

Comprehensive Cancer Care: Integrating Complementary & Alternative Therapies
Where Do We Go From Here?

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Panelists: Clement Bezold, PhD; William Fair, MD; Wayne Jonas, MD; Ralph Moss, MD; Mary Ann Richardson, DrPH; David Rosenthal, MD; Ernst Wynder, MD

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Dr. Bezold: By the time I get finished, you can decide where I am. As a futurist, usually I'm at about 30,000 feet. That's probably where I'll be.

Jim has asked me to sit through the conference and to react at this point. I will do that in light of trends that we see going on in health care, some clearly visible here, some less so. On the screen is where you can get more detailed data and information. We're releasing a report at the end of this month on *Complementary and Alternative Approaches in U.S. Health Care*. I'll also mention in passing, as Jim did, the American Cancer Society futures book, *Horizon 2013*. I have also done a presentation for NCI about PDQ. In that, I put together a number of trends on cancer. There's more detail than I'll be able to put in this brief presentation, but you can get it there. I'll make some comments about the congressional context in a moment.

Looking at the meeting, it's clear that one of the major trends going on in health care is you. The rise of complementary and alternative approaches in health care is one of the most significant aspects of U.S. health care. In 1990, one third of all Americans were using some form of alternative approach. Now it's 40%, and in cancer, it's higher. It's clear that this is a major phenomenon within U.S. health care. The discussions that we're going through are a critical piece of where this community is going.

The first trend that I see and want to talk about is outcomes. Outcomes will drive U.S. health care. Outcomes will. They have not. This is as relevant for the complementary community as the conventional community. Twenty years ago, when I first met Jim at a

conference on alternative approaches, it was clear that the alternative fields were not keeping outcomes. They weren't doing any better than conventional approaches. Conventional approaches are getting better and better each year. They're still not very good. We still have lots of inadequately tested approaches, but the same is true for complementary.

As a futurist, I'd argue that every clinician, complementary or otherwise, will become an outcome generator. We will increasingly look at everyday practice of every clinician. You'll have practice management tools, but it is mostly your own discipline that will increasingly record outcomes. I'd argue that looking at the marketplace, consumers will want to know what your outcomes are. They will judge you, and they'll judge therapies, on the basis of outcomes more and more in the future. That's really important.

It's clear that when it comes to outcomes, even once you have them, complementary and alternative approaches are often disadvantaged. I was very impressed as we did our report by the writings of Mr. Dreher. He is here, but we have not met. When it comes to what conventional medicine pays attention to, you are disadvantaged, even when you have the outcomes, at this point. That will change. Both sides need to do that.

The other thing that will make outcomes more important is this recent finding of the fourth to sixth leading cause of death. Do you know what that is in the United States? The fourth to sixth leading cause of death in the United States, depending on how you count it, is the side effects of appropriately used therapies, particularly pharmaceuticals. As we pay more and more attention to that, that will become significant.

John Wennberg of Dartmouth Medical School has done a lot of patient education. When he shows people the full set of forces shaping their therapy and gives them a choice, they will often do less invasive therapy. That trend is growing in health care. It says that complementary

and alternative options that are less toxic, and in general enhance wellness and well-being, will grow. That's a major trend.

The other trend about outcomes that I'd like to put on the table for you is broader outcomes – not only survivorship, in terms of cancer, but prevention. In the Cancer Society book, Ernst Wynder has a chapter. He makes a couple of comments. First, his hypothesis is that most cancers are related to metabolic overload. The second comment is that tobacco and poverty are the two greatest causes, or correlates, of cancer in the United States.

Ultimately, if we get serious about health, we will get serious about the risk factors. That will mean we will get serious about poverty. Harold Freeman at the beginning of the first day said that poverty in the United States should not be an offense punishable by death. In the United States, if you're poor, you're more likely to die of cancer and other diseases.

In the future, this movement and conventional health care will increasingly look at broader outcomes. Related to that is the World Health Organization's Health for All Vision, which is going to set the gold standard for health outcome measures in looking at what's out there. The World Health Organization says we will not achieve health for all until we do it with equity, solidarity, ethics, gender and human rights. They've added that set of values. I see that emerging.

You should watch, as the complementary and alternative community, the rewrite of the Healthy People Objectives. The Year 2000 objectives for the nation are being rewritten. The Year 2000 objectives have two overriding goals. One is longer years of healthy life. The second is eliminating health disparities. The U.S. Government is shortly going to release these objectives. The overriding objective of eliminating health disparities is a tremendous advance in

public policy. I'd argue that you want to think about the role of complementary and alternative approaches, in doing that.

The second trend is customization. We will use genomics research to identify which genes make someone more or less likely to be successful in therapy. They've identified a gene related to whether or not taking aspirin prophylactically for stroke will work. It's clear that many of the alternative approaches – Oriental medicine, Ayurveda, homeopathy – have very extensive, phenotypic observations of what is clinically relevant. We argued, in this report coming out, that those will become as significant as genotypes. We're going to see an incredible learning upswing in the next few years because of customization of therapies.

In terms of regulation, people here were beating up on Bob Temple yesterday. Bob Temple has a very difficult job. He's doing his job, and his job is the wrong job. I believe as a futurist that his job – the 62 amendments to the Food, Drug and Cosmetic Act which established FDA's regulation – were the high water mark of the industrial era. The Congress asked FDA to protect us through a massified approach to safety and efficacy. That was because a lot of flipper babies were being born due to the terrible teratogenic effects of Thalidomide. There were problems. In effect, Temple is applying that 40-year-old approach to doing things. That's not going to work in the future. We're going to customize.

Part of your job as the alternative community is to think about what drug regulation should be. What should it be? Customization and outcomes together will mean that we can no longer ask FDA to do the job it has done before, which is approve a drug as generally being safe and efficacious. We're going to have to ask for what sets of phenotype and genotype is a drug appropriate. That's not going to be something that regulation can do. We'll have to use the market, a smarter market, far more effectively.

In terms of research, there are real biomedical opportunities. I do think that by 2020 cancer will not be a problem. Some of that will have come from people at this meeting. Some of it will come from more standard biomedical researchers. We've seen this in heart disease, where we're going to get a rotorooter pill to melt plaque from your arteries. Dean Ornish can already do that using integrated therapeutics. He argues he can reverse cancer as well. I think we'll have social design choices as to what set of characteristics we want for therapy and how that leads to lifestyle.

In terms of public policy, we should think about where our research dollar is going. Where are the greatest gains? If you were investing NCI's budget, where would you put it? I encourage Jim and the Center, from your perspective, to say, if you had that whole pot of money from NCI or NIH, what would you do with it? At the advocacy session, Frank Wiewel argued along this line. He argued that NCI should only fund those things which would not be commercially adopted – in other words, unpatentable available remedies. I don't know if I agree with that, but that's the kind of argumentation you want to put out. What would get us the greatest health gains for public policy taxpayer dollars? That's a totally appropriate thing to ask. It's something you need to be thinking about.

As a learning system, our clinical trials are almost as dumb as our regulatory processes are dumb. We need to reinvent it. If you're interested, we have another report I didn't mention, *Clinical Development 2005*. If you get on our web site, you can ask us for it. We looked at some of the things emerging. This community and OAM have been looking at what it takes to do clinical trials, but that is a moving target. When you add customization and the kind of information-rich environments we're moving to, it's a different game. You need to think about your position on that.

