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PROGRAM FOR APPLIED RESEARCH  
ON FERTILITY REGULATION

S E M I - A N N U A L R E P O R T

July 1, 1979 - December 31, 1979

Submitted to:                   Research Division  
                                  Office of Population  
                                  Development Support Bureau  
                                  Agency for International Development  
                                  USIDCA  
                                  Washington, D.C. 20523

Submitted by:                   Program for Applied Research on  
                                  Fertility Regulation  
                                  Northwestern University Medical  
                                  School  
                                  1040 Passavant Pavilion  
                                  303 East Superior Street  
                                  Chicago, Illinois 60611

In compliance with Contract AID/csd-3608  
and Contract AID/DSPE-C-0035

## TABLE OF CONTENTS

|  | <u>Page</u> |
|--|-------------|
| I. REPORT SUMMARY.....                             | 1           |
| II. CONTRACT OBJECTIVES.....                       | 2           |
| III. PROGRAM ACCOMPLISHMENTS.....                  | 3           |
| LDC Involvement.....                               | 3           |
| Scientific Summary.....                            | 5           |
| Administrative Summary.....                        | 7           |
| Subcontract Negotiations.....                      | 8           |
| Personnel.....                                     | 15          |
| Organization Chart.....                            | 16          |
| Scientific Advisory Committee.....                 | 17          |
| Site Visits.....                                   | 18          |
| Consultants.....                                   | 20          |
| Subcontract Inventory.....                         | 21          |
| IV. WORK PLAN.....                                 | 37          |
| Anticipated Accomplishments.....                   | 37          |
| Procedures and Activities.....                     | 38          |
| V. FINANCIAL REPORTS.....                          | 39          |
| Summary Financial Report.....                      | 39          |
| Expenditures for Reporting Period.....             | 40          |
| Subcontract Expenditures.....                      | 47          |
| VI. APPENDIX                                       |             |
| Scientific Advisory Committee Minutes              |             |
| Research Frontiers in Fertility Regulation Program |             |

## REPORT SUMMARY

## Project Title and Contract Number:

Program for Applied Research on Fertility Regulation  
 AID/csd-3608  
 AID/DSPE-C-0035 (7/1/79 - 6/30/81)

## Principal Investigator:

John J. Sciarra, M.D., Ph.D.  
 Professor and Chairman  
 Department of Obstetrics and Gynecology  
 Prentice Women's Hospital and Maternity Center  
 333 East Superior Street  
 Chicago, Illinois 60611

## Contractor:

Northwestern University  
 c/o Sponsored Projects Administration  
 619 Clark Street  
 Evanston, Illinois 60201

## Contract Period:

July 1, 1975 - June 30, 1979 -- AID/csd-3608  
 July 1, 1979 - June 30, 1981 -- AID/DSPE-C-0035

## Reporting Period:

July 1, 1979 - December 31, 1979

Total Expenditures Through June 30, 1979: \$3,129,025.32  
 (AID/csd-3608 only)

## Total Expenditures July 1, 1979 - December 31, 1979:

|                 |                      |
|-----------------|----------------------|
| AID/csd-3608    | \$ 579,391.98        |
| AID/DSPE-C-0035 | <u>\$ 208,256.27</u> |
| Total:          | \$ 787,648.25        |

## Committments Through June 30, 1980:

|                 |                      |
|-----------------|----------------------|
| AID/csd-3608    | \$ 870,741.78        |
| AID/DSPE-C-0035 | <u>\$ 816,126.26</u> |
| Total:          | \$1,686,868.04       |

## CONTRACT OBJECTIVES

"The contractor shall establish a (Program for Applied Research on Fertility Regulation, PARFR) which will actively involve a panel of experts to solicit, evaluate, and assist in the development and monitoring of a series of studies which require modest funding both within the U.S. and in less developed countries. These studies will include work to develop improved means of male and female sterilization, studies of once-a-month means of fertility control, and evaluation of locally-effective male and female methods of contraception."

"...The contractor shall make available and employ its research and development facilities and personnel...(to) perform a research and development program directed toward actively pursuing a number of promising leads of goal directed research to develop a new means of fertility control."

PROGRAM ACCOMPLISHMENTS

LDC INVOLVEMENT

Major emphasis continues to be placed on expanding the proportion of the projects funded by PARFR, carried out in developing countries. This is important for two reasons. First, it is essential from an institution building point of view. Support of LDC researchers and institutions is vitally necessary if their overall level of scientific expertise is to be increased. Second, it has long been a matter of contention that most of the research done to date has been carried out in developed countries. Thus, its relevance to LDC population in terms of safety, effectiveness and acceptability is highly debatable.

In order to accomplish this particular goal, PARFR has continued to expand its international network of investigators. An excellent group of well-trained young researchers has been put together, others being added to the initial membership as they are identified. At the PARFR Workshop in Guatemala, these individuals met with PARFR and AID staff members to try to determine how this portion of the program can best be implemented and expanded. It is planned to repeat this in Mexico.

Two general types of activities are on-going and anticipated. First, individual members of the network have submitted research projects which have been funded. They are, PARFR 201B, "Effect of LH-RH Agonist on Ovulation and Corpus Luteum Function in Women", Hugo Maia, Jr., M.D., Maternidade Climerio de Oliverira, Salvador, Bahia, Brazil (and) PARFR P54, "Percutaneous Injection of Monoethanolamine Oleate as a Vas Deferens Sclerosing Agent", Marcos Paulo P. de Castro, M.D., M.S., Universidade de Sao Paulo, Brazil. Continued submission of such projects is being encouraged. Second, the LDC researchers are being kept apprised of the studies being carried out under PARFR contracts on new fertility regulation techniques. They are informed about the specific work being done and also the time at which it is estimated that individual methods will be ready for additional evaluation in multiple centers using the same protocol. The members then indicate those areas in which they would like to work. When a technique appears to be feasible, contracts will be written for those investigators who signify their interest and ability to carry out further studies. This particular approach will also be continued. It is anticipated that the number of LDC projects, using both mechanisms, will continue to increase.

The Network members that are scheduled to meet during PARFR's Mexico Workshop in February, 1980 are:

- (1) Dr. Renzo Antonini, Universidade Estadual Paulista, Sao Paulo, Brazil
- (2) Dr. Luis Borghi, University of Buenos Aires, Argentina
- (3) Dr. Marcos P. De Castro, Universidade de Sao Paulo, Brazil
- (4) Dr. Emilio Fernandez, Hospital Barros Luco, Santiago, Chile
- (5) Dr. Juan Flores, Instituto Mexicano del Seguro Social, Jalapa, Veracruz, Mexico
- (6) Dr. Jose Gaitan, Universidad Juarez del Estado de Durango, Mexico
- (7) Dr. Hugo Maia, Maternidade Climerio de Oliveira, Salvador, Bahia, Brazil
- (8) Dr. Jose Nasser, Profamilia, Cali, Colombia

Drs. Carl Pauerstein (SAC) and Ricardo Asch of the University of Texas Health Science Center at San Antonio, PARFR consultants have been vital to the organization and communication with the network.

Drs. Connell and Pauerstein met with some of the Brazilian investigators in December, 1979 at a PARFR/IFRP sponsored symposium in Sao Paulo.

Dr. Alfredo Goldsmith has been enrolled as a PARFR consultant to further PARFR's LDC involvement and will be brought on PARFR's staff as the Head of Research Project Development during the next reporting period.

Other active PARFR LDC projects are:

PARFR 86K "Phase I Clinical Trial of Fallopian Tube Closure Using Methylcyanoacrylate (MCA) Tissue Adhesive Delivered Through the Single Application Fertility Regulation Device." Sung-Bong Hong, M.D., Korea University College of Medicine, Seoul, Korea.

PARFR 86Sa "Phase I Clinical Trial of Fallopian Tube Closure Using Methylcyanoacrylate (MCA) Tissue Adhesive Delivered Through the Single Application Fertility Regulation Device." Gustavo Argueta, M.D., Asociacion Demographic Salvadorense, San Salvador, El Salvador

PARFR 86Sb "Phase I Clinical Trial of Fallopian Tube Closure Using Methylcyanoacrylate (MCA) Tissue Adhesive Delivered through the Single Application Fertility Regulation Device." Ernesto Moran Caceres, MD, ISSS, San Salvador, El Salvador

PARFR 97K "Research on Instillation Techniques for Pregnancy Termination in Korea." Hyun-Mo Kwak, M.D., Yonsei University College of Medicine, Seoul, Korea.

PARFR 105N "A study of a Parenterally Administered Progesterone-Cholesterol Formulation for Use as a Post-Partum Injectable Contraceptive." Harry Rudel, M.D., CIFE, Mexico.

PARFR 200P "Phase I Clinical Trial of Fallopian Tube Closure Using Methylcyanoacrylate (MCA) Tissue Adhesive Delivered Through the Single Application Fertility Regulation Device." Ruben Apelo, M.D., JFMH Comprehensive Family Planning Center, Manila Philippines.

PARFR P52 "Effects of Gossypol on Pregnancy." Jose Perea - Sasiain, M.D., CCRP, Bogota, Colombia.

In addition to the above, PARFR initiated collaboration for Dr. Lourens Zaneveld (University of Illinois) with Dr. Gamal El-Din Behery (University of Cairo, Egypt). Dr. Zaneveld traveled to Egypt in July '79 to develop a project with Dr. Behery. The project was approved and the 1st year of the project was contracted to University of Illinois, PARFR 205(95N) entitled: "Development and Evaluation of a Reversible Vas Deferens Blocking Device," for the animal studies. Dr. Behery will be utilized as a PARFR consultant for the 1st year. A trip is proposed for Dr. Behery to assist Dr. Zaneveld with the animal surgery in February, 1980, prior to our Mexico Workshop.

Other LDC collaborations have been initiated during this reporting period involving the following studies:

(1) MCA/FEMCEPT; (2) Monkey studies to look at tubal closure via chemicals; (3) Intravaginal Insert; and, (4) Tatum Postpartum IUD Studies.

Scientific Summary

- (1) Staff and Scientific Advisory Committee (SAC) review of extension, formal, pilot study and informal research proposals. Please refer to the SAC section (Program Accomplishments) and SAC minutes (appendix) regarding specific determinations.
- (2) Staff, SAC and consultant monitoring of active research progress by review of technical reports (refer to SAC minutes in the appendix) and site visits to the following projects:
  - (a) 7/17-20/79 - Dr. Gerald Zatuchni, Mexico City - CIFE (PARFR 98M Aznar and 105N Rudel).
  - (b) 11/28/79 - Dr. Elizabeth Connell, New York (PARFR 90Np Davis).
  - (c) 11/29/79 - Drs. Robert Chatterton and Gerald Zatuchni, Philadelphia (PARFR 100N Lerner).
- (3) PARFR Staff initiated plans for our 9th workshop and subsequent publication of Research Frontiers in Fertility Regulation to be held February 11-14, 1980, at Hotel El Presidente Chapultepec, Mexico City. This workshop resulted from an invitation from Dr. Ramon Aznar (IMSS/CIFE). The scientific program was completed and all speakers and moderators have accepted. Ms. Krier travelled to Mexico in September '79 to finalize arrangements with the hotel, arrange for simultaneous translation and investigate potential publishers in order to negotiate a Spanish publication as well as the English version.
- (4) Early submission of manuscripts (due date 1/4/80) for PARFR's 9th International Workshop entitled: "Research Frontiers in Fertility Regulation", were reviewed by the editors - Zatuchni, Sciarra and Labbok - and copy-editing was begun by Ms. Kelley Osborn. Anticipated publication date is November, 1980.
- (5) PARFR Staff participated in the following medical and scientific meetings:
  - 7/17-20/79 - Dr. Zatuchni presented a paper on Vaginal Contraception to the Mexico Association for the Study of Fertility and Human Reproduction at their national conference (in conjunction with site visits of PARFR 98M and 105N).
  - 8/21-24/79 - Dr. Zatuchni attended the Society for the Study on Reproduction in Quebec, Canada to meet with potential PARFR investigators.
  - 9/79 - Dr. Zatuchni attended the annual meeting of coordinating funding agencies in Reproduction Research sponsored by WHO in Geneva, Switzerland.
  - 9/20/79 - Dr. Zatuchni participated in a NIH meeting on male reproduction in Bethesda, Maryland.
  - 10/6 - 17/79 - Dr. Zatuchni did a project development site visit to Bombay, India; Bangkok, Thailand and Hong Kong. On 10/11/79 he presented "PARFR Development in New Contraceptives" to faculty at Chulalongkorn University, Thailand.

12/8-9/79 - PARFR, along with IFRP, supported faculty to participate in the Brazilian Human Reproduction Society meeting, at the Universidad de Sao Paulo, Brazil.

The presentations given by PARFR supported participants were:

Dr. Connell - "Surgical Female Sterilization Procedures".

Dr. Davis - "Male Surgical Contraception".

Dr. Pauerstein - "The Anatomy and Physiology of the Fallopian Tube".

Dr. Sobrero - Moderated a session.

Dr. Zatuchni - "New Development in Male and Female Sterilization".

12/11/79 - At the invitation of Dr. Campos da Paz, President of the International Academy of Reproductive Medicine, two PARFR supported faculty made the following three presentations at a seminar in Rio de Janeiro.

Dr. Connell - "Risks and Benefits of Oral Contraceptives".

Dr. Zatuchni - "Risks and Benefits of IUD's" and "Recent Advances in Contraceptive Technology".

Administrative Summary

In addition to the routine management of the program, the efforts of the PARFR Administrative Staff were chiefly directed toward:

- (1) Implementation of PARFR's New Prime Contract AID/DSPE-C-0035, July 1, 1979 - June 30, 1981, funding \$3.1 Million.
- (2) Nearly all funds were committed or expended off PARFR's old contract, AID/csd-3608. Funding for 34 subcontracts which terminate on or before 6/30/80 will continue under AID/csd-3608, and will be monitored under AID/DSPE-C-0035.
- (3) Two Scientific Advisory Committee Agendas were coordinated and mailed during this period. The first SAC meeting was September 5, 1979 and the agenda included: 4 extension proposals; 6 formal proposals; 2 pilot studies; 3 informal proposals; and project monitoring, including 17 technical reports. The December 3, 1979 SAC meeting included: 6 formal proposals; 2 informal proposals; and project monitoring, including 8 technical reports.
- (4) Negotiations and execution of the following subcontracts and amendments:  
 AID/csd-3608: 7 No-cost extensions (79N, 86N, 106N, P-15, P-16, P-19, P-21)  
                   2 Additional Funding Amendments (111N, P-22)  
                   1 Terminated (108N)

AID/DSPE-C-0035: 27 New Subcontracts

(200C, 200G, 200P, 201B, 202, 203Nu, 203NMH, 203IIT, 204, 205(95N), 206UAB, 206SRI, 207, 208, 209NU, 209NMH, 210, 211, P50, P51, P52, P53, P54, P55, P56, P57, P58)

3 Additional Funding Amendments (202, 203NU, P-51)

1 Decreased Funding Amendment (203NMH)

- (5) The manuscripts from the April, 1979 Guatemala Workshop on New Developments in Vaginal Contraception were copyedited before and after the workshop, and the final manuscript was submitted to Harper & Row on August 1, 1979.
- (6) Revision and up-date of our mailing list files to incorporate new contacts.
- (7) A Lexitron Word Processor was purchased to increase secretarial staff productivity. Staff was trained during this reporting period.
- (8) The program staff during the reporting period was:

|   |   |
|---|---|
| Program Director                            | John J. Sciarra, M.D., Ph.D.  |
| Director of Administration                  | Diane H. Krier, M.B.A.  |
| Director of Technical Assistance            | Gerald I. Zatuchni, M.D., M.Sc.   |
| Project Coordinator                         | Aquiles J. Sobrero, M.D.  |
| Research Project Development<br>Coordinator | Elizabeth B. Connell, M.D.  |
| Project Controller                          | Georgia L. Fackler  |
| Three Full-time Secretaries                 | Ruvenia Thomas<br>Mary Rose Traylor<br>Julie M. Jaworski (terminated 8/24/79)<br>Mirta Bucheli (started 10/23/79) |

7/1/79 - 12/31/79

AID/csd-3608

Subcontract Negotiations

| PROJECT #  | TITLE/INVESTIGATORS/INSTITUTION  | ACTION                                       | PERIOD              | FUNDING                             |
|------------|--|--|---------------------|-------------------------------------|
| PARFR-79N  | "A Method for Reversible Sterilization in the Female"<br>C. Irving Meeker, M.D.<br>Maine Medical Center  | No-cost<br>Extension<br>(Amendment #3)       | 9/1/77 -<br>6/30/80 | -0-                                 |
| PARFR-86N  | "Phase I Clinical Trial of Fallopian Tube Closure Using Methylcyanoacrylate (MCA) Tissue Adhesive Delivered Through the Single-Application Fertility Regulation (FEMCEPT) Device"<br>Robert S. Neuwirth, M.D.<br>The St. Luke's Institute for Health Sciences<br>Ralph M. Richart, M.D.<br>Columbia University | No-cost<br>Extension<br>(Amendment #2)       | 6/1/78 -<br>3/31/80 | -0-                                 |
| PARFR-106N | "Effects of Tubal Sterilization on Menstruation: A Prospective Controlled Study"<br>Gary S. Berger, M.D.<br>The Carolina Population Center   | No-cost<br>Extension<br>(Amendment #1)       | Same                | -0-                                 |
| PARFR-108N | "Study to Determine the Safety, Acceptability and Effectiveness of the Female Contraceptive Barrier Intra-Vaginal-Device (IVD)"<br>Louise B. Tyrer, M.D., FACOG<br>Planned Parenthood Federation of America, Inc.  | Terminated due to lack of patient enrollment | T - 7/11/79         | Decreased committment (\$57,882.27) |

|            |  |   |                                   |                   |           |
|------------|--|---|-----------------------------------|-------------------|-----------|
| PARFR-111N | "An Evaluation of the Efficacy of Fimbrial Enclosure with Silastic Devices As a Reversible Female Sterilization Technique"<br>Carlton A. Eddy, Ph.D.<br>The University of Texas Health Science Center at San Antonio |   | Additional Funding (Amendment #1) | Same              | \$ 835.00 |
| PARFR-P15  | "Isolation of Effective Sperm Antigens for Use in Contraceptive Immunization"<br>Sidney Shulman, Ph.D.<br>New York Medical College   | 7 | No-cost Extension (Amendment #1)  | 3/1/79 - 2/29/80  | -0-       |
| PARFR-P16  | "Investigations of a New Vaginal Barrier Contraceptive"<br>Ernest W. Page, M.D.<br>University of California  |   | No-cost Extension (Amendment #1)  | 1/1/79 - 6/30/80  | -0-       |
| PARFR-P19  | "Identification and Evaluation of Herbs Used by Native Healers to Affect Fertility"<br>John C. Siocumb, M.D.<br>University of New Mexico   | 7 | No-cost Extension (Amendment #2)  | Same              | -0-       |
| PARFR-P21  | "Development and Preliminary Human Testing of the Retention of a New Intra-cervical Device (ICD)"<br>Milos Chvapil, M.D., Ph.D.<br>University of Arizona   |   | No-cost Extension (Amendment #1)  | 6/15/79 - 6/14/80 | -0-       |
| PARFR-P22  | "A Preliminary Investigation of Fertility Regulation by South American Tribes"<br>Lindley A. Cates, Ph.D.<br>University of Houston   | 7 | Additional Funding (Amendment #1) | Same              | \$ 188.00 |

