

written a little earlier. Gloria is going to tell you about the second edition that she did, I did the first edition. It says, "This text was written to fill a need perceived by the Stanford Arms Control group, an interdisciplinary group of nearly 20 faculty who had been jointly teaching an undergraduate arms control course under John Lewis' leadership at Stanford University since about 1970." I don't know why we didn't have a more precise date at the time, but that's what it says, and I sure don't remember now. *[laughter from the audience]*

Now it really was interdisciplinary. Let me now describe what it was. This book was published in '76. It has a chapter on SALT I when at the end of the chapter says sort of what the future of SALT I might be, long before SALT II was written. You know, also to put it in context, this is eight years after the Cuban missile crisis—this is the same year that the NPT entered into force. Okay, so this is what the course looked like: John Lewis taught deterrence theory. Sid Drell and Pief Panofsky taught nuclear weapons and there are details on the nuclear fuel cycle and all that kind of thing. I taught nonproliferation and some of the institutions. Peter Paret and Gordon Craig from the History Department taught historical questions: Europe, NATO, all these kinds of things. Joshua Lederberg from the Medical School did the section on chemical and biological warfare. And I think I could go on and on but at least that's a sampling of how genuinely and deeply interdisciplinary it was. I remember, though, that John and I were the ones who had to write the exam questions. *[laughter]* But we had some help in grading them. And we had some wonderful people in those classes. And if I can remember correctly—and I think, I hope I have my name and my memory right—one of our first students was Jim Timbie, who went on to become a major negotiator. Well, you can see why, in this context, we felt we needed a book—I gave an example. But there were more books than that; indeed, the Stanford Journal of International Law, which was started up at the time—I believe it's on its sixth volume—published a journal of collected contributions on arms control. One of the key documents in there was an article by Josh Lederberg, entitled, "The Control of Chemical and Biological Weapons." He told me that writing for a law review was the hardest thing he had ever done, you know, "the student editors tear you apart in absolutely irrational ways." *[chuckles from the crowd]* In any event, I noticed that he had cited it and things got drawn from it in his much later work as he got deeper and deeper into biological weapons control.

These weren't the only things. There's another important course which went on under the direction of **Wally Riler** *[correct name?]*. And this was the first set of simulations, simulations that were carried out between SALT I and SALT II, and in which students representing Russian and American negotiators and, I forget how many he had, I think he had some congressional types, and some Department of Defense, and State and arms control and all that kind, you know, so he could have all kinds of texture in it. In which they manage to deal with and face all kinds of problems of how you have strategic control of MIRVs before it actually began to happen in SALT II. In fact I was told once, "Well, we solved that problem in our negotiation, long before the real negotiators got to it."

We also began, at that time, programs with Japan and China and with a number of Japanese arms control specialists, and then, towards the end of the decade, John was able to open connections with China. But I think it's probably also important to put in a sense of where this was. At this time, the program was run out of Owen House, which was one of the residential buildings, long before it was renovated anywhere nearly as nicely as it is now, back when it was clobbered in noise by the construction of the new law school. That's where the program was run, and when we had our celebratory dinners, we went to a Chinese restaurant on El Camino, and I remember it was the first time I'd had course-by-course Chinese banquet, complete with a seventh-inning-type stretch part of the way through. So that will give you a sense of what the world was like in the predecessor to CISAC in the '70s.

Turn it over to you or to Gloria, and she can tell you how they took the mistakes out of the book.

[*applause*]

SH: Thank you, John. Thank you very much. I've done a number of those multi-course meals, the Chinese meals with a stretch with John Lewis in China.

Our next speaker is Gloria Duffy, who was a fellow at CISAC in the 1980s. Dr. Duffy is the co-editor, with Chip Blacker (and Chip, we're very glad to see that you were able to join us here today, thank you very much for coming) and with the Stanford Arms Control Group and as you just heard, she's co-editor along with Chip of the second edition of this landmark book, entitled "International Arms Control." The second edition was published in 1984. She co-taught PS138, which is now PS 114, with Chip Blacker and served as Deputy Assistant Secretary of Defense under secretaries Les Aspin and William Perry during the Clinton administration. Gloria is currently president of the Commonwealth Club of California. I met up with Gloria both, of course, in the early days of the Clinton administration when I was at Los Alamos, but then particularly when she was chair of the board at the Cooperative R&D Foundation where they were doing *lots* of good things in the nonproliferation field and all over the world. Gloria, thank you for joining us.

Gloria Duffy: Thank you, Sig, and thank you Lynn and others for asking me to speak today. I see so many old friends here and perhaps I should start where John Burton left off and remind us all where CISAC was during the 1980s, which was, of course in the late, lamented Galvez House, and some of my memories there when I had my office there, actually three times, I think in the '80s and '90s, was of the band shack which was next door and we could always hear the Stanford band rehearsing there.