In terms of the environment as a major trend, you heard Devra Lee Davis arguing that we're moving towards greener products and that there are a host of issues there to look at.

William Fair showed a slide of a section of prostate that had cancer cells. He argued that a third of men at 30 have prostate cancer cells in their prostate, and 50% at age 50. But that's not a problem. For many men it won't become clinically significant disease.

In the years ahead, we will be able to identify cancer and dysplasia at organ sites. It will raise the question of what do we find, because we have lots of cancer, or precancer, floating in the body. The immune system gets it. We will turn around and say, "What is it that reduces immune competence?" Michael Lerner, Theo Colborn and Nicholas Ashford's argument about the environment, particularly toxicant-induced loss of tolerance, will become more significant. Those of you in the alternative community need to have your own sense of your position about that in relation to a mostly treatment-focused movement.

In terms of policy change, moving OAM into it's own Center status is a major piece of legislation. So is Berkeley Bedell's Freedom of Choice. Those are two things you want to be active on. At the meeting on advocacy, there was a significant piece of information that you should have. Instead of just writing your congressman, call your congressman's office and identify the health person. Get that person on the phone, and have that person call Congressman Burton's staff person, Laurie Taylor. Her phone number is up on the screen, as is her e-mail address. Call their staff person. It's more powerful than simply writing a letter to your congressman. Have them say that Congressman Burton is investigating what's up and what's happening. You could do the same for Sen. Harkin in terms of his staff.

As a community you will need to take positions on regulatory reform, spending priorities at NCI and NIH, and moving beyond in terms of risk factors. What does that mean in terms of poverty and the environment, in addition to tobacco? Those are observations.

The final comment I want to make relates to vision. As futurists, we've come to find that creating the preferred future of an organization or community is the most powerful way to look ahead, the most important productivity-enhancing tool. When Bernie Siegel says desire and intention alter matter, that's what vision is about. Many of you here use imagery as visualization of that. When you put your values into an image of the future that you're committed to creating, you change the environment. Is this community doing that?

As you do it, I have an observation about who the enemy is. NCI and FDA are both public policy organizations which we, as taxpayers, should own. You should consider what you want to do. It's a tremendous compliment to Jim Gordon that Bob Temple was at this meeting. It's a tribute to Bob Temple to have as much integrity as he has to be here to deal with his questions. I don't agree with all of his questions. The comment from the naturopath about the relatively unfair way in which many of your treatments are handled, I agree with. But I've been watching Bob Temple and the FDA for 20 years. If I wanted public service with integrity, it's Bob Temple. You need to think about how you will move forward in terms of outcomes that show that there's a change. He will deal with science.

Likewise, NCI. It's a public policy debate about where we will get the greatest returns. Don't be stuck on your pain and hurt, which is in many cases justified. Likewise, the American Cancer Society. It's interesting for me to hear the comments and criticisms of it, which are well deserved. It was asleep at the switch when survivors and patient groups needed help that they didn't get. They created their own. That's totally appropriate and should happen.

But ACS is potentially your organization. ACS has name recognition that most organizations would die to have. Outside those in this community, it has very high and very positive name recognition. It also raises nearly half a billion dollars a year. Don't be held up by your past hurts, in terms of pursuing a vision. They are a very appropriate ally. I'm working closely with them myself. I encourage you to work on them and work with them.

In closing, I simply want to say that you're part of a movement. You will experience many of the same trends that conventional health care will in terms of customization, looking at the environment, and asking the bigger outcome questions. Thank you.

Dr. Gordon: Thank you, Clem. That was a wonderful summary and a wonderful message for all of us. Wayne.

Dr. Jonas: Thank you, Jim, for inviting me to the conference. It's been a very enjoyable experience. In many ways it is built off of the topic that I want to talk about. Beyond POMES, what goes on now at the NIH in the area of moving research forward in alternative and complementary medicine, specifically in cancer?

I have a cartoon I sometimes show that shows a little boy up at the board. He writes $11 + 12$, and at the bottom he says it equals 1,112. The teacher is looking over his shoulder with a very stern look. He says, "How do you know it's wrong? Maybe it's just unorthodox." I show this to illustrate that when we do research, we have to use good methods. Otherwise we get wrong answers. If we get wrong answers, we are in trouble. We have to unlearn those wrong answers before we can discover the first ones.

Also, to go back to Bob Wittes' comment at the very beginning of this conference, research is one way in which a common language can be produced, a dialogue between unconventional and conventional practice. In our sessions on research, we had a dialogue about research methods. Some of the comments were that this doesn't look a whole lot different than what we've been doing, but some creative twists are required to make sure we get good questions.

There's another cartoon I sometimes show in which a mouse is sitting on a couch. A psychiatrist is saying, "I've discovered a new form of psychotherapy, but like everything else, it has first to be tested on mice." That illustrates the issue that you can have good methods, but if you don't apply them appropriately, you get ridiculous information and you waste money. This means that the experts have to be involved in deciding not only what are the good methods, but what is the proper application of those good methods. Research in these areas is going to have to be collaborative. In developing and moving these areas forward, those who have experience in delivery of the practice must work with those who have experience in the execution of the research.

What is POMES? Some of you know. Some of you don't know. In August of last year, the OAM and the NCI put together a conference to explore approaches to moving cancer research in complementary and alternative medicine forward. One main purpose was to promote dialogue. In many ways this is an extension of that meeting. The dialogue has continued here. If you ask what has happened beyond POMES, part of it is this meeting. It's why we're one of the cosponsors, to promote this dialogue.

A second part was to look at the components and the relationships between the parties, the experts involved in executing research. One of the major questions we tried to address at

POMES, and on which we got extensive feedback, was whether research in complementary medicine would be something separate, independent. Do we need to develop a separate organization, a separate contract, a separate investigation into these areas, or will it be integrated? Will it be something that is developed along with the infrastructure, expertise, mechanisms, etc., that we currently have that do research in conventional medicine? The answer we got back from that meeting was clear. The only way to move forward is through an integrated process of research that pulls together all the experts, each of whom provides their type of information.

From that meeting and the feedback we got, we identified four major elements that need to be in place in order to move this research forward. Those are in the blue boxes in the middle. First there needs to be developmental work. Many of these areas have not been researched in the past. We don't have the basic information necessary to decide how to ask the questions. Many of the practitioners have not engaged in research. Many of the researchers are not familiar with the practices. There needs to be a communication, a dialogue, to develop those basic issues. The developmental research needs to be developed. Above and below that box are illustrations of some activities that we're engaged in right now to move the developmental process forward. Best case series, basic research, summaries of the literature, and moving dialogue forward, as in this meeting, between researchers and practitioners.

The second is advisory input. You have to have experts involved, both from the complementary and alternative medicine community. The third is scientific review. The fourth is the actual mechanisms to execute the research. These are the elements that need to be involved that were discussed extensively at the POMES meeting.

What are we doing now and what are we planning to do next, in each of these areas? In the area of developmental work, we are looking for a full-time person who will probably work closely with us but will be devoted to this work in the NCI. That person will work to buff up or increase the activity in best case series, in literature review, and in putting together expert meetings on specific research topics. We're planning to recompute our center in cancer in complementary and alternative medicine at a higher funding level next year, putting more resources and effort into a center that does a lot of the developmental work in these areas. We're also looking at other mechanisms to move forward the developmental work through contracts, etc.

