handle money, someone who will keep records—reliably. The Secretary/Treasurer is by far the most powerful person in any cryonics group (sometimes the president has to play all three roles —but be anxious and keep looking around to shift off some of these responsibilities to others ASAPl). You will also need this close someone" to provide moral support, help with planning, and just be there when you need to talk. Pick this person on the basis of personal compatibility as well as to skills.

One other major problem to be on the watch for; I call it the "I'll take anything 'cause it's all I got" syndrome. To some extent you'll have to. Because the pool of people you'll be working with will be so small, you'll often find yourself dealing with people who are; incompetent, lazy, liars, exaggerators or all of the above. The average human being does NOTHING unless he has to, but will commit to doing almost anything you ask him to on the spur of the moment (for reasons of ego, pride...). Naturally, he won't deliver. It's your job to be firm with such people. When someone causes real heartache by failing to deliver on a commitment—don't hesitate to let him and the rest of the group know this. Show that you mean business. When you get someone who truly is worthless, don't let them lie to you and don't lie to yourself. One of the hardest myths to overcome is the myth that "there is safety in numbers". Sometimes we tend to let human zeroes hang around and damage us because the physical presence of another warm body makes us feel more secure. Keep the leadership streamlined to really working people and let "hangers-on" know that they are welcome but they are not full members of the group until they at least "sign up".

Cryonics is a powerful idea. It is also a good idea. Of all the ideas in the world today, few have the power to save more lives or improve human well-being more than cryonics. It would take me pages to argue why this is so, so I won't do it here. Perhaps the most powerful argument I can give for you making a commitment to cryonics is that leaving its broader social implications aside, cryonics is almost certainly the only thing that's likely to save your life. That's perhaps the best reason of all for "going for it." Along the way you'll have adventures you never dreamed possible and experience personal growth on a scale few people can imagine. If you stick with it, you'll be a carpenter, engineer, talk show personality, emergency medical specialist and much, much more. In a world of specialists you'll find cryonics has made you into a renaissance man almost singlehandedly. You will have obeyed Heinlein's dictum about being good at solving an equation, being a carpenter, speaking in public...in short being a human being in full command of and with full use of your potentials and capabilities. This is a very rare thing indeed."

11 October, 1986:

*Yes, I can arrange training for you, and I can send you a copy of the new TRANSPORT PROTOCOL MANUAL. But, and this point is as important if not more important than any other I will make: The process of achieving the technical capability to *do* cryonics is a long, slow slog. You will need to recruit and to mentor medical and paramedical professionals and this will not happen overnight. If our experience here in the US is any guide, it will take years, perhaps a decade or more to achieve. In order to get such people you will first have to create an environment to attract them and to allow them to learn the procedures and the mind-set that are unique to cryonics, and give them the tools and facilities to practice the melding of their knowledge and skills with those hard won by those of us who have been doing cryonics for on to 20-years now.*

Jerry Leaf came into cryonics not only because he was interested and saw the urgent need for his skills, but because serious efforts to create a cryonics capability had been made over a sustained period of time; people were cryopreserved, there were sincere and rational efforts to achieve effective cryoprotective perfusion, and above all, there were places for him to work (the Alcor and Trans Time facilities). These places sat for years with little use, and, truth to tell, even after Jerry became involved and set up Cryovita, Cryovita was a dusty, almost always deserted warehouse full of equipment. It took several years of such seemingly futile operation (with Jerry footing the huge monthly bill for the lease) before a critical mass was achieved when I arrived on the scene and Hugh Hixon became involved full time. Even with Hugh, Jerry and I working very hard (Jerry and I have full-time jobs) it has taken us 4-years of punishing effort to get to the point where we have what I can honestly call technical competence, if not technical excellence. We have had to create an animal research program (dog TBW, rabbit and cat cryoprotection/ultrastructure) in order to provide the frequent practice and the validation required to master not only conventional clinical perfusion, but to adapt and extend it to cryonics.

