

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES  
PUBLIC HEALTH SERVICE

NATIONAL INSTITUTES OF HEALTH  
NATIONAL CENTER FOR RESEARCH RESOURCES  
BETHESDA, MARYLAND 20892

INSTRUCTIONS AND FORMATS FOR PREPARING THE  
ANNUAL PROGRESS REPORT  
of the  
BIOMEDICAL TECHNOLOGY RESOURCE CENTERS

Revised June, 1998

NATIONAL CENTER FOR RESEARCH RESOURCES  
BIOMEDICAL TECHNOLOGY AREA

INSTRUCTIONS FOR PREPARING THE  
ANNUAL PROGRESS REPORT

| <u>TABLE OF CONTENTS</u>                           | <u>PAGE</u>         |                |
|--|---------------------|----------------|
|  | <u>INSTRUCTIONS</u> | <u>FORMATS</u> |
| General Instructions .....                         | 3                   | None           |
| Part I - Progress Report Cover Page .....          | 5                   | 12             |
| Part II - Narrative Description .....              | 5                   | None           |
| A. Summary of Research Progress .....              | 5                   | None           |
| B. Highlights .....                                | 5                   | None           |
| Part III - Description of Program Activities ..... | 6                   | None           |
| A. Scientific Subprojects .....                    | 6                   | 13             |
| B. Resource Summary .....                          | 8                   | 14             |
| C. Geographical Data .....                         | 9                   | None           |
| D. Sources of Investigator Support .....           | 9                   | None           |
| E. Books, Papers, and Abstracts .....              | 10                  | 15             |
| F. Advisory Committee Report .....                 | 11                  | None           |
| Part IV - Administrative Data .....                | 11                  | None           |
| A. Allocation of Resource Access .....             | 11                  | None           |
| B. Dissemination of Information .....              | 11                  | None           |
| C. Training .....                                  | 11                  | None           |
| D. Suggestions or Criticisms .....                 | 11                  | None           |
| APPENDICES:  |                     |                |
| Annual Progress Report Checklist                   |                     |                |
| Sample Scientific Subproject Form                  |                     |                |
| Scientific AXIS Codes                              |                     |                |

DEPARTMENT OF HEALTH AND HUMAN SERVICES  
PUBLIC HEALTH SERVICE  
NATIONAL INSTITUTES OF HEALTH

NATIONAL CENTER FOR RESEARCH RESOURCES  
BIOMEDICAL TECHNOLOGY AREA

INSTRUCTIONS FOR PREPARATION OF  
ANNUAL PROGRESS REPORT

An Annual Progress Report for each Biomedical Technology Area (BTA) grant is due 60 days prior to the end of each award year. The reporting period is the award budget period specified on the "Notice of Award." If information for the entire period is not available, provide an estimate. The BTA uses the information provided in the progress report to justify its annual Congressional budget request for continued funding for the BTA, to administer program operations, and to fulfill requests for information from governmental agencies, Congress, and the public.

The information provided should be consistent with the institution's financial records for the period covered by this report. The Principal Investigator should collaborate with the appropriate business and financial officers of the institution in preparing the Annual Progress Report.

The Principal Investigator is responsible for the accuracy and completeness of the report and she/he MUST SIGN THE COVER PAGE of the Annual Progress Report.

EACH page must contain the complete Public Health Service (PHS) grant number (P41RR\_\_\_\_-\_\_) in the upper right corner. The responses to each item should be numbered and furnished in the sequence and format shown in the following instructions. Pages are to be numbered in sequential order; all information should be typed.

MAILING INSTRUCTIONS: Please complete this report and mail the original and 2 hard copies, as well as a 32 inch diskette in either Word or ASCII format to:

NATIONAL INSTITUTES OF HEALTH  
NATIONAL CENTER FOR RESEARCH RESOURCES  
OFFICE OF GRANTS AND CONTRACTS MANAGEMENT  
ONE ROCKLEDGE CENTER, ROOM 6086  
6705 ROCKLEDGE DRIVE, MSC 7965  
BETHESDA, MARYLAND 20892

To avoid difficulty we sometimes encounter in machine processing Word documents with tables, we ask that you avoid using the Table feature in Word.