In the advisory area (this is the "let's make sure we're not doing psychotherapy on mice" group), we're putting together what we're calling a CAP, a Cancer Advisory Panel. This is a specific advisory group to give the NIH – both the NCI and the OAM – advice on how to move forward and which projects to move forward. We plan to have it a balanced panel, so it represents the interests of the public. There are representatives from the complementary and alternative community and from the conventional community.

The purpose of this panel will be 1) to evaluate the current literature or look at summaries of evaluations in the current literature on CAM in cancer; 2) to make recommendations to the NIH as to what next steps should be taken to further evaluate those areas; and 3) to be available to observe and provide advice during the process of the research to assure that the research is being done fairly and is providing information that will be in the best interest of the public. Advisory input from our AMPAC and from the NCI will be incorporated as usual, but this is a special focus on cancer.

In the area of scientific review (this is “does 11 plus 12 equal 1,112, or not?”), there are mechanisms now to assure that once particular projects are developed, they will go through the standard scientific review process. There are NIH review panels in these areas. There are NCI centers who do their own scientific review and have been given the authority to do that review at their particular centers, as well as cooperative groups. They will be engaging in and doing the scientific review.

What about actually getting the research up and going? This is the concrete step. This is where the rubber meets the road. That’s the last part. The activities in these areas are also moving forward. Specifically, the NCI has a whole series, an extensive network of centers and cooperative groups, that do research in all phases of cancer therapy, from basic science all the way up through large multicenter clinical trials. The NCI will be using these centers and these cooperative groups to execute research that is recommended and moved forward by the CAP and the other activities that precede this. They will be executing the clinical trials. They will be looking at the quality of the products, etc., and then utilizing their resources to execute that with supplementary money from the OAM.

There’s one more thing that is not on the slide and probably has the most relevance to the public. That’s information. How do you get the information that is coming out of the research, out of the summaries, out of the clinical trials? This also is moving forward. Several months ago, the National Cancer Institute pulled their very much outdated summary sheets of information on unproven or unconventional cancer therapies. They are currently making a major effort to redo these with updated information, much of it coming from the OAM’s complementary citation index, which is now online. Anybody can access this through our web page. Much of that information was summarized from the Texas Center and other sources.

NCI is redoing the complementary and alternative medicine cancer information sheets, which will now be distributed through their cancer information network. There will be an advisory board that includes cancer experts as well as experts in complementary and alternative medicine who will review those sheets. They are planning to turn out at least one of these a month until they completely redo the entire set. We hope that then we will have a good source of public information in these areas that is up-to-date and coming from the NCI.

These are some of the activities that are currently involved. When people ask what's happening after POMES, there's a considerable amount happening after POMES. Some of it is directly related to and encouraged by the activities here at this meeting. We are moving forward specific mechanisms to get research done and get it done in a proper and a fair way.

Dr. Gordon: Thank you, Wayne. For those of you who came in a bit late, once the presentations are over there will be plenty of time to ask questions and raise issues with all of us. Ernst.

Dr. Wynder: Thank you very much. First I'd like to thank Jim for organizing this conference and all of you to have listened so patiently to the speakers for two-and-a-half days.

A long time ago I stole a motto from Hippocrates, who said, "The function of medicine is to help people die young as late in life as possible." Following this axiom, it makes more and more sense that most of our diseases are caused by our own lifestyle – what we smoke, what we drink, what we eat, our sexual activity, our physical activity. That's the good news. The bad news is that we have to do it ourselves.

I've learned three principles in cancer and in general research: 1) Cancer is not an inevitable consequence of aging; 2) as Clem said, most cancers relate to metabolic overload; and 3) I can prevent cancer without understanding the precise mechanism of causation. The same applies to treatment.

When I was in medical school, I had a teacher, Dr. Cowdry, whom I'll never forget. Most of us never forget our mentors. He said, "Wynder, if you want to be a good scientist, remember one thing. Listen to nature." I have listened to nature all my life. As a medical student, I listened to the life of lung cancer. I thought about the fact that if you inhale tobacco smoke, you irritate your lungs. I knew that if you burn organic matter, you create carcinogens. It seemed simple to me in 1950 as we published then, that smoking was indeed a cause of lung cancer.

Today we no longer pay much attention to history. Most of our young interns, and most of our doctors, are so involved in technology that they don't ask you about your habits, your family history, and your life per se. So it is with diet. If you reflect on it, we eat too much, we exercise too little. Why is it surprising that the kind of diet that we eat today, which is not in line with our biological heritage, causes disease? It's clear also in listening to history that we have to begin our habits very early in life. How does this relate to our topic today? It relates to our topic today because again, if you listen to history, you realize that what we eat is not only an important cause of cancer of the colon, breast, ovary, endometrium, prostate and pancreas, but it is also important in its therapy.

When I listen to history, I notice that the Japanese have very little breast cancer, unless they move to Hawaii or San Francisco. Then the rate goes up. Clearly it cannot be a genetic factor. Even my friends in gene therapy don't believe it happens so rapidly. It is also true that if

the Japanese develop breast cancer, they have a 40% better survival, per age and per stage, than American women. If this type of benefit was seen by any chemotherapy, the chemotherapists would get on the plane to Stockholm to accept the Nobel prize. We see it, but we pay no attention.

We at the American Health Foundation some years ago applied to the National Cancer Institute for an idea that you could use diet as an adjunct to the therapy of post-menopausal breast cancer. Some four years ago we were funded (it just shows it's possible to get funded for diet) to do a trial with 2,500 women who are in stage I and II of breast cancer. We have completed 1,500.

They're put on a 15% fat diet after treatment of tamoxifen and/or chemotherapy. We have now shown that we can keep these women at a 17% fat diet. It will take at least a year before the blindness of the trial is broken. I can only report to you today that we were able to collect 1,500 women's participation in cancer centers around the country, that our diet has worked, and that we have established nutritional activity in all of these centers.

It's our hope that these women will not only have less breast cancer recurrence and better survival, but also less cancer of colon, ovary, endometrium, coronary artery disease, rheumatoid arthritis, arthritis and all other kinds of conditions. With one stone you can get 15 birds. This is one clinical trial that we are undertaking. We are recommending that cancer centers throughout the country participate in trials of this nature.

The next one is cancer of the prostate, to which Dr. Fair referred earlier. Bill and I are engaged in a much simpler trial, because unlike for breast cancer, we have a pretty good biomarker, PSA. We are taking patients who after prostatectomy, or after watchful waiting, develop an elevated PSA. We have randomized them in a number of different groups, one of

whom will be treated with the same 15% fat diet. For those of you who cannot eat percent, that's about 30 grams of fat per day. Somebody showed yesterday a McDonald's hamburger and said it's only 26 grams of fat. On our diet, that's all you can eat that day. We need to know about diet.

Another arm gives people selenium and E. Why selenium and E? Because Dr. Larry Clark demonstrated in a prospective study a remarkable reduction in prostate cancer in men for eight years on 200 micrograms of selenium. The National Cancer Institute showed in a study in Finland that those who take vitamin E have a 35% reduction in prostate cancer. Now we are combining the E, the selenium and the low-fat diet. In other arms, we can take flaxseed oil. We can take all of the methods that were discussed that will reduce cancer, because prostate cancer is one of the very few cancers where we do have a biomarker.