*It is all too easy to mistake the above for technical mastery when in fact it is really about vision, dogged persistence, and above all LEADERSHIP. You must understand and accept that you will be *alone* in your convictions and yet surrounded by people who will tell you, relentlessly, "you (we) can't do that, we don't have enough people, and we must wait for a millionaire to provide the capital because we have no money..." and on and on. This is pernicious and must not be tolerated. Leadership is not about persuading others to do foolish things for which there is no hope of success. Indeed, if we hadn't had the success we've had here in the US, I would tell you to forget the whole enterprise. However, the fact is that we started with nothing but the meager resources of a couple of working stiffs. We began storage operations here with one guy and only one guy committed to caring for the patients: me. This was only possible for me because I have one day during the week off from my dialysis job and this allows me to take LN2 deliveries.*

There was much nay saying and some near panic at the notion that Alcor should store its own patients as opposed to contracting this most central and most critical responsibility out to a company that had allowed one of our patients to warm from up from -196^{o}C to -55^{o}C due to carelessness. The decision to care for our patients was one of the best decisions we ever made. Patients provide the ground substance of the organization and serve to weld people together enabling them to better weather the inevitable interpersonal differences and even internecine fighting to which all organizations are vulnerable. And so, to my final points; you must understand that while you may be tempted to see yourself as "Alcor" and that the local media will brand you as an extension of Alcor (USA), this is not the case.

We cannot presume to run things for you 3,000 miles away by remote control with money which is not ours, people who do not work with us every day (and may scarcely know us), all while navigating through the dangerous nuances of a different culture and a radically different medico-legal system. In short, as Ayn Rand would say, "we can't pinch hit living your lives for you." Sooner, rather than later, you must take on the full range of services; and while there will likely be people in Alcor who will be opposed to this (especially where storage is concerned) you must nevertheless do it. It is YOU to whom your members and patients are entrusting their lives - and you and only you- can discharge that responsibility properly. If YOU are not confident enough to undertake storage, then how on earth do you expect anyone else to have confidence in your ability to lead and endure? Always remember, you have a wonderful advantage which we did not enjoy, namely that should you find storage unsustainable, we exist and we will be there to help you. Of course, and this is no small thing, the reverse is also true. As of this time we are operating more or less illegally here in California since the Department of Health Services (DHS) considers cryonics illegal and has refused to issue disposition permits. This hasn't been a problem recently because all our patients have been neuro. But, it may well be a problem in the future. Cryonics needs diversification and redundancy in every area and this should be your penultimate mission in the UK.

I reproduce these lengthily quotes from the past because they demonstrate that fundamental lessons learned from experience doing cryonics in the US were not followed. I am not concerned with attaching blame here since that is a sterile and useless exercise. Indeed, there would be no point to this at all except for two issues, one pressing, and one that could arguably wait a bit. The less urgent issue is to document the historical record: what happened, apart from any analysis, is important to set down accurately because it can serve to inform those who may come after us; saving them from error and allowing faster progress. The more urgent matter is that what happened to cryonics in the UK is part of a situation still in operation to this day, and it is this situation which poses a very real threat to the lives and wellbeing of UK and European cryonicists.

Recently Alan Sinclair has written (sic): *"I am always amazed how selective peoples memories are,"* when discussing how the Alcor UK facility came to be sold.

I agree that memories can be selective and this why I have endeavored to contact primary sources and obtain first-hand recollections. In some cases I have my own clear recollections backed-up by references in correspondence from the period.

