Welcome Speech

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Ladies and gentlemen, distinguished guests, I want to give all of you a warm welcome to our second day of conference. Yesterday we heard descriptions of situations around the world concerning open access and institutional repositories. As the Chair of the Research Grants Council, I am very interested in how we can gain more value for the money we spend on research, and hope that we can implement some of the ideas we have heard here.

I'd like to tell you a story to illustrate the need for the kinds of digital institutional repositories of the sort being discussed in this meeting. In my early days I was a researcher at the NASA Goddard Space Flight Center in the USA. Since then I have continued to have an interest in rocketry and manned flights outside of Earth's atmosphere. This story is about the Apollo 11 mission that put a man on the moon in 1969. This was such a paradigm shifting event that most everyone who lived during that event remembers exactly what they were doing when Neil Armstrong spoke those famous words, "That's one small step for a man, one giant leap for mankind". Most of us were glued to our television sets and watched a very grainy and blurry broadcast of Neil walking on the moon.

That's just part of the story. The broadcast of this video from the moon to the earth was actually very high resolution and quality. However because video, telemetry, and biometric data all had to share the same broadcast spectrum, the video was put into a special format not compatible with televisions. The original video was properly recorded using 14 inch reel magnetic tape. In order to be broadcast to TV, it had to be converted and therefore lost much of its quality and detail. The original 14 inch tapes were sent from a NASA tracking station in Australia to the Goddard Space Flight Center in Maryland. So while the TV broadcast of 1969 was grainy and blurry, posterity still has access to the high-res tapes, right? Unfortunately this is not the case. The tapes have been lost to posterity.

NASA records show that they were shipped in the fall of 1969 from Goddard to the Washington National Records Center, which has 25 million cubic feet of records.

There is no bar coding or computerized tracking. No one knows what is there exactly. Recently a malfunctioning sprinkler system soaked 16,000 boxes which had to be shipped off to be freeze dried. After working for months, searchers found evidence that 140,000 tapes from the Apollo era had been sent back to Goddard between 1979 and 1985. However no trace of them could be found. There was no central administrator or database to track what went into or out of NASA. Retirements and budget cuts at NASA have taken their toll. The boxes of these tapes could still be in storage…, or sitting in someone's office, or have been recorded over…, or disposed of. The search for these tapes continue. A Google search on "Apollo 11 tapes" will quickly lead you to many articles describing the on-going search.

This story is illustrative of the problem we face as researchers, administrators, publishers and librarians trying to preserve and retain access to our hard-won research results. Let's consider these parallels;

1. NASA spent considerable money and technical talent on creating high-res high-quality video tapes. They cannot be found now. Likewise many research projects and teaching grants have been funded by academia and the government. After the projects and grants finished, many of the products of those projects and grants were available for a time, but today cannot be found. Shouldn't we preserve and retain access to these hard-won results?

2. The original grainy and blurry TV broadcast was what the world remembers. But there was supplemental material, the high-resolution tapes, which would be useful to have today cannot be found. Similarly, much research is done and subsequently published, but without the data sets upon which the research was done, and without which, the research cannot be replicated. Shouldn't we archive supplemental material?

3. There was no central authority to track materials such as these historical tapes. In like manner can we rely upon each department at our universities and government to put in place the necessary policies to preserve materials and maintain access to them in perpetuity? Will budget cuts and changing staff mean that our web pages today will disappear or hold dead links tomorrow?

I believe the research funds spent in Hong Kong for public good. However, we must ensure that these research products will be available to citizen of Hong Kong and the

world in perpetuity.

I have recently been made aware of policies made in Australia and the UK to address some of these issues. Many institutions around the world are considering new ways of scholarly communication and improving the public's access to research findings. Yet, there are many issues remain to be addressed to come up with *the* best approach. Toward the end of this meeting many issues will be discussed. I hope we will be a step closer to the solution which will be acceptable to our universities, our researchers, the publishers and the public, for the benefit of Hong Kong and the research community at large.

Thank you.