

Commercial development Licenses

Purchasers of PECE thermal cycling instruments and certain reagents are licensed by a "label license" to use those products in the PCR process for research and commercial development.

(4) ~~Licenses of third party rights relating to the PCR Business~~

To Seller

- Seller is a licensee under a letter agreement, dated October 1, 1990 with HRI Associates with respect to certain "Base Technology" as defined in that Agreement, including in part U.S. patent applications Nos. 225,725 (allele specific nucleic acid sequences); 428,494 (methods for preventing amplification carryover;), 427,303 (useful compounds); and 428,510 (a U.V. light box); 607,162 (methods and compositions for minimizing inhibition of nucleic acid amplification) and certain additional invention disclosures. A definitive license agreement is in draft. Purchaser's use of this technology is subject to the Rider set forth on Schedule 4.0 of the Assets Purchase Agreement.
- Seller is a licensee under a License Agreement, dated August 11, 1987 between Seller and the State University of New York ("SUNY") with respect to U.S. patent application No. 935,271 for use in diagnostic tests for HTLV-I and HTLV-II viruses.
- By Agreement, dated June 11, 1990, Seller is the assignee of certain patent rights of the University of Rochester and Northwestern University directed to methods and reagents for detecting and typing HPV by PCR.
- By Agreement, dated March 30, 1990 the Center for Disease Control (CDC), Seller is licensed, with the right to sublicense, a recombinant plasmid

containing the HIV genome as part of HIV research kits or HIV diagnostic kits, or in diagnostic laboratory services.

- By Agreement, effective February 1, 1991 between Seller and Genmark Inc., Seller is licensed to make, use or sell products for forensics, human identification and tissue typing that use Genmark's proprietary oligonucleotides.

To PEGI Seller's 49% undivided interest upon dissolution of PEGI

- PEGI is a licensee of the University of Louisville Research Foundation under an Agreement dated June 1, 1989 whereby PEGI has agreed to pay certain royalties to Louisville on sales of commercial products incorporating proprietary technology developed by Louisville in connection with the detection of coliform and Legionella bacteria.
- Under a license agreement dated March 1, 1991 between Cornell University Research Foundation and PEGI, PEGI has the right to manufacture and market thermostable ligase from *Thermus aquaticus*.

(5) Trademark licenses

- Agreement dated October 11, 1988 between Seller and PEGI regarding the use of the trademark "GeneAmp".
- Agreement dated August 29, 1989 between Seller and PEGI regarding the use of the trademark "Amplitaq".
- Agreement dated November 17, 1989 between Seller and PEGI regarding the use of the trademark "GeneAmplimer".

(6) Distribution and Supply Agreements Relating to the PCR Business

(for PECE Agreements refer to parenthetical note under (3) above)

- Distribution Agreement and Supply Agreement, dated June 11, 1990 between PECE and Takara Shuzo whereby PECE agreed to supply Amplitaq DNA polymerase to Takara for use in research kits developed by Takara for distribution in Japan, Korea and Taiwan. Takara agreed to use PECE as its exclusive distributor of certain products outside Japan, Korea and Taiwan.
- Distribution Agreements dated March 1, 1990 between Seller and PECE regarding the distribution of Seller's forensic products in the U.S. and the world except the U.S.
- Seller has agreed to supply Amplitaq DNA polymerase to certain licensees of its PCR technology.

(7) Commitments.

(i) Purchase Orders. Purchase order commitments are primarily made by the PCR division to ensure an adequate supply of manufacturing raw materials. As of November 25, 1991, outstanding purchase order commitments are:

<u>VENDOR</u>	<u>PRODUCT</u>	<u>QUANTITY</u>	<u>ORDER VALUE</u>	<u>TERM</u>
Amersham Research	RP Enzyme	60 M U	\$ 50,160.00	5/92
Pharmacia	dATP	75 Grams	\$ 24,000.00	TBD
	dGTP	75 Grams	\$ 24,000.00	TBD
	dCTP	75 Grams	\$ 24,000.00	TBD
	dTTP	75 Grams	\$ 24,000.00	TBD
Promega	TNAasin	36 M U	\$251,293.00	5/92
Gery	Custom Box	15,000	\$ 15,000.00	12/91
			\$412,453.00	

- (ii) Subcontract. Seller is under contract to Microbiological Associates Inc. to perform certain laboratory services to test for the presence of HPV in biological samples provided by Microbiological Associates in connection with a study undertaken for the National Cancer Institute. Total contract amount is \$46,377.