Please mail a fourth copy together with significant reprints and patent or copyright descriptions to the Health Scientist Administrator assigned to your grant at:

NATIONAL INSTITUTES OF HEALTH  
NATIONAL CENTER FOR RESEARCH RESOURCES  
BIOMEDICAL TECHNOLOGY AREA  
ONE ROCKLEDGE CENTER, ROOM 6030  
6705 ROCKLEDGE DRIVE, MSC 7965  
BETHESDA, MARYLAND 20892

## Part I. PROGRESS REPORT COVER PAGE

The format for the cover page is shown on page 12. Use it as the first page of the Progress Report.

## Part II. NARRATIVE DESCRIPTION

### II.A. SUMMARY OF RESEARCH PROGRESS

Write your summary of research progress in language readily understandable to a well-informed scientist who may not be a specialist in your field. Include a general description of resource operation which provides information on the overall objectives of the resource, summarizes progress in technological research and development, collaborative research and service, and technology dissemination and training activities. Address changes in research resource direction and their significance, including problems encountered or anticipated.

Describe the impact of this resource on biomedical research and research training at the institution and on the community that the resource serves. Institutional benefits might include special courses organized, meetings, and attraction of student and faculty participation. Scientific community benefits might include software released, workshops organized, collaborations established, service performed, technology developed, and technology disseminated through patents, publications, and personnel trained.

### II.B. HIGHLIGHTS

Summarize at least three, and preferably more, of the resource's research projects (referred to hereafter as scientific subprojects or subprojects) that illustrate the value and effectiveness of this resource. Describe accomplishments in terms of their contributions to new knowledge and their significance to actual or potential improvements of health. These highlights serve many purposes. National Center for Research Resources (NCRR) staff use them to illustrate research accomplishments to administrative and Congressional officials during budget formulation. They also serve as the basis for press releases and as examples of the kinds of research supported, or specific biomedical problems being addressed.

Each highlight should be about one page long and should be intelligible to the informed lay person. Include all of the elements of a good report: who, what, when, where, and why. An extended abstract format is suitable; include the title, authors, an introduction, methods, results, and discussion. Furthermore, each highlight should be accompanied by a reference to a significant paper/ patent/ copyright published that year or accepted/submitted for publication.

Part III. DESCRIPTION OF PROGRAM ACTIVITIES

III.A. SCIENTIFIC SUBPROJECTS

The format for scientific subprojects is shown on page 13. Follow this format to generate a report for EVERY scientific subproject carried out in the resource center during the report period. Type the complete grant number and report period in the upper right hand corner of each form. The numbers in parentheses under the heading (**LENGTH:**) represent the maximum number of CHARACTERS available in NCRR's corresponding database field for each item and may not be exceeded.

Since requests for information addressed to NCRR are usually specified in categorical terms (e.g. research on cardiovascular diseases, women's health issues), a common scientific classification coding system has been established for all programs in the NCRR to respond to these needs. A list of the codes is provided in the appendix. This coding system does not comprehensively cover all areas of science. Projects for which the codes are not well suited should be adequately described with keywords and in the abstract.

Information supplied about the subprojects is used when reporting the program's contribution to specific areas of scientific research. Please use the format with the ITEM titles entered exactly as they are shown in the example in the appendix and avoid the use of the Table feature in Word to assist us with the machine processing of these reports.

| <u>ITEM:</u> | <u>EXPLANATION:</u>   |
|--------------|---|
| 1. BTA UNIT: | Use the letter T, C, S or D to identify the subproject as being TECHNOLOGICAL RESEARCH AND DEVELOPMENT (T), COLLABORATIVE RESEARCH (C), SERVICE (S), or DISSEMINATION AND TRAINING (D). |
| 2. TITLE:    | Use descriptive titles of <u>80</u> or fewer characters. Avoid the use of a, an, the, study of, investigation of, role of, evaluation of, research on/in, at the beginnings of titles.  |

KEYWORDS:

Keywords should be used to identify focal aspects of the research (including areas not apparent from the title). Keywords should help cover inadequacies in the science AXIS codes (item 3, below). Keywords may be the names of specific diseases, disorders, methods, processes, phenomena, test organisms, or other appropriate topics.