7/1/79 - 12/31/79

AID/DSPE-C-0035

Subcontract Negotiations

| <u>PROJECT #</u> | <u>TITLE/INVESTIGATORS/INSTITUTION</u>   | <u>ACTION</u>   | <u>PERIOD</u>        | <u>FUNDING</u> |
|------------------|--|-----------------|----------------------|----------------|
| PARFR-200C       | "Data Collection and Analysis for MCA/FEMCEPT Clinical Trials"<br>Ralph M. Richart, M.D.<br>Columbia University<br>Robert S. Neuwirth, M.D.<br>The St. Luke's Institute for Health Sciences  | New Subcontract | 7/1/79 -<br>6/30/81  | \$ 30,715.00   |
| PARFR-200G       | "Phase I Clinical Trial of Fallopian Tube Closure Using Methylcyanoacrylate (MCA) Tissue Adhesive Delivered Through the Single-Application Fertility Regulation (FEMCEPT) Device" (Continuation of PARFR-86G)<br>Professor H. K. Zinser<br>Gerd Eldering, M.D.<br>Hans Baur, M.D.<br>Evangelisches Krankenhaus | New Subcontract | 9/1/79 -<br>8/31/80  | \$ 32,020.00   |
| PARFR-200P       | "Phase I Clinical Trial of Fallopian Tube Closure Using Methylcyanoacrylate (MCA) Tissue Adhesive Delivered Through the Single-Application Fertility Regulation (FEMCEPT) Device"<br>Ruben A. Apelo, M.D.<br>JFMH Comprehensive Family Planning Center<br>Manila, Philippines                                  | New Subcontract | 10/1/79 -<br>9/30/80 | \$ 6,820.00    |
| PARFR-201B       | "Effect of LH-RH Agonist on Ovulation and Corpus Luteum Function in Women"<br>Hugo Maia, Jr., M.D.<br>Federal University of Bahia<br>Brazil  | New Subcontract | 8/1/79 -<br>7/31/80  | \$ 34,600.00   |

|              |  |                                      |                       |               |
|--------------|--|--------------------------------------|-----------------------|---------------|
| PARFR-202    | "Collagen Sponge Contraceptive -- Testing of Efficacy in Human Volunteers"<br>M. W. Heine, M.D.<br>Texas Tech University School of Medicine                              | New Subcontract                      | 9/1/79 -<br>8/31/80   | \$ 41,944.00  |
|              |  | Additional Funding<br>(Amendment #1) | Same                  | \$ 7,100.00   |
| PARFR-203NU  | "Fertility Regulation by Control of Progesterone Clearance" (Continuation of PARFR-102N (P-10))<br>Robert T. Chatterton, Ph.D.<br>Northwestern University Medical School | New Subcontract                      | 9/1/79 -<br>8/31/80   | \$ 18,314.00  |
|              |  | Additional Funding<br>(Amendment #1) | Same                  | \$ 9,238.00   |
| PARFR-203NMH | "Fertility Regulation by Control of Progesterone Clearance" (Continuation of PARFR-102N (P-10))<br>Robert T. Chatterton, Ph.D.<br>Northwestern University Medical School | New Subcontract                      | 9/1/79 -<br>8/31/80   | \$ 41,660.00  |
|              |  | Decreased Funding<br>(Amendment #1)  | Same                  | (\$ 7,533.00) |
| PARFR-203IIT | "Microencapsulation of Progesterone Antibodies" (Continuation of PARFR-103N)<br>Kurt Gutfreund<br>IIT Research Institute   | New Subcontract                      | 11/1/79 -<br>10/31/80 | \$ 21,905.00  |
| PARFR-204    | "Development of Sperm Enzyme Inhibitors as Vaginal Contraceptives"<br>Lourens J.D. Zaneveld, D.V.M., Ph.D.<br>University of Illinois                                     | New Subcontract                      | 10/1/79 -<br>6/30/81  | \$116,431.00  |

|                |  |        |                 |                       |              |
|----------------|--|--------|-----------------|-----------------------|--------------|
| PARFR-205(95N) | "Development and Evaluation of a Reversible Vas Deferens Blocking Device" (Continuation of PARFR-95N)<br>Lourens J.D. Zaneveld, D.V.M., Ph.D.<br>University of Illinois  | 7<br>r | New Subcontract | 10/1/79 -<br>9/30/80  | \$ 45,443.00 |
| PARFR-206UAB   | "Baboon Studies to Evaluate Non-Biodegradable Medicated Fibers for the Controlled-Release of Contraceptive Steroids Related to Research Supported under PARFR-206SRI"<br>Lee R. Beck, Ph.D.<br>University of Alabama in Birmingham | ✓      | New Subcontract | 11/1/79 -<br>10/31/80 | \$ 18,865.00 |
| PARFR-206SRI   | "A Fibrous Polymer for the Delivery of Contraceptive Steroids to the Female Reproductive Tract" (Continuation of PARFR-104N)<br>Danny H. Lewis, Ph.D.<br>Southern Research Institute   | ✓      | New Subcontract | 11/1/79 -<br>10/31/80 | \$ 66,000.00 |
| PARFR-207      | "Hysteroscopic Sterilization by Using Uterotubal Blocking Devices"<br>Abdol H. Hosseinian, M.D.<br>Cook County Hospital  | ?      | New Subcontract | 11/1/79 -<br>10/31/80 | \$ 24,348.00 |
| PARFR-208      | "Testing the Abortifacient Potential of CI and CII, 1 Beta-Oh Androstane Derivatives, in the Baboon"<br>Lee R. Beck, Ph.D.<br>University of Alabama in Birmingham  |        | New Subcontract | 11/1/79 -<br>10/30/80 | \$ 19,406.00 |
| PARFR-209NU    | "Evaluation of A-Nor Steroids as Potential Once-a-Month Contraceptive Agents"<br>R. R. Mehta, M.Sc., Ph.D.<br>Northwestern University  |        | New Subcontract | 1/1/80 -<br>12/31/80  | \$ 29,361.00 |

|              |  |   |                       |              |
|--------------|--|---|-----------------------|--------------|
| PARFR-209NMH | "Evaluation of A-Nor Steroids as Potential<br>Once-a-Month Contraceptive Agents"<br>R. R. Mehta, M.Sc., Ph.D.<br>Northwestern Memorial Hospital                        | New Subcontract                         | 1/1/80 -<br>12/31/80  | \$ 24,288.00 |
| PARFR-210    | "Study of a Plant Product 'Gossypol' as a<br>Reversible Contraceptive in Male Rabbits"<br>M. C. Chang, Ph.D.<br>Worcester Foundation for Experimental Biology,<br>Inc. | New Subcontract                         | 1/1/80 -<br>12/31/80  | \$ 43,070.00 |
| PARFR-211    | "Study of Vas Occlusion in Animals Using<br>Chemical Agents"<br>Joseph E. Davis, M.D.  | New Subcontract                         | 12/1/79 -<br>11/30/80 | \$ 13,540.00 |
| PARFR-P50    | "Effect of Spermicidal Detergent, Nonoxynol-<br>9, on Liver Function"<br>Milos Chvapil, M.D., Ph.D.<br>The University of Arizona                                       | New Subcontract                         | 7/1/79 -<br>6/30/80   | \$ 8,000.00  |
| PARFR-P51    | "Graphic Assessment of Uterine Shape"<br>Harrith M. Hasson, M.D.   | New Subcontract                         | 10/1/79 -<br>9/30/80  | \$ 7,500.00  |
|              |  | Additional<br>Funding<br>(Amendment #1) | Same                  | \$ 2,500.00  |
| PARFR-P52    | "Effects of Gossypol on Pregnancy"<br>Jose Perea-Sasiain, M.D.<br>Universidad Nacional de Colombia<br>Bogota, Colombia   | New Subcontract                         | 10/1/79 -<br>9/30/80  | \$ 7,000.00  |

|           |   |                 |                       |              |
|-----------|---|-----------------|-----------------------|--------------|
| PARFR-P53 | "Antifertility Effects of Luteinizing Hormone Releasing Hormone Analogue in the Female Rhesus Monkey"<br>Ricardo H. Asch, M.D.<br>The University of Texas Health Science Center<br>at San Antonio | New Subcontract | 11/1/79 -<br>10/31/80 | \$ 7,500.00  |
| PARFR-P54 | "Percutaneous Injection of Monoethanolamine Oleate As a Vas Deferens Sclerosing Agent"<br>Marcos Paulo P. de Castro, M.D., M.S.<br>Universidade de Sao Paulo<br>Sao Paulo, Brazil                 | New Subcontract | 1/1/80 -<br>6/30/80   | \$ 9,350.00  |
| PARFR-P55 | "1-Hydroxyestra-1,3,5(10)-TRIEN-17B-OLS and Congeners as Contraceptive Agents"<br>Vladimir Petrow, Ph.D., D.Sc., FRIC<br>Duke University Medical Center   | New Subcontract | 11/1/79 -<br>10/31/80 | \$ 7,590.00  |
| PARFR-P56 | "Efficacy Testing of Frisch Intravasal Implants"<br>Nancy J. Alexander, Ph.D.<br>Oregon Regional Primate Research Center  | New Subcontract | 11/1/79 -<br>10/31/80 | \$ 14,665.00 |
| PARFR-P57 | "A Fibrous Polymer for the Delivery of Quinacrine to the Human Reproductive Tract"<br>Richard L. Dunn, Ph.D.<br>Southern Research Institute   | New Subcontract | 1/1/80 -<br>6/30/80   | \$ 7,428.00  |
| PARFR-P58 | "Immunologic Suppression of Fertility by a Synthetic Antigenic Determinant of Lactate Dehydrogenase C <sub>4</sub> "<br>Erwin Goldberg, Ph.D.<br>Northwestern University                          | New Subcontract | 12/1/79 -<br>11/30/80 | \$ 7,500.00  |

PERSONNEL

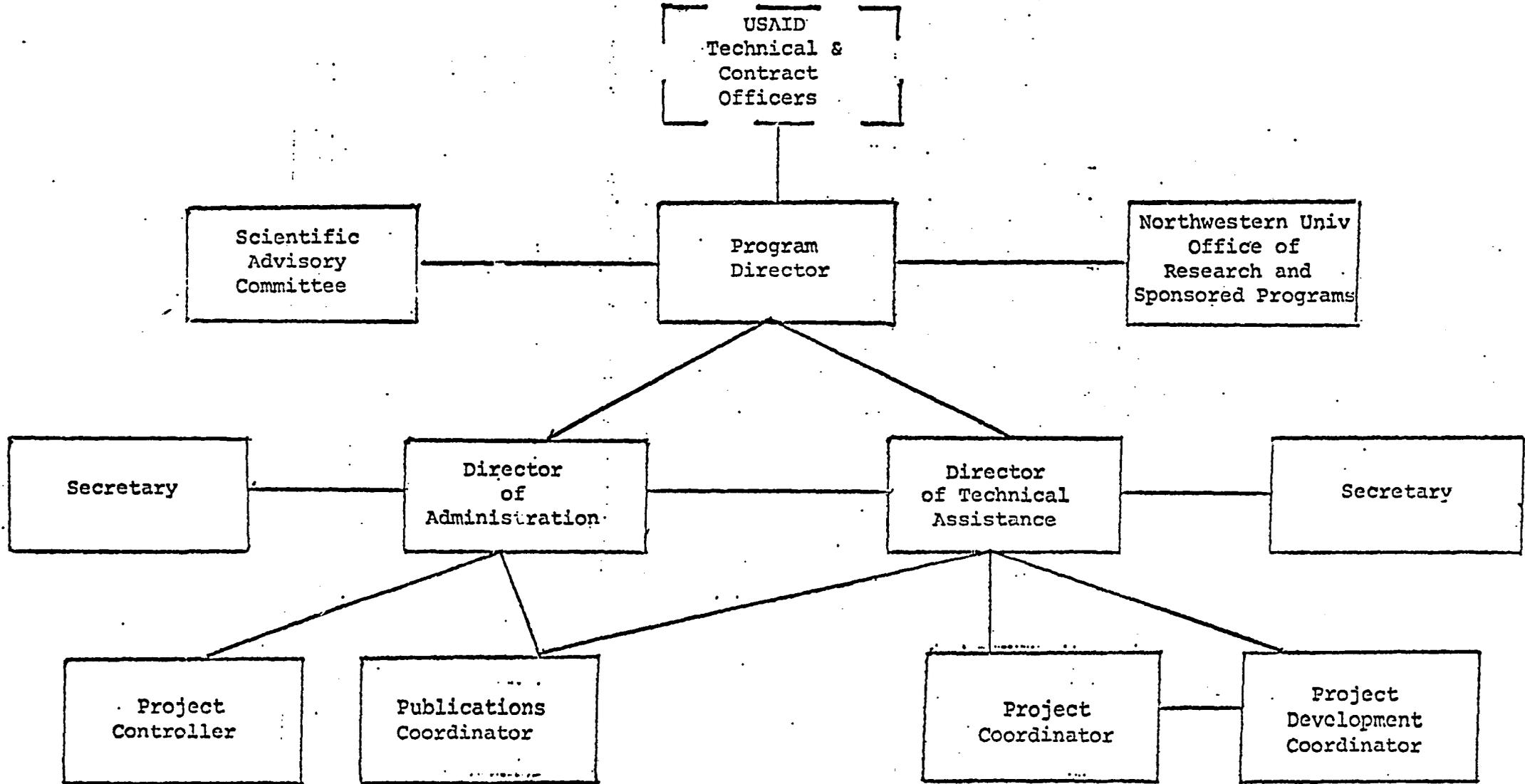
Effort and salary expenditures of PARFR personnel for this reporting period are listed below:

| <u>Staff and Title</u>  | <u>Effort in Man-Months</u> | <u>Salary</u> |
|---|-----------------------------|---------------|
| John J. Sciarra, M.D., Ph.D.<br>Director and Principal Investigator | .6                          | -0-           |
| Gerald I. Zatuchni, M.D., M.Sc.<br>Director of Technical Assistance | 4.8                         | \$19,000.02   |
| Elizabeth B. Connell, M.D.<br>Research Development Coordinator      | 6.0                         | \$23,749.98   |
| Aquiles J. Sobrero, M.D.<br>Foreign Technical Project Coordinator   | 1.5                         | \$ 4,500.00   |
| Diane H. Krier<br>Director of Administration                        | 6.0                         | \$10,990.00   |
| Georgia L. Fackler<br>Project Controller                            | 6.0                         | \$ 7,693.32   |
| Kelley Osborn<br>Publications Coordinator                           | 1.5                         | \$ 2,260.00   |
| Julie M. Jaworski<br>Secretary I                                    | 2.5                         | \$ 2,292.50   |
| Ruvenia Thomas<br>Secretary I                                       | 6.0                         | \$ 6,198.52   |
| Mary Rose Traylor<br>Secretary I                                    | 6.0                         | \$ 5,835.84   |
| Mirta Bucheli<br>Secretary I  | 2.3                         | \$ 2,282.89   |
| <u>Temporary Services</u>   |                             |               |
| Temporary Secretary   | 3.5                         | \$ 3,688.78   |
| <u>Fringe Benefits</u>  |                             | \$12,124.20   |
| <u>Indirect Costs</u>   |                             | \$32,424.53   |

Administrative Organization

The program staff is structured as indicated on the following page.

# PARFR Organization



### Scientific Advisory Committee

The membership of the Scientific Advisory Committee consisted of those individuals listed below during this reporting period:

|   |  |
|---|--|
| John J. Sciarra, M.D., Ph.D., Chairman        | Northwestern University  |
| Nancy J. Alexander, Ph.D.                     | Oregon Regional Primate<br>Research Center                     |
| Robert T. Chatterton, Ph.D.                   | Northwestern University (9/79)                                 |
| Joseph E. Davis, M.D.                         | New York Medical College                                       |
| William Droegemueller, M.D.<br>(Term. 9/5/79) | University of Arizona  |
| Edward C. Mather, D.V.M., Ph.D.               | Michigan State University                                      |
| Robert H. Messer, M.D. (Term. 9/5/79)         | University of New Mexico                                       |
| Kamran S. Moghissi, M.D.                      | Wayne State University   |
| Carl J. Pauerstein, M.D. (12/3/79)            | University of Texas Health<br>Science Center at San<br>Antonio |
| Ralph M. Richart, M.D.                        | Columbia University  |
| Susan C.M. Scrimshaw, Ph.D.                   | University of California                                       |
| Judith L. Vaitukaitis, M.D.                   | Boston University  |
| A. Albert Yuzpe, M.D.                         | University of Western<br>Ontario, Canada                       |

The Scientific Advisory Committee (SAC) held two meetings during this period: September 5, 1979, in Arlington, Virginia, and December 3, 1979, in Chicago, Illinois. Minutes of these meetings are included in the Appendix.

At these SAC meetings, the Committee reviewed Technical Reports for presently funded projects. Projects scheduled to expire during this reporting period were reviewed in depth by the Committee, who voted to extend three subcontracts (PARFR-85N, 95N, and 104N. PARFR-P18 was not extended.)

### Informal Proposals

Five informal proposals were reviewed by SAC, with resultant recommendation that one formal proposal be solicited. The formal proposal requested was:

"Microencapsulation of a Luteinizing Hormone Releasing Factor (LRF) Analogue and Its Evaluation as a Long-Acting Injectable Contraceptive Agent" Richard E. Blackwell, Ph.D., M.D.,  
University of Alabama in Birmingham

### Formal Proposals

Twelve formal proposals were reviewed by SAC with resultant recommendations that the following five projects be funded.

"Proposal to Test the Abortifacient Potential of CI and CII, 1 Beta-OH Androstane Derivatives, in the Baboon" Lee R. Beck, Ph.D., University of Alabama

### Formal Proposals (Cont.)

"Use-Effectiveness of the Nova T Post Partum and the TCU 380Ag When Inserted During the Immediate Post-Placental Period of the Puerperium" Howard J. Tatum, M.D., Ph.D., The Population Council, Inc.

"Development of Sperm Enzyme Inhibitors as Vaginal Contraceptives" L. J. D. Zaneveld, D.V.M., Ph.D., University of Illinois

"Evaluation of A-nor Steroids as Potential Once-A-Month Contraceptive Agents" R. R. Mehta, M.Sc., Ph.D., Northwestern University

"Biodegradable Fibers for the Controlled Release of Contraceptive Drugs" Richard L. Dunn, Ph.D., Southern Research Institute

In addition, the Committee made recommendations on the following proposals:

"Identification and Evaluation of Herbs Used by Native Healers to Affect Fertility" John C. Slocumb, M.D., University of New Mexico (Drs. Chatterton and Scrimshaw would be scheduled to site visit Dr. Slocumb to rewrite the protocol)

"Development and Testing of a New Intravaginal Contraceptive Method and Device (ICMD)" Matthew Freund, Ph.D., Southern Illinois University (Dr. Connell would contact Dr. Freund regarding rewriting the protocol)

### Pilot Proposals

Two pilot proposals were reviewed by SAC, with resultant recommendation that one project be funded.