The 1979 Soviet invasion of Afghanistan brought the curtain down on the arms control efforts that President Kennedy had undertaken after the Cuban missile crisis, beginning with his pursuit of the comprehensive test ban. In disappointment, realizing that the prevailing national and domestic political situation would allow very little to be accomplished in the area of arms control, in 1980 I left the Arms Control Association in Washington DC to come here to CISAC invited by my good friend, Chip Blacker, who was a fellow student in our undergraduate college. Here I found not just amazing colleagues from whom I could learn so much at my still tender age of 27 but also the ability to keep working productively in our field; to continue making an effort to shape policy even though I was not still in Washington. To help lay the groundwork so that when the political climate did improve we'd be well-prepared to resume progress on resolving some of our most difficult international security problems.

I remember the 1980s as a time of great alarm in our field. The Reagan administration brought to office an instinct to do things differently from the traditional ways of relating to the USSR and pursuing arms control. At its most positive and in its ultimate form this instinct led to the Reykjavik summit, but in its earliest and most mistaken configuration it produced half-baked concepts and unwise statements that had the U.S., the Soviet Union, and our respective allies dancing on a tightrope of mutual threats and fears. Some of us remember one of the most provocative statements of that era by deputy undersecretary of defense T.K. Jones, that "with enough shovels we can dig a hole, cover it with a door, and a couple feet of dirt and thereby survive a nuclear attack." Then, the president murmured at a 1984 press conference into a microphone that he thought was turned off that he had outlawed

the Soviet Union and the bombing would begin in 5 minutes. Beneath the imprudence of these statements, new policy initiatives like the strategic defense initiative were mounted, the abrogation of the ABM treaty was advocated and the process of pursuing almost all arms control treaties was halted. Both the positives and the negatives of these new strategies of the early 80s demanded serious policy scholarship, and led to what was then called the Stanford Arms Control program to become what I believe is the single most important venue for that policy work in the United States.

Some of the most notable work at CISAC in the 1980s was on the Strategic Defense Initiative, with crucial analysis of the technological, military and diplomatic implications of the system. CISAC produced superb thinking and writing that shaped the national debate on SDI. I still recall some of the memorable phrases that Sid Drell coined in his papers and congressional testimony on SDI. When proponents of Star Wars said that shooting down an incoming missile was as easy as shooting at the moon, Sid pointed out that the moon is a fixed object and as he put it, "the moon doesn't shoot back." We've been enjoying Sid's pointed and insightful comments ever since then.

With the arrival of our wise elder statesman Bill Perry in 1981, the scope of CISAC's work expanded even further. Path breaking projects moved forward on establishing a security relationship with China, which as John Barton remarked started even earlier under John Lewis' leadership; on improving security in the Pacific region; on moving forward with arms control in Europe; on improving compliance with arms control treaties, a project that I was involved in; on utilizing new technology to make necessary weapons systems more effective. CISAC produced a long list of papers, books, congressional testimony and briefings on Capitol Hill and for U.S. and foreign leaders.

Sometimes it takes years for this kind of policy scholarship to mature. The work done at CISAC on SDI in the 1980s became the basis for the eventual cancellation of that program. The seeds of the security relationship with China that were laid by John Lewis, Dr. Perry, and others in the 80s have in fact matured into the cooperation we've seen in recent years with China on North Korea. The work at CISAC really did lay the foundation for future policy, which was able to move forward again when the politics did shift.

In addition to the serious scholarly groundwork, the 1980s was a time when CISAC played an important role in broadening the spectrum of voices heard on international security issues. And Chip Blacker played key leadership role in this regard. Chip actively brought women into the discussion, starting with what have been called the "4 fellowettes" here at CISAC: Condi Rice, Janne Nolan, Cindy Roberts and me, in 1980-82. Scholarship at CISAC was also further internationalized with more and more international fellows; I remember Yoshi Nakamura from Japan, Hua Di from China, fellows from Israel including Shai Feldman and Ariel Levite, and many others from many countries in the years to follow working with their American colleagues at CISAC to bring a global perspective to the questions they were investigating. CISAC also led the field to become increasingly interdisciplinary in nature; again John Barton mentioned this not only in the arms control course PS 138 but also in the research that was undertaken here. So Herb Abrams from the Medical School worked with regional specialists and with historians and physicists all collaborating to contribute in their areas of expertise. It was the time of the large interdisciplinary arms control course that many of us taught and so many students took, and Dr. Blacker and I edited the second edition of the textbook that brought these different disciplines to bear. Both the first and second textbooks were not only used in our course but around the country and in fact throughout the English-speaking world.

I continue to run into the students who took the arms control course at Stanford. They pop up all the time: someone will come up to me and introduce themselves as having been in the course. For example, Jim Canales, the president of the Irvine Foundation. Hal Harvey, the founder of first The Energy Foundation and now ClimateWorks, and so many more and as I work with these younger graduates of CISAC—of the CISAC course, in other areas of life -- I see the interdisciplinary thinking that they learned here at work, in their later roles, even if not in the arms control field.

CISAC also led in the effort to have policy scholarship as being a value in the academic environment. It was the time when Sid Drell went to bat to obtain regular faculty appointments for such policy scholars as Chip Blacker, Sally Ride, and Ted Postol. CISAC has also had a role in the creation of many other projects and organizations. There was a time when a woman named Sally Lilienthal came to see John Lewis and after meeting with a group of us at CISAC asked me to come to work as the first director of her new foundation, Ploughshares Fund. The fund continues to fund arms control and security projects and David Holloway and I continue to sit on the board. It was in many ways a child of CISAC, informed by the outlook here, and the contacts here, and it shares that status with a number of other projects and organizations.

