

ONLINE APPENDIX

Complete Interview List and Sources

Technique	Name	Position and Organization	Source	Interview Date(s)¹
rDNA	Paul Berg	Stanford biochemistry professor	Bancroft	1997
rDNA	Mary C. Betlach	Boyer's lab assistant at UCSF	Bancroft	1994
rDNA	Herb Boyer	Co-inventor, UCSF professor, Genentech founder	Bancroft	1994
rDNA	Ronald Cape*	Cetus Co-Founder	Bancroft	2003
rDNA	Stanley Cohen	Co-inventor, Stanford professor	Bancroft	1995
rDNA	Roberto Crea	DNA chemist, Genentech co-founder	Bancroft	2002
rDNA	David V. Goeddel	Genetech scientist, Tularik CEO	Bancroft	2001, 2002
rDNA	James Gower	Business development at Genentech	Bancroft	2004
rDNA	William Green	General counsel, Chiron	Bancroft	2005
rDNA	Herbert L. Heyneker	UCSF & Genentech molecular geneticist	Bancroft	2002
rDNA	Irving Johnson	Eli Lilly (VP Research) and Genentech	Bancroft	2004
rDNA	Thomas D. Kiley	Genentech VP and legal counsel, entrepreneur	Bancroft	2000, 2001
rDNA	Dennis G. Kleid	Scientist and patent agent at Genentech	Bancroft	2001
rDNA	Arthur Kornberg	Stanford biochemist, DNAX cofounder, Nobel prize winner	Bancroft	1997
rDNA	Daniel Koshland, Jr.	Professor of immunology, UC Berkeley	Bancroft	1998
rDNA	Laurence Lasky	Genentech scientist	Bancroft	2003
rDNA	David Martin	UCSF and Genentech	Bancroft	2004
rDNA	Edward E. Penhoet	Chiron CEO and UC Berkeley Public Health Dean	Bancroft	1998
rDNA	Diane Pennica	Genentech scientist	Bancroft	2003
rDNA	George Rathman	Amgen CEO	Bancroft	2003
rDNA	Arthur Riggs	Director of the Beckman Research Institute, City of Hope hospital	Bancroft	2005
rDNA	Steven Rosenberg	Chiron scientist	Bancroft	1992
rDNA	William J. Rutter	UCSF, Chiron	Bancroft	1992
rDNA	Richard H. Scheller	Columbia, Stanford, Genentech research director	Bancroft	2001, 2002
rDNA	Robert A. Swanson	Genentech co-founder	Bancroft	1997
rDNA	Axel Ullrich	Genentech scientist	Bancroft	1994, 2003
rDNA	Daniel G. Yansura	Genentech senior scientist	Bancroft	2001
rDNA	William Young	Lilly, Genentech Director of Manufacturing and COO	Bancroft	2004
rDNA	(Personal 01)*	Professor of pharmacology, major Midwestern university	Personal	2008

Technique	Name	Position and Organization	Source	Interview Date(s)
rDNA	(Personal 02)*	Biochemistry PhD student, major West Coast university	Personal	2006
rDNA	(Personal 03)*	Lab technician, major West Coast university	Personal	2007
rDNA	(Personal 04)*	Lab technician, major West Coast university	Personal	2007
rDNA	(Personal 05)*	Independent industry consultant	Personal	2007
rDNA	(Personal 06)*	Co-founder and chief scientist, biotech startup	Personal	2006
rDNA	(Personal 07)*	Research associate, major biotech	Personal	2008
rDNA	(Personal 08)	Technology licensing director, major West Coast university	Personal	2009
rDNA	(Personal 09)*	PostDoc, major West Coast university	Personal	2009
rDNA	(Personal 10)*	Researcher, major biotech firm	Personal	2010
PCR	Norman Arnheim	SUNY, Cetus, USC	Smithsonian	1992
PCR	John G. Atwood	Senior scientist, Perkin-Elmer	Smithsonian	1993
PCR	Ronald Cape*	Cetus and UC Berkeley	Bancroft	2003
PCR	Henry Erlich	Cetus scientist	Smithsonian	1992
PCR	David H. Gelfand	VP, Director, Senior Scientist Cetus, Roche	Smithsonian	1992
PCR	Donald Glaser	Cetus co-founder, Chiron, UC Berkeley professor	Bancroft	2003, 2004
PCR	Lawrence Allen Haff	Perkin-Elmer principal scientist	Smithsonian	1993
PCR	Elena D. Katz	Perkin-Elmer senior staff scientist	Smithsonian	1993
PCR	Shirley Kwok	Cetus scientist	Smithsonian	1992
PCR	Kary Mullis	Inventor, Cetus	Smithsonian	1992
PCR	Enrico Picozza	Perkin-Elmer senior technical specialist	Smithsonian	1993
PCR	Riccardo Pigliucci	President of Perkin-Elmer instrument group	Smithsonian	1993
PCR	Randall K. Saiki	Research associate Cetus, Research investigator Roche	Smithsonian	1992
PCR	Stephen Scharf	Research associate Cetus, senior scientist Roche	Smithsonian	1992
PCR	John Sninsky	Director of Research for Cetus PCR division	Smithsonian	1992
PCR	Michael Urdea	Senior Scientist at Chiron	Bancroft	1992
PCR	Tom White	Roche VP of R&D, Senior director of research at Cetus	Smithsonian	1992
PCR	(Personal 01)*	Professor of pharmacology, major Midwestern university	Personal	2008
PCR	(Personal 02)*	Biochemistry PhD student, major West Coast university	Personal	2006
PCR	(Personal 03)*	Lab technician, major West Coast university	Personal	2007