"1-Hydroxyestra-1,3,5(10)-Trien-17B-OLS and Congeners As Contraceptive Agents" Vladimir Petrow, Ph.D., Duke University Medical Center

### Site Visits

Site visits were conducted for the following projects during this reporting period:

| <u>Project</u>   | <u>Site Visitor(s)</u> | <u>Date</u> |
|--|------------------------|-------------|
| PARFR-98M, "Norethisterone Microcapsule Injectable Contraceptive Study"                                | G. Zatuchni, M.D.      | 7/17/79     |
| Ramon Aznar, M.D., Gustavo Zamora, M.D., Centro de Investigacion Sobre Fertilidad y Esterilidad (CIFE) |                        |             |

Site Visits (Cont.)

| <u>Project</u>   | <u>Site Visitor(s)</u>                    | <u>Date</u> |
|--|---|-------------|
| PARFR-90Np, "New Method for Obstructing the Vas Deferens by Direct Injection of Chemical Agents: A Non-Operative Technique of Male Sterilization"<br>Joseph E. Davis, M.D., Planned Parenthood | E. Connell, M.D.                          | 11/28/79    |
| PARFR-100N, "Investigation of New Compounds to Terminate Pregnancy"<br>Leonard J. Lerner, Ph.D., Jefferson Medical College of Thomas Jefferson University                                      | R. Chatterton, Ph.D.<br>G. Zatuchni, M.D. | 11/29/79    |

CONSULTANTS

The following is a list of Program Consultants, indicating their areas of expertise, contributions to the Program, and payment therefore. This list includes members of the Scientific Advisory Committee.

| <u>CONSULTANT</u>   | <u>PURPOSE</u>                          | <u>EFFORT</u> | <u>FEE</u>             |
|---|---|---------------|------------------------|
| Nancy J. Alexander, Ph.D.<br>Reproductive Physiology                              | SAC 9/4-5/79                            | 2 days        | \$ 300                 |
|   | SAC 12/2-3/79                           | 2 days        | 300                    |
| Lee R. Beck, Ph.D.<br>Reproductive Biology  | RFFR Consultation<br>between 12/3-11/79 | 7 days        | 1,050                  |
| Robert T. Chatterton, Ph.D.<br>Steroid Biochemistry                               | SAC 9/4-5/79                            | 2 days        | 300                    |
|   | Site Visit 11/28-29/79                  | 2 days        | 300                    |
|   | SAC 12/2-3/79                           | 2 days        | 300                    |
| Joseph E. Davis, M.D.<br>Urology  | SAC 9/4-5/79                            | 2 days        | 300                    |
|   | SAC 12/2-3/79                           | 2 days        | 300                    |
| William Droegemueller, M.D.<br>Obstetrics & Gynecology                            | SAC 9/4-5/79                            | 2 days        | 300                    |
| Alfredo Goldsmith, M.D.<br>Research Program Development                           | SAC Consult 12/2-3/79                   | 2 days        | 366                    |
| Edward C. Mather, D.V.M., Ph.D.<br>Animal Reproductive Physiology                 | SAC 9/4-5/79                            | 2 days        | 300                    |
|   | SAC 12/2-3/79                           | 2 days        | 300                    |
| Robert H. Messer, M.D.<br>Obstetrics & Gynecology                                 | SAC 9/4-5/79                            | 2 days        | 300                    |
| Kamran S. Moghissi, M.D.<br>Obstetrics & Gynecology<br>Reproductive Endocrinology | SAC 9/4-5/79                            | 2 days        | 300                    |
|   | SAC 12/2-3/79                           | 2 days        | 300                    |
| Carl J. Pauerstein, M.D.<br>Reproductive Biology                                  | Network Consult 7-12/79                 | 6 days        | 900                    |
|   | SAC 12/2-3/79                           | 2 days        | 300                    |
| Ralph M. Richart, M.D.<br>Obstetrics & Gynecology<br>Pathology                    | SAC 9/4-5/79                            | 2 days        | 300                    |
|   | Site Visit 9/16-18/79                   | 3 days        | 450                    |
|   | SAC 12/2-3/79                           | 2 days        | 300                    |
| Susan C. M. Scrimshaw, Ph.D.<br>Medical Anthropology                              | SAC 9/4-5/79                            | 2 days        | 300                    |
|   | SAC 12/2-3/79                           | 2 days        | 300                    |
| Judith Z. Vaitukaitis, M.D.<br>Endocrinology                                      | SAC 9/4-5/79                            | 2 days        | 300                    |
|   | SAC 12/2-3/79                           | 2 days        | 300                    |
|   | Site Visit 12/6/79                      | 1 day         | 150                    |
| A. Albert Yuzpe, M.D.<br>Obstetrics & Gynecology                                  | SAC 9/4-5/79                            | 2 days        | 300                    |
|   | SAC 12/2-3/79                           | 2 days        | 300                    |
| Lourens J.D. Zaneveld, D.V.M., Ph.D.<br>Male Reproductive Biology                 | Site Visit 7/13-21/79                   | 9 days        | 1,350                  |
| <b>TOTAL :</b>  |   |               | <b><u>\$10,866</u></b> |

PROGRAM ACCOMPLISHMENTSSubcontracts

Below are capsule summaries of work proceeding under subcontracts during this reporting period (July 1, 1979 to December 31, 1979):

|                         |                  |
|-------------------------|------------------|
| I. FEMALE STERILIZATION | C. TRANSCERVICAL |
|-------------------------|------------------|

Project: PARFR-86N, K, G & 200G, Sa, Sb, 200P

Phase I Clinical Trial of Fallopian Tube Closure Using Methylcyanoacrylate (MCA) Tissue Adhesive Delivered Through the Single-Application Fertility Regulation (FEMCEPT) Device

PARFR-86N

Robert S. Neuwirth, M.D. -- St. Luke's Institute for Health Sciences  
Ralph M. Richart, M.D. -- Columbia University (New York)

\$36,602

6/1/78 - 3/31/80

PARFR-86K

Sung-bong Hong, M.D. -- Korea University Medical College, Seoul, Korea

\$16,080

5/1/79 - 4/30/80

PARFR-86G & 200G

Hans Baur, M.D. -- Evangelisches Krankenhaus, Cologne, West Germany

\$54,116.53

9/1/78 - 8/31/80

PARFR-86Sa

Gustavo Argueta, M.D. -- Asociacion Demografica Salvadorena, San Salvador, El Salvador

\$12,410

3/15/79 - 3/14/80

PARFR-86Sb

Ernesto Moran Caceres, M.D. -- Instituto Salvadoreno del Seguro Social, San Salvador, El Salvador

\$8,000

3/15/79 - 3/14/80

PARFR-200P

Ruben Apelo, M.D. -- JFMH Comprehensive Family Planning Center, Manila, Philippines

\$6,820

10/1/79 - 9/30/80

Objectives: To determine the safety and efficacy of the single application fertility regulation device for the delivery of methylcyanoacrylate to the fallopian tubes of human volunteers.



PARFR-79N (Cont.)

Objectives: To fabricate a variety of special devices designed for use in the stump-tail macaque monkey and to insert them in 45 animals. Observations will be carried out with regard to effectiveness against pregnancy, and later removal of the devices and fertility restoration.

Results: The devices performed poorly as a potentially reversible tubal block. Major difficulties were experienced in removing the suture material that kept the device from migrating. Investigator plans to utilize a newly developed tubal clip, instead of suture. Result of clip in rabbit is not yet available.

Project: PARFR-94N

Modern Modified Aldridge Procedure

William Droegemueller, M.D. -- University of Arizona

\$62,061.92 (Arizona)      12/1/77 - 12/31/79  
\$17,849.50 (U of I)

Objectives: To test in baboons a modern modification of the Aldridge procedure i.e., a surgical technique of enclosing the fimbria of the fallopian tubes in a stocking made of microporous expanded polytetrafluoroethylene. The animals had the caps implanted and are being observed for fertility. At an appropriate time, the majority of animals will be re-operated, the devices removed, and mating again carried out to establish the reversibility of the procedures.

Results: None of the 20 animals became pregnant while the devices were in place. Preliminary results indicate return of fertility in a few animals following device removal. PARFR is awaiting submission of final Technical Report.

Project: PARFR-P13

An Evaluation of the Efficacy of Candidate Fimbrial Prosthesis in Female Rabbits and the Evaluation of Fimbrial Devices as a Reversible Technique of Female Sterilization

Ivo Brosens, M.D., Ph.D. -- Catholic University of Leuven, Leuven, Belgium  
Willem Boeckx, M.D.

L. E. Laufe, M.D. -- IFRP

\$11,680.59 (Belgium)      5/1/78 - 4/30/80  
\$ 2,750.00 (IFRP)

Objectives: To evaluate in the rabbit various biocompatible materials for their potential use as tubal hoods.

Results: Ultra thin silastic proved superior to other materials, both in the breeding portion of the experiment with devices on, and in the "reversal" experiments with devices removed. Experiment started in Rhesus monkeys at different institution.

Project: PARFR-111N

An Evaluation of the Efficacy of Fimbrial Enclosure with Silastic Devices as a Reversible Female Sterilization Technique

Carlton A. Eddy, Ph.D. -- University of Texas Health Science Center  
at San Antonio  
L. E. Laufe, M.D. -- IFRP

\$58,290 (Texas)                      6/1/79 - 5/31/80  
\$ 3,340 (IFRP)

Objectives: To determine in the Rhesus monkey the efficacy of ultra thin silastic tubal hoods as potentially reversible female sterilization devices.

Results: Awaiting first Technical Report due 2/1/80.

Project: PARFR-207

Hysteroscopic Sterilization by Using Uterotubal Blocking Devices

A. H. Hosseinian, M.D. -- Cook County Hospital/Chicago Medical  
School

\$24,348                                  11/1/79 - 10/31/80

Objectives: To determine in selected volunteer women, the contraceptive efficacy of the UTJ plug.

Results: Project has just started.

|                         |          |
|-------------------------|----------|
| I. FEMALE STERILIZATION | E. OTHER |
|-------------------------|----------|

Project: PARFR-106N

Effects of Tubal Sterilization on Menstruation: A Prospective Controlled Study

Gary S. Berger, M.D. -- University of North Carolina

\$47,676                                  2/1/79 - 1/31/80

Objectives: Using a unique data base of 4,000 women followed for approximately 40 years, to determine prospectively the menstrual cycle outcome following sterilization.

Results: Preliminary results indicate that sterilization done in a variety of manners and techniques causes no menstrual cycle abnormalities when the patient is used as her own control.

|                        |          |
|------------------------|----------|
| II. MALE STERILIZATION | B. OTHER |
|------------------------|----------|

Project: PARFR-90Np

New Method for Obstructing the Vas Deferens by Direct Injection of Chemical Agents: A Non-Operative Technique of Male Sterilization

Joseph E. Davis, M.D. -- Planned Parenthood Federation of America

\$54,007

2/1/79 - 1/31/80

Objectives: To test in a large number of male volunteers a direct percutaneous injection of an ethanol-formalin mixture, as a vas-occlusive agent.

Results: Preliminary results indicate that the formulation and injection is safe; azoospermia develops in approximately 4 weeks in about 60% of males, using 0.1 ml. A new instrument has been designed to provide for vas stability and injection which could give superior results. Study to be expanded to other clinical centers.

Project: PARFR-205(95N)

Development and Evaluation of a Reversible Vas Deferens Blocking Device

L. J. D. Zaneveld, D.V.M., Ph.D. -- University of Illinois at the Medical Center

\$45,443

10/1/79 - 9/30/80

Objectives: To test in rabbits and primates a reversible vas deferens blocking device.

Results: Primate results indicate 100% azoospermia when the device is appropriately inserted. Fertility restoration among these primates is of the order of 75% upon device removal. Additional studies are planned for device refinement. Collaboration with Egyptian investigator has been obtained.

Project: PARFR-107

Is Sperm Antigen a Caustive Agent for Atherosclerosis after Vasectomy?

Nancy J. Alexander, Ph.D. -- Medical Research Foundation of Oregon

\$83,318

4/1/79 - 9/30/80

Objectives: To determine in Rhesus monkeys whether sperm antigens are associated with the premature development of atherosclerosis in monkeys fed high fat and cholesterol diets following vasectomy.

Results: Project has just started. First Technical Report due 5/1/80.

Project: PARFR-211

Study of Vas Occlusion in Animals Using Chemical Agents

Joseph E. Davis, M.D.

\$13,540

12/1/79 - 11/30/80

Objectives: To study vas occlusion in mongrel dogs using MCA and silver acetate alginate (from PARFR-86N & 89N), injected under direct vision to test their efficacy, the degree of occlusion and tissue effects.

Results: Project has just started.

Project: PARFR-P12

Development of Microporous Materials for Thin Intravascular Implants

David H. Frisch, Ph.D., M.I.T.

\$15,000

7/1/78 - 6/30/80

Objectives: To develop an intravascular implant capable of vas blocking, and which can be easily reversed.

Results: Prototype implants have been designed and developed, and a suitable instrument for insertion. Animal trials in Rhesus monkeys are soon to begin.

Project: PARFR-P56

Efficacy Testing of Frisch Intravascular Implants

Nancy Alexander, Ph.D., Medical Research Foundation of Oregon

\$14,665

11/1/79 - 10/31/80

Objectives: To determine the efficacy in cynomolgus monkeys of the microporous intravascular implants developed by Dr. David Frisch (MIT) under PARFR-P12.

Results: Project has just started.

III. INTRAUTERINE CONTRACEPTION D. OTHERProject: PARFR-92N

Contraception by Induction of Mild Uterine Inflammation

Deborah J. Anderson, Medical Research Foundation of Oregon

\$86,107.65

6/1/77 - 12/31/79

PARFR-92N (Cont.)

Objectives: To determine if pregnancy can be interrupted by the induction of mild uterine inflammation in the rat.

Results: Glycogen has been found to have an excellent contragestational effect when administered in appropriate doses on certain days of pregnancy. Various matrices are being investigated to provide for slow continued release of the glycogen. Awaiting final Technical Report.

Project: PARFR-P21

Development and Preliminary Human Testing of the Retention of a New Intracervical Device (ICD)

Milos Chvapil, M.D., Ph.D., University of Arizona

\$7,500

6/1/79 - 11/30/79

Objectives: Unique biocompatible material of teflon derivatives will be investigated to determine their retention characteristics when placed in the human cervix.

Results: Non-medicated ICD prototypes have been developed and in vivo studies started.

Project: PARFR-P51

Graphic Assessment of Uterine Shape

H. M. Hasson, M.D.

\$10,000

10/1/79 - 9/30/80

Objectives: To determine the reliability of a new intrauterine measuring device that can provide a basis for more appropriate IUD fitting.

Results: Project has just started.

**IV. SYSTEMIC CONTRACEPTION      B. INJECTABLES AND IMPLANTS**

Project: PARFR-83N

Studies to Test an Injectable Delivery System for the Sustained Release of Norethisterone

Lee R. Beck, Ph.D., University of Alabama Medical Center

\$257,849

4/1/76 - 3/31/80

Objectives: To develop an injectable formulation for the control of fertility in women utilizing norethisterone in combination with biodegradable injectable, controlled-release delivery system.

PARFR-83N (Cont.)

Results: Continuing studies have resulted in the development of specifically timed release systems. Animal studies and toxicology studies are being completed in preparation for extensive clinical trials.

Project: PARFR-98M

Norethisterone Microcapsule Injectable Contraceptive Study

Ramon Aznar, M.D., Gustavo Zamora, M.D., Centro de Investigacion Sobre Fertilidad y Esterilidad (CIFE), Mexico City, Mexico

\$34,265 (Mexico)                      7/1/78 - 6/30/80  
\$10,780 (UAB)

Objectives: Phase I clinical study among twelve women, using two dosage forms of norethisterone, both given as an injectable contraceptive.

Results: Data in process of being collected.

Project: PARFR-110N

Optimization of an Injectable Microcapsule Formulation for the 90-Day Delivery of Norethisterone

Danny H. Lewis, Ph.D., Southern Research Institute

\$65,972                                      4/1/79 - 3/31/80

Objectives: To perform all toxicology studies, metabolic studies, release rate information, degradation of polymer and steroid in a three month injectable biodegradable system.

Results: Preliminary information indicate the feasibility of the manufacturing process for large scale-up. GLP procedures are being followed. Plan to obtain FDA-IND when necessary studies completed.

Project: PARFR-104N and PARFR-206SRI

A Fibrous Polymer for the Delivery of Contraceptive Steroids to the Female Reproductive Tract

Danny H. Lewis, Ph.D., Southern Research Institute

\$132,000                                      11/1/78 - 10/31/80

Objectives: To fabricate and evaluate in vitro and in vivo, progesterone-releasing fibers as potential systems for contraception in the male and female.

PARFR-104N (Cont.) and PARFR 206SRI

Results: Progesterone-releasing fibers have been developed which appear to provide for zero-order release rates. In vivo determinations indicate the feasibility of the system for intrauterine contraception. Additional studies are planned to further refine the release rates and to determine the appropriateness of other chemical compounds joined to the polymer.

Project: PARFR-206UAB

Baboon Studies to Evaluate Non-Biodegradable Medicated Fibers for the Controlled-Release of Contraceptive Steroids Related to Research Supported Under PARFR-206SRI

Objectives: To continue on-going studies in the baboon to evaluate non-biodegradable progesterone fiber systems for the controlled-release of contraceptive steroids.

Results: Project just started. Studies to be done in collaboration with SRI.

Project: PARFR-91N

Preparation and Evaluation of Biodegradable Cylindrical Implants for Fertility Control

Donald L. Wise, Ph.D., Dynatech R/D Company

\$177,141

6/1/77 - 3/31/80

Objectives: To demonstrate in baboons, supported by further testing in rats, that a small biodegradable cylindrical implant releasing d-norgestrel at approximately zero-order for a period of at least twelve months is feasible.

Results: In vivo (baboon) results using the biodegradable rods releasing Levo-norgestrel suggested release levels that were too high, thereby causing irregular bleeding. Investigators have developed new rods for release rate studies in rats.

Project: PARFR-105N

A Study of a Parenterally Administered Progesterone Cholesterol Formulation for Use as a Post-Partum Injectable Contraceptive

Harry W. Rudel, M.D., Centro de Investigacion Sobre Fertilidad y Esterilidad (CIFE), Mexico City, Mexico

\$56,236

5/1/79 - 4/30/80

Objectives: Phase I clinical trial to determine the rate of release of progesterone from the uniquely designed formulation in post-partum women, men, and lactating women.

Results: Prototype formulation exhibits good release rate characteristics.

Project: PARFR-203NU & NMH

Fertility Regulation by Control of Progesterone Clearance

Robert T. Chatterton, Ph.D., University of Illinois at the Medical  
Center (102N (P-10) 9/1/79 transferred to Northwestern University

\$27,552 (NU)

9/1/79 - 8/31/80

\$34,127 (NMH)

Objectives: To test the hypothesis that clearance of progesterone can be sufficiently increased by oral administration of encapsulated anti-progesterone antibodies to bring about involution of the endometrium.

Results: An antiprogestosterone antibody has been developed and preliminary animal studies indicate its effectiveness in reacting with progesterone, causing decreases in serum progesterone levels. Oral administration is being investigated.

Project: PARFR-103N and 203IIT

Microencapsulation of Progesterone Antibodies

Allan P. Gray, Ph.D., IIT Research Institute

\$50,013

11/1/78 - 10/31/80

Objectives: To develop suitable encapsulation processes that will permit the oral administration of progesterone antibody without being digested and that will permit the entrance of progesterone molecules into the capsule.

Results: Two different formulations appear promising with respect to their resistance to gastric digestion and their capability of permitting progesterone molecules to enter the capsule and combine with antibody.

Project: PARFR-114N

The Induction of Luteolysis and Ovulation Inhibition by LRF-Agonist

S.S.C. Yen, M.D., University of California

\$65,959

6/15/79 - 6/14/80

Objectives: To determine in female volunteers, the efficacy of super analogs of LRF-agonist to cause a luteolytic effect or ovulation inhibition.

Results: Delay due to rework of statement of work in that NIH and PARFR subcontracts similar.

Project: PARFR-201B  
 Effect of LH-Rh Agonist on Ovulation and Corpus Luteum Function in Women  
 Hugo Maia, Jr., M.D., Maternidade Climerio de Oliveria, Salvador, Bahia, Brazil  
 \$34,600 8/1/79 - 7/31/80

Objectives: To determine in female volunteers the effects of LH-RH agonist on ovulation and subsequent corpus luteum function.

Results: Awaiting first Technical Report due 2/1/80.

Which?