3. Science AXIS Codes  
(AXIS I: and AXIS II:)

Use ONLY the NCRR Scientific Classification in the Appendix of these instructions for ALL sub-projects. Assign AT LEAST one code, but no more than six codes, for EACH AXIS. Space between multiple codes. Be as specific as possible when using codes with sub-codes, e.g., protein synthesis should receive 74H, not 74 alone.

4. Investigator Information (note please follow the example in appendix; numbers appended to the headings INVEST1:, DEGREE1:, DEPT1:... aid in machine processing of this information).

(a) Investigator(s)  
(INVEST1:, INVEST2:,  
ETC)

List all investigators involved with the scientific subproject. The scientist in charge of the subproject should be listed first (Full Name: Last, First, Middle Initial), then co-investigators. Be sure to include the Principal Investigator of any supporting grant. The maximum allowable number of names per subproject is 25.

(b) Degree(s)  
(DEGREE1:, DEGREE2:,  
Etc.)

List the academic degree(s) of EACH investigator.

(c) Department(s)  
(DEPT1:, DEPT2:,  
Etc.)

List the department(s) of EACH investigator.

(d) Non-Host Institution  
(NONHOST1:,  
NONHOST2:, Etc.)

List the institutions ONLY for those investigators from an institution other than the host institution. The host institution is the resource institution responsible for completing this annual report.

5. Percent BTA Dollars  
(% BTA \$:)  
This figure represents the percentage of the total BTA awarded dollars that was allocated to the individual subproject. Administrative and miscellaneous dollars should be prorated among the subprojects. When added together, the total of the percentages of all subprojects must equal 100%.
6. Percent BTA Dollars  
For AIDS  
(% BTA \$ FOR AIDS:)  
Same as in 5 for AIDS-related research. When added together, the total percentages of all subprojects must equal the total AIDS effort.
7. ABSTRACT:  
An abstract should accompany each subproject and not exceed 2,000 characters or about 300 words.

The most useful abstract has an informative title, an introduction to provide background and rationale for the work, methods for testing the hypothesis, results, and discussion to put the results in context, give them interpretation, and point a direction for further study. For technology development projects, a report oriented toward engineering standards, rather than scientific method, would be more appropriate, wherein the introduction would identify and state the importance of the technological problem, and the methods would present a rational, economical, and feasible approach to its solution. The information provided by an abstract represents a major resource for the BTA to answer frequent questions from other NIH administrators, public health officials, Congress, and the public.

### III.B. RESOURCE SUMMARY

The format for the resource summary is shown on page 14. Information provided in this table should be broken down by BTA unit: Technology Research and Development (TECH RES & DEVEL), Collaborative Research and Service (COLLAB RES & SERVICE), and Dissemination and Training (DISSEM & TRAINING). Under each unit heading, enter the appropriate numbers.

- | <u>ITEM:</u>               | <u>EXPLANATION:</u>  |
|----------------------------|--|
| 1. Number of Publications  | This should agree with the information provided in the listing of BOOKS/PAPERS/ABSTRACTS.  |
| 2. Number of Subprojects   | The number of subprojects specified must match the number of subproject reports.   |
| 3. Number of Investigators | The number of investigators must match the number reported in the subproject reports. Do not count an investigator more than once. |

4. Percent of BTA Funds Allocated Report the funding allocation in PERCENTAGES; they MUST add up to 100%. Prorate administrative and miscellaneous dollars to individual subprojects.
5. Service Fees Collected If fees were collected for the use of the resource, report totals of all such receipts here.
6. Other Funds Report all other funds directly supporting the resource on this line. Do not include funds reported under BTA funds allocated or service fees collected.