The logic of mutual security is inexorable. Having evolved from the old “scorpions in the bottle” relationship between the U.S. and the Soviet Union, to the need for the type of collaboration between the group of six companies working on North Korea with regard to its nuclear weapons program. Once again, over the past eight years, the pace of progress on mutual security has paused. The new officials now taking the wheel in U.S. policy, many of them with backgrounds that include time at or exposure to CISAC, face a daunting task to put the momentum on the range of security measures from the test ban to a START follow-on to the future of the NPT to finding mechanisms to deal with all of the new challenges from terrorism and non-state actors that have intensified in recent years.

Once again, with the work of Bill Perry and his group of four elder statesmen, with Scott Sagan’s work with India and Pakistan, with Chip Blacker’s expertise on the former Soviet countries and the work of so many of the rest of you here in this room, CISAC will be the most important brain trust and provider of policy talent in the coming few years. The investments of the past decade will pay off in the same way the investments of the ‘80s paid off in progress in security issues in the 1990s.

Personally, I am very grateful to CISAC; for thirty years, it’s been my intellectual home, and my go-to place for the expertise on the projects that I’ve undertaken, whether dismantling weapons in the former Soviet Union under Dr. Perry’s leadership, or starting an organization or foundation program. To Chip, to Bill, to Sid, and all my other friends here, I am honored to continue to be a part of this important enterprise.

[*applause*]

SH: Thank you, Gloria. Lynn Eden will speak next about CISAC in the 1990s. She was a fellow here at the center 1987-88 and then again 1989 and ‘90. She’s the acting co-director, as I had mentioned; she’s also senior research scholar and has been our associate director of research for a number of years. In the area of international security, Lynn is focused on U.S. foreign and military policy, arms control, the social construction of science and technology and organizational issues regarding nuclear policy and homeland security. Lynn—

Lynn Eden: I'm gonna start with rollerblades, and I'm gonna end with someone flat on his back. These are actually not the same person, however. But before I do that, let me say how I think of the '90s. First and foremost it was the end of the Cold War. So we can start with about 1990 when actually Gorbachev visited Stanford and as I recall I think it was you, David, who got a line inserted in his speech where he may have actually mentioned the work that CISAC was doing? Or maybe John got it in? I don't know but—

[from audience] **David Holloway:** It wasn't me but it was understood!

[laughter]

LE: in any case we thought that was a great coup. I did not manage to get into the small, kind of outdoor area where Gorbachev was actually speaking. I was actually standing out with the masses when his motorcade came through and here was his limousine, several limousines, that had flown in from Moscow and all of these flags of various former Soviet republics waving, and a lot of protestors and it was quite a grand event. For CISAC, of course, and for our fellows this was an exciting and really wrenching time. We had fellows whose dissertations were ripped out right from under them [*chuckles from the audience*], and their careers suddenly had huge question marks. Not unlike the situation of younger academics today, actually, with our economy not doing as well as we would like, to say the least. But some of those fellows, first, all of them survived and thrived, and some of them actually thrived in academia, including Mike McFaul, Jim Goldgeier, Erica Weinthal, Rob Darst, I'm just thinking of some of the people working in this area.

It was also a period, since it was the post-Cold War period, now, when we were trying to think, "Well, what is the new security agenda, how do we think about the future, what should we be working on?" We did some work in cybersecurity—very far-reaching, you might say, at the time, I think. Maybe we should revisit that. Bill and Dave Bernstein with Mike McFaul had our program on industrial demilitarization in Russia, and this was also a period when what we now call regional and internal conflict was then called ethnic conflict. In fact, we were in the mid-'90s thinking of it pretty much as ethnic conflict and I remember how through the MacArthur Consortium David and I began to say, "you know, maybe this isn't the best way to think about it. It isn't quite right."

So let me end my seriousness and turn to a slightly different key here. But let me say one other thing. Well, this is not too serious, but I was looking back through my computer. It turns out that this was the era when we first got on email; now, some of you may have been on email in the '80s but I wasn't. I remember I thought I wanted to get on in late '91 and Dave Sare said, "Nah, it's too hard, don't bother." So I waited a little while and I noticed that by '92, '93 I was on and I'm sure that our younger fellows cannot possibly imagine what life could have been like before and let me tell you, it's better with email.

So, the rollerblades. Now, Paul knows what this refers to. Paul Stockton had just come after I believe four years, of working for Moynihan—four years, was it? And he was kind of decompressing and so he rollerbladed to work, and I don't think your hair was all that long at the time. I remember asking Paul, "Well, why did you leave Washington?" and he looked me straight in the eye and I still to this day don't know if he was serious or not, impossible to tell, he said, "I couldn't take the lying anymore." Now, this becomes especially baffling given that Paul is about to turn around and go back to Washington. [*laughter from the audience*].

