



UNIVERSITY GENETICS CO. · 537 NEWTOWN AVENUE, P.O. BOX 6080 · NORWALK, CT 06852

The attached documents summarize the offering of Limited Partnership Units in DNA LIMITED PARTNERSHIP. University Genetics (UGEN) successfully completed this offering in 1981 and is presently planning to structure four similar Research & Development Partnerships for placement in 1982.

The new Partnerships will be structured so as to provide the investor with the following:

1. Tax leverage (approximately 3 to 1 in 1982, with a total of 85-88% of the full investment over the term of the Partnership).
2. A pro rata interest in Partnership royalty income resulting from the commercialization of funded research products.
3. A pro rata interest in Partnership common stock in an associated new subsidiary company of University Genetics.

Each of the new Partnerships will attempt to raise \$2-3 million dollars under the constraints of a Rule 146 offering and will pay a 10% sales commission to the placement agent.

The four new UGEN Limited Partnerships will be established around the following opportunities:

1. Cytogenetic analysis for genetic counseling (both prenatal and preventive medicine risk profiling). Diagnostic Limited Partnership associated with Genetic Clinics Inc.
2. Genetic production of hormones and neuropeptides. Peptide Limited Partners I associated with Neurogen Inc.
3. Production of genetically engineered vaccines. Vaccine Limited Partnership I associated with Genovac Inc.
4. Funding of 15-20 University originated genetic engineering research projects (similar to complete placement). DNA Limited Partnership II associated with University Genetics Company.

5. Closing Date: December 21, 1981, extendable until December 31, 1981 at the election of the General Partners.
6. To Subscribe:
 - * Complete Subscription Documents
 - * Make check for \$30,000.00 payable to:

"Schupack, Rosenfeld, Fischbein,
Bernstein & Tannenhauser, Escrow Agent"
 - * Mail to:

DNA Limited Partnership
Post Office Box 6080
Norwalk, Connecticut 06852
7. A limited number of fractional units may be available. Interested parties should promptly contact the General Partners, telephone: (203) 846-3958 or (203) 846-3461.

7. Tumor Control Agents
8. Production of Appetite Suppressant Agents
9. Therapeutic Properties of an Immunodeficiency Agent
10. Diagnosis of Protozoan Lung Infections
11. Treatment for B-Streptococcal Disease
12. Production of Human Blood Factor XII
13. Control of Human Blood Pressure
14. Neuroactive Agents for Control of Blood Pressure and Cardiovascular Regulation

BUSINESS INTERACTION BETWEEN
THE PARTNERSHIP, UGEN AND UPAT

UGEN will furnish services to the Partnership in identifying, evaluating and recommending research and development projects to be funded by the Partnership, in negotiating and administering research and development contracts, and in procuring and administering patents for inventions and licensing such patents and inventions to industry. UGEN will retain for itself, as overhead and profit (if any), 25% of the total amount received from the Partnership. All of UPAT's property rights with respect to inventions in the field of genetic engineering will be assigned as follows: (a) to GTM, and reassigned by GTM to the Partnership, with regard to those inventions on which the Partnership funds research and development, or (b) to UGEN with regard to those inventions on which the Partnership does not do any funding. The latter commitment will cover rights presently held or acquired in the future during a 25 year term. Any Net Licensing Revenues received from rights acquired by the Partnership by such assignment, or from rights in inventions resulting from the research and development projects funded by the Partnership, will be retained 50% by the Partnership and paid 50% to UGEN until the Partnership has retained cumulative Net Licensing Revenues in an amount such that the Limited Partners' share is equal to their total capital contribution (approximately \$3,750,000, if 25 Units are sold and \$2,250,000, if 15 Units are sold). Thereafter, 25% of any Net Licensing Revenues will be retained by the Partnership and 75% will be paid to UGEN.

FEDERAL INCOME
TAX CONSEQUENCES

The majority of Partnership capital will be expended in contracting for research and development, and this is expected to result in losses to the Partnership during at least the early years of operation which should result in tax deductions to the Partners, under Section 174 of the Internal Revenue Code. If there is no income to the Partnership from exploitation of genetic engineering technologies through the end of 1982, tax deductions to the

12. Genetic Engineering of Plants from Single Cells
Dr. C. Lundeen, University of North Carolina

Genetic information can be transferred into virtually any dicotyledonous plant cell by using a bacterial plasmid system. However, at present, very few whole plants can be grown from such engineered cells (e.g., tobacco and carrot).