Project: PARFR-P19  
 Identification and Evaluation of Herbs Used by Native Healers to Affect Fertility  
 John C. Slocumb, M.D., University of New Mexico  
 \$7,700 2/1/79 - 1/31/80

Objectives: To identify herbs used by Navaho Indians as antifertility substances, to extract active ingredients and determine in small animals the efficacy of the preparations.

Results: Cooperation with native healers has resulted in the identification of several plants utilized for the purposes of their supposed anti-fertility effect. Clinical studies to be developed.

Project: PARFR-P53  
 Antifertility Effects of Lutenizing Hormone Releasing Hormone Analogue in the Female Rhesus Monkey  
 Ricardo Asch, M.D., University of Texas Health Sciences Center at San Antonio  
 \$7,500 11/1/79 - 10/31/80

Objectives: To provide information on the luteolytic action of the LHRH analogues and its effects on ~~implantation and/or pregnancy interference~~.

Results: Project just started.

?

|                          |           |
|--------------------------|-----------|
| V. BARRIER CONTRACEPTION | B. FEMALE |
|--------------------------|-----------|

Project: PARFR-85N

Collagen Sponge Contraceptive--Testing of Efficacy in Human Volunteers

Milos Chvapil, M.D., Ph.D., University of Arizona

\$98,124

12/1/76 - 6/30/80

Objectives: To develop and test an intravaginal long-acting contraceptive made of collagen sponge.

Results: Post-coital studies indicate 85% of test negative for sperm, 10% with 1-3 sperm per HPF and 5% with 4-9 sperm per HPF. Further clinical trials are proposed, the development of a collagen sponge containing spermicide of a new type is being investigated. ?

Project: PARFR-202

Collagen Sponge Contraceptive--Testing of Efficacy in Human Volunteers

M. W. Heine, M.D., Texas Tech University School of Medicine

\$49,044

9/1/79 - 8/31/80

Objectives: To determine the safety, acceptability and effectiveness of collagen sponge contraceptive.

Results: Enrollment of volunteers is proceeding well.

Project: PARFR-204

Development of Sperm Enzyme Inhibitors as Vaginal Contraceptives

L. J. D. Zaneveld, D.V.M., Ph.D., University of Illinois at the Medical Center ?

\$116,431

10/1/79 - 6/30/81

Objectives: To evaluate in vitro and in vivo a number of sperm enzyme inhibitors for their vaginal contraceptive activity.

Results: Project just started.

Project: PARFR-P16

Investigations of a New Vaginal Barrier Contraceptive

Ernest W. Page, M.D.

\$6,000

1/1/79 - 6/30/80

PARFR-P16 (Cont.)

Objectives: To develop and preliminarily test a new vaginal barrier contraceptive made of cellulose and spermicide.

Results: A suitable device and insertion applicator have been developed. Preliminary studies among volunteer women indicate good acceptability. Post-coital studies among protected women are underway.

Project: PARFR-P17

Development and Testing of a New Intravaginal Contraceptive Method and Device (IVCD) 7

Matthew Freund, Ph.D., Southern Illinois University

\$7,500 2/1/79 - 9/30/79

Objectives: To develop and test a new concept for a disposable intravaginal barrier type of contraceptive.

Results: Prototypes have been developed indicating the feasibility of the concept. PARFR awaiting application for extended research project from Dr. Freund.

Project: PARFR-P50

Effect of Spermicidal Detergent, Nonoxynol-9, on Liver Function

Milos Chvapil, M.D., Ph.D., University of Arizona

\$8,000 7/1/79 - 6/30/80

Objectives: To determine in female volunteers, the effects on liver function of daily intravaginal administration of standard doses of nonoxynol-9.

Results: Awaiting first Technical Report due 1/1/80.

**VII. PREGNANCY TERMINATION C. MIDTRIMESTER**

Project: PARFR-97N, 97K

Research on Instillation Techniques for Pregnancy Termination in Korea

PARFR-97N

Theodore M. King, M.D., Ph.D., The Johns Hopkins University

\$108,442 8/1/78 - 4/30/80

PARFR-97K

Hyun Mo Kwak, M.D., Yonsei University College of Medicine, Seoul, Korea

\$66,550 7/1/78 - 6/30/80

PARFR-97N, 97K (Cont.)

- Objectives: To compare the results--safety, complications and effectiveness-- of four different approaches using combinations of prostaglandins, urea and oxytocin.
- Results: Study well underway, but data too preliminary for satisfactory analysis.

VII. PREGNANCY TERMINATION D. OTHERProject: PARFR-100N

Investigation of New Compounds to Terminate Pregnancy

Leonard J. Lerner, Ph.D., Jefferson Medical College

\$109,384

9/1/78 - 2/29/80

- Objectives: Using the golden hamster and rat, to determine the efficacy of a series of new compounds on the peri-implantation period.
- Results: Over 30 compounds have been examined and six appear promising as contragestational agents. Continued investigations are ongoing to determine oral activity and mechanisms of action.

Project: PARFR-208

Testing the Abortifacient Potential of CI and CII, 1 Beta-Oh Androstane Derivatives, in the Baboon

Lee R. Beck, Ph.D., University of Alabama Medical Center

\$19,406

11/1/79 - 10/31/80

- Objectives: To test the anti-fertility and abortifacient potential of compounds CI and CII (hydroxylated androstane derivatives) in the baboon, and to define the mechanism of action.
- Results: Project just started.

Project: PARFR-P20

Effect of the Estrogen-Bromocryptine Regimen in the Post-Implantation Phase in Baboons

Joseph W. Goldzieher, M.D., Southwest Foundation for Research and Education

\$7,500

6/1/79 - 11/30/79

- Objectives: To determine in baboons whether a synergistic effect of estrogen and bromocryptine are effective in preventing implantation.
- Results: Awaiting final Technical Report.



PARFR-P18 (Cont.)

Objectives: To determine the efficacy of newly developed acrosin-acrolysin inhibitors as potential male contraceptive agents.

Results: Preliminary results indicate that in immature hamsters treated with the compound over 75 days has caused a significant reduction in mean litter size. Insufficient quantities of inhibitor were available so that a dose response could not be elaborated. The results in mature hamsters were not significant. Awaiting final report.

Project: PARFR-P52

Effects of Gossypol on Pregnancy

Jose Perea-Sasiain, M.D., Corporacion Centro Regional de Poblacion,  
Bogota, Colombia

\$7,000

10/1/79 - 9/30/80

Objectives: To determine the effects of gossypol when administered to pregnant animals, at the time of fertilization, implantation and during early pregnancy.

Results: Awaiting first Technical Report.

Project: PARFR-P58

Immunologic Suppression of Fertility by a Synthetic Antigenic  
Determinant of Lactate Dehydrogenate C<sub>4</sub>

Edwin Goldberg, Ph.D., Northwestern University

\$7,500

12/1/79 - 11/30/80

Objectives: To determine if an antigenic fragment of lactate dehydrogenate C<sub>4</sub>, a sperm specific isozyme is capable of raising antibodies in rabbits immunized with the peptide-carrier conjugate.

Results: Project just started.

WORK PLANAnticipated Accomplishments

PARFR's next six month reporting period promises even greater expansion over this and previous reporting periods. This is due to the following:

- 1) The participation of staff in relevant scientific meetings.
- 2) Negotiations are underway for clinical trials of the following PARFR supported developments:
  - a) Collagen Sponge - The investigator and PARFR are interested in testing the sponge in a variety of socio-cultural settings in both developed and developing countries. Meetings will be set up with potential clinical investigators in Mexico in February, 1980.
  - b) Spermicidal Condom - Additional PARFR support will be requested to permit the small scale manufacture of a suitable number of biodegradable condoms containing spermicide to be used in clinical studies of acceptability and effectiveness. These clinical studies are anticipated to be carried out in the U.S. and in developing countries. This study has been delayed since Schering has bought the previous subcontractor, the Emko Company (PARFR-P8). The budget request is still being formulated by Schering.
  - c) The Utero-Tubal Junction Blocking Device - The investigator and PARFR are again working closely together on the equipment modifications required and the development of an appropriate protocol for Phase II human studies to be carried out in the United States, and possibly in Chile and Germany. Dr. Hosseinian has returned to the United States and has initiated clinical trials at Cook County Hospital in Chicago (PARFR-207). We are awaiting the first technical report in the next reporting period before LDC centers are initiated.
  - d) MCA-FEMCEPT Project - We currently have 5 clinical sites (2 in Salvador, 1 in Germany, 1 in Korea, and 1 in the Philippines) for the project entitled: "Phase I Clinical Trial of Fallopian Tube Closure Using Methylcyanoacrylate (MCA) as a Tissue Adhesive Delivered Through the Single Application Fertility Regulation (FEMCEPT) Device." An MCA clinical investigators meeting is scheduled on February 12, 1980, in Mexico. 4-5 potential investigators will also be contacted at this time for initiating clinical trials to look at 1-2 potential variables.
  - e) Intra-Vaginal Insert (IVI) - The protocol for this is the old PARFR-108N which terminated July 11, 1979, due to lack of patient enrollment by PPFA. Drs. Carl Pauerstein and Ricardo Asch (University of Texas Health Sciences Center at San Antonio) have re-applied to PARFR under their auspices to develop the protocol and enlist 4-5 clinical centers in LDC's. Meetings with the Network will be held in Mexico in February, 1980.
  - f) Tatum IUD Study - Dr. Howard Tatum (Population Council) has proposed to PARFR an IUD Study which will be carried out in Brazil, Dominican Republic, Philippines, and Thailand. The investigators will meet in Mexico in February, 1980, to begin the protocol and administrative procedures.

### Anticipated Accomplishments (Cont.)

#### 3) Publications:

- a) During this reporting period, PARFR received the Harper and Row publication of the proceedings of the PARFR Workshop on Animal Models for Research on Contraception and Fertility.
- b) Books from the 7th PARFR Workshop, Pregnancy Termination: Procedures, Safety, and New Developments were received from Harper and Row during this reporting period. Copies were sent to all participants and selected LDC investigators.
- c) PARFR's 8th Workshop entitled New Developments in Vaginal Contraception, held at the Camino Real Hotel in Guatemala City, Guatemala, April 25-27, 1979, was submitted to Harper and Row for publication. The books are scheduled to be released in January, 1980. We are still exploring the possibility of publishing a Spanish version of the book, possibly through PIACT in Mexico.
- d) Plans are finalized during this reporting period for PARFR's 9th Workshop: Research Frontiers in Fertility Regulation, to be held February 11-14, 1980, at Hotel El Presidente Chapultepec, Mexico City. The program is included in the Appendix. PARFR secured a grant from UNFPA to support 50 LDC investigators to attend as observers.
- e) Fertility Regulation Research and Development Reports - PARFR is planning to establish a research technical information report which will review the latest R and D efforts on selected topics in a series of four to six issues per year. For each issue, a pertinent and knowledgeable investigator will be selected to review published and unpublished studies in a specific area of fertility regulation. The selected investigator/consultant will be given adequate time and PARFR assistance to review the findings in the specified field. This material then will be submitted to PARFR for final review and editing, and subsequent publication. Each review will be about six to ten pages, prepared in a loose-leaf manner. PARFR will use its own mailing lists, domestic and foreign, and selected mailing from the Population Report series. Approximately 3,000 copies of each issue will be distributed internationally. Investigators who have been asked to submit reports are Lee R. Beck, Ph.D., Emil Steinberger, M.D., Robert T. Chatterton, Ph.D., Ralph Richart, M.D., and Samuel S. C. Yen, M.D. Dr. Beck's will be the first issue entitled: Biodegradable Polymer-Steroid Systems. The first issue will be completed and distributed in the next reporting period.

### Procedures and Activities

- 1) The scheduled Scientific Advisory Committee meetings for 1980 are: March 10, 1980 (Chicago), June 22, 1980 (New York), September 7, 1980 (Washington, D.C.), and December 8, 1980 (Chicago).
- 2) PARFR is planning on initiating a small symposium in Indonesia for December, 1980.

Summary Financial Reports

This section includes:

- A. AID/DSPE-C-0035      Monthly Financial Reports, 7/1/79 - 12/31/79
- B. AID/csd-3608        Quarterly Financial Reports, Sept. '79 and Dec. '79
- C. AID/DSPE-C-0035      Current Subs - Budgeted and Expended
- D. AID/csd-3608        Current Subs - Budgeted and Expended
- E. LDC Research Budgeted and Expended Funds

| <u>AID/csd-3608</u><br>(7/1/75 - 6/30/81)  | <u>AID/DSPE-C-0035</u><br>(7/1/79 - 6/30/81) | <u>TOTAL</u><br>(Both Contracts) |
|--|--|----------------------------------|
| 7/1/79 - 12/31/79 Expenditures - \$ 579,391.98 + \$ 208,256.27 =                     |  | \$ 787,648.25                    |
| "            "            Commitment            870,741.78 +            816,126.26 = |  | 1,686,868.04                     |
| 7/1/75 - 6/30/79 Expenditures - \$3,129,025.32                                       |  |                                  |
| "            "            Balance            (269,928.08)            475,617.47      |  |                                  |
| BUDGET:  | \$4,309,231.00                               | \$1,500,000.00                   |

|                 |    | Budget<br>7/1/79-<br>6/30/80 | Expended<br>7/1/79-<br>11/30/79 | Expended<br>12/1/79-<br>12/31/79 | Total<br>Cum. Exp.<br>7/1/79-<br>12/31/79 | Outstand.<br>Commits<br>1/1/80-<br>6/30/80 | Uncommitted<br>Balance |
|-----------------|----|------------------------------|---------------------------------|----------------------------------|---|--|------------------------|
| Salaries        | 02 | 143,400.00                   | 56,854.99                       | 11,338.33                        | 68,193.32                                 | 66,349.98                                  | 8,856.70               |
|                 | 03 | 46,425.00                    | 14,008.18                       | 3,199.90                         | 17,208.08                                 | 17,701.41                                  | 11,515.51              |
| Total Salaries  |    | <u>189,825.00</u>            | <u>70,863.17</u>                | <u>14,638.23</u>                 | <u>85,401.40</u>                          | <u>84,051.39</u>                           | <u>20,372.21</u>       |
| Fringe Benefits | 13 | 27,145.00                    | 10,045.23                       | 2,078.97                         | 12,124.20                                 | 12,019.35                                  | 3,001.45               |
| Indirect Cost   | 88 | 74,035.00                    | 26,754.62                       | 5,669.91                         | 32,424.53                                 | 32,780.03                                  | 8,830.44               |
| Supplies        | 05 | 35,750.00                    | 5,425.13                        | 10,388.36                        | 15,813.49                                 | 15,870.69                                  | 4,065.82               |
|                 | 09 | 1,300.00                     | 443.07                          | 132.65                           | 575.72                                    | ---  | 724.28                 |
|                 | 10 | 12,000.00                    | 2,776.34                        | 850.88                           | 3,627.22                                  | ---  | 8,372.78               |
|                 | 12 | 850.00                       | 380.90                          | 70.30                            | 451.20                                    | 421.80                                     | (23.00)                |
|                 | 78 | 100.00                       | 13.68                           | 33.30                            | 46.98                                     | 38.30                                      | 14.72                  |
| Total Supplies  |    | <u>50,000.00</u>             | <u>9,039.12</u>                 | <u>11,475.49</u>                 | <u>20,514.61</u>                          | <u>16,330.79</u>                           | <u>13,154.60</u>       |
| Equipment       | 06 | 2,500.00                     | ---                             | 346.50                           | 346.50                                    | ---  | 2,153.50               |
| Consulting Fees | 49 | 19,400.00                    | 5,550.00                        | 666.00                           | 6,216.00                                  | 1,500.00                                   | 11,684.00              |
| Travel          | 07 | 75,000.00                    | 11,149.70                       | 4,860.73                         | 16,010.43                                 | 6,549.24                                   | 52,440.33              |
| Workshop/Publ.  | 91 | 60,000.00                    | 9,131.86                        | 5,622.00                         | 14,753.86                                 | 18,502.20                                  | 26,743.94              |
| Subcontracts    | 90 | 927,095.00                   | ---                             | 11,160.00                        | 11,160.00                                 | 562,665.00                                 | 353,270.00             |
| Pilot Studies   | 92 | 75,000.00                    | ---                             | 9,304.74                         | 9,304.74                                  | 81,728.26                                  | (16,033.00)            |
| TOTAL RESEARCH  |    | <u>1,002,095.00</u>          | <u>---</u>                      | <u>20,464.74</u>                 | <u>20,464.74</u>                          | <u>644,393.26</u>                          | <u>337,237.00</u>      |
| TOTAL WORKSHOP  |    | <u>60,000.00</u>             | <u>9,131.86</u>                 | <u>5,622.00</u>                  | <u>14,753.86</u>                          | <u>18,502.20</u>                           | <u>26,743.94</u>       |
| TOTAL ADMIN.    |    | <u>437,905.00</u>            | <u>133,401.84</u>               | <u>39,635.83</u>                 | <u>173,037.67</u>                         | <u>153,230.80</u>                          | <u>111,636.53</u>      |
| TOTAL           |    | <u>1,500,000.00</u>          | <u>142,533.70</u>               | <u>65,722.57</u>                 | <u>208,256.27</u>                         | <u>816,126.26</u>                          | <u>475,617.47</u>      |

ACN/mrt  
2/8/80

PARFR Financial Report, December 31, 1979

AID/DSPE-C-0035 (4263-404)

|                 |    | Budget<br>7/1/79-<br>6/30/80 | Expended<br>7/1/79-<br>10/31/79 | Expended<br>11/1/79-<br>11/30/79 | Total<br>Cum. Exp.<br>7/1/79-<br>11/30/79 | Outstand.<br>Commits<br>12/1/79-<br>6/30/80 | Uncommitted<br>Balance |
|-----------------|----|------------------------------|---------------------------------|----------------------------------|---|---|------------------------|
| SALARIES        | 02 | 143,400.00                   | 44,806.66                       | 12,048.33                        | 56,854.99                                 | 77,408.31                                   | 9,136.70               |
|                 | 03 | 46,425.00                    | 10,754.83                       | 3,253.35                         | 14,008.18                                 | 20,738.62                                   | 11,678.20              |
| TOTAL SALARIES  |    | <u>189,825.00</u>            | <u>55,561.49</u>                | <u>15,301.68</u>                 | <u>70,863.17</u>                          | <u>98,146.93</u>                            | <u>20,814.90</u>       |
| FRINGE BENEFITS | 13 | 27,145.00                    | 7,857.09                        | 2,188.14                         | 10,045.23                                 | 14,035.01                                   | 3,064.76               |
| INDIRECT COST   | 88 | 74,035.00                    | 20,786.96                       | 5,967.66                         | 26,754.62                                 | 38,277.30                                   | 9,003.08               |
| SUPPLIES        | 05 | 35,750.00                    | 3,507.28                        | 1,917.85                         | 5,425.13                                  | 10,297.19                                   | 20,027.68              |
|                 | 09 | 1,300.00                     | 259.74                          | 183.33                           | 443.07                                    | ---   | 856.93                 |
|                 | 10 | 12,000.00                    | 1,931.02                        | 845.32                           | 2,776.34                                  | ---   | 9,223.66               |
|                 | 12 | 850.00                       | 310.60                          | 70.30                            | 380.90                                    | 492.10                                      | (23.00)                |
|                 | 78 | <u>100.00</u>                | <u>---</u>                      | <u>13.68</u>                     | <u>13.68</u>                              | <u>---</u>                                  | <u>86.32</u>           |
| TOTAL SUPPLIES  |    | 50,000.00                    | 6,008.64                        | 3,030.48                         | 9,039.12                                  | 10,789.29                                   | 30,171.59              |
| EQUIPMENT       | 06 | 2,500.00                     | ---                             | ---                              | ---                                       | 350.00                                      | 2,150.00               |
| CONSULTING FEES | 49 | 19,400.00                    | 4,950.00                        | 600.00                           | 5,550.00                                  | ---   | 13,850.00              |
| TRAVEL          | 07 | 75,000.00                    | 8,624.96                        | 2,524.74                         | 11,149.70                                 | 6,957.06                                    | 56,893.24              |
| WORKSHOP/PUBL.  | 91 | 60,000.00                    | 8,617.86                        | 514.00                           | 9,131.86                                  | 9,640.96                                    | 41,227.18              |
| SUBCONTRACTS    | 90 | 927,095.00                   | ---                             | ---                              | ---                                       | 356,597.00                                  | 570,498.00             |
| PILOT STUDIES   | 92 | <u>75,000.00</u>             | <u>---</u>                      | <u>---</u>                       | <u>---</u>                                | <u>52,255.00</u>                            | <u>22,745.00</u>       |
| TOTAL RESEARCH  |    | 1,002,095.00                 | ---                             | ---                              | ---                                       | 408,852.00                                  | 593,243.00             |
| TOTAL WORKSHOP  |    | 60,000.00                    | 8,617.86                        | 514.00                           | 9,131.86                                  | 9,640.96                                    | 41,227.18              |
| TOTAL ADMIN.    |    | <u>437,905.00</u>            | <u>103,789.14</u>               | <u>29,612.70</u>                 | <u>133,401.84</u>                         | <u>168,555.59</u>                           | <u>135,947.57</u>      |
| TOTAL           |    | 1,500,000.00                 | 112,407.00                      | 30,126.70                        | 142,533.70                                | 587,048.55                                  | 770,417.75             |