To those of you who are scientists, I suggest if you really want to make an impact, give us an early biomarker for cancer of the breast and cancer of the colon, so we can also monitor progression beyond waiting for recurrence. These things are possible.

What about doing a trial in your own practice? We think it's entirely possible that you can take stage IV cancer of the pancreas or of the colon and do a trial in your own practice, as Dr. Gonzalez has carried out on his own. I'll give you statistics. Cancer of the pancreas has a survival of two years of .3%. You need only two patients to survive two years in order to have a significant difference. For stage IV cancer of colon, two year survival is 20%. You need only have a 50% survival to show that your therapy works.

To all of those who make claims, as you have done here at this meeting, that your particular therapy works, you need to demonstrate that in a scientific manner. This can be in

either a large clinical trial, which you may not be able to do, or in a small clinical trial that you can do in your practice. Such clinical trials in a private setting should be possible.

Dr. Gonzalez, who presented his data this morning, will conduct the first randomized trial on cancer of the pancreas, with 70 or 90 patients. It has the same survival I've just indicated. The average survival is six months. Gemzar, the recognized treatment for cancer of the pancreas today, will be used as a control. We have been able to contribute to this trial being initiated. I'm very happy that I'm able to give some support to this study. I'm chairman of an oversight committee, which all of us have. Everyone who believes that what they're doing is pretty good ought to have an oversight committee of some outsiders. We are lucky that Karen Antman has agreed to do this randomized trial at Columbia.

These trials are clearly possible. We hope to study the mechanism whereby pancreatic enzymes may affect cancer growth in the experimental animal. In the meantime, however, it is not absolutely necessary to know the mechanism (even though it helps) in order to demonstrate whether a particular treatment modality works.

I have summarized briefly my ideas about prevention and therapy. They relate largely to lifestyle, and in therapy, largely to components which are not toxic. One element of the trial that Dr. Gonzalez will do is quality of life. Quality of life, and mobility, are very important aspects of treating our cancer patients. Sometimes I can cry, seeing the way we treat cancer patients today. We doctors do not give enough attention to the misery which these patients go through while we give them our so-called orthodox therapy. Mobility and quality of life are very important elements.

In conclusion, sometimes you think about life and you think about what you want to do. One reason I never entered politics is because of what you see in the Congress today. In one of

the most important public health decisions our Congress could make, to prevent our children from starting smoking, our Congress is blinking in view of the enormous pressure they get from major industrial forces on the outside.

That leaves science. In 1950, when I submitted to my professor my work on smoking and lung cancer, he said to me, “Wynder, you’re going to have a hard time.” I said, “Why is that, Dr. Graham?” He said, “The tobacco industry will hate you. The media, who make money on tobacco, will hate you as well. The Congress, who gets supported by tobacco, will not particularly like you. The medical profession is apathetic, and the smokers don’t care.”

But then he said, “You know, Wynder, there’s one thing you have going for you.” I said, “What is that, Dr. Graham?” I got off my chair, and he said, “You know what you have going for you? You happen to be right.” So it is, I believe, with nutritional treatment of certain cancers. We are right, and we can prove it. The reason I became a scientist rather than a politician is that in the long run – sometimes in the very long run – truth will finally prevail. I thank you.

Dr. Gordon: Thank you, Ernst. At next year’s conference we’ll be hearing much more from you. Thank you very much. Ralph.

Dr. Moss: I only am going to speak for five minutes. I’m going to say five things. It’s a fantastic conference. It’s a historic conference. This struggle began a long time ago. Many of us can remember when it seemed very one-sided. We were being attacked on every side. Clinics were being shut. There were raids, armed raids if you remember Jonathan Wright. Burzynski’s clinic raided, Burton’s clinic shut down, and so forth. Clearly we are heading into

and are in a new era, a new phase of the struggle, and a very important one. It is a millennial feeling that I have, and I probably share with you.

We're also heading into a time when we will have not just freedom of choice, but the equally important freedom of information. The information to know which of these treatments work and which of them do not – which will turn out to be great breakthroughs, and which will turn out to be frauds. This is the inevitable and necessary concomitant to freedom of choice. We have to have both. One alone will not do. In the past we were shut out from this research establishment. We had no choice but to fight, and we fought well. We fought very well. We built our movement.

If you look around, there are about 1,000 people in this room. We're back to where we were at the time of the laetrile movement. I've been in four meetings this year alone with over 1,000 people, all alternative meetings. The difference is (and it's a tremendous difference) that the laetrile movement was not based on science. This movement is based around science. That makes all the difference in the world. That movement, no matter how vehement it was, had to peter out. It couldn't win in a scientific age. We're in a scientific age, and now we're going to base ourselves around and make science our bedrock. We have no vested interest in these treatments. We don't care which one of them wins and which loses, which fail and which don't.

When we started with the OAM, the scientific establishment was condescending. They treated us like we were at best the little brother. They were going to show us how it had to be done. Times have changed. I really sense a change. Now we're partners. We bring something enormously important to all of this. We bring not just numbers. We bring ideas, intelligence, and our own way. The synthesis, the intelligence of the patients as a collective, is just

phenomenal. Here we are. This is the result of our struggle. It's not over. When you enter into a stage like this, the struggle goes to a higher level. It's a higher and a more intense struggle.

It has to be fought in a different way. I would emphasize to everybody – you've been a wonderful, wonderful audience – but simple humanity, simple questions of politeness rule. At the POMES meeting just last August, I was still in the fighting mode. A man came over to me and said, "They've held out the olive branch to you (meaning the establishment) and you should take it." You know who that man was? It was Glenn Warner, who underwent persecution for having been a holistically-oriented, board certified oncologist in the State of Washington. He had his license taken from him at the age of 75. He's a wonderful man. He was telling me that they've held out the olive branch, and you have to take it. That's why I say to all of you – I know most of you have no trouble with this, but to the skeptics – they've held out the olive branch. If you don't take it, you'll be bypassed. History will pass you by. We should take it. We should do so enthusiastically.

If we have problems, let's criticize the other side, what used to be the other side (the FDA, the ACS, the NCI), as colleagues, just like we should criticize colleagues in our own field. They are our colleagues. If that's what we're going to do, let's do it. If we don't accept them as colleagues, we shouldn't be here. Hold another meeting, or do something else. I mean this very honestly. We have to make the leap. In part it is a leap of faith. If we don't make that leap, then it's not going to happen. We're going to be left behind.

The American Cancer Society goal of reducing cancer mortality by the year 2015 by 50% is a noble goal. I know these promises were made in the past. But you know what? What they didn't have in the past was us. We, as a movement, and as a group, are probably the strongest force for cancer prevention in the United States. They need us just like we need them. We have

to see a concomitant opening on their side also. When we see their committees filling up with members of complementary and alternative medicine groups, when we see that openness translated organizationally, then it will be all the more meaningful.

For once, I think the outlook is excellent. I said at the POMES meeting that I had guarded enthusiasm. Some of you will remember. My enthusiasm now is unguarded. I really think that we should plunge into this. Let's take over this whole cancer war. We can do it. Thank you very much.

Dr. Gordon: Thank you, Ralph. Mary Ann.