I'm gonna back up one, back up, just before that, then I'll jump to the end. When I first came to CISAC and I don't mean as a fellow, but visiting, I'm quite sure I had already met Chip and I was out here visiting in San Francisco and I decided to come down and meet this guy named Ted Postol. I had a nice talk with Ted; I probably met Gerri then. I was trying to count up how many jobs people held that Gerri used to do and by my count it's now four people who now do the job that Gerri used to do. And I'm referring to Gerri Bowman for anyone who doesn't know her yet.

So I came down, I had a nice time and then Ted did something that was very confusing to me as someone who at that point was at a fellowship in Boston. He said, "Do you want to have lunch? I'll get some people together: here's Herb Abrams, here's Herb, here's Dave Bernstein, let's all go off to lunch." Well I looked at Herb, he was wearing a little bowtie, I knew he was from Boston, I knew he was eminent, I could just tell, but unlike how his counterparts acted in Boston, he seemed like a normal human being! He was totally nice! Where was all the hierarchy? I knew this was a very different place from where I was, which is now the Belfer Center. Where I, by the way, had a wonderful time but only associating with my fellow fellows at that point.

Let's see, so let me skip up to someone being flat on his back. David got the idea that in thinking about a new agenda we really did need to do more on regional and internal security and we did a search and we identified Steve Stedman as the person we wanted to bring out and I had a lot of conversations with Steve as we basically wrote a proposal and ultimately that effort of ours as we know was successful. But at the time Steve—I had a lot of phone conversations with him -- I didn't realize that until at some point he said, "You know actually I'm lying here on my back. My back has gone out, and I can write this proposal, but it's a little bit difficult." So it was successful, we got Steve. I think that the program that Dave effected by having Steve here at Stanford and then our Hamburg Fellows, actually I think has made a huge mark on the field. So with that, let me end, and turn it back to Sig.

[*applause*]

SH: Thank you, Lynn. Our fourth presenter is a product of CISAC's honors program. Jessica McLaughlin graduated from Stanford in 2005; her thesis for her honors program work was "A Bayesian Updating Model for Intelligence Analysis," and some of you might recognize that it sounds like management science and engineering, and that won the CISAC William J. Perry Prize for excellence in policy-relevant research in international security studies. She is now a management consultant at Oliver Wyman. Jessica, we look forward to your remarks.

Jessica McLaughlin: Thank you. Let me start by saying what an honor it is to be here today in this company. It really is great being back at CISAC after my four years being away. My experience at CISAC was different than those that you just heard. I first learned of CISAC my sophomore year at Stanford in Professor May's sophomore seminar, "Nuclear Weapons: Power and Technology." Sophomore Seminars, for those of you who don't know, are really intimate classes of around 10 students where professors teach a really personal, engaging discussion around topics that they are passionate about. This class that I took with Professor May really piqued my interest about nuclear topics and about CISAC in general.

I then later joined CISAC my senior year to write my honors thesis and Professor May graciously took me on as an advisee. This was in 2005, CISAC at this time I guess was working on a broad range of topics but it was also sort of in the aftermath of the Iraq war where a lot of press was just coming out about the decisions that had been made going in.

Professor Sagan really encouraged all the students in the honors program to leverage the skills that we learned in our individual majors to contribute something a little bit different to each of our theses. So as Dr. Hecker mentioned I was a management science and engineering major and so Professor May really encouraged me to write a thesis that leveraged those engineering and those analytical problem-solving skills that I'd learned in management science and engineering. So I ended up writing this thesis about using a Bayesian analytical model for intelligence analysis and used the Iraq war as a case study.

Writing an honors thesis through CISAC was one of the best experiences, if not the best, while I was at Stanford. The resources that were available to us as undergraduates were just unparalleled. Honors College in DC exposed us to a broad range of industry experts we had in house; Bill Perry, along with all of you in the room today so it really was a fantastic experience and a much more personal one, much more individual exposure than many people get in their experiences at Stanford.

So today I'm four years out of college. I'm still at the same management consulting job that I took out of school, and it's funny to say, it might be surprising but I actually am really finding what I learned writing my thesis and the same interests that led me to pursue that Bayesian model for intelligence analysis following with me today. I've concentrated on using, like, analytical methods for problem solving and actually have ended up building a couple of Bayesian updating models since. So again, thank you all for having me here and it's really great to see you all again.

SH: It's now my great pleasure to introduce Bill Perry. As you know, Bill was the 19th Secretary of Defense of the United States and you also heard that he was the second co-director on the natural sciences side here at CISAC. And Bill is going to link this past that we've heard about to the future. And of course as you know he had such an enormous impact on the past of this place, and we also expect him to have an enormous impact on the future because all you ever have to do is to hear Bill teach in class and I had the pleasure of teaching with him now for four years, and then he has also given guest lectures in the sophomore seminar class that I took over from Mike May and I must say I enjoy teaching as much as he apparently enjoyed taking it. So Bill is such an enormous inspiration to our students and to the future of this country. So Bill, I'd like you to come up and say a little bit about the future of CISAC.

William J. Perry (WJP): Thank you. For the past is prologue for me to draw a little bit on the past as a link to the future. I got connected to CISAC by a most unusual route. It began when President Carter recognized China. It was in, 1979, I guess that was—

(audience member): Eight.