- (iii) Grant. Dr. Henry Erlich is the recipient of a grant from the National Institute of Health in the amount of approximately \$200,000 to investigate the genetic polymorphism in the HLA-DP region susceptible to autoimmune disease. The work is ongoing at Seller's facility in Emeryville.

- (8) Other Agreements relating to the PCR Business are listed by type on Attachment A to this Schedule 2.1(d).

ATTACHMENT A TO SCHEDULE 1.2(d)

This Attachment comprises Parts I, II, and III, which are organized in the following format:

INSTITUTION NAME

Name of Investi- gator	TYPE	NUM	STATUS	Description of materials sent	DATE Eff.	DATE Exp.	Purpose of agreement or research
		AMD No.	STATUS	Description of Amendment	DATE Eff.	DATE Exp.	Purpose

- (1) TYPE refers to the document type, and the following abbreviations are used: RA (Research Agreement); LTR AGT (Letter Agreement); CSA (Consulting Services Agreement); CLSA (Clinical Studies Agreement); CA or CA-V (Confidentiality Agreement); SA (Services Agreement); OPT (Option); MTA (Materials Transfer Agreements).
- (2) NUM refers to an internally-generated agreement number.
- (3) STATUS refers to the status of the agreement, and the following terms are used: PRELIM (an internal request for such an agreement has been made); SENT (a draft of an agreement has been sent to the other party); FOLLOW-UP (further contact has been made with the other party); FINAL (the agreement has been executed by all parties); CXLD (the request for the agreement has been dropped or abandoned). STATUS does not reflect the legal status of an agreement that has been finalized.
- (4) DATE Eff. refers to the effective date of an agreement, while DATE Exp. refers to its expiration date, if any.
- (5) AMD No. refers to an amendment to an agreement, which may include a renewal. The other entries have the same meanings as set forth for the parent entry.

PCR AGREEMENTS
 (Confidentiality Agreements Only)
 COLLABORATORS DATABASE
 12/05/91

INSTITUTION

FILE NAME	TYPE	AGT#	AND#	STATUS	DESCRIPTION	EFFECTIVE	EXPIRE	EXPERIMENT
AMRAD CORPORATION LIMITED								
Grace, John	CA	4831		FINAL	Each party to receive information relating to PCR, PCR technology, and DNA detection involving GCN4 protein	20-MAR-89	19-MAR-92	
APPLIED BIOSYSTEMS, INC.								
Kronick, Mel N.	CA	3903		FINAL	CETUS' PCR technology, etc.; A.B.I.'s nucleic acid sequencing, etc.	08-JUN-88	07-JUN-91	
			1	CXLD	Renewal			
[REDACTED]	CA	7461		FINAL	PECI's info. re: light scattering detector for determination of biopolymer molecular weight, instrument design and applications of the technology	29-APR-91	29-APR-94	
APPLIED BIOTECHNOLOGY, INC.								
Peltzman, Steven M.	CA	3833		FINAL	HIV and SIV vaccines	03-JUN-88	02-JUN-91	
[REDACTED]	CA	7524		FINAL	Cetus' info on design of accessories which facilitate performance and analysis of PCR; Bel-Art's info on fabrication of plasticware accessories for lab use	10-DEC-90	10-DEC-93	evaluate suitability of entering into a business relationship
[REDACTED]	CA	7353		FINAL	Bio-Rad's info. re: Chelex 100	17-JUL-91	17-JUL-94	

HIGHLY CONFIDENTIAL
 ATTORNEY'S EYES ONLY

RMS 06475

CHASE HOUGHTON INTERNATIONAL

NULL INVESTIGATOR CA

7369

FINAL 2-way; Cetus' Pro/Group instrument systems 12-APR-91 11-APR-94

into Evaluating the suitability of entering a business relationship or research agreement.