PARFR Financial Report, November 30, 1979

AID/DSPE-C-0035 (4263-404)

|                 |    | <u>Budget</u><br>7/1/79-<br>6/30/80 | <u>Expended</u><br>7/1/79-<br>9/30/79 | <u>Expended</u><br>10/1/79-<br>10/31/79 | <u>Total</u><br><u>Cum.Exp.</u><br>7/1/79-<br>10/31/79 | <u>Outstand.</u><br><u>Commits</u><br>11/1/79-<br>6/30/80 | <u>Uncommitted</u><br><u>Balance</u> |
|-----------------|----|-------------------------------------|---------------------------------------|---|--|---|--------------------------------------|
| SALARIES        | 02 | 143,400.00                          | 33,748.33                             | 11,058.33                               | 44,806.66  | 89,456.64   | 9,136.70                             |
|                 | 03 | 46,425.00                           | 8,788.83                              | 1,966.00                                | 10,754.83  | 15,728.00   | 19,942.17                            |
| TOTAL SALARIES  |    | <u>189,825.00</u>                   | <u>42,537.16</u>                      | <u>13,024.33</u>                        | <u>55,561.49</u>                                       | <u>105,184.64</u>   | <u>29,078.87</u>                     |
| FRINGE BENEFITS | 13 | 27,145.00                           | 5,994.61                              | 1,862.48                                | 7,857.09   | 14,899.83   | 4,388.08                             |
| INDIRECT COST   | 88 | 74,035.00                           | 15,707.47                             | 5,079.49                                | 20,786.96  | 40,635.90   | 12,612.14                            |
| SUPPLIES        | 05 | 35,750.00                           | 2,069.44                              | 1,437.84                                | 3,507.28   | 10,081.88   | 22,160.84                            |
|                 | 09 | 1,300.00                            | 108.09                                | 151.65                                  | 259.74   | ---   | 1,040.26                             |
|                 | 10 | 12,000.00                           | 899.39                                | 1,031.63                                | 1,931.02   | ---   | 10,068.98                            |
|                 | 12 | 850.00                              | 170.00                                | 140.60                                  | 310.60   | 562.40  | (23.00)                              |
|                 | 78 | 100.00                              | ---                                   | ---                                     | ---  | 13.68   | 86.32                                |
| TOTAL SUPPLIES  |    | <u>50,000.00</u>                    | <u>3,246.92</u>                       | <u>2,761.72</u>                         | <u>6,008.64</u>  | <u>10,657.96</u>  | <u>33,333.40</u>                     |
| EQUIPMENT       | 06 | 2,500.00                            | ---                                   | ---                                     | ---  | 350.00  | 2,150.00                             |
| CONSULTING FEES | 49 | 19,400.00                           | 2,700.00                              | 2,250.00                                | 4,950.00   | 600.00  | 13,850.00                            |
| TRAVEL          | 07 | 75,000.00                           | 4,518.78                              | 4,106.18                                | 8,624.96   | 8,708.74  | 57,666.30                            |
| WORKSHOP/PUBL.  | 91 | 60,000.00                           | 413.00                                | 8,204.86                                | 8,617.86   | 6,586.00  | 44,796.14                            |
| SUBCONTRACTS    | 90 | 927,095.00                          | ---                                   | ---                                     | ---  | 206,073.00  | 721,022.00                           |
| PILOT STUDIES   | 92 | 75,000.00                           | ---                                   | ---                                     | ---  | 22,500.00   | 52,500.00                            |
| TOTAL RESEARCH  |    | <u>1,002,095.00</u>                 | <u>---</u>                            | <u>---</u>                              | <u>---</u>   | <u>228,573.00</u>   | <u>773,522.00</u>                    |
| TOTAL WORKSHOP  |    | 60,000.00                           | 413.00                                | 8,204.86                                | 8,617.86   | 6,586.00  | 44,796.14                            |
| TOTAL ADMIN.    |    | <u>437,905.00</u>                   | <u>74,704.94</u>                      | <u>29,084.20</u>                        | <u>103,789.14</u>                                      | <u>181,037.07</u>   | <u>153,078.79</u>                    |
| TOTAL           |    | <u>1,500,000.00</u>                 | <u>75,117.94</u>                      | <u>37,289.06</u>                        | <u>112,407.00</u>                                      | <u>416,196.07</u>   | <u>971,396.93</u>                    |

PARFR Financial Report, October 31, 1979

AID/DSPE-C-0035 (4263-404)

|                 |    | Budget<br>7/1/79-<br>6/30/80 | Expended<br>7/1/79-<br>8/31/79 | Expended<br>9/1/79-<br>9/30/79 | Total<br>Cum.Exp.<br>7/1/79-<br>9/30/79 | Outstand.<br>Commits<br>10/1/79-<br>6/30/80 | Uncommitted<br>Balance |
|-----------------|----|------------------------------|--------------------------------|--------------------------------|---|---|------------------------|
| SALARIES        | 02 | 143,400.00                   | 22,690.00                      | 11,058.33                      | 33,748.33                               | 99,524.97                                   | 10,126.70              |
|                 | 03 | 46,425.00                    | 6,710.73                       | 2,078.10                       | 8,788.83                                | 17,694.00                                   | 19,942.17              |
| TOTAL SALARIES  |    | <u>189,825.00</u>            | <u>29,400.73</u>               | <u>13,136.43</u>               | <u>42,537.16</u>                        | <u>117,218.97</u>                           | <u>30,068.87</u>       |
| FRINGE BENEFITS | 13 | 27,145.00                    | 4,116.10                       | 1,878.51                       | 5,994.61                                | 16,762.31                                   | 4,388.08               |
| INDIRECT COST   | 88 | 74,035.00                    | 10,584.26                      | 5,123.21                       | 15,707.47                               | 45,715.39                                   | 12,612.14              |
| SUPPLIES        | 05 | 35,750.00                    | 975.05                         | 1,094.39                       | 2,069.44                                | 9,765.50                                    | 23,915.06              |
|                 | 09 | 1,300.00                     | ---                            | 108.09                         | 108.09                                  | ---   | 1,191.91               |
|                 | 10 | 12,000.00                    | ---                            | 899.39                         | 899.39                                  | ---   | 11,100.61              |
|                 | 12 | 850.00                       | 134.00                         | 36.00                          | 170.00                                  | 703.00                                      | (23.00)                |
|                 | 78 | 100.00                       | ---                            | ---                            | ---                                     | ---   | 100.00                 |
| TOTAL SUPPLIES  |    | <u>50,000.00</u>             | <u>1,109.05</u>                | <u>2,137.87</u>                | <u>3,246.92</u>                         | <u>10,468.50</u>                            | <u>36,284.58</u>       |
| EQUIPMENT       | 06 | 2,500.00                     | ---                            | ---                            | ---                                     | 350.00                                      | 2,150.00               |
| CONSULTING FEES | 49 | 19,400.00                    | 1,350.00                       | 1,350.00                       | 2,700.00                                | 1,200.00                                    | 15,500.00              |
| TRAVEL          | 07 | 75,000.00                    | 1,290.14                       | 3,228.64                       | 4,518.78                                | 7,368.54                                    | 63,112.68              |
| WORKSHOP/PUBL.  | 91 | 60,000.00                    | ---                            | 413.00                         | 413.00                                  | 15,423.86                                   | 44,163.14              |
| SUBCONTRACTS    | 90 | 927,095.00                   | ---                            | ---                            | ---                                     | 187,759.00                                  | 739,336.00             |
| PILOT STUDIES   | 92 | <u>75,000.00</u>             | <u>---</u>                     | <u>---</u>                     | <u>---</u>                              | <u>8,000.00</u>                             | <u>67,000.00</u>       |
| TOTAL RESEARCH  |    | 1,002,095.00                 | ---                            | ---                            | ---                                     | 195,759.00                                  | 806,336.00             |
| TOTAL WORKSHOP  |    | 60,000.00                    | ---                            | 413.00                         | 413.00                                  | 15,423.86                                   | 44,163.14              |
| TOTAL ADMIN.    |    | <u>437,905.00</u>            | <u>47,850.28</u>               | <u>26,854.66</u>               | <u>74,704.94</u>                        | <u>199,083.71</u>                           | <u>164,116.35</u>      |
| TOTAL           |    | <u>1,500,000.00</u>          | <u>47,850.28</u>               | <u>27,267.66</u>               | <u>75,117.94</u>                        | <u>410,266.57</u>                           | <u>1,014,615.49</u>    |

|                 |    | Budget<br>7/1/79-<br>6/30/80 | *Expended<br>7/1/79-<br>7/31/79 | *Expended<br>8/1/79-<br>8/31/79 | Total<br>Cum.Exp.<br>7/1/79-<br>8/31/79 | Outstand.<br>Commits<br>9/1/79-<br>6/30/80 | Uncommitted<br>Balance |
|-----------------|----|------------------------------|---------------------------------|---------------------------------|---|--|------------------------|
| SALARIES        | 02 | 143,400.00                   | ---                             | 22,690.00                       | 22,690.00                               | 110,583.30                                 | 10,126.70              |
|                 | 03 | 46,425.00                    | ---                             | 6,710.73                        | 6,710.73                                | 28,920.10                                  | 10,794.17              |
| TOTAL SALARIES  |    | <u>189,825.00</u>            | <u>---</u>                      | <u>29,400.73</u>                | <u>29,400.73</u>                        | <u>139,503.40</u>                          | <u>20,920.87</u>       |
| FRINGE BENEFITS | 13 | 27,145.00                    | ---                             | 4,116.10                        | 4,116.10                                | 19,948.99                                  | 3,079.91               |
| INDIRECT COST   | 88 | 74,035.00                    | ---                             | 10,584.26                       | 10,584.26                               | 54,406.33                                  | 9,044.41               |
| SUPPLIES        | 05 | 35,750.00                    | ---                             | 975.05                          | 975.05                                  | 8,468.62                                   | 26,306.33              |
|                 | 09 | 1,300.00                     | ---                             | ---                             | ---                                     | ---  | 1,300.00               |
|                 | 10 | 12,000.00                    | ---                             | ---                             | ---                                     | ---  | 12,000.00              |
|                 | 12 | 850.00                       | ---                             | 134.00                          | 134.00                                  | 739.00                                     | (23.00)                |
|                 | 78 | 100.00                       | ---                             | ---                             | ---                                     | ---  | 100.00                 |
| TOTAL SUPPLIES  |    | <u>50,000.00</u>             | <u>---</u>                      | <u>1,109.05</u>                 | <u>1,109.05</u>                         | <u>9,207.62</u>                            | <u>39,683.33</u>       |
| EQUIPMENT       | 06 | 2,500.00                     | ---                             | ---                             | ---                                     | 350.00                                     | 2,150.00               |
| CONSULTING FEES | 49 | 19,400.00                    | ---                             | 1,350.00                        | 1,350.00                                | 450.00                                     | 17,600.00              |
| TRAVEL          | 07 | 75,000.00                    | ---                             | 1,290.14                        | 1,290.14                                | 1,862.07                                   | 71,847.79              |
| WORKSHOP/PUBL.  | 91 | 60,000.00                    | ---                             | ---                             | ---                                     | 7,118.00                                   | 52,882.00              |
| SUBCONTRACTS    | 90 | 927,095.00                   | ---                             | ---                             | ---                                     | 138,995.00                                 | 788,100.00             |
| PILOT STUDIES   | 92 | 75,000.00                    | ---                             | ---                             | ---                                     | ---  | 75,000.00              |
| TOTAL RESEARCH  |    | <u>1,002,095.00</u>          | <u>---</u>                      | <u>---</u>                      | <u>---</u>                              | <u>138,995.00</u>                          | <u>863,100.00</u>      |
| TOTAL WORKSHOP  |    | <u>60,000.00</u>             | <u>---</u>                      | <u>---</u>                      | <u>---</u>                              | <u>7,118.00</u>                            | <u>52,882.00</u>       |
| TOTAL ADMIN.    |    | <u>437,905.00</u>            | <u>---</u>                      | <u>47,850.28</u>                | <u>47,850.28</u>                        | <u>225,728.41</u>                          | <u>164,326.31</u>      |
| TOTAL           |    | <u>1,500,000.00</u>          | <u>---</u>                      | <u>47,850.28</u>                | <u>47,850.28</u>                        | <u>371,841.41</u>                          | <u>1,080,308.31</u>    |

\*Expenditures given for August 1979 include expenditures for July 1979 since the PARFR account was not opened until August 1979.

|                 |    | <u>Budget</u><br>7/1/75-<br>6/30/79 | <u>Expended</u><br>7/1/75-<br>9/30/79 | <u>Expended</u><br>10/1/79-<br>12/31/79 | <u>Total</u><br><u>Cum. Exp.</u><br>7/1/75-<br>12/31/79 | <u>Outstand.</u><br><u>Commit</u><br><u>Through</u><br>6/30/80 | <u>Balance</u>     |
|-----------------|----|-------------------------------------|---------------------------------------|---|---|--|--------------------|
| Salaries        | 02 | 267,128.89                          | 269,218.89                            | ---                                     | 269,218.89  | ---  | (2,090.00)         |
|                 | 03 | <u>112,224.14</u>                   | <u>103,708.02</u>                     | ---                                     | <u>103,708.02</u>                                       | ---  | <u>8,516.12</u>    |
| TOTAL SALARIES  |    | 379,353.03                          | 372,926.91                            | ---                                     | 372,926.91  | ---  | 6,426.12           |
| Fringe Benefits | 13 | 52,354.04                           | 51,269.43                             | ---                                     | 51,269.43   | ---  | 1,084.61           |
| Indirect Costs  | 88 | 133,140.46                          | 131,094.58                            | ---                                     | 131,094.58  | ---  | 2,045.88           |
| Supplies        | 05 | 108,057.16                          | 108,484.39                            | 21,691.15                               | 130,175.54  | 2,190.55   | (24,308.93)        |
|                 | 09 | 1,600.00                            | 527.81                                | ---                                     | 527.81  | ---  | 1,072.19           |
|                 | 10 | 36.13                               | 5,931.81                              | ---                                     | 5,931.81  | ---  | (5,895.68)         |
|                 | 12 | 1,537.00                            | 1,591.00                              | ---                                     | 1,591.00  | ---  | (54.00)            |
|                 | 78 | <u>2,091.89</u>                     | <u>1,567.39</u>                       | ---                                     | <u>1,567.39</u>   | ---  | <u>524.50</u>      |
| TOTAL SUPPLIES  |    | 113,322.18                          | 118,102.40                            | 21,691.15                               | 139,793.55  | 2,190.55   | (28,661.92)        |
| Equipment       | 06 | 15,755.55                           | 14,771.56                             | 13,019.00                               | 27,790.56   | 1,215.00   | (13,250.01)        |
| Consulting Fees | 49 | 50,944.00                           | 40,973.11                             | ---                                     | 40,973.11   | ---  | 9,970.89           |
| Travel          | 07 | 135,321.02                          | 142,009.00                            | 1,851.20                                | 143,860.20  | 495.00   | (9,034.18)         |
| Moving Expense  | 18 | 6,846.17                            | 2,963.91                              | ---                                     | 2,963.91  | ---  | 3,882.26           |
| Remodel & Maint | 52 | 16,249.30                           | 11,249.30                             | ---                                     | 11,249.30   | ---  | 5,000.00           |
| Wksp/Publ       | 91 | 203,404.33                          | 164,852.77                            | 19,000.00                               | 183,852.77  | 8,500.00   | 11,051.56          |
| Subcontracts    | 90 | 3,077,193.92                        | 2,246,198.60                          | 262,998.36                              | 2,509,196.96  | 810,750.42   | (242,753.46)       |
| Pilot Studies   | 92 | <u>125,347.00</u>                   | <u>76,020.08</u>                      | <u>17,425.94</u>                        | <u>93,446.02</u>  | <u>47,590.81</u>   | <u>(15,689.83)</u> |
| TOTAL RESEARCH  |    | 3,202,540.92                        | 2,322,218.68                          | 280,424.30                              | 2,602,642.98  | 858,341.23   | (258,443.29)       |
| TOTAL WORKSHOP  |    | 203,404.33                          | 164,852.77                            | 19,000.00                               | 183,852.77  | 8,500.00   | 11,051.56          |
| TOTAL ADMIN     |    | <u>903,285.75</u>                   | <u>885,360.20</u>                     | <u>36,561.35</u>                        | <u>921,921.55</u>                                       | <u>3,900.55</u>  | <u>(22,536.35)</u> |
| TOTAL           |    | 4,309,231.00                        | 3,372,431.65                          | 335,985.65                              | 3,708,417.30  | 870,741.78   | (269,928.08)       |

|                  |    | Budget<br>7/1/75-<br>6/30/79 | Expended<br>7/1/75-<br>6/30/79 | Expended<br>7/1/79-<br>9/30/79 | Total<br>Cum.Exp.<br>7/1/75-<br>9/30/79 | Outstand.<br>Commit.<br>Through<br>6/30/80 | Balance      |
|------------------|----|------------------------------|--------------------------------|--------------------------------|---|--|--------------|
| Salaries         | 02 | 267,128.89                   | 267,128.89                     | 2,090.00                       | 269,218.89                              | ---  | (2,090.00)   |
|                  | 03 | 112,224.14                   | 103,273.42                     | 434.60                         | 103,708.02                              | ---  | 8,516.12     |
| TOTAL SALARIES   |    | 379,353.03                   | 370,402.31                     | 2,524.60                       | 372,926.91                              | ---  | 6,426.12     |
| Fringe Benefits  | 13 | 52,354.04                    | 50,915.99                      | 353.44                         | 51,269.43                               | ---  | 1,084.61     |
| Indirect Costs   | 88 | 133,140.46                   | 130,185.72                     | 908.86                         | 131,094.58                              | ---  | 2,045.88     |
| Supplies         | 05 | 108,057.16                   | 104,692.04                     | 3,792.35                       | 108,484.39                              | 6,395.61                                   | (6,822.84)   |
|                  | 09 | 1,600.00                     | 315.71                         | 212.10                         | 527.81                                  | ---  | 1,072.19     |
|                  | 10 | 36.13                        | 3,832.69                       | 2,099.12                       | 5,931.81                                | ---  | (5,895.68)   |
|                  | 12 | 1,537.00                     | 1,537.00                       | 54.00                          | 1,591.00                                | ---  | (54.00)      |
|                  | 78 | 2,091.89                     | 1,567.39                       | ----                           | 1,567.39                                | ---  | 524.50       |
| TOTAL SUPPLIES   |    | 113,322.18                   | 111,944.83                     | 6,157.57                       | 118,102.40                              | 6,395.61                                   | (11,175.83)  |
| Equipment        | 06 | 15,755.55                    | 14,422.80                      | 348.76                         | 14,771.56                               | 14,234.00                                  | (13,250.01)  |
| Consulting Fees  | 49 | 50,944.00                    | 37,923.11                      | 3,050.00                       | 40,973.11                               | ---  | 9,970.89     |
| Travel           | 07 | 135,321.02                   | 131,194.44                     | 10,814.56                      | 142,009.00                              | 2,145.20                                   | (8,833.18)   |
| Moving Expense   | 18 | 6,846.17                     | 2,963.91                       | ---                            | 2,963.91                                | ---  | 3,882.26     |
| Remodel & Maint. | 52 | 16,249.30                    | 11,249.30                      | ---                            | 11,249.30                               | ---  | 5,000.00     |
| Wksp/Publ.       | 91 | 203,404.33                   | 163,749.39                     | 1,103.38                       | 164,852.77                              | 26,500.00                                  | 12,051.56    |
| Subcontracts     | 90 | 3,077,193.92                 | 2,038,113.87                   | 208,084.73                     | 2,246,198.60                            | 1,078,717.13                               | (247,721.81) |
| Pilot Studies    | 92 | 125,347.00                   | 65,959.65                      | 10,060.43                      | 76,020.08                               | 64,936.07                                  | (15,609.15)  |
| TOTAL RESEARCH   |    | 3,202,540.92                 | 2,104,073.52                   | 218,145.16                     | 2,322,218.68                            | 1,143,653.20                               | (263,330.96) |
| TOTAL WORKSHOP   |    | 203,404.33                   | 163,749.39                     | 1,103.38                       | 164,852.77                              | 26,500.00                                  | 12,051.56    |
| TOTAL ADMIN.     |    | 903,285.75                   | 861,202.41                     | 24,157.79                      | 885,360.20                              | 22,774.81                                  | (4,849.26)   |
| TOTAL            |    | 4,309,231.00                 | 3,129,025.32                   | 243,406.33                     | 3,372,431.65                            | 1,192,928.01                               | (256,128.66) |