> Alan goes on to say (sic): *When Alcor UK was build it had a STORAGE BAY long time storage was always a possibility but WHO WAS GOING TO RUN THE STORAGE SIDE not me, I soon realized most people in cryonics in the UK at that time and in fact now are happy to have everything required providing they don't have to lift a finger to help."*

One sentence later he writes (sic): *"The facility closed by unrelated problems, there was little reason after many years of running why the facility which had a fully fitted operating room a separate storage facility designed with the advise of Mike Darwin and a EXACT COPY of the Alcor riverside facility (minas the cryovita section) where Alcor patients were stored at the time so any nonsense of not wanting storage is just that."*

These two statements stand in contradiction to each other and also stand in contradiction to my recollections of our conversations on this subject at the time (backed up by

mention in related correspondence sent a few days later). While the facility was indeed built to accommodate storage, I remember my dismay upon arriving at the European Cryonics Conference (October 26-28, 1990) only to discover that Alan did not want to do storage and that he had no intention of doing storage. Alan and I had a comparatively emotional discussion over that issue (at the Thatched Cottage the evening following the tour of the Alcor UK facility) and the reasons he gave at that time bear no relationship to those he has given above. As noted in a subsequent communication to Alcor Directors:

5 November, 1990:

"Alan Sinclair has, he says, decided not to pursue to storage of patients in the UK. He stated that he had configured the facility for storage only in the event that we encounter problems in the US or that other contingencies might necessitate initiating patient care. He seems to have two primary reasons for making this decision. The first reason is that he does not believe storage would be legal in the Eastbourne facility and he cites the lack of clear, authorizing language in the Anatomy Act along with (un-sourced) concerns that being a licensed cemetery is a requirement for storing "dead bodies." His second concern seems decidedly more selfish and also (as a consequence) more understandable. He feels strongly that we in the US have a better chance for long-term organizational success, or in other words, that he has a better chance of personal survival if he trusts his storage to Alcor in the US rather than to Alcor in the UK.

Needless to say, I find this attitude really troubling, and I think it dangerous to Alcor UK's stability and prospects for long term success. Because of his enormous financial input, doggedness in discussion (he wins by wearing down as much as by reason) and extraordinary manual and engineering skill, Alan has become more or less the de facto leader of Alcor UK. As such, his confidence, or lack thereof, may prove critical to the survival of the group when the first real crisis occurs somewhere down the line."

When Alan writes (sic), "*I soon realized most people in cryonics in the UK at that time and in fact now are happy to have everything required providing they don't have to lift a finger to help"* I can understand his frustration and even resentment, but a careful analysis of the situation at the time the decision to dispose of the Alcor UK facility was taken tells a different story, as do the events leading up to that decision. In the decade prior to the sale of the building Alan had

repeatedly asked for and received greater financial participation in the Alcor UK facility. In fact, at the time the decision to sell was taken Alan was a minority shareholder with approximately 1/4th interest in the property. Far from no one lifting a finger or providing a penny, the members of Alcor UK had taken on the lion's share of the investment in the property. In particular, Mike Price had become a majority shareholder.

I have spoken with Mike (and with others) who were involved at that time. I have asked Mike specifically for his reasons for deciding to sell the building since he had the power to veto such a sale. The reasons he gives are instructive and very much at odds with the account Alan gives. Mike stated that he began to doubt the personal utility of cryonics sometime in the mid to late 1990s because he came to believe that advancing medical and artificial intelligence technologies, coupled with existing life and health-extension via vitamin supplementation, would allow him to live indefinitely, without needing to be cryopreserved using unperfected methods. Despite holding this opinion he was not, he has stated, in any way considering disposing of the Eastbourne facility. Certainly, this change of mind was of great importance in taking the decision when it came, but it was neither the initiating event nor the proximate reason.

Mike gives the following reasons as the proximate causes of the decision to cash out his shares and dispose of the building:

1) Alcor US, under management by Fred and Linda Chamberlain, began a series of draconian changes in requirements for membership in Alcor, principally that all paperwork be executed in English, that all insurance be issued by US companies and that (as a consequence) the member physically be present in the US to purchase the policy and undergo the required history and physical. Further, there were indications that support for carrying out standbys and cryoprotective perfusion might soon be withdrawn. It was clear that what was really happening was that Alcor US was, in effect, cutting Alcor UK loose – walking away from their UK members without the good grace to tell them clearly and unequivocally that that was their intention.