Dr. Richardson: Hi. When we were funded at the Center for Alternative Medicine Research by Wayne's group two-and-a-half years ago, frankly I didn't know how I was going to pull it off. I knew that it was going to be a process. I tried to take it one step at a time, to integrate and work with the conventional oncology community as well as the complementary and alternative medicine community. We're in the school of public health, and this is truly a public health issue. At least half of cancer patients are using these therapies. From a public health perspective, it's important that we evaluate them and provide information to cancer patients. We're in two-and-a-half years now. It's been quite a process, just like this conference has been quite an amazing process.

I want to share with you how validating it was for me to have the deputy head of the division of medicine from M.D. Anderson be a commentator on two of the panels on integrative cancer practices. Our chief of clinical investigations, the head of pharmacology at M.D. Anderson, also came to this conference. That makes me very hopeful. In addition to the

conventional community, we have a number of people from the alternative and complementary groups here. The Hoxsey is represented. We have the Floressence group, and physicians who are using the 714X therapy. It's amazing that everybody is willing to come together and move forward with research. That's exactly what we need.

My key points from being on two panels, the integrative practice panel and the research panel, are three issues. Number one, the idea of reimbursement is very important. Cancer patients and people in the audience wanted to know how the therapies provided in integrative practices are being reimbursed. The answer was they are being paid for by the patients. That's something that's very important that we need to address. It's going to be answered as we have answers to the efficacy of these therapies. If we show that they're effective, they're going to be reimbursed.

The second point is especially salient for cancer patients, the idea of combining these therapies with conventional chemotherapeutic and radiotherapeutic regimens. Contraindications of using antioxidants and vitamins. That's an area that definitely needs a lot of research. We're interested in that at M.D. Anderson. We need to see more research efforts in that area.

Third is the idea of funding. It's true that not all trials are going to cost, like the hypericum, five million dollars. But we do need money allocated for research. Again, it's true that not all of these therapies are ready for randomized controlled trials. Some need development work, in the animal models, *in vitro*, and in phase I and II trials. Still we need money. I think that's going to come as well.

In closing, it's beginning to dawn on me that this truly is a movement. It's beginning to sink in. We've heard it from our futurist. This is not going away now. The public is driving this, and they're going to continue to move forward. It's very exciting. I'm reminded of what

Larry Dossey, a fellow Texan says. “The train has left the station on this one. It’s on the way.” I don’t think there’s any turning back. It’s wonderful that we have these collaborations and the input and the conventional establishment working with us. It’s a very exciting time. We’ll just have to continue with the process. Thank you.

Dr. Gordon: David.

Dr. Rosenthal: Thank you, Jim. When I was invited to participate in this meeting, I was personally excited – anxious, but pleased to attend. As a director of a university health service, I have a clear working relationship with Dr. Herb Benson from the Mind-Body Medical Institute. We do a lot of work together. Also, the Director of the Alternative and Complementary Therapies at the Department of Medicine at the Beth Israel Deaconess Hospital, Dr. David Eisenberg, who also has a grant from the OAM.

Some of the things that we began at our own health service have been rather interesting. We offer complementary therapy as a covered benefit. Personally, I’ve participated in and committed to a number of clinical trials that may have seemed kind of disconcerting when first approached to meet them. My wife and I were first asked to take part in an oral vaccine program for polio, back in the early sixties. This was scary. We didn’t realize that some of the side effects and toxicity might be encephalitis. I took part in the hepatitis B vaccination program, not knowing whether I was going to get the vaccine or a placebo.

Later was the Harvard physician study – randomizing physicians to aspirin versus a placebo or beta carotene versus a placebo, or both, or placebo. Some people thought it was a very hokey study. It turned out to be a very successful study.

I have been batting 100% when the studies were closed. I did get the oral polio vaccine. I did get hepatitis B vaccine, and I was randomized to aspirin and beta carotene. Seventy-five percent success rate on those studies is very good. It's very important for all of us to pay attention to clinical trials.

The American Cancer Society was very pleased to be invited to take part in this program. The American Cancer Society is a voluntary health organization. It is the largest voluntary health organization in the nation, with over three million volunteers. Point number one is that it's not my society. It's not any one person's society. It is your society as well. It has been formed in the public trust. Its goals are for the public trust and in the name of the public trust.

Second, it is not the same American Cancer Society that was formed 85 years ago, let alone the society it was five years ago. Eighty-five years ago, volunteers were making bandages. You saw the history of the American Cancer Society and its relationship to quackery and now to its work on complementary and alternative therapies. Your American Cancer Society is a changing society. Times change. We all need to adapt to change.

I know, as I'm sure many of you know, and anybody involved in merges or right-sizing knows, that change is full of pain. Many people are feeling pain with all of the change. We need to remember that change is constant. It is what leads to success and to good things at the end of the road.

I don't believe there is anyone in this room who disagrees with the goals that you've heard – decreasing the morbidity and incidence of cancer and improving the quality of life of everybody afflicted with chronic illnesses, including cancer. But how do we organize ourselves to reach our goals? We need to collaborate to accomplish these goals in cancer control. You heard no one can do this alone. We need to collaborate. It is why the American Cancer Society

is here at these meetings. This past year the American Cancer Society has run a national meeting on alternative and complementary therapies, as well as a regional meeting in California on the same topic. We need to break down the “we” and the “they.” It needs to be only “we” all working together.

What can and should the ACS role be? For those of you who don't know, there are four major areas that the American Cancer Society is involved in. You're probably all familiar with the American Cancer Society as a research organization. But the American Cancer Society is only a small contributor to the national research program. We have less than one to two percent of the national research program. We try to fill a niche in that research program. Recently we have targeted research into areas that are needed – into the psychosocial and behavioral area, into the policy of health care delivery. This is a significant area of research. We hope many investigators in the room will look to us and apply for funding.

Information, advocacy and cancer control are increasing and larger parts of the work of the American Cancer Society. You heard me talk on Friday about cancer information, and trying to provide all the resources that a cancer patient might need to deal with their cancer. That includes the work of people like Barrie Cassileth and others, who are writing on our databases updated information on all alternative and complementary therapies.

Cancer control is a major area of importance, with major participation by the American Cancer Society now. Trying to control cancer, prevent cancer, and improve the quality of life of cancer patients.

Finally, there is advocacy. Advocating for cancer patients, for the public and for the cancer patients to be. Advocating for a comprehensive cancer treatment. That's what we're talking about here at this meeting. What is a comprehensive cancer care? We need to advocate

for funding for it. We need to advocate to make sure people are aware of it and have the availability of it.

This is a major area that I'll be working on Monday and Tuesday with our public issues and public policy office in Washington, DC. We continue to advocate for more funds, for doubling the National Institutes of Health budget, which will double the National Cancer Institute's budgets and all research devoted to cancer.

We need to work together to reach these goals. We will only reach them by working together. You may not be able to walk into the National Cancer Institute and offer your help. You may not be able to walk into the CDC and offer your help. But please, please know that you can always walk to your local office of the American Cancer Society in the thousands and thousands of cities and towns throughout the American Cancer Society and work together so that we can accomplish these goals. Thank you for allowing me to be here at this meeting.

Dr. Gordon: Thank you very much for being here, David, and for this message of coming together.

We have some time now if people would like to come to the microphones and ask questions or raise issues. We're very happy to answer them. We'll do that for about 20 or 25 minutes. I'll say a few words, and then we'll close.

