

Community Parent Resource Centers competition at: <http://e-grants.ed.gov>.

## V. Application Review Information

**Selection Criteria:** The selection criteria for this competition are listed in 34 CFR 75.210 of EDGAR. The specific selection criteria to be used for this competition are in the application package.

## VI. Award Administration Information

1. **Award Notices:** If your application is successful, we notify your U.S. Representative and U.S. Senators and send you a Grant Award Notification (GAN). We may also notify you informally.

If your application is not evaluated or not selected for funding, we notify you.

2. **Administrative and National Policy Requirements:** We identify administrative and national policy requirements in the application package and reference these and other requirements in the *Applicable Regulations* heading, in section I of this notice.

We reference the regulations outlining the terms and conditions of an award in the *Applicable Regulations* heading, in section I of this notice and include these and other specific conditions in the GAN. The GAN also incorporates your approved application as part of your binding commitments under the grant.

3. **Reporting:** At the end of your project period, you must submit a final performance report, including financial information, as directed by the Secretary. If you receive a multi-year award, you must submit an annual performance report that provides the most current performance and financial expenditure information as specified by the Secretary in 34 CFR 75.118.

4. **Performance Measures:** Under the Government Performance and Results Act (GPRA), measures have been developed for evaluating the overall effectiveness of this program. Requirements concerning the performance measures are in the application package for this competition.

## VII. Agency Contact

**FOR FURTHER INFORMATION CONTACT:** The Grants and Contracts Services Team, U.S. Department of Education, 400 Maryland Avenue, SW., room 3317, Switzer Building, Washington, DC 20202-2550. Telephone: 1-202-205-8207.

If you use a telecommunications device for the deaf (TDD), you may call the Federal Information Relay Service (FIRS) at 1-800-877-8339.

Individuals with disabilities may obtain this document in an alternative format (e.g., Braille, large print, audiotape, or computer diskette) on request to the Grants and Contracts Services Team listed in this section.

## VIII. Other Information

**Electronic Access to This Document:** You may view this document, as well as all other documents of this Department published in the **Federal Register**, in text or Adobe Portable Document Format (PDF) on the Internet at the following site: [www.ed.gov/news/fedregister](http://www.ed.gov/news/fedregister).

To use PDF you must have Adobe Acrobat Reader, which is available free at this site. If you have questions about using PDF, call the U.S. Government Printing Office (GPO), toll free, at 1-888-293-6498; or in the Washington, DC, area at (202) 512-1530.

**Note:** The official version of this document is the document published in the **Federal Register**. Free Internet access to the official edition of the **Federal Register** and the Code of Federal Regulations is available on GPO Access at: [www.gpoaccess.gov/nara/index.html](http://www.gpoaccess.gov/nara/index.html).

Dated: March 4, 2004.

**Troy R. Justesen,**

*Acting Deputy Assistant Secretary for Special Education and Rehabilitative Services.*

[FR Doc. 04-5390 Filed 3-9-04; 8:45 am]

BILLING CODE 4000-01-P

## DEPARTMENT OF EDUCATION

### Brown v. Board of Education 50th Anniversary Commission; Meeting

**AGENCY:** Brown v. Board of Education 50th Anniversary Commission, Department of Education (ED).

**ACTION:** Notice of meeting.

**SUMMARY:** This notice provides the schedule of a forthcoming meeting of the Brown v. Board of Education 50th Anniversary Commission. This notice also describes the functions of the commission. This document is intended to notify the general public of their opportunity to attend.

**DATE AND TIME:** March 16, 2004, at 3 p.m.

**ADDRESSES:** Kansas Union, Kansas University, 1301 Jayhawk Blvd., Big. 12 Room, Lawrence, KS 66045-7548.

**FOR FURTHER INFORMATION CONTACT:** Mary McPhail, 330 C Street SW., Washington, DC 20202, (202) 205-9529.

**SUPPLEMENTARY INFORMATION:** The Brown v. Board of Education 50th Anniversary Commission is established under Pub. L. 107-41 to commemorate the 50th anniversary of the Brown

decision. The Commission, in conjunction with the U.S. Department of Education, is responsible for planning and coordinating public education activities and initiatives. Also, the Commission, in cooperation with the Brown Foundation for Educational Equity, Excellence, and Research in Topeka, Kansas, and such other public or private entities as the Commission deems appropriate, is responsible for encouraging, planning, developing and coordinating observances of the anniversary of the Brown decision. The meeting of the Commission is open to the public. Individuals who will need accommodations for a disability in order to attend the meeting (*i.e.* interpreting services, assistive listening devices, materials in alternative format) should notify Mary McPhail at (202) 205-9529 by no later than March 12, 2004. We will attempt to meet requests after that date, but cannot guarantee availability.