2) These policy changes by Alcor US lead to what Mike Price describes as "bitter conflict" resulting in "much bad blood within Alcor UK over the issue of what should be done." Mike has stated that while he, Garret Smyth and some others in Alcor UK advocated "simply doing things on our own and forgetting about the problems in the US," the group became polarized over the issue of switching arrangements to CI or remaining with Alcor.

3) At that time Alan had switched his arrangements to CI and publicly stated that "CI does the same or better job for far less money." The group became divided and, as Mike has noted, any thoughts of pursuing an independent operation and storing patients in the UK became impossible.

A number of others in Alcor UK have remarked that Alan frequently "threatened" to sell the building, starting as early as two years after it was purchased. My own recollections of this are

both clear and unpleasant because this tactic resulted in a stream of Alcor UK member calls expressing distress and fear at the prospect of losing their local cryonics capability. I well remember long conversations between Carlos Mondragon (then Alcor President), Jerry Leaf, and myself discussing how to handle this problem. It was, in fact, Mike Price, Alcor US (directly using US funds) , and Alcor US and Mike acting as proxies for other members in Alcor UK, who progressively bought up Alan's shares in the building.

When Alan says (sic), *"Yes I built the unit yes I supplied £350K money but I offered the members 180 £1000 shares that half price to buy the whole facility so we it could be owned and run by a collective but as I recall 3 took up the offer and only 1 was a large share holder who wanted to get out by the time the UK facility closed.(these figures may not be exact but close)."* I would agree that Mike Price was certainly the largest shareholder, and the individual who put the most money on the line, other than Alan. However, this discounts the extraordinary effort put forth by Alcor US management at the time, who not only voted to buy shares in the UK facility, but did so in part using patient care fund money. This was done for the reason that all of us at that time felt the UK facility was invaluable and should be retained even at the risk of precious patient care fund capital. In fact *the* justifying reason for using patient care fund money was that the UK facility served as a potentially vital safe haven to where the patients could be evacuated should storage become impossible for us in the US.

As to what transpired at the end, Mike Price gives the following account in response to questions from me about how things unfolded:

*"Alan did not force the sale of the building -- it was very definitely a *mutual decision*that both groups agreed with. What happened was that there was a final meeting, at Alan's place, between what we can loosely call the "CI group" and the "Alcor group" to see if we could patch our differences up. It became clear that we couldn't and both groups split to chew things over.*

*I left in the Alcor group, obviously, (with Andrew Clifford, Sue, Tim, and possibly a few others). We stopped off a few miles along the coast road and swiftly decided that that we would have to sell the building. As I recall it, we sent a text message to Alan to that effect, which crossed over with a message from Alan saying the same thing. Who *sent* which message first I'm not sure (probably Alan), but the *decision* was very definitely made independently by both groups. Alan should not be regarded as the instigator of the decision -- indeed he asked me to reconsider a few days later, but I felt that the Rubicon had been crossed, too much bad blood had been spilt and I was just sick to death of everything. I wanted out.*

A few days later I sent out an email to everyone saying that I didn't wish to be the largest shareholder any more. As I recall I gave people to a week to let me know of any offers to buy out most of my share. To which there was a resounding silence from everyone except Andrew Clifford who offered to increase his stake (although not by enough on his own).

Re: UK storage. I distinctly recall telling the combined group (either at that final meeting, or a just prior one) that this was a golden opportunity for us in the UK to go for our own storage and

*put the US schisms behind us, and don't recall getting a positive response or public backing from *anyone* in *either* group. The most "positive" responses were along the lines of "yeah, right, but who are we going to go with, CI or Alcor?" which I found incredibly frustrating. Perhaps some people did agree with me, but I don't remember getting any strong public backing at the critical time (which was needed), and I clearly recall my bitter frustration at this."*

As Mike Price commented when I spoke with him by phone on 19 July,2008, "had we (Alcor UK) had patient storage capability the whole debate over CI vs. Alcor and the resulting bad blood would never have happened. We would have just carried on and remained unified as a group of people who wanted cryonics and was providing it for themselves."

