

**UCLA**

**Research Administration**

# UCLA Centennial and 100<sup>th</sup> Research Administration Forum

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Marcia L. Smith

November 14, 2019

# Welcome & Announcements



2009 - 2019



**UCLA**



**CENTENNIAL  
CELEBRATION**

# Agenda

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- **Office of the Human Research Protection Program**
  - Roll-out of PI and Faculty Assurances – *Moore Rhys*
- **Extramural Fund Management**
  - Closing Expired Funds – *Will Murdoch*
  - ERS Listserv Changes – *Will Murdoch*
  - Ascend: Expenditure Type – *Yoon Lee*
- **UCLA Trivia and 100<sup>th</sup> RAF Raffle** – *Kurt Durlless and Evan Garcia*

**UCLA**

**Research Administration**

# OHRPP Updates

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November 14, 2019 – 100<sup>th</sup> RAF 🎉

# OHRPP Updates

Annual PI and FS Assurances



Human Research News

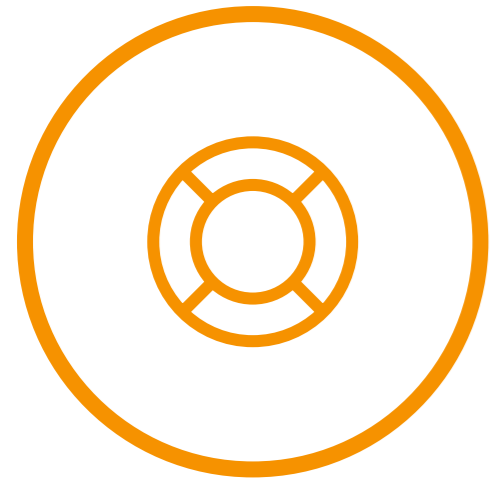


Training opportunities



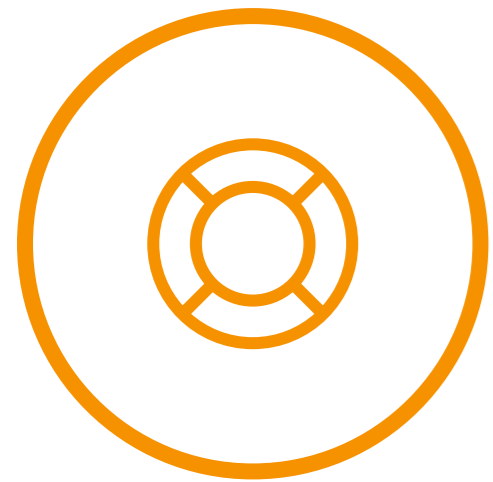
# Annual PI and Faculty Sponsor Assurances

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**In order to keep track of active studies that don't require continuing review, OHRPP has worked with ORIS to create a mechanism for a yearly check-in with investigators.**

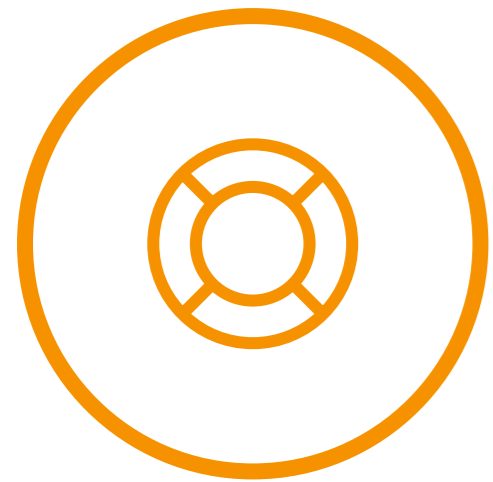
# Annual PI and Faculty Sponsor Assurances



**These will be required (in lieu of continuing review) to continue the following types of research:**

- **Certified exempt**
- **Studies determined eligible for expedited review**
- **Research that has progressed to the point of only collecting results of clinical care procedures/tests for follow-up**
- **Research that has progressed to the point of data analysis only**
- **Studies where a UCLA IRB is relying on another IRB**