Dated: March 4, 2004.

**Kenneth L. Marcus,**

*Senior Counselor for Civil Rights.*

[FR Doc. 04-5301 Filed 3-9-04; 8:45 am]

BILLING CODE 4000-01-M

## DEPARTMENT OF EDUCATION

[CFDA Nos. 84.007, 84.032, 84.033, 84.038, 84.063, 84.069, and 84.268]

**Student Assistance General Provisions, Federal Supplemental Educational Opportunity Grant, Federal Family Education Loan, Federal Work-Study, Federal Perkins Loan, Federal Pell Grant, Leveraging Educational Assistance Partnership, and William D. Ford Federal Direct Loan Programs**

**ACTION:** Notice of deadline dates for receipt of applications, reports, and other records for the 2003-2004 award year.

**SUMMARY:** The Secretary announces deadline dates for the receipt of documents and other information from institutions and applicants for the Federal student aid programs authorized under Title IV of the Higher Education Act of 1965, as amended, for the 2003-2004 award year. The Federal student aid programs include the Federal Perkins Loan, Federal Work-Study, Federal Supplemental Educational Opportunity Grant, Federal Family Education Loan, William D. Ford Federal Direct Loan, Federal Pell Grant, and Leveraging Educational Assistance Partnership programs.

These programs, administered by the U.S. Department of Education

(Department), provide financial assistance to students attending eligible postsecondary educational institutions to help them pay their educational costs.

*Deadline and Submission Dates:* See Tables A and B at the end of this notice.

**Table A—Deadline Dates for Application Processing and Receipt of Student Aid Reports (SARs) or Institutional Student Information Records (ISIRs) by Institutions**

Table A provides deadline dates for application processing, including corrections, and, for purposes of the Federal Pell Grant Program, receipt by institutions of SARs or ISIRs.

**Table B—Federal Pell Grant Program Submission Dates for Disbursement Information by Institutions**

Table B provides the earliest submission and deadline dates for institutions to submit Federal Pell Grant disbursement records to the Department's Common Origination and Disbursement (COD) System.

In general, an institution must submit Federal Pell Grant disbursement records no later than 30 days after making a disbursement or becoming aware of the need to adjust a student's previously reported Federal Pell Grant disbursement. We consider that Federal Pell Grant funds are disbursed on the earlier of the date that the institution: (a) Credits those funds to a student's account in the institution's general ledger or any subledger of the general ledger, or (b) pays those funds to a student directly. We consider that Federal Pell Grant funds are disbursed even if an institution uses its own funds

in advance of receiving program funds from the Department [34 CFR 668.164(a)]. An institution's failure to submit disbursement records within the required 30-day timeframe may result in an audit or program review finding. In addition, the Secretary may initiate an adverse action, such as a fine or other penalty for such failure.

**Other Sources for Detailed Information**

We publish a detailed discussion of the Federal student aid application process in the following publications:

- *2003–2004 Student Guide.*
- *Funding Your Education.*
- *2003–2004 High School Counselor's Handbook.*
- *A Guide to 2003–2004 SARs and ISIRs.*
- *2003–2004 Federal Student Aid Handbook.*

Additional information on the institutional reporting requirements for the Federal Pell Grant Program is contained in Volume 3, Chapter 3 of the 2003–2004 *Federal Student Aid Handbook*, which is available at the Information for Financial Aid Professionals Web site at: <http://www.ifap.ed.gov>.

*Applicable Regulations:* The following regulations apply: (1) Student Assistance General Provisions, 34 CFR part 668 and (2) Federal Pell Grant Program, 34 CFR part 690.