I believe the above is a reasonably concise and accurate account of what transpired and why. If I have made any errors in this narrative I would ask that Alan, and any others with certain knowledge, bring them to my attention.

What I have never understood about the objection of Alan and a number of the other members to cryopatient storage in the UK, on the basis of there being insufficient manpower, is that patient storage is the least labor intensive part of cryonics operations. If a group cannot muster reliable staff to store patients then they have absolutely no hope of mustering sufficient and reliable personnel to perform standby and transport operations. How is a time and labor-sensitive area of operations which must go on indefinitely and be ready round-the-clock be feasible, while patient storage is not?

I know all too well from personal experience that it is very easy to sit about and criticize someone with 20-20 hindsight. This is especially galling when the critic or critics wearing the retro-spectacles have never even bothered to bestir themselves from the chair from whence they make their "sage" observations. While many criticisms of me are possible and justified, I cannot be accused of not having entered the fray, taken my wounds, and shed my blood with the best of them. I would be more than happy to leave this history to the past, but the situation is such that the events of those days, and their underlying causes, are still in play, and are affecting the safety and potential survival of UK and European cryonicists now, *not the least of whom is you.*

Regarding vitrification in the UK Alan has written (sic): *"This is correct and they (sic Alcor) are very close for the US but they can't for the UK until the transport problem is solved. If anyone comes up with that solution everything is in place to vitrify in the UK. The alterative as Mike (Darwin) rightly states is to store in the UK. but who is going to* pa*y for it?"* I would like to note that I know of no realistic plans by Alcor to create vitrification capability in the UK. Vitrification as practiced by Alcor is more complicated and more demanding than conventional cryoprotective perfusion and requires sophisticated temperature control, monitoring, and highly experienced personnel to administer it. Indeed, done properly and per specifications, the current Alcor Transport Protocol requires the participation of very well trained and medically experienced personnel who are available not only with little or no notice, but who can remain deployed for several days, if necessary. Historically, Alcor has been unable to muster such a team for deployment to the UK, let alone create one locally in the UK.

What is more, the notion that you can solve the many problems attendant to shipping vitrified patients at LN2 immersion or vapor temperatures by simply contracting out for the purchase of an item of hardware is not the case. Deployment and operation of a shipping unit, as well as loading of the patient, will require trained, and above all, experienced personnel. It is not the same as putting a kettle on the hob to boil water or perhaps more analogously a leg of lamb in the freezer; it will be a complex operation requiring precision timing and much practice. And of course, the fundamental stumbling block, for onto 5 years now, is the hard fact that large quantities of LN2 in the cargo hold are (or are perceived to be) incompatible with safe aircraft operation. It might be a fair analogy to argue that you would have about as much luck trying to ship a 50 gallon drum of aviation petrol by air as cargo. Yes, the plane is loaded with the same stuff, but not only is it carefully packaged (with many safety precautions) its presence is an inescapable necessity for planes to fly. This is not the case with LN2.

Leadership is believing in the people you work with, attracting others to work with you, and, just as importantly, believing in yourself. Making good decisions and following through on them, often against great odds, is certainly what is required for success in cryonics. Over the past 18 years I have watched (and even participated) in UK cryonics being whipsawed in one direction after another (quite apart from the facility or the issue of CI vs. Alcor). I have seen the discouragement demoralize and ultimately immobilize others in UK cryonics, and I've seen the rapid and near continuous reconfiguration of facilities leave people bewildered and confused. This latest series of pronouncements over vitrification and shipping is simply a continuation of what has been an ongoing problem.

In the coming years I may be spending a significant fraction of my time outside the US and in the sphere of European cryonics. I like London a great deal, and if I can manage it, I plan to spend as much time here as the law allows. Thus, my interests are far from unselfish and I am going on the record as saying that I think the approach that Alan, and the comparatively small group of UK cryonicists allied with him, are taking is ill conceived and very likely unworkable. It is certainly nothing I'd chance my life on. While not initiated by Alan or the other British cryonicists, the bitter divisiveness caused by Alcor's misbehavior during the Chamberlain's tenure of management has been nothing short of disastrous, and I believe that no one would argue that UK cryonics is better off, let alone better poised to take advantage of the increased credibility of, and interest in cryonics based on decisions taken over the last 10 years. I am anxious to see that this changes.