WJP: Eight or nine. [*crowd laughs*] A year after that, more important to me, the president asked me to lead the first delegation, military delegation to China. I was thrilled at the opportunity. But I quickly discovered no one in the Defense Department, I mean no one, had the faintest idea about modern China. So I went out to the State Department. I found *one* person, one person who knew about it, Nick Platt, who understood something about modern China but he said, "What you ought to do is get out to Stanford, there's something out there called, something like the Northeast Asia Forum or something, and talk with John Lewis. So he set up a dinner meeting with John, and John and I spent the whole evening talking about China. Which prepared me better than I possibly could have ever been prepared for that momentous trip. A year later I was out of government and back in California. I thought I'd

stop in and visit John. Thank him for the help he'd given me. And in the course of talking he said, "Come on down the hall with me," and this of course was in the Galvez House. He showed me an office. He said, "This is your office."

[laughter from the audience]

It happened about just like that. So John got the hook on me—in me right away and a few years later he got a little bit further by having me be co-director. It was a magnificent experience; and when I went to Washington, I left here very reluctantly, I hated to leave CISAC, I hated to leave my class. But Mike May stepped in and took over both my class and the co-director of CISAC, which I've always been grateful for that.

When I finished my term as Secretary of Defense, I never looked back; I came right back to Stanford, this time full-time. And as I was thinking about what made this place so special, and from the first day I was here, it was not only the professors, and the fellows, and the research people around here who are so smart but they are so collegial. I didn't find that anywhere else in the country that I've been. What a collegial group this is. Secondly, they were dedicated to solving world problems. There are a lot of scholars and academicians out here to be sure, but all of them have in the back of their mind they're gonna apply this to real life and important problems. You don't find that in many research centers around the world either. And finally, they were engaged in something which was called Track II, meeting with scholars in other countries and meeting with government people in other countries and sort of keeping touch with what was going on, keeping track, especially important with countries with whom we had little or no relations. John's seminal work with China, for example, was just one very strong example of that. During the '80s, I guess we went back, he led a delegation to China almost every year. That was a remarkable thing.

So when I came back from, Secretary of Defense, and started to look towards the future of this organization. I said, first of all, whatever else we do, let's keep this collegiality. It is what makes this place unique. Secondly, let's keep something else that makes it unique, which is a mixture of political sciences and physical sciences. I don't see that anywhere else in the world, and I think this really affects the blend of the way we work here. Having said that, let me say I don't think we do it well enough. It's important that we have the mixture of people here, but we don't quite have the right mixture of process so that we get the best utilization of these people and the *[undecipherable]* and the other in the right way. So there's lots of room for improvement, but we're starting from a very strong base. I think we need to continue this Track II effort; when I was in government I saw over and over again how important it was, particularly in cases like China, where we'd gone for years without any dialogue at all and so when we finally did get to talking with them on an official basis, we had the Track II as a foundation on which to build.

But I also discovered something that I hadn't noticed that clearly when I came back, which is the very important role CISAC plays with students. With Jessica here that is a brilliant example. And of course it was true from the beginning, the original course that John set up was a course for students. But the way we work with students today I think is much more impressive, more effective than it was in those days. I think, for example, that the Sophomore Seminar which have already been mentioned. Sig, I think you're teaching a Sophomore Seminar now; others are as well. We have a Sophomore College which Chip has gotten me involved in several times—I think a brilliant idea; and then the Honors program, which I think Scott has gotten me involved in that several times—again another brilliant idea and we see one of the great products of that Honors program here.

So as we move forward, let's keep that connection with students, in close contact with students, and to bring your students into our midst, not just having them as students. And the three we have I've already identified calling, the Sophomore Seminar, the Sophomore College, and the Honors program are great—we can build on those, we can make—advance them further. Whatever else we do though, I think as I reflect on my position as a secretary, reflect on the—I don't know quite how to express this, but—when you're in an organization like this, you build intellectual capital. And when you're in the government, you spend that capital. We have people in this organization who go in and out of government; they're not exactly here in training for government but it does help. There's no other country in the world that has a system like ours. Sometimes you'll hear people referring in a derogatory way to what they call a revolving door. But believe me, the fact that we have people who move from government to universities, from universities to government, from industry to government—is what makes, I think what gives our government a quality and good judgment about that you will not find in any other national security establishment in the world. And you are an integral part of that and you should continue to be in the future. Thank you.

[*applause*]

SH: Thank you, Bill, for your encouraging words about the future and we very much look forward to—I know I'm really struck—when I came here by this three-part mission of doing scholarly research, and the education and training, and then the policy outreach and the impact. I can't help but to reflect that the few people that have been mentioned here also had a substantial impact on me personally; for example Mike May had this very positive impact when he gave me the Sophomore Seminar class, and it becomes like a little family. I just had them out at the National Ignition Facility on a day at Livermore for example. What a treat to be able to do that with your sophomores. Mike and I were actually there this morning for the formal dedication of the world's largest laser; these 192 beams collapsing on a tiny little capsule to create what the sun does all by itself. And then you know John Lewis had enormous impact on me but it's a little different. You know, it used to be that back in Februarys what I liked to do is to go helicopter skiing in Canada. That's one of the things that's held over from my life in Austria when I was growing up (although we didn't have helicopters). [*chuckles from the audience*] So now, I've wound up spending Februarys in Yongbyon and Pyongyang [*laughs*]. And let me tell you, that's a different deal. And then for Bill Perry, you know it was always in our family, we always made Thanksgiving time the time for family to get together. The last four years Thanksgiving has been, along with Bill, to grade half of about 250 term papers! And so it's changed the nature of at least of my Thanksgiving. But what it's also done is it's brought me into this family and what a terrific family, what a great history, and how much I look forward to the future of this place and the young folks taking over and carrying the torch.