Participant: I'm Roger Rogers from Vancouver, Canada. I'm a family physician in that city. I have two comments. The first is that the regulatory bodies in Canada and the United States have been both a source of frustration and embarrassment to both of our countries. In Canada, it has been estimated that more than 100 treatments have been abandoned in the last 60

years because they were either useless, dangerous or fatal. When we look at the comparison of health products and pharmaceutical products, it may not be appropriate for the FDA and the Health Protection Branch to govern or rule on the adequacy or relevance of a particular product. It may be that we need a different agency that will look at these things under a more realistic viewpoint.

The second comment is that there is already an international initiative in progress to limit the availability of health products to all the countries of the World Health Organization. This is referred to as the Codex Commission. In Canada there are more than 67 products of nature that were God given, part of our heritage on our planet, that are now regulated as tightly as marijuana.

If we were to buy some of these forbidden herb products or natural products in the United States and go across the border with them, if we were found, four things can possibly happen. The first is that the product can be seized, regardless of how much you paid for it. The second possibility is that you can have your car impounded. The third possibility is that you can be fined \$5,000. And the fourth possibility is that you can be charged with a criminal offense. Even growing these natural products in your own garden would be viewed as a criminal offense. We shouldn't take our freedom for granted. The United States apparently has been able to forestall any kind of implementation of the Codex Commission. But if you don't watch closely, the same thing that happened in Germany can happen here.

Dr. Gordon: Thank you. Any comment from any panelist? Clem.

Dr. Bezold: On the question of the FDA as the right source, I'm not clear on what the ultimate design issue is. It is clear to me that the current regulations that FDA enforces are not appropriate. They will become less appropriate in the future. The ideal thing would be to have the market become clear enough and smart enough so that we can make informed choices. Then buyers and insurers can pay, in effect, for the most effective basket of things. Whether or not, and how soon, that will be, and how much protection we need from a police force or a regulatory force like FDA, is open. It's a very changing issue. It's a set of design questions. That's what we need to put on the table.

Participant: I'm Ann Fonfa, speaking as a breast cancer patient and activist. Dr. Jonas, it's very important to point out that when you say public, you mean patient participation. We think that needs to be in every aspect of all decision-making at all ends of NIH, NCI and down to OAM.

Another question I have is there's been a lot of discussion about soy products and estrogenic projects and the dangers. I would like to have someone comment on the fact that, as Dr. Wynder mentioned, in Asia they have different levels of breast cancer, lower levels, different responses. Obviously soy products are part of their diet, along with seafood and iodine. It seems to me that our life experience counts in the fact that that exists. Soy can't be as dangerous as we keep hearing. It may be, and also let's do some studies on it. Thank you.

Dr. Gordon: Wayne, do you want to comment? Mary Ann, and then Bill.

Dr. Jonas: There's discussion about both the potential benefits and dangers of soy proteins, and specifically soy estrogens. Soy estrogens are thought to be the components of soy that are having influence, or maybe having influence, on a number of endocrine-related illnesses, including breast cancer. There's a considerable surge in research now looking at soy estrogens, soy-derived estrogens and soy proteins, both in terms of refined extracts as well as dietary supplements. They're looking at the effects, for example, of soy-based diets on cardiovascular risk factors, on post-menopausal symptoms and this type of thing.

Any time you have an estrogen or estrogen-related compound, then the effects can be potentially beneficial or potentially risky. Tamoxifen is an example of that. It produces both benefits and increased risks. These products have the same potential and should be researched. One of our centers in Stanford is looking into this and doing some studies currently on soy-based diets and soy-supplemented diets in post-menopausal women and in cardiovascular risk factors. There are a number of other groups that are, too.

Dr. Gordon: Go ahead, Bill.

Dr. Fair: I hope that no one would get the idea from this meeting that soy is bad. There are some problems that have been pointed out due, as Wayne said, to the estrogenic effect. But soy is an integral part of the trial that Dr. Wynder and I are running. We give 40 grams of soy powder a day. In the study I'm involved in with Dean Ornish at UCSF, we also use soy. In our laboratories we've been able to show dramatic slowing of the growth rate of prostatic cancer in the animals, and a significant drop in PSA when those animals bearing a human prostate cancer

were given soy products. It's like a lot of other things. In excess, soy can be bad. But the benefits, at least at this point, far outweigh the potential disadvantages.

Dr. Gordon: Would you say the same thing about breast cancer?

Dr. Fair: We haven't done any experiments in breast cancer. Certainly the indirect evidence, as Ernst mentioned, from the Oriental studies would indicate maybe that's also the case.

Dr. Wynder: Jim, let me comment on that. What's very important is that we study all these factors separately from one another. We are now studying soy with and without isoflavone. In prostate cancer we have it rather easy, because we study the effect on PSA. In breast cancer, Petrakis has shown that soy products increase breast fluid. I didn't want to bother you with statistics, but I'd like you to remember one piece of statistics. In terms of a long-term effect, to determine long-term a 10% difference in terms of breast cancer mortality, you need to have for stage I and II disease 2,500 patients. Such studies can only be done in a large-scale trial.

Dr. Gordon: Ralph, and Mary Ann.

Dr. Moss: We also have to be very careful that we maintain a sense of fairness and balance and common sense when we look at ingredients in foods. My favorite example is beets. There's arsenic in beets. If you were to isolate the arsenic from the beets, you could kill

whatever rats or humans you wanted to. But that doesn't make beets dangerous. There's so little arsenic that it's absolutely harmless. In the past we've had examples of polemical, ideological studies in food and herbs, which were designed to denigrate those products and to dissuade people from turning towards more natural solutions.

Dr. Gordon: I want to respond to one thing. I very much agree with you that there needs to be patient representation. One of the important things about the OAM Advisory Council is there is significant representation of patients, of people who have had experience with a variety of illnesses, including particularly breast cancer. The aim is that there will always be citizen representatives on all of those committees. That's right, isn't it Wayne? I wanted to make that explicit.

Participant: My name is Jack Riley. I'm a clinical psychologist working with patients with cancer. This has been a very exciting meeting. Thank you. In the context of this exciting and historic occasion, there's a brief and friendly comment I'd like to make as a psychologist. Much of what we've heard this weekend as alternative medicine frankly is neither. Some of it is really the mainstream of other healing disciplines. Much of it is mainstream psychology. Some of it is mainstream nutrition. The Chinese physicians must look at the novelty of many of these approaches, because in fact they are traditional medicine of other cultures.

The plea is, I hope that we all make sure that people who have expertise elsewhere, and traditions that are mainstream and have a history in other areas, are respected as such and used as such and not diluted. That in the process of incorporating and accommodating all these other techniques and methodologies and traditions, they neither become overly Westernized in the

case of Eastern medicine, or become overly medicalized in the case of psychology, and so on.

Just a plea, a friendly one, that we all work together on this, that we not try to dilute and take on so much that it may fail to some extent, and then be regarded as something that did not have the promise that it truly has.

Dr. Gordon: Any comments on that comment? If not, I want to say one thing. This is an ongoing struggle. It's also an ongoing struggle with indigenous healing systems. I was recently in China. One of the things that was troubling to me is that in China as well, the focus has tended to be on a single, individualized treatment. Most of the centers, and this is certainly true in cancer treatment, have lost the sense of integrating all of the elements of their culture.