Current Subcontracts  
Budgeted & Expended Funds (4263-404-90)  
AID/DSPE-C-0035

| <u>Subcontract</u>                | <u>Budget/Period</u>            | <u>Expended/Period*</u>           |
|-----------------------------------|---------------------------------|-----------------------------------|
| 200C<br>Richart/Columbia U.       | \$ 30,715<br>7/1/79 - 6/30/81   | - 0 -                             |
| 200G<br>Zinser/Germany            | \$ 32,020<br>9/1/79 - 8/31/80   | - 0 -                             |
| 200P<br>Apelo/Philippines         | \$ 6,820<br>10/1/79 - 9/30/80   | - 0 -                             |
| 201B<br>Maia/Brazil               | \$ 34,600<br>8/1/79 - 7/31/80   | \$ 13,690<br>8/1/79 - 12/31/79    |
| 202<br>Heine/Maine Med. Ctr.      | \$ 49,044<br>9/1/79 - 8/31/80   | - 0 -                             |
| 203NU<br>Chatterton/Northwestern  | \$ 27,552<br>9/1/79 - 8/31/80   | - 0 -                             |
| 203NMH<br>Chatterton/Northwestern | \$ 34,127<br>9/1/79 - 8/31/80   | - 0 -                             |
| 203IIT<br>Gutfreund/IIT           | \$ 21,905<br>11/1/79 - 10/31/80 | - 0 -                             |
| 204<br>Zaneveld/U of I            | \$116,431<br>10/1/79 - 6/30/81  | - 0 -                             |
| 205(95N)<br>Zaneveld/U of I       | \$ 45,443<br>10/1/79 - 9/30/80  | - 0 -                             |
| 206UAB<br>Beck/U of Ala.          | \$ 18,865<br>11/1/79 - 10/31/80 | \$ 4,157.98<br>11/1/79 - 12/31/79 |
| 206SRI<br>Lewis/SRI               | \$ 66,000<br>11/1/79 - 10/31/80 | \$ 4,950.40<br>11/1/79 - 11/30/79 |
| 207<br>Hosseinian/Cook County     | \$ 24,348<br>11/1/79 - 10/31/80 | \$ 2,437.22<br>11/1/79 - 1/31/80  |
| 208<br>Beck/U of Ala.             | \$ 19,406<br>11/1/79 - 10/31/80 | - 0 -                             |
| 211<br>Davis                      | \$ 13,540<br>12/1/79 - 11/30/80 | - 0 -                             |

\*Expenditure TOTALS are taken from dates on invoices in that there is a lag time to when they show up on NU Budget Statements.

Current Subcontracts  
 Budgeted and Expended Funds ( Pilots 4263-404-92)  
 AID/DSPE-C-0035

| <u>Subcontract</u>                 | <u>Budget/Period</u>            | <u>Expended/Period*</u>           |
|------------------------------------|---------------------------------|-----------------------------------|
| P50<br>Chvapil/U of Arizona        | \$ 8,000<br>7/1/79 - 6/30/80    | \$ 1,517.06<br>7/1/79 - 12/31/79  |
| P51<br>Hasson                      | \$ 10,000<br>10/1/79 - 9/30/80  | \$ 6,800<br>10/1/79 - 12/31/79    |
| P52<br>Perea Sasiain/Colombia      | \$ 7,000<br>10/1/79 - 9/30/80   | \$ 3,700.64<br>10/1/79 - 12/31/79 |
| P53<br>Asch/UTHSSA                 | \$ 7,500<br>11/1/79 - 10/31/80  | - 0 -                             |
| P55<br>Petrow/Duke U.              | \$ 7,590<br>11/1/79 - 10/31/80  | - 0 -                             |
| P56<br>Alexander/Med.Research Fdn. | \$ 14,665<br>11/1/79 - 10/31/80 | \$ 732.38<br>11/1/79 - 12/31/79   |
| P58<br>Goldberg/Northwestern       | \$ 7,500<br>12/1/79 - 11/30/80  | - 0 -                             |

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Current Subcontracts  
Budgeted & Expended Funds  
AID/csd-3608

(4263-401-90)

| <u>Subcontract</u>                    | <u>Budget/Period</u>              | <u>Expended/Period *</u>           |
|---------------------------------------|-----------------------------------|------------------------------------|
| 79N<br>Meeker/Maine Med. Ctr.         | \$138,500.26<br>2/1/77 - 6/30/80  | \$131,386.71<br>2/1/77 - 12/31/79  |
| 83N<br>Beck/U of Alabama              | \$257,849.00<br>4/1/76 - 3/31/80  | \$241,783.86<br>4/1/76 - 12/31/79  |
| 85N<br>Chvapil/U of Arizona           | \$ 98,124.00<br>12/1/76 - 6/30/80 | \$ 97,135.19<br>12/1/76 - 12/31/79 |
| 86N<br>Neuwirth/St. Luke's            | \$ 36,602.00<br>6/1/78 - 3/31/80  | \$ 23,013.36<br>6/1/78 - 6/30/79   |
| 86G<br>Zinser/Germany (final)         | \$ 27,159.00<br>9/1/78 - 8/31/79  | \$ 22,096.53<br>9/1/78 - 8/31/79   |
| 86K<br>Hong/Korea                     | \$ 16,080.00<br>5/1/79 - 4/30/80  | \$ 4,527.00<br>5/1/79 - 12/31/79   |
| 86Sa<br>Argueta/Salvador              | \$ 12,410.00<br>3/15/79 - 3/14/80 | \$ 6,811.00<br>3/15/79 - 1/14/80   |
| 86Sb<br>Caceres/Salvador              | \$ 8,000.00<br>3/15/79 - 3/14/80  | \$ 1,040.00<br>3/15/79 - 12/14/79  |
| 89N<br>Gregor/Columbia                | \$112,073.00<br>1/15/77 - 4/14/80 | \$102,483.20<br>1/15/77 - 11/30/79 |
| 89N<br>St. Luke's                     | \$ 63,326.00<br>11/1/77 - 4/14/80 | \$ 46,732.10<br>11/1/77 - 12/31/79 |
| 90Np<br>Davis/Planned Parenthood      | \$ 54,007.00<br>2/1/79 - 1/31/80  | \$ 31,098.59<br>2/1/79 - 11/30/79  |
| 91N<br>Wise/Dynatech                  | \$177,141.00<br>6/1/77 - 3/31/80  | \$149,088.36<br>6/1/77 - 12/31/79  |
| 92N<br>Anderson/Ore. Primate Res.Ctr. | \$ 86,107.65<br>6/1/77 - 12/31/79 | \$ 74,319.98<br>6/1/77 - 11/30/79  |
| 93N<br>Muckenhirn/NAS (final)         | \$ 50,500.00<br>8/1/77 - 6/30/79  | \$ 50,362.22<br>8/1/77 - 6/30/79   |

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Current Subcontracts  
Budget & Expended Funds  
AID/csd-3608

(4263-401-90)

50.

| <u>Subcontract</u>                     | <u>Budget/Period</u>               | <u>Expended/Period *</u>           |
|--|------------------------------------|------------------------------------|
| 94N<br>Droegemuller/U of Arizona       | \$ 62,061.92<br>12/1/77 - 12/31/79 | \$ 35,617.39<br>12/1/77 - 11/30/79 |
| 94N<br>University of Illinois (final)  | \$ 17,849.50<br>10/1/78 - 12/31/79 | \$ 14,960.75<br>10/1/78 - 12/31/79 |
| 95N<br>Zaneveld/U of Illinois (final)  | \$113,348.00<br>7/1/77 - 9/30/79   | \$113,348.00<br>7/1/77 - 9/30/79   |
| 97N<br>King/J.Hopkins Univ.            | \$108,442.00<br>8/1/78 - 4/30/80   | \$ 30,705.87<br>8/1/78 - 12/31/79  |
| 97K<br>Kwak/Korea                      | \$ 66,550.00<br>7/1/78 - 6/30/80   | \$ 17,261.78<br>7/1/78 - 12/31/79  |
| 98M<br>Aznar/CIFE - Mexico             | \$ 34,265.00<br>7/1/78 - 6/30/80   | \$ 19,753.78<br>7/1/78 - 12/31/79  |
| 98M<br>University of Alabama           | \$ 10,780.00<br>7/1/78 - 6/30/80   | \$ 2,026.13<br>7/1/78 - 11/30/79   |
| 100N<br>Lerner/Jeff. Med. College      | \$109,384.00<br>9/1/78 - 2/29/80   | \$ 95,007.70<br>9/1/78 - 12/31/79  |
| 102N(P-10)<br>Chatterton/U of Illincis | \$ 46,767.00<br>11/1/78 - 10/31/79 | \$ 24,209.56<br>11/1/78 - 7/31/79  |
| 103N<br>Gray/IIT (final)               | \$ 28,108.00<br>11/1/78 - 10/31/79 | \$ 28,108.00<br>11/1/78 - 10/31/79 |
| 104N<br>Lewis/SRI                      | \$ 66,000.00<br>11/1/78 - 10/31/79 | \$ 60,103.39<br>11/1/78 - 10/31/79 |
| 105N<br>Rudel/CIFE - Mexico            | \$ 56,236.00<br>5/1/79 - 4/30/80   | \$ 11,418.24<br>5/1/79 - 12/31/79  |
| 106N<br>Berger/U of NC                 | \$ 47,676.00<br>2/1/79 - 1/31/80   | \$ 32,125.16<br>2/1/79 - 12/31/79  |
| 107N<br>Alexander/Ore.Primate Rsch.Ctr | \$ 83,318.00<br>4/1/79 - 9/30/80   | \$ 26,520.06<br>4/1/79 - 12/31/79  |

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Current Subcontracts  
Budgeted & Expended Funds (4263-401-90)  
AID/csd-3608

| <u>Subcontract</u>               | <u>Budgeted/Period</u>            | <u>Expended/Period*</u>           |
|----------------------------------|-----------------------------------|-----------------------------------|
| 108N<br>Tyrer/PPFA (final)       | \$ 62,600.00<br>3/1/79 - 2/29/80  | \$ 4,717.73<br>3/1/79 - 7/11/79   |
| 110N<br>Lewis/SRI                | \$ 65,972.00<br>4/1/79 - 3/31/80  | \$ 55,806.30<br>4/1/79 - 12/31/79 |
| 111N<br>Eddy/University of Texas | \$ 58,290.00<br>6/1/79 - 5/31/80  | \$ 15,541.76<br>6/1/79 - 12/31/79 |
| 111N<br>IFRP (final)             | \$ 3,340.00<br>6/1/79 - 5/31/80   | \$ 3,340.00<br>6/1/79 - 12/31/79  |
| 114N<br>Yen/U of California      | \$ 65,959.00<br>6/15/79 - 6/14/80 | \$ 4,785.80<br>6/15/79 - 9/30/79  |

\* Expenditure TOTALS are taken from dates on invoices in that there is a lag time to when they show up on NU Budget Statements.

Current Subcontract  
Budgeted & Expended Funds (4263-401-92)  
AID/csd-3608

| <u>Subcontract</u>                        | <u>Budget/Period</u>             | <u>Expended/Period*</u>           |
|---|----------------------------------|-----------------------------------|
| P11<br>Richart/Columbia (final)           | \$ 7,004.01<br>2/1/78 - 3/31/79  | \$ 7,003.93<br>2/1/78 - 3/31/79   |
| P12<br>Frisch/MIT                         | \$ 15,000.00<br>7/1/78 - 6/30/80 | \$ 9,553.82<br>7/1/78 - 11/30/79  |
| P13<br>Brosens/Leuven                     | \$ 11,680.59<br>5/1/78 - 4/30/80 | \$ 6,425.41<br>5/1/78 - 11/30/79  |
| P13<br>IFRP                               | \$ 2,750.00<br>5/1/78 - 4/30/80  | \$ 1,700.00<br>5/1/78 - 4/30/79   |
| P15<br>Shulman/NY Med. College            | \$ 7,500.00<br>3/1/79 - 2/29/80  | \$ 4,852.36<br>3/1/79 - 10/31/79  |
| P16<br>Page/U of California               | \$ 6,000.00<br>1/1/79 - 6/30/80  | \$ 1,008.70<br>1/1/79 - 4/30/79   |
| P17 (final)<br>Freund/Southern Ill. Univ. | \$ 7,500.00<br>2/1/79 - 9/30/79  | \$ 6,791.60<br>2/1/79 - 9/30/79   |
| P18 (final)<br>Bradford/U of Georgia      | \$ 7,500.00<br>2/1/79 - 10/31/79 | \$ 7,499.73<br>2/1/79 - 10/31/79  |
| P19<br>Slocumb/U. of New Mexico           | \$ 7,700.00<br>2/1/79 - 1/31/80  | \$ 7,002.15<br>2/1/79 - 11/30/79  |
| P20 (final)<br>Goldzieher/Southwest Fdn.  | \$ 7,500.00<br>6/1/79 - 11/30/79 | \$ 7,359.97<br>6/1/79 - 11/30/79  |
| P21<br>Chvapil/U of Arizona               | \$ 7,500.00<br>6/15/79 - 6/14/80 | \$ 2,112.76<br>6/15/79 - 12/14/79 |
| P22<br>Cates/U of Houston                 | \$ 7,688.00<br>6/15/79 - 6/14/80 | \$ 16.00<br>6/15/79 - 9/30/79     |

\* Expenditure TOTALS are taken from dates on invoices in that there is a lag time to when they show up on NU Budget Statements.

LDC RESEARCH FUNDS  
7/1/79 - 12/31/79

| <u>PARFR #</u>                | <u>Budget (Dollars)</u> | <u>Spent (Dollars)</u>        |
|-------------------------------|-------------------------|-------------------------------|
| (AID/csd-3608)                |                         |                               |
| 86K Hong - Korea              | \$ 16,080               | \$ 4,527.00 (5/1/79-12/31/79) |
| 86Sa Argueta - Salvador       | 12,410                  | 6,811.00 (3/15/79-1/14/80)    |
| 86Sb Moran - Salvador         | 8,000                   | 1,040.00 (3/15/79-12/14/79)   |
| 97K Kwak - Korea              | 66,550                  | 17,261.78 (7/1/78-12/31/79)   |
| 98M Aznar - Mexico            | 34,265                  | 19,753.78 (7/1/78-12/31/79)   |
| 105N Rudel - Mexico           | 56,236                  | 11,418.24 (5/1/79-12/31/79)   |
| (AID/DSPE-C-0035)             |                         |                               |
| 200P Apelo - Philippines      | 6,820                   | -0-                           |
| 201B Maia - Brazil            | 34,600                  | 13,690.00 (8/1/79-12/31/79)   |
| P-52 Perea-Sasiain - Colombia | 7,000                   | 3,700.64 (10/1/79-12/31/79)   |

PARFR SCIENTIFIC ADVISORY COMMITTEE

MEETING XXX

ARLINGTON HYATT HOUSE  
Arlington, Virginia  
September 5, 1979

VOTING SAC MEMBERS PRESENT

John J. Sciarra, M.D., Ph.D.  
Nancy J. Alexander, Ph.D.  
Robert T. Chatterton, Ph.D.  
Joseph E. Davis, M.D.  
William Droegemueller, M.D.  
Edward C. Mather, D.V.M., Ph.D.  
Robert H. Messer, M.D.  
Kamran S. Moghissi, M.D.  
Ralph M. Richart, M.D.  
Susan C.M. Scrimshaw, Ph.D.  
Judith L. Vaitukaitis, M.D.  
A. Albert Yuzpe, M.D.

PARFR STAFF PRESENT

Elizabeth B. Connell, M.D.  
Diane H. Krier  
Aquiles J. Sobrero, M.D.  
Gerald I. Zatuchni, M.D., M.Sc.

U.S.A.I.D. MEMBERS PRESENT

Miriam H. Labbok, M.D., M.P.H.  
James D. Shelton, M.D., M.P.H.  
J. Joseph Speidel, M.D., M.P.H.

The thirtieth meeting of PARFR's Scientific Advisory Committee convened on Wednesday, September 5, 1979 at 8:00 A.M. at the Arlington Hyatt House, Arlington, Virginia. Dr. John J. Sciarra presided as Chairman. Minutes of the June 18, 1979 meeting were approved with no voiced corrections.

I. ANNOUNCEMENTS

A. Remaining SAC dates for 1979 are:

December 3, 1979 (Monday) -- O'Hare Hilton, Chicago, Illinois

B. SAC dates for 1980 thusfar are:

March 10, 1980 (Monday) -- Palmer House, Chicago, Illinois

June 16, 1980 (Monday) -- New York City

The September and December, 1980 meetings will be discussed at the December 3rd SAC Meeting.

C. Dr. Sciarra announced that Dr. Chatterton is relocating to Northwestern University from the University of Illinois, effective September 1, 1979.