So I'd like to raise a glass—I know mine's empty but I'll raise a glass anyway—and say I would like all of us to drink or at least salute the future of CISAC.

Audience: Hear, hear!

SH: So what I'd like to do now is at least spend a little bit of time and give other people a chance to say something about CISAC, the experience, anything that they would like to share with us; let's call it open microphone time. And since we were actually fortunate enough to

have John be able to come after all today. John, would you mind just kicking off? Giving us a few words.

John Lewis (JL): Thanks very much.

SH: I think we can pass this around...

JL: Thank you very much. It's fun to be here and it's been a long run, it's been an amazing run for me, 41 years here at Stanford. It started by a phone call from the then-president of Stanford, Wally Sterling, who with Frederick Terman had built the modern Stanford. Sterling who was in his last year called me up one day in early May of 1968 and said, "Professor Lewis—" I was then at Cornell—he said "Professor Lewis, we have a chair opening up at Stanford and we'd like you to come and we'd like you to come next fall, we would like you to come to build centers and if you are interested, a wonderful person by the name of Gabriel Almond will call you on Monday and the answer should be yes or no on Monday. Will you come to Stanford?"

I came to Stanford. I came into my new department, Department of Political Science, with a new chairman; Gabriel Almond had then left, and the new chairman, *[undecipherable]* said to me, "Who in the hell are you?" It's not an easy way to enter into a university. I do recommend the modern way of having recommendations and having going through all of the process, 'cause you do want your chairman to know "who the hell you are."

We came in a period of the Vietnam War. We came at a time—and that's why I met Pief Panofsky and it was sad—I was invited out to SLAC to meet a few of his scholars and then out on the lawn at SLAC, where some several hundred—all of the SLAC employees to have me speak to them about the Vietnam War. And Pief at the end of that said, "You know we need to bring knowledge to our students, and to our faculty, and we should do that soon in a course" and so he said, "I think John Barton is teaching such-and-such a course, I'm teaching something," and the three of us got together with Josh Lederberg and Barton Bernstein and Gordon Craig and all the others that have gotten mentioned and we began to teach this course it was taught—yes it's been a lot of improvement since then, but we were in a period where most of the knowledge was being conveyed with teach-ins. Thousands of students out in Frost Amphitheater were getting knowledge from that and we did participate and we did very actively so.

But one of the things one needed was to have some serious courses and that course, 300 students attended in the first round and that course was a course that in its—at one time, there were 23 of us at one point that taught, not just 20 who taught that course, and that course was the only course that size in the history of Stanford that got every student voted—gave it a four-oh. It was a class that was voted at one point the most popular course at Stanford. It was a remarkable experience. And it was remarkable for me as teaching—I had 40, 45 graduate students, some of whom are here today. Eric, and many others who are here who are my graduate students which was one of the great joys of my life. But the other joy was to have undergraduates and one of the pillars of this place was always, and always should be, the fact that we are in a university and we have students. And not just undergraduates and graduate students but visiting students who come in, visiting scholars, and we've named a number of them here today and they have indeed been a remarkable part of our lives and continue to be as Gloria and others have mentioned. My co-directors are also a part of this and the staff—we had an *extraordinary* staff. Tom Fingar was associate director, Chip Blacker, Condi Rice, these are the associate directors who made this place at the

beginning. But also there was another truly remarkable person who ought to be recognized and that's Gerri Bowman.

[*applause*]

When people speak about the spirit of this place, it's Gerri. Gerri started it, she made it possible, whether it was skating parties, or ball games, or going out to picnics, or doing all the things but just taking care of people and being part of the lives of all of the people who came through this place. So Gerri, thank you for—on all of our part.

So that's what I remember and it's been a great joy and a wonderful run with you all. Thank you.