I've long noted that two common threads in most of Alan's communications are the sentiment that not only has he born the lion's share of the burdens in UK cryonics, but that everyone else has, in effect, done nothing, contributed nothing, and is lazy, incompetent, or both. Even if this were true (which I don't believe) nothing is gained by repeating it publicly and often. The truth *is* important and should be spoken. However, frequent repetitions of remarks that discredit the contributions and efforts of its members by the leader of a group mostly serve to advertise failure in leadership and put off any participation that might be forthcoming. The brutal fact is that *all* cryonics organizations started out based upon the effort of one or two motivated individuals. Success or failure then depends upon whether that lone man, or at most two or three men, was able to persuade *competent* others to join him in the fight. This was as

true for CI as it was for Alcor; for many years Bob Ettinger labored largely alone to provide patient care and to develop the CI storage system now in use. In fact, it might reasonably be argued that CI solved this problem initially by hiring Andy Zawacki and most recently by attracting Ben Best. In fact it is instructive that all CI operations, including administration, readiness, equipment fabrication, perfusion, documentation, cool-down and long term patient storage, as well as the writing of many articles for Long Life magazine, are done by these two men alone!

From 1990 until 2008 no fewer than a dozen patients have flowed into American cryonics facilities from Europe and the Near East. In several cases the patients were extraordinarily wealthy and influential men who would likely have represented an enormous asset to UK cryonics and who could easily have provided the ongoing capital for competent labor (as CI sought and found in Andy Zawacki). One of these patients was a Russian Oligarch, another was a former member of the Russian Federation Duma, and yet another was a petrochemical mogul. There are currently 6-patients in storage in Russia – most of them held privately, at great expense, and being cared for in two cases that I know of by relatives who are both influential and wealthy. For cultural, and in some cases ideological reasons, the US was not an acceptable destination for some of these patients, but the UK might well have been – sadly, we will never know.

Alan himself has written, *"If we had all pulled together rather than pulling apart the UK would have a great facility but I have had a steep learning curve and realize its not going to happen until a multi millionaire comes along and gives members all the want for no effort."* This statement is pernicious, false and totally unsupported by the history of cryonics. The injection of large amounts of money into cryonics has mostly resulted in more harm than good and the fundamental administrative and technological advances which have occurred have decidedly *not* been as a result of the generosity of millionaires. Rather, they have come as the result of the hard work of a few men and women who wanted to *do* cryonics and who loved it for it was and is that has generated virtually all of progress to date. These men and women may have started out as customers but they became professionals – and for that there is no substitute. Above all they did not whinge that they were too few and thus incapable of action and progress.

It should be made clear that by no means was Alan Sinclair solely responsible for the demise of the UK facility. Others could have and should have stepped up and made commitments, or at very least made their voices heard loudly and clearly, and, with the exception of Andrew Clifford, this did not occur. As we now know in hindsight at about the time that decision was taken I was desperately casting about in the US for a place to work and to house the ~£250,000 worth of cryonics and research equipment I owned. I would have come to the UK in a heartbeat; staying here my allotted 6-months of each year to teach and train – gratis. I note this as a point of instruction for future decision taking in such critical and hard to reverse situations, not as *the* definitive solution to the problem. From my perspective the disintegration of Alcor UK not only could have been prevented, but almost certainly would have if the group remained unified, in other words, if they saw themselves as people who had to rely only on themselves for their wellbeing and survival. As a unified group they could then carefully identify and consider many choices, and just as importantly, generate an exhaustive list of

people to contact who might provide advice, identify additional choices, or even provide material help. At very least, such a determined, patient and dogged approach would have bought a lot of time for thoughtful and unemotional consideration.