This project involves the adaption of plant tissue culture methodology and a bacterial system to transform pea, peanut, soybean, grape and potato cells into modified plant forms.

13. Diagnosis of Cystic Fibrosis
Dr. J. Morrow, Texas Tech

This project involves screening human genes to identify mutants involved with cystic fibrosis. An objective is to develop a DNA probe for diagnosis of the disorder including prenatal diagnosis. A secondary objective is to identify protein markers of the disorder and to develop immunological diagnoses.

14. Diagnosis of Muscular Dystrophy
Dr. J. Morrow, Texas Tech

Duchenne muscular dystrophy (DMD) is the most common and most serious form of the disorder. The incidence of DMD in males at birth is 1 in 3,000 and the clinical outcome is mortality in the late teens. It is known that the genes underlying DMD are located in the X male chromosome. This project involves screening, cloning and producing a probe for DMD that can be used in prenatal diagnosis and genetic counseling of carrier females.

15. New Cloning Vectors for Yeast
Dr. P. Perlman, Ohio State University

Yeast is rapidly becoming a preferred host for genetic engineering processes because much is known about its biochemistry and fermentation processes. In addition, harmful toxins that are often produced by bacteria are not generally present in yeast systems. This project is involved in analysing appropriate vectors to shuttle genetic information into the yeast cell for commercial use.

THIS IS NOT AN OFFERING.
AN OFFERING CAN BE MADE
VIA A CONFIDENTIAL
PLACEMENT MEMORANDUM.

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DNA LIMITED PARTNERSHIP

Proposed Offering of Limited Partnership Interests

\$3,750,000

Summary Memorandum

This memorandum is a summary of an offering of twenty-five Limited Partnership Units of \$150,000 each in DNA Limited Partnership, a Connecticut limited partnership. A confidential memorandum describing the investment in detail will be available on request. This summary memorandum does not constitute an offer to purchase the securities described. It has been prepared for the convenience of potential investors and does not purport to set forth all aspects of the offering and, in particular, its RISK FACTORS.

THE PARTNERSHIP

The PARTNERSHIP (the "Partnership") is being organized to commercially exploit technologies relating to genetic engineering, including the funding of research and development of such technologies and licensing the resulting processes and products. The Partnership will also hold stock of University Genetics Co., a Delaware corporation ("UGEN") which will own existing and future rights in genetic engineering technologies obtained from University Patents, Inc. ("UPAT"). UGEN will conduct the funding programs for the Partnership. UGEN will be initially owned (excluding shares issued or reserved for executives) 90% by UPAT and 10% by the Partnership if the minimum number of Units are subscribed for, or 83% by UPAT and 17% by the Partnership if the maximum number of Units are subscribed for. The General Partners of the Partnership are Novack Management, Inc., 537 Newtown Avenue, Norwalk, Connecticut, and Genetic Technology Management, Inc. ("GTM:"), 537 Newtown Avenue, Norwalk, Connecticut, each of which will have a 1% interest in the Partnership. GTM is a wholly-owned subsidiary of UPAT.

A minimum of fifteen (15) and a maximum of twenty-five (25) limited partnership Units of \$150,000 each are being offered to a limited number of qualified offerees. Each Unit is payable as follows:

	<u>Principal Amount</u>	<u>9% Simple Interest on Unpaid Balance</u>	<u>Amount Due</u>
a) <u>Payment Due</u> Upon execution of Subscription Agreement (Closing Date 12/21/81)	\$ 30,000	\$ -0-	\$ 30,000
b) March 20, 1982	\$ 60,000	\$ 2,700	\$ 62,700
c) September 20, 1982	<u>\$ 60,000</u>	<u>\$ 2,700</u>	<u>\$ 62,700</u>
Total	<u>\$150,000</u>	<u>\$ 5,400</u>	<u>\$155,400</u>

The installments payable in March 1982 and September 1982 shall be evidenced by promissory notes bearing interest at the rate of 9% per annum. If the minimum subscriptions have not been received by December 20, 1981, all subscriptions will be terminated and funds advanced by subscribers will be returned promptly without interest. Fractional Units may be subscribed for when permitted by the General Partners.

PARTNERSHIP UGEN STOCK

There will be no initial public market for the Partnership's UGEN stock, and it will be retained as a Partnership asset until such time (if any) as a public market for UGEN stock has developed, whereupon the Partnership will distribute (subject to compliance with securities laws) its UGEN stock to the Partners.