III.C. GEOGRAPHICAL DATA

List the number of investigators who used the resource by the state (use the Postal two-letter state abbreviation) or country of each investigator's institution. The number of investigators should agree with the number reported in the Resource Summary Table. Use the following headings:

|                         |                                |
|-------------------------|--------------------------------|
| <u>STATE OR COUNTRY</u> | <u>NUMBER OF INVESTIGATORS</u> |
|-------------------------|--------------------------------|

III.D. SOURCES OF INVESTIGATOR SUPPORT

Report information on all sources of support for all investigators who performed any of the supported research at the resource. Fill out a separate sheet for each of the three BTA units: Technology Research and Development, Collaborative Research and Service, and Dissemination and Training, and indicate the applicable unit at the top of each page. Use the following headings:

|                             |                             |             |               |
|-----------------------------|-----------------------------|-------------|---------------|
| <u>LAST NAME, FIRST, MI</u> | <u>NON-HOST INSTITUTION</u> | <u>TYPE</u> | <u>AGENCY</u> |
|-----------------------------|-----------------------------|-------------|---------------|

ITEM:

EXPLANATION:

1. LAST NAME, FIRST, MI In alphabetical order, list investigators (last name, first name, middle initial) who have research support and who participated in projects performed at the resource.
2. NON-HOST INSTITUTION List the investigators' institutions ONLY if they are from institutions other than the host institution.

3. Sources of Support Identify sources of financial support for each investigator. Provide the name of the Principal Investigator in parentheses. List support only once.

(a) TYPE of Support Use the appropriate abbreviation:  
FDN Foundations or Research  
Institute funds  
SCCF State, County, City funds  
PVAS Professional and Voluntary  
Associations or Societies funds  
IND Industry funds  
OTH Other funds  
FED Federal Agency funds

(b) Federal AGENCY For federal agencies, indicate the agency's abbreviation. For example:  
DOD Department of Defense  
DOE Department of Energy  
DVA Department of Veteran Affairs  
NASA National Aeronautics and Space  
Administration  
NIH National Institutes of Health  
NIST National Institute of Standards  
and Technology  
NSF National Science Foundation  
\_\_\_ Other federal agency (specify)

### III.E. BOOKS, PAPERS, AND ABSTRACTS

Follow the format on page 15. List all publications, that resulted from the reported year grant's support and/or from the use of the center's resources. Do not include publications resulting from work not related to this grant's support and/or actual use of the Center's resources. List separately books, paper and abstracts.

Fill out a separate form for each of the three units: Technology Research and Development (T), Collaborative Research and Service (C), and Dissemination and Training (D). Group ALL published reports together arranged alphabetically by author. Then, group ALL "in press" articles in the same order.

Enter the total numbers of books, papers, and abstracts that are published or in "press". Indicate by an asterisk those publications that met the obligation to acknowledge the resource's contribution.

### III. F. ADVISORY COMMITTEE REPORT.

A copy of the Advisory Committees Report should be included as part of the Annual Progress Report.

PART IV. ADMINISTRATIVE DATA

IV.A. ALLOCATION OF RESOURCE ACCESS (ADVISORY COMMITTEES)

Briefly describe the methods employed to allocate access to the resources supported by this grant. Describe the role of the Advisory Committee and any other external and/or internal groups that advise the principal investigator on the direction of the research, priorities, and requests from investigators for collaborative or service use of the resources. Provide copies of the minutes of any Advisory Committee meetings held during the funding period. If there were no meetings, explain why, and state what plans have been made to hold such a meeting. List the membership of each committee, using the following headings:

**COMMITTEE'S/GROUP'S NAME (If available)**

**Member's Name      Institution      Area of Expertise**

IV.B. DISSEMINATION OF INFORMATION

Briefly describe activities undertaken to disseminate the technological developments of the resource. Also describe ways by which the scientific community is made aware of the availability of the resource.

IV.C. TRAINING

Briefly describe training activities conducted during the reporting period.

IV.D. SUGGESTIONS OR CRITICISMS

Please provide suggestions, comments, and criticisms that you believe would affect the efficiency and effectiveness of the resource and/or the Biomedical Technology Area. Suggestions aimed at improving program or grant administration, and criticisms on inherent program limitations, neglected program opportunities, and additions or alternatives to the program's goals are invited.