**FOR FURTHER INFORMATION CONTACT:**

Harold McCullough, U.S. Department of Education, Federal Student Aid, 830 First Street, NE., Union Center Plaza, room 93B2, Washington, DC 20202–5345. Telephone: (202) 377–4030.

If you use a telecommunications device for the deaf (TDD), you may call

the Federal Information Relay Service (FIRS) at 1–800–877–8339.

Individuals with disabilities may obtain this document in an alternative format (*e.g.*, Braille, large print, audiotope, or computer diskette) on request to the program contact person listed under **FOR FURTHER INFORMATION CONTACT**.

**Electronic Access to This Document**

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To use PDF you must have Adobe Acrobat Reader, which is available free at this site. If you have questions about using PDF, call the U.S. Government Printing Office (GPO), toll free, at 1–888–293–6498; or in the Washington, DC, area at (202) 512–1530.

You may also view this document in PDF at the following site: <http://www.ifap.ed.gov>.

**Note:** The official version of this document is the document published in the **Federal Register**. Free Internet access to the official edition of the **Federal Register** and the Code of Federal Regulations is available on GPO Access at: <http://www.gpoaccess.gov/nara/index.html>

**Program Authority:** 20 U.S.C. 421–429, 1070a, 1070b–1070b-3, 1070c–1070c-4, 1071–1087–2, 1087a, and 1087aa–1087ii; 42 U.S.C. 2751–2756b.

Dated: March 4, 2004.

**Theresa S. Shaw,**

*Chief Operating Officer, Federal Student Aid.*

**BILLING CODE 4000–01–P**

| Table A. Deadline Dates for Application Processing and Receipt of Student Aid Reports (SARs) or Institutional Student Information Records (ISIRs) by Institutions |                                                                                                                                          |                                                                                        |                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Who Submits?                                                                                                                                                      | What is Submitted?                                                                                                                       | Where is it Submitted?                                                                 | What is the Deadline Date for Receipt?                                                              |
| Student                                                                                                                                                           | Free Application for Federal Student Aid (FAFSA) on the Web or Renewal FAFSA on the Web                                                  | Electronically to the Department's Central Processing System (CPS)                     | June 30, 2004 <sup>1</sup>                                                                          |
|                                                                                                                                                                   | Signature Page (if required)                                                                                                             | To the address printed on the signature page                                           | July 14, 2004                                                                                       |
| Student through an Institution                                                                                                                                    | An electronic original or Renewal FAFSA                                                                                                  | Electronically to the Department's CPS                                                 | June 30, 2004 <sup>1</sup>                                                                          |
| Student                                                                                                                                                           | A paper original FAFSA or paper Renewal FAFSA                                                                                            | To the address printed on the FAFSA, Renewal FAFSA, or envelope provided with the form | June 30, 2004                                                                                       |
| Student                                                                                                                                                           | Corrections on the Web with all required electronic signatures                                                                           | Electronically to the Department's CPS                                                 | September 17, 2004 <sup>1</sup>                                                                     |
| Student                                                                                                                                                           | Corrections on the Web needing paper signatures                                                                                          | Electronically to the Department's CPS                                                 | September 9, 2004 <sup>1</sup>                                                                      |
|                                                                                                                                                                   | Paper signatures for Corrections on the Web                                                                                              | To the address printed on the signature page                                           | September 14, 2004                                                                                  |
| Student through an Institution                                                                                                                                    | Electronic corrections and requests for a duplicate Student Aid Report (SAR)                                                             | Electronically to the Department's CPS                                                 | September 17, 2004 <sup>1</sup>                                                                     |
| Student                                                                                                                                                           | Paper corrections (including change of mailing and email addresses, institutions, or requests for a duplicate SAR) using Part 2 of a SAR | To the address printed on Part 2 of the SAR                                            | September 6, 2004                                                                                   |
| Student                                                                                                                                                           | Change of mailing and email addresses, change of institutions, or requests for a duplicate SAR                                           | To the Federal Student Aid Information Center by calling 1-800-433-3243                | September 17, 2004                                                                                  |
| Student                                                                                                                                                           | SAR with an official expected family contribution (EFC) calculated by the Department's CPS (Pell Only)                                   | To the institution                                                                     | The earlier of:<br>- the student's last date of enrollment; or<br>- September 17, 2004 <sup>2</sup> |
| Student through CPS                                                                                                                                               | ISIR with an official EFC calculated by the Department's CPS (Pell Only)                                                                 | To the institution from the Department's CPS                                           | The earlier of:<br>- the student's last date of enrollment; or<br>- September 17, 2004 <sup>2</sup> |