Had any other members of the group independently decided to switch to CI it would have mattered naught. However, when Alan Sinclair made that decision it had impact far beyond his personal situation. He was the leader of the group and his decision not only to switch, but to vigorously advocate that others do the same, was not merely a vote of no-confidence in Alcor US (which was fully justified), but also the death knell for Alcor UK. The crucial point here is that it does not seem reasonable that anyone would have taken this decision if they really saw themselves as they were then, and as they remain to this day: a group of people who are, in the final analysis, on their own. No one in the US is going to come dashing in to save you (they have their own problems to sort out), and if you rely on that you will confront another 18-years of broken promises and abysmal care. Thus, the most golden rule in cryonics is that nobody, absolutely nobody, is going to save your life for you. If you want it you must do it for yourself or you must join another group and relocate to near their facilities. Once you commit to creating a local group, and working to establish cryonics in your own country, you must believe in and fight for that group at all costs short of your very life.

Over this past year I have been scanning in news clippings from the past 4 decades covering cryonics and this has caused me to reflect on the truly terrible crises Alcor endured in the 1980s; most spectacularly the Dora Kent incident and the fight for the legality of cryonics with the California DHS. I did not acquit myself well during the Dora Kent crisis, but, fortunately, others did. Victory seemed impossible and survival unimaginable, at least to me. My lack of courage, or more honestly, common sense (after all, what exactly was our alternative but to fight on?) cost me dearly. But it also taught me what leadership is all about and it gave me the insight and resolve never to make that mistake again.

As I was pondering this matter late one night here in London, Garret Smyth handed me the following quote from Shakespeare's Henry V. There was much irony in this act for, unbeknownst to Garret, this play, along with Shakespeare's Richard III, was quoted often and at length by Curtis Henderson as a metaphor for the struggle of cryonics. He and Gillian Cummings would often riff off of each other reciting pages of dialogue at a go.

I therefore think it good and proper to end with those words prefaced with a few more about the battle Agincourt. While there has been much debate about just how badly the English were outnumbered that day, it is not disputed that there were at least 3 skilled French soldiers

for every English soldier. Conventional military wisdom is that victory is impossible when the odds reach or exceed 3 to 1 (against) on the battlefield. Beyond the numerical superiority of the French there was the wretched situation of the English army. They were malnourished, racked with dysentery, and had just marched 260 miles in two-and-a-half weeks!

We do not know what Henry said to his men on the eve, or on the morning of the battle; those words are lost to history. We may, however, fairly presume that the Bard caught the sense of those words and whether they were spoken by Henry on the rain-soaked fields of Agincourt on the morning of 25 October, 1415 (Saint Crispin's Day) or not, they *were* spoken by Curtis Henderson (more than once) within the confines of the Cryonics Society of New York and Cryo-Span storage facility at Coram, Long Island - spoken as words of instruction and inspiration to a lad who was a would-be cryonics professional in 1972 and 1973. Take these words as I took them, as instruction and inspiration:

The Battle of Agincourt: the armies clash

*WES*TMORELAND. O that we now had here
But one ten thousand of those men in England
That do no work to-day!