CHILDREN'S HOSPITAL OAKLAND

Johnson, John P. CA

1906

FINAL Visitor's CA 20-NOV-85

CHIRON CORPORATION

Patrick, Carolyn CA

3881

FINAL CETUS/KODAK possessive nucleic acid amplification technology, PCR, and DNA probes; CHIRON possessive Non-A, Non-B hepatitis viruses 19-MAY-88 18-MAY-91

CITY OF HOPE NATIONAL MEDICAL CENTER

Wallace, Bruce CA

4451

FINAL Cetus to receive confidential information on "Gene Mapping & Genotyping with Polymerase Chain Reaction Polymorphisms" (U-1350) 05-DEC-88 04-DEC-91

CORTEX BIOCHEM, INC.

NULL INVESTIGATOR CA

7126

FINAL 2 way; Cetus' info. re: assay and chemistries of polyethylenimine, and Cortex' info. re: formulation and composition of magnetizable particles 01-JAN-91 31-DEC-95

E. I. DU PONT DE NEMOURS & COMPANY

NULL INVESTIGATOR CA

3935

FINAL info re Cetus' gene amplification technology, application to in vitro diagnostics and Dupont info re development of in vitro diagnostic products 07-JUL-88 06-JUL-93

Wolfe, John R. CA

4160

FINAL Du Pont's ltr agt re possible licensing by Cetus to Du Pont of Cetus' PCR technology & Cetus' evaluation of Du 18-MAY-88 17-MAY-91

Pont's SNAP (Synthetic Nucleic Acid Probe)

Wolfe, John R.	CA	4161	FINAL	Du Pont's ltr wgt re possible licensing by Cetus to Du Pont of Cetus' PCR tech & Cetus' evaluation of Du Pont's DNA sequencing tech with Taq polymerase etc.	18-MAY-88	17-MAY-91
Wolfe, John R.	CA	4272	FINAL	Cetus' PCR, Taq polymerase, nucleic acid sequencing; Du Pont's DNA Sequencing Technology and DNA Sequencer	11-OCT-88	10-OCT-93
[REDACTED]	CA	7405	FINAL	Genelebs info re PCR-based research reagent	07-JUN-91	07-JUN-94
GEORGE WASHINGTON UNIVERSITY						
Garrett, Carleton	CA	3455	FINAL	info relating to oligonucleotide primers and probes	23-FEB-88	22-FEB-91
Garrett, Carleton	CA-V	5094	FINAL		25-MAY-89	
GEORGETOWN UNIVERSITY						
Psallidopoulos, Miltiades	CA-V*	3777	FINAL		05-MAY-88	
HARVARD UNIVERSITY						
Heyeck, Kevin	CA	6430	FINAL	Harvard's invention by Dr. Greg Verdine "Preparation of Oligonucleotides Bearing Tethered Functional Groups"	19-MAY-90	18-MAY-93
Mullins, James	CA	2271	FINAL	PCR technology; sent	13-APR-87	06-APR-87
Mullins, James	CA	4644	FINAL	PCR to characterize viral agents	13-APR-87	12-APR-92

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ATTORNEY'S EYES ONLY

RMS 06477

[REDACTED]	CA	7603	FINAL	HPV PCR protocols, primers and probes, and PCR reagents	12-NOV-91	12-NOV-96
LUDWIG INSTITUTE FOR CANCER RESEARCH (SWEDEN)						
Kan-Hansen, Slavenka	CA	5092	FINAL	Cetus' PCR technology; Kan-Hansen's multiple sclerosis (MS) technical information	19-MAY-89	18-MAY-92
MASSACHUSETTS INSTITUTE OF TECHNOLOGY						
Thilly, William G.	CA-V	1844	FINAL		08-SEP-86	
MILLIPORE CORPORATION						
McKenzie, William D.	CA	4576	FINAL	"Mutual Non-Disc'l Agt" Parties: Millipore, Div's Chromatography & Milligen, & Cetus; feasibility of incl Millipore membranes & devices in Cetus' diag test kits	13-JAN-89	12-JAN-92
NATIONAL JEWISH CENTER FOR IMMUNE/RESP MEDICINE						
Palmer, Edward	CA-V	2312	FINAL	Visitor's	10-MAR-87	
NIH-NATIONAL INST OF ALLERGY & INFECTIOUS DISEASES						
Feinstone, Steve	CA	2209	FINAL	PCR technology		
NIH-NATIONAL INST OF ENVIRONMENTAL HEALTH SCIENCES						
Kunkel, Thomas A.	CA-V	4210	FINAL	mutant, native and recombinant Taq and other thermostable DNA polymerases for research studies on the fidelity of thermostable DNA polymerases	19-SEP-88	
NIH-NATIONAL INSTITUTE ON AGING						
Kittur, Smita	CA-V	3093	FINAL	HTLV testing	12-OCT-87	
NUCLEICS, INC.						
Glassberg, Jeffrey	CA	5218	FINAL	Info relating to DNA-based antisense technology	11-JUL-89	10-JUL-90
			CXLD	Renewal		

