Bridging the Distance Between Medical/Scientific Content and Broader Audiences for a Collection on HIV/AIDS Research

LUDMILA POLLOCK,
Cold Spring Harbor Laboratory,
New York
COLD SPRING HARBOR LABORATORY (CSHL), NEW YORK

Community: 1,100 Employees, 600 Research Staff
56 Research Laboratories

Meetings & Courses for scientific exchange & technology training serve 12,000 annual visiting scientists

9th Annual Conference of the International Council on Archives

ROME
19-23 September 2022
132 Years – Birthplace of Molecular Biology

1st institution in the country to conduct genetics research

8 Nobel Prize Winners

Focus on Young Scientists

Prestigious National Cancer Institute designation since 1987

Human Genome Project Planned at CSHL
The CSHL Archives has been collecting unique materials relating to breakthrough discoveries and world-recognized research from 1890 to the present time, documenting the history of molecular biology, genetics, and biotechnology worldwide and 132-year history of Cold Spring Harbor Laboratory, New York.

Our Goals:
- Identify, acquire, preserve, digitize original materials
- Provide worldwide access to organized original materials and digital collections
- Broad educational and scholarly program based on archival collections
The Genentech Special Collection's holdings include papers of Sydney Brenner, Matthew Meselson, Elof Carlson, Walter Gilbert, Hermann J. Muller, Bruce Wallace, Charles Weissmann, Charles Yanofsky, and Norton Zinder.

Also contains rare scientific reprints collected between 1868 and 1960 by Charles B. Davenport and Milislav Demerec; these number over 90,000 reprints.

The Oral History Collection, which consists of 230 video interviews with pioneers and prominent contemporary scientists in molecular biology and biotechnology, is also a part of the Genentech Special Collection.

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**INSTITUTIONAL & PERSONAL COLLECTIONS – 4,337 LF**

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<td>- Personal Collections such as Charles Davenport, Alfred D. Hershey, Barbara McClintock, James D. Watson, Carol Greider to name a few</td>
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<td>- Other Institutional Collections include CSHL Symposia Collection, CSHL Meetings and Courses Collection, Rare Books Collections, Audiovisual Collection, among others</td>
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With the support of BGI
CSHL Archives enables to continue our mission of exploring and disseminating the history of genetics, molecular biology, and biotechnology worldwide based upon the unique materials within the BGI Nobel Laureates Collections
In 1952, Alfred Hershey with laboratory technician Martha Chase proved that DNA carried genetic information.

The Drosophila laboratory at Austin, Texas. Hermann J. Muller used a jeweler’s loupe to examine flies. 1920s

Press Conference, Harvard University on announcement of Walter Gilbert’s Nobel Prize Award, October 1980.

Waring blender used in the Hershey-Chase experiment in 1952


UC @ Berkeley Department of Molecular Biology, ca. 1985
Carol Greider rotation Notebook from Elizabeth Blackburn Laboratory, 83-84

Letter between Francis Crick and Maurice Wilkins regarding the structure of DNA, 1951

Corn cob from McClintock’s work on transposable genes, with handwritten label, ca. 1960s

Barbara McClintock, 1941

Francis Crick in the Lab, ca. 1950s
Digital Archive includes digitized and born-digital collections such as oral histories, History of Science Meetings, recent decades of Cold Spring Harbor Symposia.
Founded in 2018 The Center promotes humanistic understandings of modern biology and medicine and offers a variety of educational programs.

We organize public events, host virtual and physical exhibitions, create and publish resources for popular and scholarly audiences. The center also awards a range of visiting fellowships and internships.
ORAL HISTORY COLLECTION AT CSHL

The Cold Spring Harbor Laboratory Archive has undertaken a major initiative to document the history of science through the words and images of the scientists who have worked and regularly visited here. This unique collection of oral histories provides an unprecedented perspective on the development of molecular biology, the present state of the science, and visions of the future by the leading scientists in the field.

http://library.cshl.edu/oralhistory/interview/misc/biotechnology/tessier-lavigne-research-at-genentech/
Proceedings from our Meetings on the History of Science are all available online:

http://library.cshl.edu/Meetings/History-of-Science/
HIV/AIDS Research: Its History & Future

History of Science Meeting at CSHL, 2016

• 3 day meeting
• 49 talks of HIV/AIDS pioneers
• 12 hours a day talks about the past and debate the future
• 130 participants
Fauci showed a photo of himself testifying before a congressional hearing, which he said he has done 245 times since taking the job—often about the HIV/AIDS budget and other issues related to the epidemic. He did it because he didn’t think AIDS research was heading in the right direction.
Oral Histories of Biology, Medicine, and Pandemic Response project, June 15 - October 12, 2020

This project consisted of two parts:

1. 49 talks, discussions and panels from the October 2016 history of science meeting “HIV/AIDS Research: Its History and Future,” with a combined length of about 24 hours of video have been transcribed edited, annotated and indexed.