Technique	Name	Position and Organization	Source	Interview Date(s)
PCR	(Personal 04)*	Lab technician, major West Coast university	Personal	2007
PCR	(Personal 05)*	Independent industry consultant	Personal	2007
PCR	(Personal 06)*	Co-founder and chief scientist, biotech startup	Personal	2008
PCR	(Personal 07)*	Research associate, major biotech	Personal	2008
PCR	(Personal 09)*	PostDoc, major West Coast university	Personal	2009
PCR	(Personal 10)*	Researcher, major biotech firm	Personal	2010
PCR	(Personal 11)	Senior executive, major scientific instruments firm	Personal	2005
PCR	(Personal 12)	Lab technician, major West Coast university	Personal	2007
PCR	(Personal 13)	Lab technician, major West Coast university	Personal	2007
PCR	(Personal 14)	PhD student in chemistry, major West Coast university	Personal	2007
PCR	(Personal 15)	Professor of chemistry, major West Coast university	Personal	2008
PCR	(Personal 16)	Lab technician, mid-size biotech	Personal	2008
PCR	(Personal 17)	Chemistry PhD student, major West Coast university	Personal	2009
PM	Craig Anderton	Engineer, composer	NAMM	2005
PM	Ray Kurzweil	Kurzweil founder and engineer	NAMM	2007
PM	Thomas Oberheim	Oberheim founder and engineer	NAMM	2005
PM	Jeff Rona	Innovator, composer	NAMM	2005
PM	Dave Smith	Sequential Circuits founder and engineer	NAMM	2005
PM	John Worthington	Manager of Advanced Music Group, Apple	NAMM	2007
PM	(Personal 18)	Professor of music, major West Coast university	Personal	2005, 2008
PM	(Personal 19)	Professor of music, major West Coast university	Personal	2002
PM	(Personal 20)	Licensing Associate, major West Coast university	Personal	2004
PM	(Personal 21)	Senior executive, digital music startup	Personal	2004
PM	(Personal 22)	Audio engineer, major semiconductor firm	Personal	2004
PM	(Personal 23)	Professor of music, major West Coast university	Personal	2004, 2007, 2008
PM	(Personal 24)	Professor of electrical engineering, major West Coast university	Personal	2005
PM	(Personal 25)	Independent consultant	Personal	2004
PM	(Personal 26)	Research associate, major West Coast university	Personal	2004

Technique	Name	Position and Organization	Source	Interview Date(s)
PM	(Personal 27)	Audio engineer, mid-size digital music firm	Personal	2006
PM	(Personal 28)	Licensing Associate, major West Coast university	Personal	2005
PM	(Personal 29)	Research associate, major West Coast university	Personal	2009
PM	(Personal 30)	Audio engineer, multinational musical instruments firm	Personal	2008
PM	(Personal 31)	PhD student, major West Coast university	Personal	2008
PM	(Personal 32)	Audio engineer, multinational musical instruments firm	Personal	2008
PM	(Personal 33)*	Independent consultant	Personal	2009
PM	(Personal 34)	Software engineer, multinational software firm	Personal	2009
PM	(Personal 35)	Audio engineer, boutique digital music firm	Personal	2012
PAC	C. Sydney Burrus	Professor, Rice University	IEEE	1998
PAC	Alfred Fettweis	Engineer, ITT, Siemens	IEEE	1997
PAC	Fumitada Itakura	Engineer, NTT	IEEE	1997
PAC	William Lang	IBM	IEEE	1997
PAC	Alan V. Oppenheim	Professor of electrical engineering and computer science, MIT	IEEE	1997
PAC	Thomas Parks	Professor of electrical engineering, Rice and Cornell	IEEE	1998
PAC	Ron Schafer	Bell Labs, Professor at Georgia Tech	IEEE	1998
PAC	Manfred Schroeder	Engineer, Bell Labs	IEEE	1994
PAC	(Personal 33)*	Independent consultant	Personal	2009
PAC	(Personal 36)	Senior engineer, major audio firm	Personal	2005
PAC	(Personal 37)	Engineer, major German research institute	Personal	2005
PAC	(Personal 38)	Licensing Director, major mass media firm	Personal	2005
PAC	(Personal 39)	Consulting professor, major West Coast university	Personal	2008
PAC	(Personal 40)	Engineer, major audio firm	Personal	2008
PAC	(Personal 41)	Engineer, Internet radio startup	Personal	2006
PAC	(Personal 42)	Engineer, major consumer technology firm	Personal	2007
PAC	(Personal 43)	Lead engineer, digital music startup	Personal	2006
PAC	(Personal 44)	Independent consultant	Personal	2009
PAC	(Personal 45)	Audio engineer, multinational consumer technology company	Personal	2007
PAC	(Personal 46)	PhD student, major West Coast university	Personal	2008

¹ In the case of the oral histories, note that dates in the references may not match dates in this Online Appendix. The date in the Appendix refers to the interview date, while the date in the references refers to the publication date for the oral history. Typically, there is a lag as the oral historians reviewed the transcripts with the subjects.

* indicates interviews that addressed more than one technique. These interviews are listed alongside each relevant technique.