WULL INSTITUTION

Inderlied, Clark CA 7403 FINAL Cetus' info on PCR as it relates to in vitro human diagnostics 02-AUG-91 01-AUG-96

Rose, Elise CA 5732 FINAL Rose to act as independent contractor from December 19, 1989 for up to one year, to assist H. Erlich in the study of a candidate Wilms' tumor gene using PCR 27-DEC-89 acting as an independent contractor, assist H. Erlich in the study of a candidate Wilms' tumor gene using PCR

[REDACTED]

[REDACTED] CA 7525 FINAL Cetus and Porex to exchange confidential info on disposable filtration accessory for solid phase extraction 12-NOV-90

QMC INDUSTRIAL RESEARCH LTD.

Brown, Melanie J. CA 1595 FINAL improving thermostability of enzymes 03-NOV-86

[REDACTED]

[REDACTED] CA 7437 FINAL PECT info. re: PCR process and QC specifications for synthesis and purif. of oligos for use in PCR, and RG's info. re: synthesis and purif. of oligos 16-AUG-91 16-AUG-94

SIMONS GENETYPE DIAGNOSTICS

Simons, Malcolm J. CA 1560 1 FINAL DNA probes Renewal 20-MAR-85 19-MAR-90

SISKA DIAGNOSTICS INC.

Herten, Ulrich CA 4187 FINAL Cetus to receive info on transcription-based methods for in-vitro amplification of nucleic acid sequences 23-FEB-88 22-FEB-93

SPECIALTY LABORATORIES, INC.

MULL INVESTIGATOR	CA	3770	FINAL	commercialization of PCR; Cetus & SLI to transfer info & material		
Walters, O., Jr.	Calvin CA	3813	FINAL	"Confidentiality Bailment Agt"; PCR	&	29-JAN-88 28-JAN-93
Walters, O., Jr.	Calvin CA	6961	FINAL	SLI's info. re: rapid extraction of DNA from whole blood		11-DEC-90 10-DEC-93
STANFORD UNIVERSITY						
Holodny, Mark	CA-V	4673	FINAL	work with Eric Groves and Michael Konrad in molecular biology and PCR assays		14-FEB-89
Schwartz, David H.	CA-V	3825	FINAL	PCR work on Merigan's patient samples		02-JUN-88
Wiesendanger, Hans U. D.	CA	6606	FINAL	Stanford's information relating to technology entitled "Rapid Annealing of Nucleic Acids"		31-MAY-90 30-MAY-93
STATE UNIVERSITY OF NEW YORK						
Rokita, Steven E.	CA	5699	FINAL	SUNY's technology, "Sequence Selective DNA Crosslinking," R-667		19-DEC-89
STATE UNIVERSITY OF NEW YORK AT ALBANY						
Steinman, Charles	CA	5823	FINAL	SUNY's technology, "Improvement of Primer-Directed Nucleic acid Amplification," R-678		09-FEB-90
						SUNY's "Improvement of Primer-Directed Nucleic Acid Amplification"
STATE UNIVERSITY OF NEW YORK, RESEARCH FOUNDATION						
MULL INVESTIGATOR	CA	7462	FINAL	Cetus' info. re: PCR technology. SUNY's info. re: Detection of Specific DNA Sequences by In Situ Hybridization		15-MAR-91 15-MAR-96

in Paraffin-Embedded
Tissues



NULL INVESTIGATOR CA

7413

FINAL

Stratocytels info. re: 18-APR-91
development and
identification of clones
expressing receptors,
particularly antibodies
or portions, capable of
binding certain ligands
and/or functioning as
catalysts for desired
reactions