SH Thank you, John. The microphone is open! Anybody else? Scott! By all means. Scott came out of hiding for this event, we think. [*chuckles*]

Scott Sagan: Well, how could you call that *hiding* when you took my picture and froze it up there?! [*referring to slideshow paused on photo of him with infant son*]

[*laughter*]

It was embarrassing, but it is, in one sense, appropriate, because I can date the comment I wanted to make by that. Now I, obviously, look exactly the same today as I did then, but Ben is a freshman at Stanford now, so this is 18 years ago. And the memory that I wanted to share with you was from shortly after this, when I had an offer from a rival university and went and talked to my colleagues here about "should I stay, or should I go?" And my CISAC colleagues were uniformly supportive—"You should stay! If you want to go, we'll support you, that's a great thing, that's a great opportunity as well, but this is a wonderful place." And I went elsewhere in the university and I recall one dean who said "You know, security, those problems are done." [*audience laughs*] "The Cold War's over. I mean, I don't care whether you stay or go, but you should go into a different field!" [*more laughter*] "Because the problems that you're dealing with are pretty much over," and another senior colleague just said "Well, you know, you should really consider going to another university in which you have an easier time doing interdisciplinary research." And I'm very glad that I rejected both of those pieces of advice from outside CISAC, and accepted the support and advice of people *here*. So even though I agree with Bill, that there's much that we can do to improve on the teaching, and improve on the interdisciplinary aspects, we've had a great run, and this is a great institution, and very glad to still be a part of it, so thank you.

[*applause*]

SH: I certainly want to thank Scott—it's been a great pleasure serving as co-director with him, and understanding his passion for all three of our missions to scholarly research, to teaching, as well as the policy outreach. Microphone is still open, for anyone that wants to come up and say anything...okay, Mike?

Michael May: Everybody, everything has been said but not everybody's said it so...[*chuckles from crowd*] I'll say it. When I came here, in 1990 actually and the guy who brought me here is Bill Perry, whom I'd known in earlier incarnation since the 1960s, I think it was, when you were running your company and I was running the lab, and we sat on different committees together. So I'd retired from the lab by then and he called me up and he said, I forget how it

started but something like, “What are you doing?” and I said “Well you know, this and that,” and he said, “Well, you might as well do that at Stanford. Why don’t you come and join me and we’ll teach this new course on technological policy issues having to do with security.” Well, I knew very little about Stanford, I’m a UC Berkeley graduate, at least that’s where I got my PhD so that all I knew about Stanford is they were the bad guys on the football field; I think I had been here about twice in my life. So I did come, however, part-time.

As everybody has said this is a unique and certainly a wonderful place to work, terrific. There is a variety of intellectual stimulation and other stimulation with respect to education and research that is very difficult to find this kind of combination everywhere, and the collegiality is wonderful, so it’s been a terrific experience. I hope it goes on a few more years. And the teaching, I had done very little teaching before. My career had been in research and development at the Livermore Lab and for the government. So, except for an occasional course I hadn’t taught very much so that was a new and a great experience, and one that I’m delighted I had an opportunity to do. So I’m very grateful I had the chance to have come to CISAC and work with all of you. Thank you.

[*applause*]

SH: Thank you, Mike. Mike was also quite an inspiration to me in that, you know, I came out here as a visiting professor thanks to John Lewis and to Scott Sagan. But then Mike actually showed me that there is actually life after laboratory [*laughter from audience*] and I didn’t think so, but indeed there is. David.

David Holloway (DH): I think one of the things that’s been remarkable about CISAC is not only all the good qualities that have been mentioned but the fact that we’ve had so many visiting fellows and even permanent people from outside the United States. And this, therefore, has led to many cultural encounters within CISAC. And I thought instead of saying something, I came recently across a book of memoirs by the person who I think was our first Russian fellow, Seny Berezin, back in 1989. He was a physicist from Leningrad from Physical Technical Institute. And he was a man for whom I think the word “lugubrious” [*chuckles from the audience*] was coined. So I had met him in giving a talk at the Physical Technical Institute, and we talked about SDI, and I think you were still co-director then, John. So he came in 1989. We sent him invitations and he came. And I want to read a little bit from the memoir. It’s an idiosyncratic view, I should say, of CISAC, but I think if you’ll bear with me I think in the end, it says something rather profound and something that I think is true about CISAC and about California. So he says,

“I arrived in Stanford in the September of 1989. So they gave me a small office, a computer, a typewriter, two chairs. They taught me to use the coffee machine and the microwave. They helped me get settled in an inexpensive hotel and then left me to myself. I took a pile of journals out of the center library and began to familiarize myself with the material. And after a week I was summoned by the director of the center, Professor Lewis. He sat me down in a chair, offered me a cup of coffee, and then had an anxious look on his face and asked, ‘Have you had bad news from home?’ ‘No, no, nothing bad.’ ‘Then it must be the jet lag.’ ‘No, I’m over the jet lag, I had a couple of bottles of California wine and my biorhythms are just fine.’ ‘Oh, what wine did you have?’ asked John. ‘Oh, a Chardonnay from Sonoma Valley.’ ‘Oh, that’s good, that’s a good wine,’ said John. ‘So then it must be the climate, the heat, the smell from the eucalyptus trees. All of this is unusual for you.’ ‘Nooo...everything is fine, and the scent of the eucalyptus trees, that’s medicinal, I actually go and walk around the trees so I can smell them.’ ‘So...everything is fine, then?’ asked John. ‘Everything’s excellent.’ ‘Well then,’