KING. What's he that wishes so?
My cousin Westmoreland? No, my fair cousin;
If we are mark'd to die, we are enow
To do our country loss; and if to live,
The fewer men, the greater share of honour.
God's will! I pray thee, wish not one man more.
By Jove, I am not covetous for gold,
Nor care I who doth feed upon my cost;
It yearns me not if men my garments wear;
Such outward things dwell not in my desires.
But if it be a sin to covet honour,
I am the most offending soul alive.
No, faith, my coz, wish not a man from England.
God's peace! I would not lose so great an honour
As one man more methinks would share from me
For the best hope I have. O, do not wish one more!
Rather proclaim it, Westmoreland, through my host,
That he which hath no stomach to this fight,
Let him depart; his passport shall be made,
And crowns for convoy put into his purse;
We would not die in that man's company
That fears his fellowship to die with us.
This day is call'd the feast of Crispian.
He that outlives this day, and comes safe home,
Will stand a tip-toe when this day is nam'd,
And rouse him at the name of Crispian.
He that shall live this day, and see old age,
Will yearly on the vigil feast his neighbours,
And say 'To-morrow is Saint Crispian.'
Then will he strip his sleeve and show his scars,
And say 'These wounds I had on Crispian's day.'
Old men forget; yet all shall be forgot,
But he'll remember, with advantages,
What feats he did that day. Then shall our names,
Familiar in his mouth as household words-
Harry the King, Bedford and Exeter,
Warwick and Talbot, Salisbury and Gloucester-
Be in their flowing cups freshly rememb'red.
This story shall the good man teach his son;
And Crispin Crispian shall ne'er go by,
From this day to the ending of the world,
But we in it shall be remembered-
We few, we happy few, we band of brothers;

For he to-day that sheds his blood with me
Shall be my brother; be he ne'er so vile,
This day shall gentle his condition;
And gentlemen in England now-a-bed
Shall think themselves accurs'd they were not here,
And hold their manhoods cheap whiles any speaks
That fought with us upon Saint Crispin's day.

Henry, and his men, won the Battle of Agincourt that day; they not only routed the French, they crushed them and annihilated a goodly share of the nobility in the process. Henry not only made it to Calais (his initial objective), he went on to become the regent and heir to the French throne under the terms of the Treaty of Troyes in 1420. It also bears noting that Henry's victory was not simply a miraculous triumph of will and courage, but also of technological savvy. Henry's army was comprised of 80% archers equipped with Welsh longbows. The French had a few archers equipped with crossbows. Today, it is difficult for us to understand the power of the longbow. It could easily pierce the armour of the time, pass through a man and pin him to his horse or to the ground. It has been estimated that Henry's ~6,000 arches discharged an average of 60 to 70 arrows a minute with a fair degree of accuracy. This was, then, the medieval equivalent to deploying a company of machine gunners against the French at Agincourt. As I said earlier, there is no substitute for selecting the right technology. Both leadership and good judgment are required for victory.

In the UK, from 1990 on, there was a terrible reluctance to grasp the nettle and take on the full burden of cryonics by and for British cryonicists. This reluctance was understandable in that accepting the responsibility to care for patients in long term cryogenic storage is a huge obligation, and one which involves considerable day-to-day effort. I know that one very legitimate concern Alan Sinclair had (which was shared by others in UK cryonics at the time) was that there were not enough truly committed cryonicists in Britain to ensure the success of such an open-ended undertaking. I have no doubt that this was true then, no doubt that it is true now, and no doubt that it was true for both Alcor and CI when they (respectively) made the decision to commence storage operations. In fact, I would go so far as to say that this *still* true for both organizations: can you ever have enough truly committed cryonicists to ensure the success the success of the indefinite care of cryopatients? Since I was the foremost advocate of undertaking storage of patients at Alcor in 1981 (and one of 3 people responsible for the final decision) I can speak with authority about the fear and uncertainty that accompanied that decision.

A common English-language idiom, which is also the title for this essay, is to "grasp the nettle." This is a particularly appropriate idiom and metaphor

in the case of UK cryonics. *Urtica dioica*, or the stinging nettle as it is more commonly known, is a ubiquitous weed here in the UK. The stings are quite painful and even the gentlest contact will leave a fiery rash of stings. However, if the plant is grasped firmly with the bare hand, crushing the stingers instead of allowing them to penetrate the skin, the plant may be safely handled. Unfortunately, there is a natural hesitancy when grabbing a nettle and it is almost a given that first time practitioners of such bare-fisted tactics close their hand too gently and too slowly, and so get stung. Cryonics will be reborn in the UK sooner or later. I believe that that time is now at hand. However, regardless if I am wrong or right on that point, I am certain that when the time comes it will be essential that British cryonicists act with resolve and accept full and complete responsibility for their own wellbeing – including for their long-term cryogenic care.