DEPARTMENT OF HEALTH AND HUMAN SERVICES  
PUBLIC HEALTH SERVICE  
NATIONAL INSTITUTES OF HEALTH

NATIONAL CENTER FOR RESEARCH RESOURCES  
BIOMEDICAL TECHNOLOGY AREA

ANNUAL PROGRESS REPORT

1. PHS GRANT NUMBER: P41RR0xxxx-xxx
2. NAME OF RECIPIENT INSTITUTION:
3. HEALTH PROFESSIONAL SCHOOL (If applicable):
4. REPORTING PERIOD:
  - A. FROM (Month, Day, Year):
  - B. TO (Month, Day, Year):
5. PRINCIPAL INVESTIGATOR:
  - A. NAME:
  - B. TITLE:
  - C. SIGNATURE:
6. DATE SIGNED (Month, Day, Year):
7. TELEPHONE NUMBER (Include Area Code):
8. FACSIMILE NUMBER (Include Area Code):
9. ELECTRONIC MAIL ADDRESS:
10. Was Patent or Copyright awarded this grant year: Y/N
11. Total % effort related to AIDS research: --.--%

**SCIENTIFIC SUBPROJECT**

GRANT NUMBER: P41RRxxxx-xxx  
REPORT PD: (mm/dd/yy-mm/dd/yy)

**ITEM:      LENGTH:**

BTA UNIT:      (1)

TITLE:          (80)

KEYWORDS:

AXIS I:         (40)

AXIS II:        (40)

INVEST1:       (25)

DEGREE1:       (15)

DEPT1:          (20)

NONHOST1:      (25)

INVEST2:       (25)

DEGREE2:       (15)

DEPT2:          (20)

NONHOST2:      (25)

INVEST3:       (25)

DEGREE3:       (15)

DEPT3:          (20)

NONHOST3:      (25)

% BTA \$:

% BTA \$  
for AIDS:

ABSTRACT:

See Instructions, Part III.A., Pages 6-8

**RESOURCE SUMMARY**

GRANT NUMBER: P41RRxxxx-xxx  
REPORT PD: (mm/dd/yy-mm/dd/yy)

| TECH RES<br>& DEVEL<br>(T) | COLLAB RES<br>(C) | SERVICE<br>(S) | DISSEM &<br>TRAINING<br>(D) | TOTAL |
|----------------------------|-------------------|----------------|-----------------------------|-------|
|----------------------------|-------------------|----------------|-----------------------------|-------|

NUMBER OF  
PUBLICATIONS

NUMBER OF  
SUBPROJECTS

NUMBER OF  
INVESTIGATORS

|                                      |      |
|--------------------------------------|------|
| PERCENT OF<br>BTA FUNDS<br>ALLOCATED | 100% |
|--------------------------------------|------|

PERCENT OF  
BTA FUNDS  
ALLOCATED  
FOR AIDS

SERVICE FEES  
COLLECTED (\$)

OTHER FUNDS(\$)

See Instructions, Part III.B., Pages 8-9

**BOOKS/PAPERS/ABSTRACTS**

GRANT NUMBER: P41RRxxxx-xxx  
REPORT PD: (mm/dd/yy-mm/dd/yy)

BTA unit: (T, C, S, or D)

NUMBER PUBLISHED -

Books:            Papers:            Abstracts:

NUMBER IN PRESS -

Books:            Papers:            Abstracts:

**Books**

**Papers**

**Abstracts**

List Author(s), Title of Article, Journal, Volume, Number, Pages, Year Published, and asterisk for those that specifically acknowledged the contribution of the resource.

See Instructions, Part III.E., Page 10

## APPENDIX

### BIOMEDICAL TECHNOLOGY AREA ANNUAL PROGRESS REPORT CHECKLIST

The completed Annual Progress Report should contain all of the elements listed below, in the order shown. All of the formats are included in the progress report instructions along with explanations of what information is needed.