II. NEW BUSINESS

A. EXTENSION PROPOSAL REVIEW

1. PARFR-85N -- Milos Chvapil, M.D., Ph.D., The University of Arizona  
"Collagen Sponge Contraceptive -- Testing of Efficacy in  
Human Volunteers"

Funding Requested: \$68,122                      Length: One Year

Dr. Chvapil seeks continued PARFR support for the further development of the collagen sponge as a contraceptive method. Based on post-coital studies, he has the impression that the sponge alone will not provide a sufficiently high level of efficacy. He would like to develop a spermicidal cream containing zinc and buffered acidity that would be used in combination with the sponge. There was considerable discussion in relation to the use of spermicides as was presented in our Vaginal Contraception Meeting in Guatemala. Dr. DroegemueLLer reported that Chvapil does have a limited IND to treat herpes with zinc. Dr. ConneLL felt that the FDA would require an IND for zinc utilized as a spermicidal method of contraception. The Committee generally felt that if zinc was to be looked at, it should be looked at in a separate study. Dr. Zatuchni reported that Dr. Heine will be beginning clinical trials of the collagen sponge alone, and using the collagen with nonoxynol-9 as a "control" group and we should have results from this in approximately 3-4 months. PARFR Staff were advised to rework the protocol in accordance with the Committee's suggestions to bring the CS to clinical trials in an expedited manner.

2. PARFR-P18 -- Marion M. Bradford, Ph.D., University of Georgia  
"Evaluation of Acrosin-Acrolysin Inhibitors as Male  
Contraceptive Agents"

For this extension request Robert A. McRorie, Ph.D. is the proposed principal investigator.

Funding Requested: \$62,023                      Length: One Year

Preliminary data generated in this pilot study does not support their contention of a positive result. The Committee comments to the proposed protocol for the extension of this project were totally negative, therefore this request was not approved.

A. EXTENSION PROPOSAL REVIEW (continued)

3. PARFR-95N -- Lourens J.D. Zaneveld, D.V.M., Ph.D., University of Illinois at the Medical Center and G.E.D. Beheri, M.D., University of Cairo, Egypt  
"Development and Evaluation of a Reversible Vas Deferens Blocking Device"

Funding Requested: \$65,590 (1st), \$28,635 (2nd)

In July, 1979, Dr. Zaneveld visited with Dr. Beheri in Egypt to collaborate on a joint protocol for the further development of a potentially reversible vas deferens blocking device. This proposal submission is the result of their combined efforts. The protocol calls for animal testing during the first year which will be done at BRL at the University of Illinois. Provided the results of the animal studies are positive, clinical trials will be initiated during the second year at the University of Cairo in Egypt. Dr. Joseph Davis pointed out his concerns of this procedure: 1) potential migration of the device; 2) lack of tissue ingrowth; 3) questionable value of fascial envelope; and 4) sperm leakage. However, he reported that Dr. Lee's (Korea) results have been good utilizing a similar method. In spite of his questions, he felt that the rabbit data was favorable enough to continue support of this project for another year to study the device in the primates. The SAC approved the funding of this project for one year. PARFR staff will work out the contractual arrangements with the University of Illinois for this first year utilizing Dr. Beheri as a consultant.

4. PARFR-104N -- Danny H. Lewis, Ph.D., Southern Research Institute  
"A Fibrous Polymer for the Delivery of Contraceptive Steroids to the Female Reproductive Tract"

Funding Requested: \$66,000                      Length: One Year

Originally funded by PARFR, SRI has demonstrated the feasibility of a fibrous system (nonbiodegradable polyethylene fibers) loaded with progestational agents that can provide constant low level release into the female reproductive tract over extended periods of time. This system has been studied both in vitro and in vivo, using female baboons at the University of Alabama. During the remaining three months on the present subcontract, Dr. Lewis intends to improve the technical aspects of fiber spinning containing even higher loadings of progesterone. Dr. Lewis seeks continuing support to optimize the nonbiodegradable fibrous system in order to produce fibers capable of even greater and more controlled release rates and mechanical strengths. The principal investigator is convinced that at the end of these next twelve months, these nonbiodegradable fibers containing steroids will be at the stage of development for contraceptive application. The methods that they are considering are an active IUD tail, the polymer totally as an IUD, or an intravasal device. SRI has also spun a biodegradable polymer. A proposal on this will be submitted for the December SAC

56

A. EXTENSION PROPOSAL REVIEW (continued)

4. PARFR-104N -- Danny H. Lewis (continued)

Meeting. The comments of the Committee were to involve a clinician with this project during the next twelve months so that the contraceptive application can be planned toward a specific endpoint. The SAC Committee voted to approve this project.

B. FORMAL PROPOSAL REVIEW

1. Anita P. Hoffer, Ph.D., Harvard Medical School  
"Morphological Studies on the Cytotoxic Effects of Gossypol in the Male Rat"

Funding Requested: \$96,027                      Length: Two Years

Discussion ensued relating to the choice of animals: rats versus rabbits and/or primates. There are several recent studies which cast some doubt on the efficacy and toxicology of gossypol. Accordingly, a one-day mini workshop, on gossypol, was suggested. This mini-workshop, which would number about 25 persons, who are currently involved in looking at gossypol, will be scheduled for Tuesday, March 11, 1980, after the SAC Meeting, and prior to the Andrology Meeting which is on Male Contraception at the Palmer House in Chicago. The SAC voted not to approve this project until further clarifications evolved at the Workshop.

2. Lourens J.D. Zaneveld, D.V.M., Ph.D., University of Illinois at the Medical Center  
"Development of Sperm Enzyme Inhibitors as Vaginal Contraceptives"

Funding Requested: 1st Yr. - \$65,233; 2nd Yr. - \$65,883

In a previously supported PARFR project in 1974-75, Dr. Zaneveld demonstrated the effectiveness of certain sperm enzyme inhibitors. Unfortunately, the potential toxicity of some of the compounds detracted from their potential of clinical usage. In this proposal Dr. Zaneveld clearly indicates the need for better vaginal preparations for sperm inhibition and he proposes to test already approved FDA compounds. This proposal was approved by the SAC with the recommendation to concentrate on compounds that have the ability to inhibit hyaluronidase.

57

B. FORMAL PROPOSAL REVIEW (continued)

3. R.R. Mehta, M.Sc., Ph.D., Northwestern University  
"Evaluation of A-nor Steroids as Potential Once-A-Month  
Contraceptive Agents"

Funding Requested: \$109,362                      Length: Two Years

Dr. Mehta, an associate of Dr. Chatterton, transferred to Northwestern University with Dr. Chatterton on September 1, 1979. In this study, she proposes to study two A-nor steroids, anordrin and dinordrin 1, as potential systemic contraceptives by buccal route in the rat with a final objective of exploring their potential as systemic contraceptives on a once-a-month basis in the human. This project was approved with the recommendation that Dr. Mehta should be urged to move quickly from the rat to other animals. Dr. Messer also suggested that she consult with Dr. Helmuth Vorherr at the University of New Mexico in Albuquerque regarding abortifacient studies in rats. In the long-term, Dr. Scrimshaw suggested that the timing of administration be such that women would remember to take it, in other words, a once-a-month pill, would be easiest to remember if it were administered on the first day of the menstrual period.

4. Dr. Octavio Peralta, Centro Nacional de la Familia (CENFA),  
Santiago, Chile  
"Comparative Clinical Trial of Vaginal Spermicides in the  
Postpartum Period"

Funding Requested: \$32,940                      Length: 18 Months

Dr. Peralta proposes to determine the safety, effectiveness, acceptability and influence on breast feeding of vaginal spermicidal agents as compared to the Copper-T IUD. SAC voted not to approve this project in that the study design was inappropriate and the objectives of the study were unclear.

5. Lee R. Beck, Ph.D., University of Alabama, Birmingham  
"Proposal to Test the Abortifacient Potential of CI and CII,  
1 Beta-OH Androstane Derivatives, in the Baboon"

Funding Requested: \$21,024                      Length: One Year

This proposal is PARFR-initiated in that PARFR became aware that Schering has been assigned a recent U.S. patent for "novel agents for inducing abortion." Schering postulates that the mechanism of action of the drug is a uterine epithelium detaching phenomena. Dr. Zatuchni suggested that Dr. Beck determine if Schering were interested in studying the potential of these compounds in the baboon model. This proposal seeks to evaluate the potential utility of two compounds, CI and CII, which are hydroxylated androstane derivatives, by testing the antifertility and abortifacient potential of these compounds in the baboon and attempt to define the mechanism of drug action. The SAC recommended that this project be approved for funding.

B. FORMAL PROPOSAL REVIEW (continued)

6. Howard J. Tatum, M.D., Ph.D., The Population Council, Inc.  
"Use-effectiveness of the Nova T Post Partum and the TCU  
380Ag When Inserted During the Immediate Post-Placental  
Period of the Puerperium"

Funding Requested: \$102,541                      Length: Three Years

Dr. Tatum proposes to enroll 100 patients for each type of IUD at five collaborating centers in the Dominican Republic, Brazil, Colombia, Philippines, Sweden and Thailand. The SAC approved this project but AID questioned the number of centers and the required amount of patients. PARFR staff will obtain a biostatistical consultation regarding the statistical significance of the anticipated results.

C. INFORMAL PROPOSAL REVIEW

1. S.K. Dey, Ph.D., University of Kansas  
"Investigation of Non-Steroidal Agents to Terminate Early  
Pregnancy"

Funding Requested: 1st Yr. - \$26,960; 2nd Yr. - \$29,311  
3rd Yr. - \$31,807

Dr. Dey seeks support from PARFR to study various aspects of histamine action in rabbits and mice. The investigators believe that the use of certain non-steroidal agents can effectively interfere with the process of implantation, thereby resulting in a method of luteal phase contraception. SAC voted to request a formal proposal, and outlined their concerns with choice of animal and other protocol questions.

2. SAC voted not to request a formal proposal for the following two projects:

- a. Taneaki Oikawa, Ph.D., Yamagata University, Japan  
"Immunobiochemical Characterization of the Male Reproductive  
Tissue Specific Antigen(s) in the Golden Hamster"

"Funding Requested: 1st Yr. - \$18,700; 2nd Yr. - \$13,300

- b. Dr. M.S. Rao and Prof. B.C. Bapna, Postgraduate Institute of  
Medical Education and Research, Chandigarh, India  
"The Use of a Combination of Testosterone Enanthate +  
DMPA/DANAZOL For Temporary Male Contraception"

Funding Requested: 1st Yr. - \$16,852.50; 2nd Yr. - \$17,692.50;  
3rd Yr. - \$19,635

D. PILOT STUDY REVIEW

1. Vladimir Petrow, Ph.D., Duke University Medical Center  
"1-Hydroxyestra-1,3,5(10)-Trien-17B-OLS and Congeners  
As Contragestative Agents"

Funding Requested: \$7,500                      Length: One Year

In a sense, this proposed pilot study is a companion to the studies proposed by Dr. Beck on the two compounds patented by Schering. The compounds will be screened for contragestational and uterotropic activity, with active compounds additionally screened for their ability to suppress rat uterine decidual response. Should the results be positive, Dr. Petrow would then submit a formal proposal for extended research. The SAC voted to approve this pilot study project.

2. John B. Josimovich, M.D., New Jersey Medical School  
"Prospective Study of Hyperprolactinemia and Its Relation  
To Oral Contraceptive Use"

Funding Requested: \$218,051                      Length: Five Years

This pilot study request was not approved for funding in that this current area of research is being supported by NIH, and the study does not fall within PARFR objectives.

E. TECHNICAL REPORTS

The following technical reports were submitted in the Agenda for SAC information and discussion:

1. PARFR-79N -- C. Irving Meeker, M.D., Maine Medical Center  
"A Method for Reversible Sterilization in the Female"
2. PARFR-83N -- Lee R. Beck, Ph.D., University of Alabama in  
Birmingham  
"Studies to Test an Injectable Delivery System for the  
Sustained Release of Norethisterone"
3. PARFR-86N -- Robert S. Neuwirth, M.D., The St. Luke's Institute  
for Health Sciences  
"Phase I, Clinical Trial of Fallopian Tube Closure Using  
Methylcyanoacrylate (MCA) Tissue Adhesive Delivered Through  
The Single-Application Fertility Regulation (FEMCEPT) Device"

Dr. Richart reported on the progress of the MCA FEMCEPT study. There are five clinical centers: two in Salvador, one in Germany, one in Korea, and one in Sweden (which is not PARFR supported). In October, Dr. Ruben Apelo, Philippines, will start. The current bilateral closure rate is in the vicinity of 80% with a single injection of 0.6 ml. Some of the failures have been the result of applicator failure. A meeting of the investigators involved in the study is planned for the February, 1980 Mexico Workshop.

E. TECHNICAL REPORTS (continued)

4. PARFR-89N -- Harry P. Gregor, Ph.D., Columbia University  
"Fallopian Tube Cauterization and Closure by Silver  
Acetate-Alginate Formulations"

The investigators are trying to locate Langoor monkeys in India as the primate model for testing the transcervical application of the drug. Unfortunately, PARFR is unable to directly support research in India. Dr. Richart is currently trying to locate an interested investigator with access to Cebus monkeys (Brazil) which have the same straight cervix as the Langoors.

5. PARFR-90Np -- Joseph E. Davis, M.D., Planned Parenthood Federation of America  
"New Method for Obstructing the Vas Deferens by Direct Injection of Chemical Agents: A Non-Operative Technique of Male Sterilization"

Dr. Davis is attempting to follow-up the original 27 patients, 11 of whom are azoospermic after the first injection. Drs. Davis and Richart are evaluating the specimens of those that have been vasectomized from this group. In April, Dr. Davis went on T.V. following which he had 150 inquiries and 77 volunteer interviews. Under this new subcontract, Dr. Davis has performed 17 procedures, 9 of the volunteers are azoospermic, all within four weeks. Three patients still have high sperm counts. The others have gone down significantly and may become azoospermic.

6. PARFR-91N -- Donald L. Wise, Ph.D., Dynatech R/D Company  
"Preparation and Evaluation of Biodegradable Cylindrical Implants for Fertility Control"

Dr. Zatuchni has been in contact with Dr. Henry Gabelnick at NIH who is interested in obtaining these rods for toxicology testing. Dr. Vaitukaitis reported that at the end of March, she had visited with the investigators. She recommended that they obtain continuing consultation of a clinical nature.

7. PARFR-97K -- Hyun-Mo Kwak, M.D., Yonsei University College of Medicine  
"Research on Instillation Techniques for Pregnancy Termination in Korea"
8. PARFR-98M -- Ramon Aznar, M.D., Centro de Investigacion Sobre Fertilidad y Esterilidad (CIFE)  
"Norethisterone Microcapsule Injectable Contraceptive Study"

E. TEHCNICAL REPORTS (continued)

9. PARFR-100N -- Leonard J. Lerner, Ph.D., Jefferson Medical College of Thomas Jefferson University  
"Investigation of New Compounds to Terminate Pregnancy"
10. PARFR-102N -- Robert T. Chatterton, Ph.D., Northwestern University (9/1/79)  
"Fertility Regulation by Control of Progesterone Clearance"  

Dr. Chatterton reported that his move to Northwestern went well. His accomplishments to date have been: 1) characterization of antiprogestosterone anti-serum; 2) immunization of animals - sheep and rabbits; 3) serum levels of bound and unbound progesterone measured; 4) tested for presence of feedback stimulation; 5) anti-body encapsulation; and 6) in vitro testing of encapsulated anti-bodies.
11. PARFR-103N -- Alan P. Gray, Ph.D., IIT Research Institute  
"Microencapsulation of Progesterone Antibodies"
12. PARFR-106N -- Gary S. Berger, M.D., University of North Carolina at Chapel Hill  
"Effects of Tubal Sterilization on Menstruation: A Prospective Controlled Study"
13. PARFR-108N -- Louise B. Tyrer, M.D., Planned Parenthood Federation of America, Inc. (FINAL)  
"Study to Determine the Safety, Acceptability and Effectiveness of the Female Contraceptive Barrier Intra-Vaginal-Device (IVD)"  

This subcontract terminated July 31, 1979 and the report submitted in this Agenda is the final report. The termination was requested by the principal investigator in that PPFA was unable to enroll sufficient patients for the study. PARFR plans to find other groups for the clinical trials of the IVD.
14. PARFR-110 -- Danny H. Lewis, Ph.D., Southern Research Institute  
"Optimization of an Injectable Microcapsule Formulation for the 90-Day Delivery of Norethisterone"
15. PARFR-P15 -- Sidney Shulman, Ph.D., New York Medical College  
"Isolation of Effective Sperm Antigen for Use in Contraceptive Immunization"
16. PARFR-P17 -- Matthew Freund, Ph.D., Southern Illinois University  
"Development and Testing of a New Intravaginal Contraceptive Method and Device (IVCD)"
17. PARFR-P19 -- John C. Slocumb, M.D., University of New Mexico  
"Identification and Evaluation of Herbs Used by Native Healers to Affect Fertility"

62

I. ADMINISTRATIVE

A. PARFR is operating under a new prime contract, AID/DSPE-C-0035, effective 7/1/79 through 6/30/81. Active subcontracts that were administratively negotiated prior to June 30, 1979 will continue to receive support to 6/30/80, utilizing funds from PARFR's old contract, AID/CSD-3608.

B. Update from June 18, 1979 SAC Meeting:

1. Pilot Study

a. PARFR-P52 -- Jose Perea-Sasiain, M.D., Corporacion Centro Regional de Poblacion (CCRP), Bogota, Colombia  
"Effect of Gossypol on Pregnancy"

Subcontract fully executed.

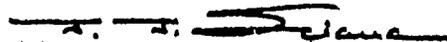
V. MISCELLANEOUS

A. Dr. Gerald Zatuchni reported on PARFR's 1980 Workshop "Research Frontiers in Fertility Regulation," February 11-14, 1980 at Hotel El Presidente Chapultepec in Mexico City, Mexico. He distributed the final program.

B. The SAC was provided with: "The Agreement Between The Government of the United States of America and The Government of the People's Republic of China on Cooperation in Science and Technology" for their information.

There being no further business, the meeting adjourned at 2:00 P.M.

Respectively submitted,



John J. Sciarra, M.D., Ph.D.  
Program Director, PARFR  
Chairman, Scientific Advisory Committee



Diane H. Krier, M.B.A.  
Director of Administration, PARFR

PARFR SCIENTIFIC ADVISORY COMMITTEE

MEETING XXXI

O'HARE HILTON  
Chicago, Illinois  
December 3, 1979

VOTING SAC MEMBERS PRESENT

John J. Sciarra, M.D., Ph.D.  
Nancy J. Alexander, Ph.D.  
Robert T. Chatterton, Ph.D.  
Joseph E. Davis, M.D.  
Edward C. Mather, D.V.M., Ph.D.  
Kamran S. Moghissi, M.D.  
Carl J. Pauerstein, M.D.  
Ralph M. Richart, M.D.  
Susan C.M. Scrimshaw, Ph.D.  
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A. Albert Yuzpe, M.D.

PARFR STAFF PRESENT

Elizabeth B. Connell, M.D.  
Diane H. Krier, M.B.A.  
Aquiles J. Sobrero, M.D.  
Gerald I. Zatuschni, M.D., M.Sc.

U.S.A.I.D. MEMBER PRESENT

Miriam H. Labbok, M.D., M.P.H.

VOTING SAC MEMBERS ABSENT

William Droegemueller, M.D.  
Robert H. Messer, M.D.

CONSULTANT PRESENT

Alfredo Goldsmith, M.D., M.P.H.

The thirty-first meeting of PARFR's Scientific Advisory Committee convened on Monday, December 3, 1979 at 8:00 A.M. at the O'Hare Hilton, Chicago, Illinois. Dr. John J. Sciarra presided as Chairman. Minutes of the September 5, 1979 meeting were approved with no voiced corrections.