| Student                              | Valid SAR (Pell Only)                         | To the institution                           | Except for late disbursements under 34 CFR 668.164(g), the earlier of:                                                                                                                                                                          |
|--------------------------------------|-----------------------------------------------|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Student through CPS                  | Valid ISIR (Pell Only)                        | To the institution from the Department's CPS | - the student's last date of enrollment; or<br>- September 17, 2004 <sup>2</sup><br>For late disbursements, the earlier of:<br>- the timeframes provided in the regulations at 34 CFR 668.164(g)(4)(i); or<br>- September 17, 2004 <sup>2</sup> |
| Student                              | Verification documents                        | To the institution                           | The earlier of: <sup>3</sup><br>- 120 days after the student's last date of enrollment; or<br>- September 17, 2004                                                                                                                              |
| Student                              | Valid SAR after verification (For Pell Only)  | To the institution                           | The earlier of: <sup>4</sup><br>- 120 days after the student's last date of enrollment; or<br>- September 17, 2004 <sup>2</sup>                                                                                                                 |
| Student through the Department's CPS | Valid ISIR after verification (For Pell Only) | To the institution from the Department's CPS | - 120 days after the student's last date of enrollment; or<br>- September 17, 2004 <sup>2</sup>                                                                                                                                                 |

<sup>1</sup> The deadline for electronic transactions is 11:59 p.m. (Central Time) on the deadline date. Transmissions must be completed and accepted by 12:00 midnight to meet the deadline. If transmissions are started before 12:00 midnight but are not completed until after 12:00 midnight, those transmissions will not meet the deadline. In addition, any transmission picked up on or just prior to the deadline date that is rejected may not be reprocessed because the deadline will have passed by the time the user gets the information notifying him/her of the rejection.

<sup>2</sup> The date the ISIR/SAR transaction was processed by CPS is considered to be the date the institution received the ISIR or SAR regardless of whether the institution has downloaded the ISIR from its SAIG mailbox.

<sup>3</sup> Although the Secretary has set this deadline date for the submission of verification documents, if corrections are required, deadline dates for submission of paper or electronic corrections and the submission of a valid SAR or valid ISIR to the institution must still be met.

<sup>4</sup> Students completing verification while no longer enrolled will be paid based on the higher of the two EFCs.

Table B. Federal Pell Grant Program Submission Dates for Disbursement Information by Institutions

| Who Submits? | What is Submitted?                                                                                                      | Where is it Submitted?                                                                                                                                                                             | What is the Earliest Submission and Deadline Date for Receipt?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------|-------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Institutions | At least one acceptable disbursement record must be submitted for each Federal Pell Grant recipient at the institution. | To the Common Origination and Disbursement (COD) System using either:<br>- the COD website at: <a href="http://cod.ed.gov">http://cod.ed.gov</a> ; or<br>- the Student Aid Internet Gateway (SAIG) | <p><b>Earliest Submission Dates:</b><br/>An institution may submit disbursement information as early as June 21, 2003, but no earlier than:</p> <ul style="list-style-type: none"> <li>(a) 30 calendar days prior to the disbursement date under the advance payment method;</li> <li>(b) 7 calendar days prior to the disbursement date under the Just-in-Time or Cash Monitoring #1 payment methods; or</li> <li>(c) the date of disbursement under the Reimbursement or Cash Monitoring #2 payment methods.</li> </ul> <p><b>Deadline Submission Dates:</b><br/>Except as provided below, an institution is required to submit disbursement information no later than the earlier of:</p> <ul style="list-style-type: none"> <li>(a) 30 calendar days after the institution makes a disbursement or becomes aware of the need to make an adjustment to previously reported disbursement data; or</li> <li>(b) September 30, 2004.<sup>1</sup></li> </ul> <p>An institution may submit disbursement information after September 30, 2004, only:</p> <ul style="list-style-type: none"> <li>(a) for a downward adjustment of a previously reported award;</li> <li>(b) based upon a program review or initial audit finding per 34 CFR 690.83;</li> <li>(c) for reporting a late disbursement under 34 CFR 668.164(g); or</li> <li>(d) for reporting disbursements previously blocked as a result of another institution failing to post a downward adjustment.</li> </ul> |