2. 209 CSHL Oral History videotaped conversations with participants in the molecular and genomic revolutions (each video varying in length from 15 to 60 minutes) were transcribed, indexed, and annotated.

The project was supported by the US National Endowment for the Humanities
Any questions the HS has about given individuals, names, topics, or events are brought to the Project Director and Institutional Archivist, who answer directly or consult our collections for answers.
Oral Histories of Biology, Medicine, and Pandemic Response

RESULT OF THE PROJECT:

24+ hours of video were resulted in a transcript of over 211,000 words, to which were added: 1,291 cross-indexed terms in six categories (people, theories, places/institutions, tools, and organisms), many of which double as glossary entries; 866 unique citations, and likely 900–1000 total citations across all 49 talks and panels.
“ORAL HISTORIES OF BIOLOGY, MEDICINE, AND PANDEMIC RESPONSE”

Program

Organizers: Robert C. Gallo, John M. Coffin, Mila Pollock & Bruce D. Walker

SESSION 1: THE STORY OF ANIMAL RETROVIRUSES
Co-chair: Julie Overbaugh  Fred Hutchinson Cancer Research Center
Co-chair: Steve Goff  HHMI Investigator, Columbia University

James D. Watson  Welcome
Mila Pollock  Introduction
Robert Gallo  Introduction
Robin Weiss  Retrovirus History, Early Searches for Human Retroviruses
John Coffin  Origin of Molecular Retrovirology
Harold Varmus  Animal Retroviruses & Cancer Research
Myron Essex  From Feline Leukemia Virus to AIDS in Africa

SESSION 2: THE PANDEMIC BEGINS: EARLY DISCOVERIES
Co-chair: Michael Gottlieb  UCLA Medical Center
Co-chair: Bruce Walker  Ragon Institute of MGH, MIT and Harvard

Paul Volberding  The First Patients
James Curran  Deciphering the Epidemiology of AIDS
Mark Harrington  The Importance of Activism to the US Response
Robert Gallo  Discoveries of Human Retrovirus their Linkage to Disease as Causative Agents & Preparation for the Future

François Barré-Sinoussi  Discovery of HIV
Anthony Fauci  35 Years of HIV/AIDS: Science and Policy

SESSION 3: ANTIRETROVIRAL THERAPY
Co-chair: Sandra Lehman  Merck Research Labs
Co-chair: John Mellors  University of Pittsburgh

Marty St. Clair  Discovery of AZT as the First Anti-HIV Drug
Samuel Broder  The First Clinical Trials of Antiretroviral Drugs

Anthony Fauci  35 Years of HIV/AIDS: Science and Policy

Videos

Abdool-Karim
About A Meeting
Baltimore
Barr-Sinoussi
Berger
Broder
Blumenthal
Coffin
Cohen
Curtan
Desrosiers
Emran
Emini
Essex
Fauci
Gallo
Gottlieb
Hahn
Harden
Harrington
Haynes
Haruda
Hildebrand
Hilier
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Lifson
Malin
Martin
Mellors
Panel Discussion
Peeters
Redfield
Rice
Richman
Ruprecht
Schnitzler
Shaw
Siliciano
Silkla
St. Clair
Varmus
Volberding
Walker
Watson
Weiss
Wong-Staal

9th Annual Conference
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ROME
19-23 September 2022
2.6 Tony Fauci — 35 Years of HIV/AIDS: Science and Policy

Tony Fauci: [00:00:00] Thank you very much, Bruce. It's really a pleasure and a privilege actually to be here with you today and join so many of our long-standing colleagues in reviewing this, really, I think, a historic situation of the 35 years that we've had to experience with this most extraordinary disease.

I want to thank the organizers for inviting me. I want to particularly thank Bob Gallo who actually when he called me up and invited me, asked me and [00:00:30] gave me the suggestion about what he thought would be a good idea for me to do, and that is to take a look at and to review with you from a personal standpoint, in so much the same way as Paul [Volberding] and others have done, the triple role that I have had over the last 35 years in HIV/AIDS, and that is both as a scientist, as the chief of the Laboratory of Immunostructure, as the director of NIAID, and then finally, in my role in the conception of, [00:01:00] development of, and implementation of the PEPFAR program.

I'm going to rapidly go through this talk and to talk to you about each of these. First, my role as a scientist. Several of you who have already presented have actually made the point that it's the perspective from which you've come. We've heard from the people who've been involved in endogenous retroviruses for years before HIV. We heard from Paul about his situation of being a clinician and an oncologist that took care of patients. I came at [00:01:30] it from a clinical standpoint.