THOMAS JEFFERSON UNIVERSITY

Katz, Philip A. CA

4952

FINAL

"Confidential Disclosure 04-MAY-89
Agreement" Cetus to
receive 1) a method for
detecting mismatched
base pairs 2) an AIDS
Virus Diagnostic, and 3)
Peptide Synthesis

TOTAL PACKAGE

NULL INVESTIGATOR CA

7368

FINAL

2-way; Peci's reagent 29-MAR-91 28-MAR-94

Evaluating the
suitability of entering
into a business
relationship or research
agreement

TROPICAL MEDICINE INSTITUTE

Meyer, Christian, CA
G.

6818

FINAL

09-MAY-90

UNITED STATES BIOCHEMICAL CORPORATION

Weisblatt, Mel CA

4374

FINAL

3 Party Agt: Peci's gene
amplification technology
and USB's research
reagents 20-JUL-88 19-JUL-93

UNITED STATES DEPARTMENT OF THE ARMY

Henchal, Erik A. CA

1760

FINAL

PCR technology 26-NOV-86 25-NOV-89

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Fout, G. Shay CA

7308

FINAL

DNA sequence info for 08-AUG-91 08-AUG-93 test for Legionella in
Legionella groundwater

UNITED STATES FEDERAL BUREAU OF INVESTIGATION

Budowie, Bruce	CA-V	1907	FINAL		10-JUN-86	
UNIVERSITAT MUENSTER						
Horst, Jurgen	CA-V	2381	FINAL		02-APR-87	
UNIVERSITY OF CALIFORNIA						
Jordan,	CA	7365	FINAL	"Secrecy Agreement for Data" for In Situ PCR	19-FEB-91	18-FEB-96
UNIVERSITY OF CALIFORNIA, BERKELEY						
Buoncrisiani, Martin	CA-V	3793	FINAL	PCR forensics work in Erlich's lab	17-MAY-88	
Paabo,	CA	5216	FINAL	"Secrecy Agreement for Data" UC's info developed by Drs. Paabo and Wilson relating to detection of nucleic acid modifications via jumping PCR (UC Case 89-045-1)	31-MAY-89	30-MAY-94
Sensabaugh, George G.	CA-V	1846	FINAL	PCR	01-SEP-88	was here working on PCR amplification
Walsh, Patric Sean	CA-V	3794	FINAL	PCR forensics work in Erlich's lab	23-MAY-88	
von Beroldingen, Cecilia H.	CA-V	1796	FINAL		08-DEC-86	PCR related to forensic medicine
UNIVERSITY OF CALIFORNIA, DAVIS						
Gumerlock, Paul H.	CA-V	4740	FINAL	Cetus PCR technology in the detection of HLA	12-OCT-88	
Gumerlock, Paul H.	CA-V	5095	FINAL	assisting Kawasaki and Paradise in the area of	18-MAY-89	01-JAN-90 assist Kawasaki and Paradise of Cetus

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RMS 06483

molecular biology in
research on the
detection of HLA
expression using PCR

Corporation in the area
of molecular biology in
research on the
detection of HLA
expression using PCR
(Ampl) ...IL-2 clinical
studies

1 FINAL Renewal and modify 02-JAN-90 01-JAN-91
2 FINAL Renewal 02-JAN-91 01-JAN-92

Hedgecock, Dennis CA-V 5032 FINAL 10-MAY-89

Hinrichs, Steven CA-V 4170 FINAL 23-AUG-88

Impraim, Chaka C. CA 2189 FINAL dot blot analysis; 07-FEB-86 06-FEB-88
03-JAN-88 do not renew
CA per Saiki

UNIVERSITY OF CALIFORNIA, IRVINE

Hatfield, G. CA 5159 FINAL "Secrecy Agreement for 13-JUN-89 12-JUN-94
Wesley UC's info
developed by Drs.
Hatfield and Gutman's on
codon-pair utilization
(UC Case 88-125-1)

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

Gitscher, Jane CA 4705 FINAL "Secrecy Agreement"; 24-FEB-89 23-FEB-94
Cetus to receive UC Case
Nos. 87-064-1 "Rapid
Diagnosis of
Hemophilis..." and
87-064-2 "Improved
Process for Amplifying
and Detecting..."