1. Cover Page
2. Summary of Research Progress (narrative)
3. Highlights (narrative)
4. Scientific Subproject Forms (Technological Research and Development, Collaborative Research and Service, Dissemination and Training)
5. Resource Summary (table)
6. Geographical Data (table)
7. Sources of Investigator Support (table)
8. Books, Papers, and Abstracts (table)
9. Advisory Committee report
10. Allocation of Resource Access (narrative and table)
11. Dissemination of Information (narrative)
12. Training (narrative)
13. Suggestions or Criticisms (narrative)
14. Significant reprints and description of significant patents or copyrights (include complimentary copy to HSA)
15. Diskette in Word or ASCII Format

SAMPLE SCIENTIFIC SUBPROJECT FORM

SCIENTIFIC SUBPROJECT

GRANT NUMBER: P41RR01000-07

REPORT PD: (08/01/90-07/30/91)

BTA UNIT: C

TITLE: Resistance to Lithium Therapy in Lymphoblastoid Cells  
from Patients

KEYWORDS: Bipolar affective disorder, genetics, human cells

AXIS I: 2 4 9 21 19

AXIS II: 58 72 74C 50B

INVEST1: Doe, John R

DEGREE1: MD PHD

DEPT1: Psychiatry

NONHOST1:

INVEST2: White, Harriet M

DEGREE2: PHD

DEPT2: Genetics

NONHOST2: U of Alaska, Anchorage

INVEST3: Smith, Arthur

DEGREE3: DSC

DEPT3: Biochemistry

NONHOST3:

INVEST4: Jones, Sherman P

DEGREE4: PHD

DEPT4: Psychiatry

NONHOST4: Cambridge U, England

% B RTP \$: 2.5%

% BTA \$  
for AIDS: 0 %

ABSTRACT: Some patients with bipolar affective disorder do not respond to lithium therapy. There is evidence that this is a genetically-transmitted trait. Because myo-inositol monophosphatase disturbances have been implicated in affective disorders, the kinetics of this enzyme are being studied for lithium-induced inhibition. Lymphocytes are collected from patients, their family members, and controls, and are virally-immortalized, grown in culture, and harvested for enzyme experiments. We have found that enzyme derived from controls is inhibited by lithium, whereas enzyme from lithium-resistant patients shows less sensitivity to lithium-induced inhibition. Enzyme samples derived from family members show variable results--some in the range of the controls, some in the range of patients, and some intermediate. These preliminary results offer a potential explanation for lithium resistance. Confirmatory studies are in progress and preliminary experiments on amplifying examples of the several enzyme variants are planned.

## NCRR SCIENTIFIC CLASSIFICATION

### AXIS I

#### RESEARCH AREA (MAX. 6 CODES)

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>1 Animals, Whole               <ul style="list-style-type: none"> <li>a. Vertebrates, Mammals</li> <li>b. Vertebrates, Non-Mammal</li> <li>c. Invertebrates</li> </ul> </li> <li>Animals, Cell/Membrane/Tissue/Organ               <ul style="list-style-type: none"> <li>d. Vertebrates, Mammal</li> <li>e. Vertebrates, Non-Mammal</li> <li>f. Invertebrates</li> </ul> </li> <li>2 Biological/Chemical Compounds</li> <li>3 Biomaterials</li> <li>4 Human, Cells Only</li> <li>5 Human, Adult               <ul style="list-style-type: none"> <li>a. Female b. Male</li> </ul> </li> <li>Human, Infant/Child               <ul style="list-style-type: none"> <li>a. Female b. Male</li> </ul> </li> <li>6 Human, Membrane/Tissue/Isolated Organ</li> <li>7 Microorganisms               <ul style="list-style-type: none"> <li>a. Bacteria b. Viruses</li> <li>c. Parasites d. Other</li> </ul> </li> <li>8 Plants/Fungi</li> <li>9 Technology/Technique Development</li> <li>11 Facility Construction/Improvement</li> </ul> | <ul style="list-style-type: none"> <li>12 Clinical Trials               <ul style="list-style-type: none"> <li>a. Multi-center b. Single Center</li> </ul> </li> <li>13 Cardiovascular System</li> <li>14 Connective Tissue</li> <li>15 Endocrine System</li> <li>16 Gastrointestinal System               <ul style="list-style-type: none"> <li>a. Esophagus b. Gallbladder</li> <li>c. Intestine d. Liver</li> <li>e. Pancreas f. Stomach</li> </ul> </li> <li>17 Hematologic System</li> <li>18 Integumentary/Skin System</li> <li>19 Lymphatic and Reticulo-Endothelial System</li> <li>20 Muscular System</li> <li>21 Nervous System</li> <li>22 Oral/Dental</li> <li>23 Reproductive System</li> <li>24 Respiratory System</li> <li>25 Sensory System               <ul style="list-style-type: none"> <li>a. Ear b. Eye c. Taste/Smell d. Touch</li> </ul> </li> <li>26 Skeletal System</li> <li>27 Urinary System/Kindney/Renal</li> <li>28 Other (SPECIFY)</li> </ul> |
|---|---|