|                                                                                                                                                                            |                                                  |                                                                                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Request for administrative relief based on a natural disaster or other unusual circumstances, or an administrative error made by the Department                            | By email to:<br>sfa.administrative.relief@ed.gov | The earlier of:<br>- a date designated by the Secretary after consultation with the institution; or<br>- January 31, 2005 |
| Request for administrative relief for a student <sup>2</sup> who reenters the institution (1) within 180 days after initially withdrawing and (2) after September 15, 2004 | By email to:<br>sfa.administrative.relief@ed.gov | The earlier of:<br>- 30 days after the student reenrolls; or<br>- May 2, 2005                                             |

<sup>1</sup> The deadline for electronic transactions is 11:59 p.m. on September 30, 2004. Transmissions must be completed and accepted by 12:00 midnight to meet the deadline. If transmissions are started before 12:00 midnight but are not completed until after 12:00 midnight, those transmissions will not meet the deadline. In addition, any transmission picked up on or just prior to the deadline date that is rejected may not be reprocessed because the deadline will have passed by the time the user gets the information notifying him/her of the rejection.

<sup>2</sup> Applies only to students enrolled in clock-hour and nonterm credit-hour educational programs.

NOTE: The COD System must accept origination data for a student from an institution before it accepts disbursement information from the institution for that student. Institutions may submit origination and disbursement data for a student in the same transmission. However, if the origination data is rejected, the disbursement data is rejected.

[FR Doc. 04-5391 Filed 3-9-04; 8:45 am]

BILLING CODE 4000-01-C

## DEPARTMENT OF ENERGY

### Office of Science Financial Assistance Program Notice DE-FG01-04ER04-17; Innovative Technologies for In Vivo Targeted Radiopharmaceutical Dose Delivery and Deposition

**AGENCY:** Department of Energy (DOE).

**ACTION:** Notice inviting grant applications.

**SUMMARY:** The Office of Biological and Environmental Research (OBER) of the Office of Science (SC), U.S. Department of Energy (DOE), hereby announce its interest in receiving grant applications to support one specific research area within the Medical Applications Program: Innovative Technologies for *In Vivo* Targeted Radiopharmaceutical Dose Delivery and Deposition. The emphasis will be on the therapeutic use of ionizing radiation. The specific goals include: (1) development of radiochemical methodologies for labeling the targeting molecules with and for site-specific delivery of therapeutic dose levels of radioactivity, and (2) development of radiobiology-based microdosimetry techniques to accurately measure and predict the potential therapeutic use, dose and dose rate delivery of ionizing radiation. Applicants are encouraged to propose innovative methodologies and technologies to label biological ligands with therapeutic level radioactivity, ensure *in vivo* delivery of intact radioisotopically labeled molecules to specific tumor cell types, and develop novel microdosimetry paradigms. Applications for clinical trials using already developed compounds and techniques will not be considered.

**DATES:** Before preparing a formal application, potential applicants are encouraged to submit a brief preapplication. All preapplications referencing Program Notice DE-FG01-04ER04-17, should be received by DOE by 4:30 p.m., eastern time, April 12, 2004. A response encouraging or discouraging the submission of a formal application will be communicated by electronic mail within approximately 2 weeks.

Formal applications submitted in response to this notice must be received by 4:30 p.m., eastern time, June 15, 2004, to be accepted for merit review and be considered for award in Fiscal Year 2004 or early 2005.