I. ANNOUNCEMENTS

- A. Dr. Sciarra announced that Dr. William Droegemueller and Dr. Robert Messer are rotating off PARFR's SAC Committee as of this meeting. Dr. Sciarra has sent each a note of thanks and appreciation for their long services to PARFR.
- B. Dr. Sciarra introduced Dr. Carl Pauerstein, Professor and Chairman, Department of Obstetrics and Gynecology, University of Texas Health Science Center at San Antonio. Dr. Pauerstein's appointment to the SAC Committee is for December, 1979, through December, 1982.
- C. Ms. Krier distributed a memo to all SAC members which reiterates Northwestern University's travel reimbursement policy. Original receipts, documenting actual expenses, must be submitted for reimbursement.
- D. Dr. Sciarra introduced Dr. Alfredo Goldsmith who will be joining PARFR's staff early in 1980.
- E. Scheduled meeting dates for PARFR's SAC are:  
March 10, 1980 (Monday) -- Palmer House, Chicago, Illinois  
June 22, 1980 (Sunday) -- New York Statler Hilton, New York  
September 7, 1980 (Sunday) -- Washington, D. C.  
December 8, 1980 (Monday) -- Chicago, Illinois

II. NEW BUSINESSA. FORMAL PROPOSAL REVIEW1. S. K. Dey, Ph.D., University of Kansas Medical

"Investigation of Non-Steroidal Agents to Terminate Early Pregnancy"

Funding Requested: \$115,392      Length of Project: Three Years

This formal proposal was generated following review of the informal proposal at the September 5, 1979 SAC meeting. After a preliminary review of the formal proposal, Dr. Connell contacted Dr. Dey and asked him to append the proposal by addressing the four questions that were raised at the previous review. The four points addressed were 1) the reasons for the choice of rabbits and mice as test animals; 2) justification for doing the in vitro experiments; 3) considerations regarding prolactin in the presence of antihistamine usage; and 4) the question as to why women taking antihistamines are not infertile. His reply was attached to the proposal.

The principal investigator seeks support for three years to determine in rats and mice the mechanisms of action related to the process of implantation, specifically focused on the role of histamine, its receptors, and prostaglandin synthesis. The protocol as presented is basic research. The staff felt that the only portion of the study that would be of interest to PARFR are the experiments to study the effects of histamine, histamine agonist and inhibitors of HDC, on embryo development and blastocyst implantation in rabbits and mice. There was considerable discussion involving the appropriateness of the chosen animal model, the contents of the experimental design, whether this approach would prove useful in the human female, and whether the secondary effects might rule out clinical usage.

The committee voted not to approve this project.

2. John C. Slocumb, M.D., University of New Mexico

"Identification and Evaluation of Herbs Used by Native Healers to Affect Fertility"

Funding Requested: \$68,005      Length of Project: One Year

Dr. Zatuchni reported that with the assistance of PARFR Pilot funding, (PARFR P-19), the principal investigator and his associates have been able to develop working relationships with several agencies in New Mexico, a number of herbalists and a few rural health clinics. They have identified a group of women who use various herbs as abortifacients and/or as contraceptives. They have also been able to locate and collect sufficiently large quantities of the various herbs for further chemical and biological investigations.

In this formal proposal the investigators propose to evaluate the clinical effects of various herbs. They expect to identify 25 women who use the herbs as menstrual inducers and/or abortifacients, and 25 women who use herbs as contraceptives. These women will have a complete medical history and physical examination. Baseline blood tests

65

II. NEW BUSINESSA. FORMAL PROPSOAL REVIEW (continued)2. John C. Slocumb, M.D., continued

will be obtained. Following herb self-use, pertinent hormonal determinations will be made and suitable follow-up obtained.

Another part of the proposal is the biochemical and pharmacologic evaluation of lithosperma. Animal studies are proposed that will determine the potential of this natural herb as a luteolytic agent. During the discussion, the committee stated that clinical efficacy has to be demonstrated first. If demonstrated, then the biochemical and pharmacologic evaluation should be performed. It was also recommended that the title be changed to identify "lithospermum" rather than "herbs".

It was decided that Drs. Chatterton and Scrimshaw would be scheduled for a site visit with Dr. Slocumb and staff to rework two separate proposals. Their reports will be discussed at the March 10, 1980 SAC meeting.

3. Gary S. Berger, M.D., University of North Carolina at Chapel Hill

"The Effects of Intrauterine Devices and Oral Contraceptive Pills on Subsequent Reproductive Health and Fertility"

Funding Requested: \$49,353      Length of Project: One Year

Dr. Berger, under subcontract PARFR 106N, has previously utilized a unique data source, the Menstruation and Reproductive History Program, to look at the effects of tubal sterilization on menstruation. The current proposal is aimed at evaluating two different sets of information utilizing the same data. The first of these is to look at the possible effects of the use of intrauterine devices and oral contraceptives on subsequent menstrual patterns. The second is the evaluation of these contraceptive techniques on future fertility patterns and/or pregnancy outcomes.

It was pointed out that NICHD has recently sent out an RFP dealing with this very question. The consensus of SAC was that it would not be possible to collect sufficient data from this data base from which to draw meaningful conclusions; the number of patients are too small and the follow-up is too low.

It was recommended to PARFR staff that we obtain preliminary print-outs of the computer data base to look at the possibility of additional utilization of this information, inasmuch as it has been updated under the prior PARFR subcontract.

4. Matthew Freund, Ph.D., Southern Illinois University

"Development and Testing of a New Intravaginal Contraceptive Method and Device (ICMD)"

Funding Requested: \$213,678      Length of Project: Three Years

This proposal is an out-growth of a PARFR-supported pilot study (PARFR-P17) which attempted to determine the feasibility of a spermicidal-releasing solid disc-shaped device that would dissolve to a liquid

66

II. NEW BUSINESSA. FORMAL PROPOSAL REVIEW (continued)4. Matthew Freund, Ph.D. continued -

state over a period of 6 to 8 hours. Dr. Freund has been successful in working with Polysciences in the accomplishment of producing sample batches of polymers having the required physical chemical properties of an ICMD. Work has begun utilizing Dextrans as the device materials in the samples which also include spermicide - 1% nonoxynol-9. The samples, when dissolved in saline, reach spermicide levels within less than one minute. The samples have also kept their stability at room temperature over a 6-week test period and maintained their mechanical properties.

Dr. Freund seeks PARFR support for a three year period to bring this initial study to clinical testing. The staff proposes that the protocol is much too long in developmental time and can be shortened to no more than 24 months to bring the development to a clinical testing situation. It was recommended that Dr. Freund be advised to rework the protocol and contact someone such as Dr. William Masters to develop a clinical testing protocol. He will be advised to resubmit this proposal to PARFR in time for the review at the March 10, 1980 SAC meeting.

5. Gupi N. Gupta, Ph.D., Cornell University Medical College

"Studies on Bioabsorbable Subdermal Contraceptive Pellet Implants"

Funding Requested: \$116,186      Length of Project: One Year

Dr. Zatuschni reported that the principal investigator seeks PARFR support for continuation of his work with long-acting injectable steroidal preparations, particularly fused pellets of NED and cholesterol. The P.I. has had previous NIH support for the basic developmental work in animal studies. Dr. Gupta considers the time appropriate to launch a Phase I clinical trial, which would be a pharmacologic-endocrine type of study.

The committee felt that Dr. Gupta should be advised to apply for an IND exemption from the FDA. Once such is obtained, the protocol should be developed for a Phase I clinical study of the pharmacodynamics and metabolism of a pellet made from cholesterol and levonorgestrel. It is planned that this 3-month system would be studied at Cornell University as well as one or two places outside the United States, perhaps by Dr. Croxatto in Chile and/or Dr. Coutinho in Brazil.

6. Richard L. Dunn, Ph.D., Southern Research Institute

"Biodegradable Fibers for the Controlled Release of Contraceptive Drugs"

Funding Requested: \$49,410      Length of Project: One Year

Dr. Connell reported that research done under Subcontract PARFR 104N<sub>1</sub> at SRI has demonstrated that fibers containing contraceptive agents can be formulated which will release these agents at constant rates. In this

67

II NEW BUSINESSA. FORMAL PROPOSAL REVIEW (continued)6. Richard L. Dunn, Ph.D. continued -

protocol, Dr. Dunn proposes to fabricate a fiber consisting of a central medicated core, in this case progesterone, and a casing made of various soluble polymers. The committee, after considerable discussion, voted to approve this project, but suggested a site visit to determine overlap, if any, with the present research program.

B. INFORMAL PROPOSAL REVIEW1. George R. Howe, Ph.D., University of Massachusetts

"Scrotal Implants as a Means of Reversible Sterilization in Male Rats"

Funding Requested: \$8,475                      Length of Project: One Year

Dr. Zatuchni reported that the investigator has constructed scrotal implants of silastic tubing containing either copper or steroids, placing them in the scrotal sacs of rats. Unfortunately 50% of the implants were lost during the first month due to manipulation of the incision by the animal. In those animals in which a skin clip was added to prevent loss of the implants, a high percentage of the males did not impregnate the females. The SAC committee voted not to request a formal proposal because of the unlikelihood of a useful contraceptive method based on this concept.

2. Richard E. Blackwell, Ph.D., M.D., University of Alabama in Birmingham

"Microencapsulation of a Luteinizing Hormone Releasing Factor (LRF) Analogue and Its Evaluation as a Long-Acting Injectable Contraceptive Agent"

Funding Requested: \$60,000                      Length of Project: One Year

This proposal seeks to determine the feasibility of microencapsulating LRF agonist in an erodible system similar to the chronomer developed by the Alza Corporation. The microencapsulation process will be developed by SRI. The LRF agonists preparation will be subcontracted to the Salk Institute. After the establishment of suitable release rates in vitro, the microencapsulated super-agonists will be injected into female baboons to determine in vivo release rates and effects on other hormones. This proposal calls for the development of both a three-month and six-month releasing system. The committee voted to request a formal proposal for inclusion in the March 10, 1980 SAC meeting agenda.

C. SITE VISIT REPORTS

1. PARFR 90Np -- Joseph E. Davis, M.D., Planned Parenthood Federation of America

"New Methods for Obstructing the Vas Deferens by Direct Injection of Chemical Agents: A Non-operative Technique of Male Sterilization."

Dr. Elizabeth Connell site visited Dr. Joseph Davis on November 28, 1979. Bilateral vas injection has been performed or attempted in 26 volunteers following screening, complete history, physical and appropriate laboratory tests. To date, 17 of the group are azoospermic, verified in most cases within 4 weeks of the injection. One patient has been reinjected and is now sterile. Two patients have had a decrease in sperm count, but have not returned for further semen analyses. In three cases there was a significant decrease in the number of sperm in the ejaculate but further tests have shown a return toward normal levels. In two instances sperm counts have not fallen. Reinjection or a vasectomy has been offered to those not becoming azoospermic. One patient exhibited a lowering but not to zero and has subsequently had a standard vasectomy.

The only complication to date is one episode of epididymitis. However, excoriation of the skin at the site of the injection occurred in those patients where there had been leakage of the chemical onto the skin. Dr. Davis has found that placing of jelly on the scrotum prior to injection has decreased the frequency of irritation. The clamp has been found to produce damage to the skin of the scrotum. Various ways to try to handle the problem were discussed, such as making minor adjustments in the tightness of the clamp.

It appears that the overall success rate must be improved. Perhaps two injections with the new device will be successful in producing sterility in a high percentage of cases. It appears that if motile sperm are still present at the end of 2 months, reinjection should be performed.

Dr. Davis is currently studying dogs with MCA and Silver Acetate Alginate as potential substitutes for formaldehyde which he is currently using.

2. PARFR 100N -- Leonard J. Lerner, Ph.D., Jefferson Medical College

"Investigation of New Compounds to Terminate Pregnancy"

Funding Level: \$109,384                      Subcontract Dates: 9/1/78 - 2/29/80

Site Visitors: Gerald I. Zatzchni, M.D., Robert T. Chatterton, Ph.D.

Date of Visit: November 29, 1979

Over thirty compounds have been studied for pregnancy termination activity in hamsters and rats. Dr. Lerner has been successful in narrowing his selection for further testing of two or three of the most promising compounds. He will have completed all his initial studies by the end of the contract. The future PARFR-supported activities will be dependent upon his December, '79 discussions with both LePetit Research Labs and Carlo Erba Pharmaceutical Company, both in Italy.

D. TECHNICAL REPORTS

PARFR-89N -- Harry P. Gregor, Ph.D., Columbia University

"Fallopian Tube Cauterization and Closure by Silver Acetate-Alginate Formulations"

Dr. Ralph Richart reported that Dr. Gregor has been successful in permanently scarring the fallopian tubes in rabbits and rhesus monkeys, using silver acetate-alginate formulations. However, the problem of utilizing the rhesus as an animal model is that the silver acetate-alginate has to be delivered retrograde through the fimbrial portion of the fallopian tube, due to the presence of a cervical calliculus. Dr. Richart has been attempting to arrange for Langoor monkeys in India. It was recommended to him that the cebus monkeys which have a straight cervix could be utilized due to the difficult situation of funding projects in India.

Dr. Connell offered to establish a contact in Brazil for cebus monkeys. Dr. Sobrero offered to contact Dr. Jorge Rosner during his coming trip to Argentina to secure cebus monkeys. Dr. Alexander also offered to contact Oregon Research Primate Center's Kenya affiliate for utilizing baboons.

PARFR-92N -- Deborah J. Anderson, Ph.D., Oregon Regional Primate Research Center

"Contraception by Induction of Mild Uterine Inflammation"

Dr. Nancy Alexander reported that Dr. Anderson's project terminates 12/31/79. Within the next 2 months, they will prepare and submit their final technical report to PARFR and discuss what they feel can be done with the data in terms of clinical trials.

PARFR-97N -- Theodore M. King, M.D., Ph.D., The Johns Hopkins University

"Research on Instillation Techniques for Pregnancy Termination in Korea"

As of October 1, 1979, 128 case summaries have been received from Korea and the results have been extracted and evaluated.

PARFR-107N -- Nancy J. Alexander, Ph.D., Oregon Regional Primate Research Center

"Is Sperm Antigen A Causative Agent for Atherosclerosis After Vasectomy"

Dr. Alexander reported that the background studies have been completed and that she is now ready to attempt to study localization of sperm antigens. Rabbits will be given an atherogenic diet and immunized under various regimes with sperm antigens. Anti-sperm antisera will be labeled with fluorescein. Tissue sections will be stained to evaluate localization of antigens.

D. TECHNICAL REPORTS (continued)

PARFR-P12 -- David H. Frisch, Ph.D., Massachusetts Institute of Technology  
 "Development of Microporous Materials for Thin Intravasal Implants"

PARFR-P16 -- Ernest W. Page, M.D.

"Investigations of a New Vaginal Barrier Contraceptive"

Eighteen of the proposed 40 feasibility studies and eleven of the proposed post-coital studies have been completed during the nine and one-half months since the study began. All eleven of the post-coital studies performed at the time of ovulation had been negative. Thus far this suggests a high degree of theoretical effectiveness of the sponge barrier spermicide combination. A no-cost extension to June 30, 1980 was executed in order to provide the investigator with more time due to the slowness in enrollment of patients.

PARFR-P20 -- Joseph W. Goldzieher, M.D., Southwest Foundation for Research and Education

"Effect of the Estrogen-Bromocryptine Regimen in the Post-Implantation Phase in Baboons"

The results of this pilot study have demonstrated a luteolytic effect of estrogen and CB-154 administered sequentially in the non-pregnant baboon. With a lower dosage of estrogen, a depression of progesterone was seen in pregnant baboons, which rebounded after the cessation of treatment, with a higher estrogen dosage in the unequivocal abortifacient effect as seen in pregnant baboons. None of these treatments were associated with any adverse reactions.

PARFR-P21 -- Milos Chvapil, M.D., Ph.D., The University of Arizona

"Development and Preliminary Human Testing of the Retention of a New Intracervical Device (ICD)"

Two manufacturers have been contacted to collaborate on the development of the ICD. Projections: 1) During November, non-medicated ICD prototypes will be inserted into three to five patients, with scheduled hysterectomies, to observe the acceptability of the device expulsion, tissue reaction to the insert, and personal complaints. 2) Dr. Chvapil will continue studies on the release of progesterone from the membrane polymer. 3) In a close collaboration with Gortex, Inc., they will keep evaluating in laboratories and in clinical patients, new developmental prototypes.

11

### III. ADMINISTRATIVE

#### A. Fully executed subcontracts from September 5, 1979 SAC meeting:

##### 1. Extension Proposals

- a. PARFR-205(95N) -- Lourens J.D. Zaneveld, D.V.M., Ph.D.,  
The University of Illinois at the Medical Center  
"Development and Evaluation of a Reversible Vas Deferens  
Blocking Device"  
10/1/79 - 9/30/80 -- Budget - \$45,443

For the first year of this study, a subcontract will not be written with the University of Cairo. Dr. Gamal Beheiry will be enrolled as a PARFR consultant for his collaboration on this project. It is proposed that Dr. Beheiry will assist Dr. Zaveveld with the surgery the week before the Mexico Workshop.

- b. PARFR-206SRI -- Danny H. Lewis, Ph.D., Southern Research Institute  
"A Fibrous Polymer for the Delivery of Contraceptive Steroids  
to the Female Reproductive Tract"  
11/1/79 - 10/31/80 -- Budget - \$66,000

- PARFR-206UAB -- Lee R. Beck, Ph.D., University of Alabama in  
Birmingham  
"Baboon Studies to Evaluate Non-Biodegradable Medicated  
Fibers for the controlled-release of Contraceptive Steroids  
Related to Research Supported under PARFR-206SRI"  
11/1/79 - 10/31/80 -- Budget - \$18,865

##### 2. FORMAL PROPOSALS

- a. PARFR-204 -- Lourens J.D. Zaneveld, D.V.M., Ph.D.,  
The University of Illinois at the Medical Center  
"Development of Sperm Enzyme Inhibitors as Vaginal Contra-  
ceptives"  
10/1/79 - 6/30/81 -- Budget - \$116,431
- b. PARFR-209NMH and PARFR-209NU -- R.R. Mehta, M.Sc., Ph.D.  
Northwestern University  
"Evaluation of A-nor Steroids as Potential Once-A-Month  
Contraceptive Agents"

Two subcontracts were written on this project to simplify the financial reporting for the Hospital and the University.

PARFR-209NMH dates - 1/1/80 - 12/31/80 -- Budget - \$24,288

PARFR-209NU dates - 1/1/80 - 12/31/80 -- Budget - \$29,361

2. Formal Proposals continued

- c. PARFR-208 -- Lee R. Beck, Ph.D., University of Alabama in Birmingham

"Testing the Abortifacient Potential of CI and CII, 1 Beta-Oh Androstane Derivatives, in the Baboon"

11/1/79 - 10/31/80 -- Budget - \$19,406

- d. Howard J. Tatum, M.D., Ph.D., The Population Council, Inc.

"Use-effectiveness of the Nova T Post Partum and the TCU 380Ag When Inserted During the Immediate Post-Placental Period of the Puerperium"

This project is awaiting completion and approval of the Human Subjects requirements. Five subcontracts will be written. The Population Council will be subcontracted with for the administrative and coordination of four clinical centers. Each of these clinical centers will be subcontracted individually.

3. PILOT STUDY

- a. PARFR-P55 -- Vladimir Petrow, Ph.D., Duke University Medical Center

"1-Hydroxyestra-1,3,5(10)-TRIEN-17B-OLS and Congeners as Contraceptive Agents"

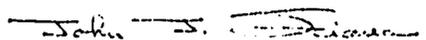
11/1/79 - 10/31/80 -- Budget - \$7,590

IV. MISCELLANEOUS

- A. Dr. Gerald Zatuchni reported on PARFR's 1980 Workshop: "Research Frontiers in Fertility Regulation," February 11-14, 1980 at Hotel El Presidente Chapultepec, in Mexico City. The final program was distributed.

There being no further business, the meeting adjourned at 2:30 P.M.

Respectfully submitted



John J. Sciarra, M.D., Ph.D.  
Program Director, PARFR  
Chairman, Scientific Advisory Committee



Diane H. Krier, M.B.A.  
Director of Administration