said John, ‘if your family are healthy at home, if the jet lag is over, if the climate suits you, and in general, everything is wonderful, then, why are you so gloomy? Look at you! My colleagues can’t work! “Why is our Seny so sad?” they ask. “What has happened to him? How can we help him?” If nothing bad has happened to you, don’t traumatize people, smile!’ He said—and this is quoting John—‘it’s even in the rules of the road of California that you have to keep smiling! Otherwise, the police will pull you over.’ He said, ‘look out the window: blue sky, sun is shining, the hummingbirds are flying, the office is very comfortable, the coffee is good, you’ve got a good stipend—smile, for god’s sake! Smile the way I do.’ And then he stuck out his jaw, and a *huge*, expansive smile appeared on his face. And I, with a kind of creaking, stretched my cheeks up to my ears, and left his office, holding that smile on my face as I went along the long corridor till I reached the door into my room. And after that, every morning, before I went to work, I looked at myself in the mirror. I stretched my mouth, I bared my teeth, and for some minutes I held that kind of mimetic face. And it was as unnatural, and as unusual, for me as the fencing stance *en garde* had been when I took up fencing. But I got used to it, finally. And I even had some success. After a couple of weeks I was going around, like a normal Californian, holding my idiotic, smiling fortitude, and not eliciting from anyone the desire to administer urgent, humanitarian aid.”

But he says that one occasion, he lost his smile, and that was the earthquake. Of course, that was Loma Prieta. He says Webster’s Dictionary fell on his head, in the library, and when he saw how people reacted, he was very impressed. He said, you know, the traffic lights were out, so people volunteered to try and direct the traffic; the people came out of the shops to say, “if you need anything, if you’re a victim of the earthquake, take some food,” he was given a pile of bananas and oranges, he was given a trolley—a supermarket trolley to bring all of this and he brought it, in his memory, to Galvez House. And so he concludes this little essay. He was a very talented man, and actually this book is—

John Lewis: Good fiction writer.

DH: Yeah! [*chuckles*]. No, no, but this now, he says “Whenever people say to me how greedy or materialistic, how cruel Americans are, I remember the San Francisco Airport. The volunteers at the crossroads, naked down to the waist, the owners of the little shops who, without waiting for any instructions, wheeled their wares onto the sidewalk, and distributed them free to people who had suffered in the earthquake. And to this day, the words ring in my ears: ‘Are you a victim of the earthquake? Take this, whatever you wish.’ They say, in New Orleans, it was different; I don’t know, I wasn’t in New Orleans, but I was in the Bay Area in 1989 and I remember with astonishment what I witnessed. The most surprising was that in spite of the terrible, natural disaster, they were all maintaining their smiling attitude, as they were instructed to do in the rules of the road of the state of California.”

[*applause*]

SH: That actually reminds me of one of the things I was going to point out, is that out in the hallway, just past the central hallway, going into East, thanks to a donor, who wishes to remain anonymous, there’s a beautiful bookcase. And David, perhaps we can get this book as an honorary CISAC author into that bookcase. Anyone else? You don’t have to have been a co-director, by the way, to speak. Yes?

Bob Hamerton-Kelly (BHK): I know why he was so gloomy.

SH: Ah!

BHK: I'm Bob Hamerton-Kelly, and I spent time here representing the churches. You remember in the '80s the Catholic bishops and Methodist bishops and Lutherans all came out with powerful statements concerning just war and nuclear war. And John and Sid Drell thought that it might be useful to have someone around who was at least familiar with these things. Well, Berezin came to me one day to discuss the apocalypse of John, the last book in the Bible, which is called Revelation, 'cause he thought the end of the world was near. And maybe he thought the Loma Prietan earthquake was something of a confirmation of this for him. And one of the most important signs for him was in the King James version, and the King James translation, there was a reference to the signs of the end of the world that would include the sun going down at noon, the stars falling out of the sky, fire would ring out from the earth and the poisoning of the earth by wormwood. He pointed out to me that the term "wormwood" in English, in Russian is *Chernobyl*. [*murmurs from the audience*] And this was a sign for him of course, for him a great deal of concern. He turned it to a rather literal, mystical interpretation of the book of Revelation that I don't myself share. But we did have long and mostly circular conversations about these deep religious matters, all keying on the fact that wormwood and *Chernobyl* were the same word. So I submit that as an explanation of why Andrei Berezin was so gloomy.

[*applause*]

SH: Thank you. Anyone else? I know we've had many of you standing out there a long time, and I'm just going to have you stand for another minute because it's our tradition at Wine and Cheese and this is sort of the super family Wine and Cheese to also say goodbye for our CISAC people who are moving on. I think that most of you know that Paul Stockton is moving on to the Department of Defense as was mentioned, in spite of what he said about Washington. He's going to become Assistant Secretary of Defense for Homeland Defense and Americas' Security Affairs. And then our own Michael Chaitkin is going to be a Luce Scholar in Beijing. And then we have a number of fellows who have served here with us who are moving on: Tom Bruneau, Colonel Takehiro Morita, Amandeep Gill, Frank Foley, Dara Cohen and Patrick Johnston; we just want to wish them all good luck in your next endeavor and thank you all for having enriched the CISAC environment. We appreciate it very much. And to end it, let me just say thank you to all of you for joining us in our family gathering. It was a great pleasure. Thank you for all those of you who shared your experiences; it was a great family gathering. Thank you all.

[*applause*]

SH: There is more food and drink so by all means...[*fades out*]