PARTNERSHIP/UGEN R & D CONTRACT

The Partnership will enter into a contract with UGEN pursuant to which UGEN will perform R & D work in connection with certain defined genetic engineering technologies. UGEN will subcontract all of the work to be performed under the contract to various university research groups. The Partnership will pay UGEN by delivery of cash and promissory notes on a schedule which is determined in accordance with anticipated commencement of the research and development on separate items of the technologies.

Proposals for funding have been received by UGEN from many universities, and the following is a partial list of the proposals that UGEN is considering for funding:

1. Natural Cotton Pesticides
2. Manipulation of Cytoplasmic Factors in Potatoes
3. Insertion of Chromosomes into Plant Cells
4. Transfer of Nuclear and Mitochondrial Genes
5. Genetic Engineering of Plants from Single Cells
6. New Cloning Vector for Plants

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DNA LIMITED PARTNERSHIP

Broker/Dealer Confidential Summary Sheet

1. A total of 25 Limited Partnership Units are being offered.
 - A) Price per Unit -- \$150,000 + \$5,400 (interest at 9%) = \$155,400
 - B) Unit is purchased as follows:
 - * Upon execution.....\$30,000.00
 - * March 21, 1982.....\$62,700.00
(includes interest)
 - * September 21, 1982..\$62,700.00
(includes interest)
 - C) Tax Deductions (approximate):
 - * 1981.....\$100,000.00
 - * 1982.....\$ 32,000.00
 - D) Purchaser Receives:
 - * Pro rata interest in Partnership's royalty income.
 - * Pro rata interest in Partnership's UGEN stock (50,000 shares)
2. University Patents will be assigning 13 licensed Genetic Engineering technologies to UGEN, and has agreed to assign all its future Genetic Engineering technologies to UGEN for a 25 year period.
3. UGEN as of November 1, 1982 has received approximately 120 research proposals requesting funding from many major U. S. and foreign universities.
4. Tax Opinion:

Schupak, Rosenfeld, Fischbein, Bernstein &
Tannenhauser
555 Madison Avenue
New York, New York 10022
(Contact: Robert Tannenhauser, Esq.)

We are presently interested in identifying one or more Broker/Dealers interested in handling the placement of the above-described Partnerships. We would also like to identify individual sales agents interested in placing the units of these Partnerships.

If you would like to pursue these opportunities further, please contact:

George M. Stadler
Vice President
University Genetics Co.
537 Newtown Avenue
Norwalk, Connecticut 06851
Telephone: (203) 846-9012

DNA LIMITED PARTNERSHIP

1. Capitalization

Minimum:

15 units @ \$150,000/unit = \$2,250,000

Could raise as:

30 ($\frac{1}{2}$ units) @ \$75,000/unit = \$2,250,000

or

5 units @ \$150,000/unit =	\$ 750,000
20 units @ \$ 75,000/unit =	\$1,500,000
	<u>\$2,250,000</u>

or

25 ($\frac{1}{2}$ units) @ \$75,000/unit =	\$1,875,000
10 ($\frac{1}{4}$ units) @ \$37,000/unit =	\$ 375,000
	<u>\$2,250,000</u>

Maximum:

25 units @ \$150,000/unit = \$3,750,000

Could raise as:

11 units @ \$150,000/unit =	\$1,650,000
24 ($\frac{1}{2}$ units) @ \$75,000 =	\$1,800,000
8 ($\frac{1}{4}$ units) @ \$37,500/unit =	\$ 300,000
	<u>\$3,750,000</u>

Appendix 1 - Cont.

2. Equity in UGEN

7,500,000 shares of UGEN issued:

Minimum Deal: (15 units @ 50,000 shares/unit)

UPAT/GTM_____	6,500,000	shares (87%)
Partnership_____	750,000	shares (10%)
UGEN Management_____	250,000	shares (3%)
Total_____	7,500,000	shares

Maximum Deal: (25 units @ 50,000 shares/unit)

UPAT/GTM_____	6,000,000	shares (80%)
Partnership_____	1,250,000	shares (17%)
UGEN Management_____	250,000	shares (3%)
Total_____	7,500,000	shares

UGEN FUNDED PROJECTS
In Order of Priority

1. Dental Caries Vaccine
Dr. J. Ferretti, University of Oklahoma

It has been known for some time that a bacterial strain Streptococcus mutans, which feeds on adsorbed sugar, is the cause of tooth decay. Crude vaccines made from protein antibodies have been shown to act effectively against the development of tooth decay in animals. To remove side effects, it is necessary to produce a "pure" i.e. single component antibody vaccine. This end is to be achieved by selectively producing vaccines using individually cloned S. mutans coat proteins.