This is a picture of me as in my chief residency in internal medicine at the New York Hospital-Cornell Medical Center. I had previously, after medical school, done three years of residency in New York Hospital-Cornell, and then I went down to the NIH and NIAID. Recruited down there by Sheldon Wolf, [1930–1994], my mentor, my dear friend, and ultimately actually the best man at my wedding. I went back to Cornell as a chief resident, [00:02:00] and then came back to the NIH, with a career that I tried to balance between fundamental basic bench research and the issue of clinical medicine.

I studied infectious diseases and immunology, but my early research before HIV was fundamentally looking at the regulation of the immune response in diseases of aberrant immune regulation, in which, together with Shelly Wolf, [00:02:30] we developed remission-inducing therapeutic regimens for diseases that were formerly fatal like Wegener's granulomatosis and the vasculitis. [00:03:00] I was focused on aberrancy of the immune response. The point I want to make with you is that my background was inadvertently training me for a disease that I had no idea was going to come upon us.
PEPFAR Program

Fully hyperlinked Index of topics and themes

PEPFAR has been mentioned in the other talks
2.5 Françoise Barré-Sinoussi — Discovery of HIV

Françoise Barré-Sinoussi: Thanks for inviting me, Bob and Bruce. I’m the first woman as a speaker. [Laughter] [applause] Things have changed over the years but still, you can see that men are always the first. [laughed] [06:08:07] joking of course.

I’m going to tell you about the discovery of HIV. When I was preparing the slides, I realized myself, I want to do this. What am I going to say? Everybody knows about this history, so it’s going to be very boring.” Then I said “Okay. Let’s try to make a classical presentation but also at the same time in [06:08:16] place maybe some new things that people may never know, at least some of them. Never heard about it.” So it’s a hard decision maybe to start by my own story because very often when you’re giving talk, I have people asking me, “Hey come on what do you think you started to be treated in 1983?” Apparently, no one knows. You want to see my slides, they’ve been involved as a young researcher in retrovirus and cancer. We heard yesterday about the discovery of the reverse transcriptase, and we heard yesterday about the cellular origin of retrovirus, and I was starting to work in my lab on [06:08:28] it at the same time with the minister, Jean-Claude Chevallier. [laughed] In 1983 and for my PhD I had to do a topic to work on an viral antibiotic, H-922 (antitumor antibiotic). [laughed] So you remember that, H-237.

Title: You know you had [unintelligible 06:10:34]

Françoise: It happened. So that was my main work to try to find out if this drug [06:09:25] was capable to inhibit the reverse transcriptase of murine leukemia virus (MLV), the French virus, whether this drug was capable to make a survival in man (inhibited by French leukemia virus). So that was the first part of my work all Pasteur. Then I learned reverse transcriptase at the time by a guy who’s here Dan Halach. Dan was working at [06:10:47] the in the early years of reverse transcriptase, and after my PhD, invented myself at the MLV, not really in talk, but in Paris Street by [unintelligible 09:00:12] probably I still remember that, we met by the time that I was working my PhD—I’m my position working on this restriction (a restriction enzyme that detects MLV) with Bob Rosser. If I’m mentioning H-922 and H-91 [06:10:53] restriction, it’s because somehow in the lab of HYF, we of course all the development of antiviral drug and antifungal drugs. My restriction enzyme that is of course 350.

We looked also whether we were able, in a serum fragment, to have the density of these virus, both reverse transcripts, etc. associated with this [06:11:08] plate. So we published that in 1983. And then we were saying that the reverse transcriptase, we were saying that similar to HTLV, we need to inhibit that people that were received from Bantu, that’s because no restriction, with MLV [H92] or [15:19] and another patient that transferred [06:11:26] with AIDS, were capable to have antibodies, the antibodies of the virus that was detected was detected in these patients.

Citations

3. Valleron, Alexandre-Jean; Fauchère, François; Grubben, Anne-Françoise; Farenc, Jean-François; Lebec, Jean-Claude; Chermann, Jean-Claude; Barré-Sinoussi, Françoise; Roques, Bernard-Paul; Pessin, Jean-Denis; et al.: “Isolation of New Lymphotropic Retrovirus from Two Siblings with Hypoplastic B. One with AIDS.” The Lancet. 2, 392: 328 (April 10, 1983): 532–7. doi:10.1136/lancet.1983.281.7293.3

AZT (azidothymidine)

AZT, azidothymidine, also known as Zidovudine (ZDV). The first effective antiretroviral to treat AIDS on the market, with much controversy. AZT is a nucleoside reverse transcriptase inhibitor, and is an analogue of thymidine.

Combivir is a double combination of AZT and 3TC. Trizivir is a triple combination of AZT, 3TC, and abacavir.
At gathering of HIV/AIDS pioneers, raw memories mix with current conflicts.
Documentary Filmmaker
Staffan Hildebrand, Stockholm, SWEDEN
COUNTRIES UTILIZING WEBSITE

Users from 123 countries

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