Your point is well-taken, that we need to integrate the various aspects of a whole system of healing. In this sense, as strange as it may sound, this group of people, people working with a variety of different traditions, as well as with Western medicine, may indeed be helpful to some of our elder brothers and sisters in these traditions. We can help them to see the power of their own traditions. The forces of narrow reductionism are at work everywhere in the world.

Participant: Hi. My name is Ava Avalos. I'm a third year medical student at the University of Southern California. It's really important as we talk about the future that we consider medical students and the state of medical school education today in this country. On a positive note, over the past three days I've heard about a lot of different therapies that have been presented to us in medical school as the future therapies. That's really positive. I also think that the emphasis that's being placed right now in medical school on molecular biology and genetics is something that can be integrated together and should be.

It's important that you remember that there are thousands of us. We're enthusiastic, young, good minds, and we're open right now. This is a great time to catch us, before we end up as residents going crazy and not having time to listen to anything. That's the future, the medical students now. Any agenda that's being developed should include an outreach to medical students.

One thing that is really easy for all of you to do, alternative practitioners and doctors, is to go to the medical schools and do lunch-time presentations. Volunteer your time. You can do an acupuncture presentation. We'd love that. There are tons of students who are totally open. We sit in those classrooms. We're bombarded with information, and information that we know is wrong, sometimes. We think, "That's terrible. That couldn't be right." We want to hear from you, so I want to encourage you all to really reach out to medical students.

Dr. Gordon: Thank you. It's great to have you here. I know Ralph has a comment, but we hope also that you will get the word out to other medical students and help us do that. We want more medical students to be here and be part of this work as well.

Dr. Wynder: Jim, I'd like to comment. I'll make you an offer. I'll offer you to be a summer student at the American Health Foundation. We need people with your enthusiasm.
(Applause)

Dr. Moss: I've spoken at three medical schools in New York. At one of them, which will go unnamed, it took an actual rebellion on the part of the students, and a petition that somewhere between 50 and 70% of the students signed, in order to get them to institute an

elective course in alternative medicine. It can be done. It was done. Almost every school in New York now has such a program, so it can be done. (Applause)

Dr. Richardson: I know that the medical students petitioned the AMA last fall. I think it said we want to know about alternative and complementary therapies. The AMA organization did a survey of all the medical schools, 125. They got 100% compliance. They asked them what sorts of therapies, are they doing any training in this? Is it part of the curriculum, or is it an elective? They have that information. They asked them then to follow up with schools that are providing overview courses or whatever to provide their curriculum. That's being compiled right now and will be prepared this summer. You should look for that.

Dr. Gordon: Great. Incidentally, at last count, which is about six months ago, there were 67 medical schools which had either elective, or in a few cases required, courses in complementary and alternative medicine. I want to add (and it's a recurring note) that medical school is very much focused on technique. It is important that we not just focus on a particular technique or several particular techniques, but that we focus on that force of integration which can transform all of medicine. That's really vital in medical education.

We have medical students who work with us, too. We welcome them. That's great, what Ernst has offered. Medical students have worked at the OAM. All of us are eager to include medical students in our work and to move ahead with them. Thanks.

Participant: My name is Dee Moulton. I'm a long time member of the alternative health care community. I want to first appreciate everything that has happened here. It's vital and

encouraging. I also want to respond to your question to us as to what are the future directions for the conference and other things to consider. I heard the first gentleman use a phrase, “preferred future possibilities,” or some such thing. That really struck me.

A second comment by Maureen Redl also struck me earlier. She said, “If we go for the cure, we miss the healing.” That’s true on both an individual level and on a cultural level. While we look for the cures, while we look for the things that support individual patients, cancer people, in their healing journey, also keep in mind that we’re facing a cancer epidemic that potentially holds the seeds for a cultural healing.

If we go simply for those things that ease the pain and get rid of, eradicate the cancer, maybe we as a culture miss the healing. Things that different cancer survivors have spoken to us of – love, community and authenticity of being – are the very things that we as a culture are craving. We need these things on a whole level, for the healing of our children, our planet, ourselves, all the way along. In terms of future directions for this conference, to somehow keep that in the background, or to keep that up for discussion, seems important to us all. Again, I thank you for what you’ve done here.

Dr. Gordon: Thank you. I agree with you. I think we need to keep it in the foreground, as well.

Participant: My name is Dick Evans. I’m a physician from Houston. I want to echo what all the other speakers have said. Thank you so much for this fabulous conference. I’ve come away walking about this high off the ground, with the people I’ve met and what I’ve learned. It has been wonderful. I want to thank Ralph Moss. Freedom of information is new to

me. Boy, that's important. Think of the things that we don't know. Think of the information that has not been distributed about breast cancer, for example.

In the breast cancer trials, we have learned some amazing things. We have learned that adjuvant radiation therapy after lumpectomy does not add a single day to the survival of patients with breast cancer. We have learned that you do not have to eradicate every single cell, because promptly treated local recurrence does not spread. That goes against 100 years of surgical thinking. People who have believed you have to get every cell. I was so glad to hear Bill Fair yesterday. I hope I'm quoting you right, Bill. I think you said we need to start treating cancer as a chronic disease, think of it as a chronic disease, and get away from this idea of eliminating every single cell. That is so important. It is fundamental.

I have a talk that I give in Houston sometimes. It's called, "The Cancer Breakthrough You Never Heard Of." Thanks to Ann Fonfa, I'm going to have to change the title of my talk, because she's doing such a good job of letting people like you know the truth about the fact that radiation therapy does not spread. The key thing though, more important, is that promptly treated local recurrence doesn't spread. I've written a book called *Making the Right Choice*. That book says that all available information is compatible with the conclusion that the lessons of breast cancer apply to most, if not all, solid tumors. There is not a single piece of information in the entire world's literature that conflicts with that conclusion. I'll quit there.

Dr. Gordon: Thank you.

Participant: My name is Greg Drury, public relations and radio talk show host, "Wholeness for Humanity." I've had you on the show, James. I wanted to put forth a riddle,

more or less. Do we need a crisis like cancer to bring us together, or are we self-aware enough to realize this is a dharmic phenomenon?

Our lifestyles probably aren't perfect, the people sitting in the audience and the people on the panel. Each one of us is contributing to the world by marking the correlation between spirituality, ethics, complementary care and holistic health. Are we just the ones that happen to be sitting in these chairs doing this, because it's all happening anyway? I'd like to acknowledge the people in the audience and the people on the panel for ushering in this shift in the paradigm. This is a national shift. I also see it as a world shift. There's starvation in many countries that still shoot people for not doing their job right. This is a whole raising of consciousness. Thank you.

Dr. Gordon: Thank you. Does anyone want to address the riddle? Let it stand.

Participant: My name is Marie Galbraith. I'm an independent researcher. Since 1971, I have done research on alternative methods for healing, especially focused on cancer. I know many of you personally. My question is addressed to Dr. Jonas. Before I say anything else, I would also like to add that I think this conference is a milestone. I wasn't at the POMES meeting, but from my long experience this has to be a significant step in the right direction. I'd like to applaud absolutely everybody who has been involved with this.

I'm the mother of a child who died of cancer when she was six, of a brain stem glioma. In those days there was very little, if anything, one could do about it. That's how I got into this. To me, in an emotional sense, and every other way, this is a very meaningful moment.