2. Production of Efficient Promoters
Dr. R. Butow, University of Texas, Dallas

In genetically engineering a product from bacteria to yeast, it is important to have a good "promoter gene" that essentially controls the efficiency of the process. Normal values currently in practice involve 1-2% expression. This project has so far produced a controllable promoter that allows substantially improved expression of product. It will be used to demonstrate that peptides can be produced efficiently.

3. Production of Appetite Suppressant Agents
Dr. A. Kumar, George Washington University

Many hormone and hormone-like agents are found in chemical extracts of brain tissue. This investigator has identified such an agent which appears to be the natural on/off switch for appetite. It has been demonstrated to be effective in rats and will be produced by standard recombinant DNA, cloning and expression.

4. Therapeutic Properties of an Immunodeficiency Agent
Dr. P. Baker, Montana State University

Most diseases are rendered highly dangerous if the body is unable to develop antibodies and an acquired immunity. In general, the body's defense against foreign species involves the "turning on" of T-cells by

a complex biochemical mechanism. If the cells lack one or more of the entities required to activate this process, immunodeficiency results. In this project, the investigator had identified a key molecular species which can be prepared by conventional, but very tedious procedures. This entity is found effective in treating human immunodeficiency but should be much more effectively produced in quantity by genetic engineering and production from bacteria.

5. Tumor Control Agents

Dr. M. Hillar, Texas Southern University

At the onset of malignancies, the nuclear DNA controlling the rate of synthesis of tissue loses its ability to function normally. The expression of DNA is controlled by certain peptides that can be isolated and cloned. This investigator has isolated the peptides, has shown that their presence inhibits tumor growth in animals and that they are low or absent when tumor initiation occurs. They are expected to be producible by standard genetic engineering techniques and should prove valuable as natural chemotherapeutic agents.

6. Cloning Systems for Antibiotics

Dr. G. Brownell, Medical College of Georgia

The production of antibiotics from bacteria by microbiological techniques has been a mainstay of the pharmaceuticals industry. It now appears likely that by direct genetic intervention old strains maybe improved and new antibiotics may be produced economically. This project involves new approaches towards the exchange of genetic information between biochemically compatible, antibiotic producing, bacterial strains.

7. Cloning of Vitamin and Amino Acid Related Genes in Plants

Dr. D. Merlo, University of Missouri

In this project the investigators are cloning the important genes involved in various biosynthetic genetic processes. One of the major problems in genetically engineering plants is that the detailed biochemistry is not understood as it is in some bacterial systems. In this project, plant genes are screened in bacteria to assess their metabolic significance. After assessment, appropriate genes may be reintroduced into plants.

8. Insertion of Chromosomes into Plant Cells
Dr. D. Galbraith, University of Nebraska

This project involves the insertion of chromosomes into plant cells using lipid vesicles (molecular capsules) and is aimed at developing general methods for increasing crop yield, increasing disease resistance and decreased fertilizer requirements.

9. Degradation of Lignin
Drs. A. Frazer and L. Young, New York University.

Lignin is pervasive and largely unusable by-product of the paper industry. This project seeks to build on the identification by the investigators of bacterial strains and plasmids that degrade the lignin to commercially useful phenolic compounds and petrochemicals.

10. Metal Resistant Microorganism
Dr. A. Summers, University of Georgia

One of the most pervasive problems with scale-up operations in bacterial engineering systems is that of contamination by other non-engineered bacteria. Since the latter are generally better adapted to their own growth and proliferation, the wild strain usually becomes dominant destroying the required processing. One way to avoid this problem is to engineer bacteria that are resistant to normal bacterial poisons. In this project, plasmids are being constructed that resist many times the normal lethal concentration of inhibitory metal ions. Thus, addition of such ions to fermenters should kill wild strain bacteria, but leave engineered bacteria unaffected.

11. New Cloning Vector for Plants
Dr. P. Lurquin, Washington State University

One of the major difficulties of inserting genes into plant cells is concerned with the necessity of following the process of insertion and expression. Such difficulties can be addressed by inserting "marker" genes that allow an analysis of the success of the insertion process. This project should allow the basic methodology of gene insertion in plants, particularly carrot and tobacco, to be developed.

