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**COMBIMATRIX AND irsiCaixa FOUNDATION EXPAND  
siRNA COLLABORATION AND SELECT CANDIDATES  
FOR PRECLINICAL DEVELOPMENT AGAINST HIV**

Newport Beach, Calif. – (BUSINESS WIRE) – July 20, 2004 – Acacia Research Corporation (Nasdaq: CBMX:ACTG) announced today that its CombiMatrix group and collaborator irsiCaixa have entered into a three year research, development, and licensing agreement and have chosen two siRNA candidates for downstream pre-clinical development against HIV.

These two compounds target two key HIV genes, which are essential for the virus to thrive. In vitro measurements have shown that silencing, one or both of these genes with our siRNA molecules, can reduce the virus' efficacy by over 99%.

Dr. Clotet of irsiCaixa stated, "The effectiveness of each of these compounds at silencing and inhibiting the infectivity of HIV in vitro, is comparable or better, than any other siRNA molecules reported in the literature. We are looking forward to additional downstream development."

"This is very early stage data, and there can be no assurances that these compounds will become marketable and approved drugs. However, we are extremely pleased with our progress in the siRNA virology arena in general and HIV specifically," said Dr. Amit Kumar, President and CEO of CombiMatrix Corporation. "Additional work in the areas of delivery, toxicology, and animal studies are planned, and more details will be forthcoming. In addition to our work on HIV, we hope to identify equally powerful inhibitors of Hepatitis C virus. We feel our collaborative effort may enable us to be at the forefront of siRNA drug discovery and development for viral diseases."

The first gene silenced codes for the enzyme, HIV-1 reverse transcriptase, which is used by the virus to convert its RNA into DNA, which can then be incorporated into the genome of the infected human host. Many of the best-known and successful HIV drugs available today, inhibit the activity of reverse transcriptase. With siRNA technology, it appears that the synthesis of the enzyme could be virtually shut down, providing a potentially more powerful therapeutic approach to inhibit the virus. The second gene silenced is HIV-1 Nef, which codes for a regulatory protein, which is responsible for weakening the human immune system, thus enabling the HIV virus to rapidly replicate within the human host.

Under the terms of the expanded agreement, CombiMatrix and its potential development partners will pursue the pre-clinical development of the noted sequences with irsiCaixa providing research as appropriate. CombiMatrix will provide irsiCaixa research funding, milestone payments, and royalties upon clinical development and approval. In addition to work on HIV, the agreement covers additional virology work at irsiCaixa including Hepatitis C.

## **ABOUT siRNA**

siRNA or RNA interference, or RNAi, is a naturally occurring mechanism within cells for selectively silencing specific genes, an ability that could become the basis for a whole new class of therapeutic products. The discovery of RNAi has been heralded by many as a major breakthrough, and the journal Science named RNAi the top scientific achievement of 2002 as well as one of the top ten scientific advances of 2003.

## **ABOUT RETROVIROLOGY LABORATORY IRSICAIXA**

The irsiCaixa Foundation is a leading institute and reference center for the research and treatment of Acquired Immuno Deficiency Syndrome (AIDS) in Europe. The Foundation was founded in 1995 with the objectives of advocating, inspiring and spreading medical investigation on AIDS. The irsiCaixa Foundation Scientific Committee includes many world-renowned experts in the field of HIV research ([www.irsicaixa.org/english/about/a\\_stru.html#comite](http://www.irsicaixa.org/english/about/a_stru.html#comite)).

The activity of the irsiCaixa Foundation is mainly carried out in the Retrovirology Laboratory of the University Hospital Germans Trias i Pujol in Badalona (Barcelona, Spain). The laboratory director is Dr. Bonaventura Clotet, chief of the AIDS unit of the University Hospital. Dr. Clotet received his MD of Medicine and Surgery at the Universitat Autònoma de Barcelona, in 1976. He earned his Ph.D in the investigation of surrogate markers for connective tissue diseases in 1981.

Dr. Clotet has published more than 150 peer-reviewed papers. He is on the Editorial Board of the AIDS Journal and the Journal of the International Association of Physicians in AIDS Care. He has also authored numerous books and chapters on retrovirology and is an expert on HIV management, HIV/HCV co-infection, and treatment, HIV resistances, and siRNA research.

Professor Clotet is a member of the Governing Council of the International AIDS Society (IAS) and the Drug Resistance Mutations Group belonging to IAS. Dr. Clotet is an active member of the Expert Commission for the evaluation of research projects in the National Programme of Health and National AIDS Programme. Dr. Clotet was a co-chair of the Barcelona World AIDS meeting 2002. Information about the irsiCaixa Foundation is available at [www.irsicaixa.org](http://www.irsicaixa.org).

## **ABOUT ACACIA RESEARCH CORPORATION**

Acacia Research Corporation comprises two operating groups: Acacia Technologies Group and CombiMatrix Group.

The CombiMatrix group is developing a platform technology to rapidly produce customizable active biochips, which are semiconductor-based tools for use in identifying and determining the roles of genes, gene mutations and proteins. CombiMatrix's technology has a wide range of applications including DNA synthesis/diagnostics, siRNA synthesis, drug discovery, and

immunochemical detection. CombiMatrix provides DNA arrays to researchers under the CustomArray™ brand. CombiMatrix's Express Track<sup>sm</sup> drug discovery program is a systems biology approach, using its technology, to target common viral diseases with siRNA compounds.

The Acacia Technologies Group develops, acquires, and licenses patented technologies. Acacia's DMT technology, which is supported by 5 U.S. and 31 foreign patents, relates to audio and audio/video transmission and receiving systems commonly known as audio-on-demand, video-on-demand, and audio/video streaming, and is used for distributing digital content via several means including Internet, cable, satellite and wireless systems.

Acacia Research-Acacia Technologies (Nasdaq: ACTG) and Acacia Research-CombiMatrix (Nasdaq: CBMX) are both classes of common stock issued by Acacia Research Corporation and are intended to reflect the performance of the respective operating groups and are not issued by the operating groups.

Information about the Acacia Technologies Group and the CombiMatrix Group is available at [www.acaciaresearch.com](http://www.acaciaresearch.com).

**Safe Harbor Statement under the Private Securities Litigation Reform Act of 1995:**

*This news release contains forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. These statements are based upon our current expectations and speak only as of the date hereof. Our actual results may differ materially and adversely from those expressed in any forward-looking statements as a result of various factors and uncertainties, including the economic slowdown affecting technology companies, our ability to successfully develop products, rapid technological change in our markets, changes in demand for our future products, legislative, regulatory and competitive developments and general economic conditions. Our Annual Report on Form 10-K, recent and forthcoming Quarterly Reports on Form 10-Q, recent Current Reports on Forms 8-K and 8-K/A, and other SEC filings discuss some of the important risk factors that may affect our business, results of operations and financial condition. We undertake no obligation to revise or update publicly any forward-looking statements for any reason.*