UNIVERSITY OF COLORADO

Rotbart, Harley CA-V 3197 FINAL 09-DEC-87

UNIVERSITY OF CONNECTICUT

Berg, Claire M. CA 7452 FINAL PEG1's info. re: PCR 16-MAY-91 16-MAY-94
reagent products, and
Berg's info. re:
bacterial transposons,
fidelity and DNA
sequencing methodologies

UNIVERSITY OF DUSSELDORF

Goretzki, Peter CA 6578 FINAL One-way covering J. 15-NOV-89 14-NOV-92
 Lyon's methodology for
 the detection of G
 protein point mutations

UNIVERSITY OF FLORIDA

Sninsky, Charles CA-V 4373 FINAL 10-OCT-88

UNIVERSITY OF MIAMI

Johnson, Daniel CA 6719 FINAL "Non-disclosure Agreement" Cetus to receive "A Method for Universal PCR Amplification of DNA Restriction Fragments" 19-NOV-90 18-NOV-93

UNIVERSITY OF MINNESOTA

Jackson, J. Brooks CA-V 4184 FINAL 19-SEP-88

UNIVERSITY OF NORTH CAROLINA

Errede, Beverly CA-V 4275 FINAL 17-OCT-88

Lemon, Stanley CA 3990 FINAL disclosure of Gene Capture Assay 08-AUG-88 07-AUG-91

Reisner, Howard CA 3991 FINAL disclosure of Detection of Specific DNA Sequences Using DNA Amplification Technology 08-AUG-88 07-AUG-91

UNIVERSITY OF SOUTHERN CALIFORNIA

Arnheim, Norman CA 638 FINAL CSM VI 12-JAN-86

UNIVERSITY OF SYDNEY

MacLennan, Douglas CA 4001 FINAL Cetus to evaluate information regarding an HPV screening test 01-JUL-88 30-JUN-91

UNIVERSITY OF UTAH

White, Raymond L.	CA	240	FINAL	cystic fibrosis probes U-1186	15-SEP-86	14-SEP-89	Cystic fibrosis probes U-1186
UNIVERSITY OF WASHINGTON							
Beatty, Patrick	CA-V	2601	FINAL			28-APR-87	
Kiviat, Nancy B.	CA-V	4008	FINAL			24-JUN-88	
Laird, Charles	CA	4641	FINAL	Cetus to receive info re "Fragile X Chromosome Diagnostic Test"	11-JAN-89	10-JAN-92	
Moncla, Bernard	CA	4642	FINAL	Cetus to receive info re "New Method for the Use of DNA Probes"	11-JAN-89	10-JAN-92	
UNIVERSITY OF WISCONSIN							
Smithies, Oliver	CA-V	2188	FINAL			06-MAR-87	
UNIVERSITY SCIENCE, ENGINEERING & TECHNOLOGY, INC.							
NULL INVESTIGATOR	CA	6986	FINAL	"Methods of Detecting Picornaviruses in Biological Fluids and Tissues"	27-FEB-90		
UPPSALA UNIVERSITET							
Gyllenstein, Ulf	CA-V	2048	FINAL			23-JAN-87	
VETERANS ADMINISTRATION							
Clark, Orlo H.	CA	6622	FINAL	One way to cover J. Lyons' project of G protein point mutation detection	01-DEC-89	30-NOV-92	
VIRGINIA MASON RESEARCH CENTER							
Nepom, Barbara S.	CA	4352	FINAL	Confirmation letter that states that Nepom will not publish, talk about, or reveal to others any information, procedures, ideas, etc. that have been communicate	16-NOV-88		

Nepom, Gerald T. CA-V 3043 FINAL Visitor's CA 30-JUN-87

WALTER & ELIZA HALL INSTITUTE OF MEDICAL RESEARCH

Cory, Suzanne CA 4115 FINAL rapid sample handling 31-AUG-88 30-AUG-91
protocol for PCR

YALE UNIVERSITY

Bertha, Steve L. CA 4538 FINAL Data to receive info on 28-DEC-88
Detection of Chlamydia
Trachomatis in Clinical
Specimens by DNA
Amplification (OCR 208)