Limited Partners per Unit are expected to be as follows:

<u>Year</u>	<u>Investment</u>	<u>Approximate Deduction</u>
1981	\$ 30,000	\$100,000
1982	120,000	32,000

TAX OPINION

Schupack, Rosenfeld, Fischbein, Bernstein &
Tannenhauser
555 Madison Avenue
New York, New York 10022
(Contact: Robert Tannenhauser, Esq.)

INFORMATION

To obtain Confidential Offering Memorandum for clients
and/or answers to questions, please contact:

Mr. Martin M. Novack
Novack Management, Inc.
537 Newtown Avenue
Norwalk, Connecticut 06851
(203) 846-3461

-or-

Mr. L. W. Miles
President
University Patents, Inc.
537 Newtown Avenue
Norwalk, Connecticut 06851
(203) 846-3461

-or-

Dr. Alan G. Walton
President
University Genetics Co.
537 Newtown Avenue
Norwalk, Connecticut 06851
(203) 846-9012)

United States of America DEPARTMENT OF COMMERCE	DEPARTMENT ORGANIZATION ORDER <u>35-9</u>	
DEPARTMENT ORGANIZATION ORDER SERIES	DATE OF ISSUANCE June 26, 1984	EFFECTIVE DATE January 22, 1984
SUBJECT OFFICE OF PRODUCTIVITY, TECHNOLOGY AND INNOVATION		
<p><u>SECTION 1. PURPOSE.</u></p> <p>.01 This Order prescribes the functions of the Office of Productivity, Technology and Innovation.</p> <p>.02 This revision deletes reference to the National Productivity Advisory Committee, and incorporates new functions related to voluntary metric conversion and patent policy.</p> <p><u>SECTION 2. STATUS AND LINE OF AUTHORITY.</u></p> <p>The Office of Productivity, Technology and Innovation, a constituent operating unit of the Department, shall be headed by a Director who shall report and be responsible to the Assistant Secretary for Productivity, Technology and Innovation.</p> <p><u>SECTION 3. FUNCTIONS.</u></p> <p>The Office of Productivity, Technology and Innovation shall serve as the Departmental focus for policy and program activities relating to productivity improvement, technological development and innovation in the private sector. In carrying out these responsibilities, the Office shall:</p> <ol style="list-style-type: none"> a. Conduct studies on the effect which Federal policies, programs, legislation and regulations have on productivity growth, technological development and innovation in the private sector; b. Coordinate the development of, and serve as the principal contact for, Departmental positions on Federal policies and program which affect private sector productivity growth, technological development and innovation; c. Conduct programs designed to promote the understanding and use of productivity measurement and improvement techniques in the private sector, including: <ol style="list-style-type: none"> 1. Operation of a Departmental clearinghouse for the collection and dissemination of productivity related information to the private sector, and 2. Conduct of workshops, seminars and related outreach mechanisms to provide business decisionmakers with best practice productivity and technology information; d. Administer Departmental responsibilities under the Stevenson-Wydler Technology Innovation Act of 1980 (P.L. 96-480), including: 		

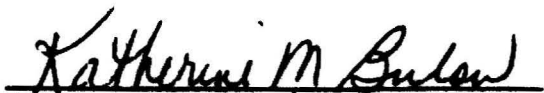
1. Serving as the focal point for policy development and industry-government consultations designed to reduce institutional and other barriers to cooperative arrangements aimed at technological advance, and
2. Develop and implement policies and programs to foster greater private sector commercialization of Federally-owned patents and other Federally-funded technologies, including technologies developed by Federal laboratories and inventions developed under Federal contracts and grants.
 - e. Establish and provide staff support for Departmental task forces, committees and steering groups responsible for the coordination of Departmental research, data collection and other activities related to private sector productivity improvement;
 - f. Maintain liaison with domestic and foreign productivity centers, institutes, committees and related organizations on methods, techniques and innovations to enhance productivity growth; and
 - g. Provide liaison between the public and private sectors on voluntary metric conversion; assist and respond to inquiries from the private sector; coordinate the Federal Government's own metric conversion activities, including coordination of interagency committees; assist State and local governments in metric problems; and identify existing barriers to voluntary conversion and recommend appropriate action.

SECTION 4. EFFECT ON OTHER ORDERS.

This Order supersedes Department Organization Order 35-9, dated April 22, 1982.


Under Secretary for Economic Affairs

Approved:


Assistant Secretary for Administration