**ADDRESSES:** Preapplications referencing Program Notice DE-FG01-04ER04-17,

are to be sent, if possible, by e-mail or fax to Ms. Sharon Betson

([sharon.betson@science.doe.gov](mailto:sharon.betson@science.doe.gov); fax: 301-903-0567). Preapplications will also be accepted if mailed to the following address: Ms. Sharon Betson, Office of Biological and Environmental Research, SC-73, 19901 Germantown Road, Germantown, MD 20874-1290.

Formal applications referencing Program Notice DE-FG01-04ER04-17, must be sent electronically by an authorized institutional business official through DOE's Industry Interactive Procurement System (IIPS) at: <http://e-center.doe.gov/>. IIPS provides for the posting of solicitations and receipt of applications in a paperless environment via the Internet. In order to submit applications through IIPS, your business official will need to register at the IIPS website. IIPS offers the option of using multiple files, please limit submissions to one volume and one file if possible, with a maximum of no more than four PDF files. The Office of Science will include attachments as part of this notice that provide the appropriate forms in PDF fillable format that are to be submitted through IIPS. Color images should be submitted in IIPS as a separate file in PDF format and identified as such. These images should be kept to a minimum due to the limitations of reproducing them. They should be numbered and referred to in the body of the technical scientific grant application as Color image 1, Color image 2, etc. Questions regarding the operation of IIPS may be e-mailed to the IIPS Help Desk at:

[HelpDesk@pr.doe.gov](mailto:HelpDesk@pr.doe.gov), or you may call the help desk at: (800) 683-0751. Further information on the use of IIPS by the Office of Science is available at: <http://www.sc.doe.gov/production/grants/grants.html>.

If you are unable to submit an application through IIPS, please contact the Grants and Contracts Division, Office of Science at: (301) 903-5212 or (301) 903-3604, in order to gain assistance for submission through IIPS or to receive special approval and instructions on how to submit printed applications.

#### FOR FURTHER INFORMATION CONTACT:

Prem C. Srivastava, Ph.D., Office of Biological and Environmental Research, Medical Sciences Division, SC-73, U.S. Department of Energy, 19901 Germantown Road, Germantown, MD 20874-1290, telephone: (301) 903-4071, fax: (301) 903-0567, e-mail: [prem.srivastava@science.doe.gov](mailto:prem.srivastava@science.doe.gov). The full text of Program Notice DE-FG01-04ER04-17 is available via the Internet using the following Web site address:

<http://www.sc.doe.gov/production/grants/grants.html>.

**SUPPLEMENTARY INFORMATION:** The BER Medical Applications Program supports directed nuclear medicine technology research in the areas of radiopharmaceutical development, molecular nuclear medicine and advanced biomedical imaging to promote the use of radioisotopes for non-invasive diagnosis and therapy.

The early BER programs focused on understanding the physical, chemical and biologic consequences of radionuclide decay in the human body. Those studies led to much of the basic information that is still used today to describe the therapeutic effects of targeted radionuclides. DOE continued to fund projects and develop technologies for therapeutic effect and use of radiation that generated much of the current knowledge in radioisotope chemistry, identification of targeting agents, methods for chemical coupling of isotopes to targeting agents, scanning and imaging techniques, mathematical modeling and internal radiation dosimetry. This research has formed the basis for many current cancer targeted radionuclide therapy modalities in various stages of development.

Current themes have developed about radiation's main molecular targets, absorbed energy doses and resultant radiation damage. This has led to the development of defined absorbed doses (Gy, Sv) that dominate our predictions about tumor destruction and normal tissue damage. Most radiobiology has been focused on radiation damage induced by high dose rate gamma and neutron exposures. Targeting with electrons, alpha and beta emitters employed at intermediate to low dose rate intensities requires a much better understanding of radiation damage to cells, and new paradigms need to be addressed to understand how best to use radioisotopes for selective destruction of solid tumors as compared to normal tissue. The recent emphasis on targeted radiopharmaceutical therapy agents against many forms of cancer has brought about an increase in the need for reliable and clinically meaningful, patient-specific internal dose calculations. The ability to link radiation dose to observed biological effect of radiation is complicated by a number of factors, including the heterogeneity of the activity distribution within normal organ tissue or within tumors, the range of the particles delivering the therapeutic dose, the total dose received, the dose rate at which the dose is delivered, (which depends on