My question is addressed to you, Dr. Jonas. Many people who call me also have telephoned the Office of Alternative Medicine. They are usually calling to find out where to go to get information on alternative therapies. I know you push different buttons to talk to this or that person when you make the phone call. I don't know that there's a button just for getting information about alternative therapies. I also don't know to what extent you're allowed to give information, except if the person knows that they're interested in acupuncture they could call the acupuncture association.

Would there be a mechanism set up yet where they could, for example, be given a list of people like Ralph Moss who has the Moss Reports, or Frank Wiewel, People Against Cancer, etc.? My question is, what is the mechanism set up for the general public when they call the office with that question? I know they ask it a lot.

Dr. Jonas: We do have a toll-free line that is a public information clearinghouse. It is run like all the information clearinghouses at the NIH. It provides information to the public in several areas: 1) about the research that's going on in the particular area of concern of that particular office, especially the research that we're involved in supporting; and 2) referrals to other sources of information about practice, about treatment, and this type of thing. It is not the role of the information clearinghouse to provide referrals to people who need a particular therapy – to physicians, for example. But we will provide information about what organizations are available that do that.

That is currently in the process of being combined with the system that already exists at the NIH called the Combined Health Information Database, or CHID. This is a central resource that all of the information clearinghouses use. It provides books, literature, the current state of

organizations like the American Cancer Society and others. However, CHID has not had information about complementary and alternative medicine to any great degree. What our information clearinghouse is doing is building up that information, that aspect of the database, and putting it into that system so that will be accessible.

The third type of information provided is public information packets. Our role in the office is not to provide information about specific disease states, which are available through the other clearinghouses, but about alternative medicine practices, such as acupuncture, homeopathy, herbal medicine, etc. If people call about a specific disease, what we are developing with the other clearinghouses at the NIH is that we provide information to those. Then people are referred to that. The example I mentioned just a few minutes ago is that the National Cancer Institute is currently revising the information they provide about complementary and alternative medicine. Individuals will get information about cancer specifically and complementary medicine through the CIS. We will have that same type of information.

Participant: Would that mean that eventually the clearinghouses would be able to give names such as Ralph Moss, or the Moss Reports? People in the alternative community, in other words, who have lists, who can give lists of people who will help the person individually?

Dr. Jonas: The Combined Health Information Database usually lists sources of information such as books and articles, and it lists organizations. Those organizations get evaluated by an outside panel that's put together. In our case, that would include individuals from the alternative medicine community and the conventional community. The panel determines whether there is reliable information, whether you can call the number and actually

get a number and actually get an answer, this type of thing. If it goes through those screening processes and is approved, then yes, it would provide that type of information.

Participant: I have one last very quick question. The last time I was on the Internet looking at the web page of the National Institutes of Health, I couldn't find the Office of Alternative Medicine listed anywhere. Has it been put on?

Dr. Jonas: Yes, it's there. Look under the Office of the Director. We are an office within the Office of the Director. We're one of the offices listed underneath there.

[The new web address for NIH's National Center for Complementary and Alternative Medicine is <http://altmed.od.nih.gov/nccam>]

Dr. Gordon: We're going to have a couple of more responses to the question of information, and that's all the questions we can have. I'm sorry. We are going to need to end. We're going to have these responses, and then we're going to close.

Dr. Richardson: Our center has evaluated some 30 therapies, the state of the science. On our website we have annotated bibliographies and reviews of those therapies. We also receive a number of phone contacts and e-mails from patients. We have a way that they can e-mail us. We spend a good bit of time talking with patients. On our web site we do have resources, and Ralph Moss is listed, as well as some other sources, such as Michael Lerner's group. We also have books and those sorts of things.

This is an area of great interest to the President of M.D. Anderson Cancer Center, providing reliable information on these to patients, because it's growing. It's very important. We're working on that in another way also.

Dr. Jonas: You can link to it through our web site. It's one of our centers.

Dr. Gordon: David, then Ernst and then Ralph. We've devoting time to this because the crucial question that we're all dealing with is how do we take the next step ahead. Information is clearly vital to moving ahead. We want to have everyone's answer. Then I'll say a couple of words, and then we'll close.

Dr. Rosenthal: As I mentioned on Friday, giving information to the public is probably one of the most important things that all of us can do, whether it's any society or any office. There's no question about that. Right now, the American Cancer Society does not refer to clinicians or to specialists, but we do give information about all of the alternative and complementary therapies. There are now close to 70 different areas that are discussed in detail on the home page. You can get that same information by phone.

The web site is very easy, www.cancer.org, and the national call center which I mentioned is open. You can try it now. It's 1 800 ACS-2345. You can get the same verbal information as well. You're absolutely right, Jim. It's most important that people be able to get the information any way they can. It can be written in various grades, various areas. We now have it in Spanish as well.

Dr. Moss: While we're giving web sites, I'll repeat mine. It's www.ralphmoss.com. We have all our back issues of the Cancer Chronicles newsletter there for free of charge access. I chaired the panel on information for this meeting. The single best line that I heard in the entire meeting was from Steve Dunn. Steve is a cancer survivor who survived stage IV metastatic kidney cancer mainly through his brain. He was able to use his intelligence and his computer skills to find a treatment that worked for him. In his case it happened to be interleukin, which we've heard other people say never works. He's living proof that it sometimes does. Steve has one of the very best web sites on cancer, called cancerguide.org.

He said that we need to approach every treatment with the appropriate level of skepticism. That's correct – neither too much nor too little. The bigger the claim, the greater the skepticism. That's only normal. I worked with Fredi Kronenberg on the list that they made for the Columbia Rosenthal Center. I insisted that before they listed any site, they require everybody who wanted to be on that list to reveal their own financial interests in any of the treatments that they were dealing with. That eliminated a number of people. It is important that anybody who is listed in this way be vetted very carefully.

Dr. Wynder: Perhaps this is a good note to end our meeting. The key, if you seek information, is what is the evidence? Recently I talked to a group of physicians, one of whom practices alternative medicine and is very much reported in the lay literature. I said to him that we need to do scientific trials to show what we do works. Then he said, "Suppose I participate, and suppose the trial shows that what I do does not work. What then am I going to do?" I said to him, as I would say to anybody who practices orthodox medicine, "If it doesn't work, if it's not cost-effective, then you shouldn't do it."

It's my hope that a year from now when we meet, Jim, we have many more alternative therapies that we have established will work. Then we can provide the proper information to anyone who would call us. Thank you.

Dr. Gordon: Thank you. Thank you all. The proceedings of this meeting are going to be on our web site. We're going to get this information out and make it available to everybody. We're also going to provide digests of the information to OAM, so OAM can use it. And we're going to put out a popular book which will summarize the perspectives that we've come to and some of the findings that have been presented.

In conclusion, I was thinking about doing another meditation, but what I'm feeling is the quality of attention. The goal of meditation is not to do meditation. The goal of meditation is to be meditative all the time. This conference has been an extraordinary experience for me. I feel that we have come together into the present. We are here looking at what we know and what we don't know. Perhaps most important of all, we're looking at it together in an increasingly respectful and loving way.

I'm immensely grateful to all of you here, all of you who have been here, all of you who have come to sit on the panels, and all of you who have come to sit with us, to talk with us, to look with us at what we know and what we don't know, to learn what we can and to accept and enjoy the mystery. Thank you very much. We'll be in touch soon. See you next year.