### AXIS II

#### RESEARCH AREA (MAX. 6 CODES)

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>30 Aging</li> <li>31 AIDS, SAIDS</li> <li>33 Alternative Medicine</li> <li>32 Anesthesiology</li> <li>34 Anthropology/Ethnography</li> <li>35 Arthritis</li> <li>36 Behavior/Psychology/Social Science</li> <li>38 Bioethics</li> <li>39 Biotechnology</li> <li>41 Cognition/Learning</li> <li>40 Communication/Speech</li> <li>42 Computer Science</li> <li>44 Congenital Defects of Malformations</li> <li>45 Deafness/Hearing</li> <li>46 Degenerative Disorders</li> <li>48 Device, Protheses, Intra/Extracoporeal</li> <li>49 Diabetes</li> <li>50 Drug/Therapeutic Agent Studies               <ul style="list-style-type: none"> <li>a. Toxic b. Other c. Orphan Drugs</li> </ul> </li> <li>51 Education</li> <li>52 Engineering/Bioengineering</li> <li>54 Environmental Sciences               <ul style="list-style-type: none"> <li>a. Toxic b. Other</li> </ul> </li> <li>56 Epidemiology</li> <li>57 Fitness, Physical</li> <li>55 Gene Therapy</li> <li>58 Genetics, Including Metabolic Errors</li> <li>59 Genome</li> <li>60 Growth and Development</li> <li>62 Health Care Applications</li> <li>63 Imaging               <ul style="list-style-type: none"> <li>a. CT e. PET i. Microscopy</li> <li>b. Laser f. Spec j. Near Infrared</li> <li>c. MRI,MRS g. Radiography k. Synchotron</li> </ul> </li> <li>64 Immunology/Allergy/Inflammation</li> <li>65 Infant Mortality/Low Birth Weight</li> </ul> | <ul style="list-style-type: none"> <li>66 Infectious Diseases</li> <li>68 Information Science</li> <li>70 Instrument Development</li> <li>69 International Health</li> <li>71 Maternal &amp; Child Health</li> <li>72 Mental Disorders/Psychiatry</li> <li>73 Men's Health</li> <li>74 Metabolism/Biochemistry/Physiology/Structure               <ul style="list-style-type: none"> <li>a. Carbohydrate e. Hormone</li> <li>b. Electrolyte/Mineral f. Lipid</li> <li>c. Enzymes g. Nucleic Acid</li> <li>d. Gases h. Protein/AminoAcids</li> </ul> </li> <li>75 Minority Health               <ul style="list-style-type: none"> <li>a. Asian/Pacific Islands b. Afro-American</li> <li>c. Hispanic d. Native American e. Other</li> </ul> </li> <li>77 Model Development</li> <li>76 Neoplasms/Oncology/Cancer               <ul style="list-style-type: none"> <li>a. Benign b. Malignant</li> </ul> </li> <li>78 Nutrition</li> <li>67 Nursing Care Research</li> <li>79 Pain</li> <li>94 Prevention</li> <li>80 Radiology/Radiation Nuclear Medicine</li> <li>81 Rare Disease</li> <li>82 Rehabilitation</li> <li>83 Sexually Transmitted Diseases</li> <li>85 Sleep Research</li> <li>84 Statistics/Mathematics</li> <li>89 Structural Biology</li> <li>87 Substance Abuse</li> <li>86 Surgery</li> <li>95 Transgenics</li> <li>88 Transplantation</li> <li>90 Trauma/Burns/Injury</li> <li>91 Vaccine</li> <li>93 Women's Health</li> <li>92 Other (SPECIFY)</li> </ul> |
|--|--|