Kavethas, Paula CA-V 4505 FINAL 02-DEC-88

NULL INVESTIGATOR CA 7036 FINAL Yale's info. re: 14-FEB-91 13-FEB-94
detection of nucleic
acid amplification
products by probe
extinction

NULL INVESTIGATOR CA 7085 FINAL Yale's info. re: 14-FEB-91 13-FEB-94
detection of nucleic
acid amplification
products by probe
extinction

Persing, David H. CA 4713 FINAL "Detection of Chlamydia
Trachomatis in Clinical
Specimens by DNA
Amplification," OCR 208

PCR AGREEMENTS
 (Excluding MTAs, CAs, CA-Vs)
 COLLABORATORS DATABASE
 12/05/91

INSTITUTION		FILE NAME	TYPE	AGT#	AMD#	STATUS	DESCRIPTION	EFFECTIVE	EXPIRE	EXPERIMENT
CELLMARK										
NULL INVESTIGATOR		AGT		7421		FINAL	Letter Agt.; CD may practice PCR solely to perform services pursuant to a contract issued by Walter Reed Army Medical Center	15-FEB-91	30-SEP-92	
CENTERS FOR DISEASE CONTROL										
Schochetman, Gerald		RA		1780		FINAL	PCR for detection of AIDS; PCR technology, Taq polymerase, probes, primers, PCR amplification machine	17-APR-87		develop commercial diagnostic, therapeutic, research products using PCR technology to the detection applied to characterization of AIDS and primate viruses. (RA Amd#1) extend the RA until April 16, 1991 and to clarify the research plan in Appendix 1
					1	FINAL	oligonucleotides SK38-39 with SK19; SK145-150 with SK102; derivatives thereof positioned in the same areas but so as to add a T at their 3 prime terminal	29-MAR-90	16-APR-91	
					2	FINAL	Renewal	17-APR-91	16-APR-92	
Schochetman, Gerald		LTR AGT		4658		FINAL	receipt of DNA phage containing complete HIV insert	03-MAR-89		Research use
CETUS CORPORATION										
Ohler, Lynne		CSA		6879		FINAL	consulting in the area of Human Genome project and PCR technology	05-NOV-90	04-NOV-91	Human Genome Project and PCR Technology
CHILDREN'S HOSPITAL OAKLAND										

Johnson, John P. RA 6096 FINAL Cetus and Children's Hospital to develop a PCR-based test for cystic fibrosis 15-APR-90 14-APR-92 develop a PCR-based test for cystic fibrosis

COLORADO DEPARTMENT OF HEALTH

Beebe, Jim LTR AGT 5880 FINAL Cetus to receive sputum samples 10-APR-90 research in the development of a mycobacterial assay

FORENSIC SCIENCE ASSOCIATES

Blake, Edward T. CSA 3836 FINAL consulting in the area of research and development activities of Cetus 11-APR-88 10-APR-89 Research and development activities of Cetus

1 FINAL Renewal; consulting in the area of research and development activities of Cetus 11-APR-89 10-APR-90

2 FINAL Renewal; consulting in the area of research and development activities of Cetus 10-APR-90 31-MAR-91

3 CXLD 3 month loan of thermocycler

Blake, Edward T. LTR AGT 5741 FINAL Cetus' sale of HLA DQalpha PCR Reaction Mixes, MgCl(2) Solution, DQalpha Typing Strips, Enzyme Conjugate (HRP-SA), Chromogen (TMB) to Forensic Science Associates 15-DEC-89 28-FEB-90

1 CXLD Renewal

Blake, Edward T. CSA 6405 FINAL consulting in the area of research and product development 10-APR-90 09-APR-91

FRED HUTCHINSON CANCER RESEARCH CENTER

Hansen, John A. RA 4529 FINAL study of HLA typing by PCR w/ sequence specific oligonucleotide probes (SSOP) for tissue transplantation 15-JUN-90 detection and characterization of HLA DNA typing for tissue transplantation

GENMARK, INC.

MULL INVESTIGATOR AGT 7419 FINAL Letter Agt.; Cetus permits Genmark to practice PCR process solely to perform 12-FEB-91