# Annual PI and Faculty Sponsor Assurances

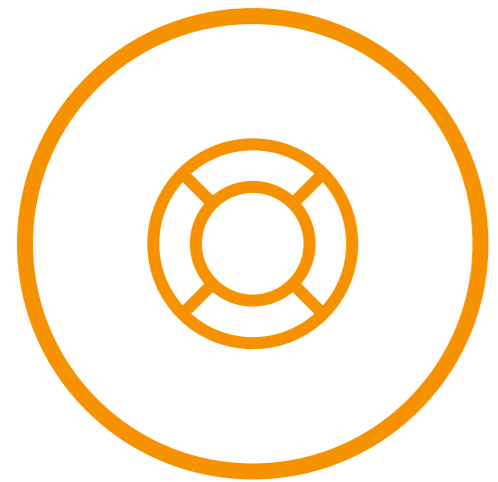


Automatic email notices (with instructions) will be sent out from the webIRB system:

- **9 months** after the initial approval (or last annual assurance) – *3 months before the assurance is due*
- **10 months** after the initial approval (or last annual assurance) – *2 months before the assurance is due*
- **11 months** after the initial approval (or last annual assurance) – *1 month before the assurance is due*
- **12 months** after the initial approval (or last annual assurance) – *the day the assurance is due*

# Annual PI and Faculty Sponsor Assurances

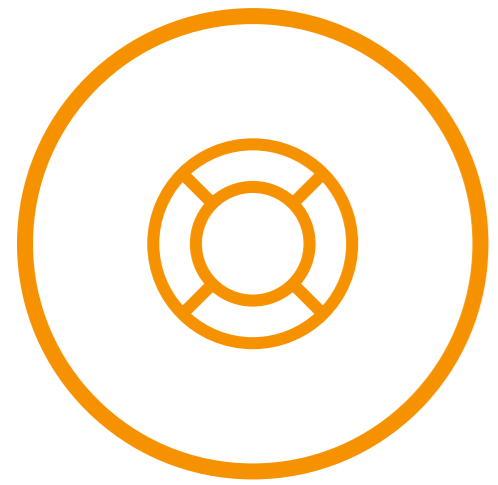
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## *Important:*

- If the PI (and faculty sponsor, if applicable) doesn't complete the annual assurance, *the study will be administratively closed*
- PI proxies **cannot** complete the assurance

# Annual PI and Faculty Sponsor Assurances



- If the PI has a faculty sponsor, *the faculty advisor must complete their assurance first*. Only once they complete it will the PI have access to the button in webIRB to complete the PI assurance.
- There is a webIRB quick guide to help researchers navigate the process.
- If you encounter problems with this process, contact [webirbhelp@research.ucla.edu](mailto:webirbhelp@research.ucla.edu)

# OHRPP “Human Research News” - Reminder

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**To be the first to know when OHRPP releases guidance and other updates, please subscribe to our listserv**

- ***To subscribe, send an email (blank subject and body) to: [investigators-l+subscribe@lists.ucla.edu](mailto:investigators-l+subscribe@lists.ucla.edu)***

# OHRPP Training Opportunities



- ✓ OHRPP Quality Improvement Unit *will come to your division/department for IRB-related training, customized to your needs.*
- ✓ *“Learn at Lunch” training series will re-launch in early 2020. Please send in your suggestions for topics.*

➤ *To request a custom training or suggest a Learn at Lunch topic, please contact: OHRPP Assistant Director, Education & Quality Improvement [Moore Rhys](#) (310) 794-6339*

# Any Questions?

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## Contact Information

### Website URL

<http://ora.research.ucla.edu/ohrpp>

### Kristin Craun, OHRPP Director

Phone: x33150

Email: [kristin.craun@research.ucla.edu](mailto:kristin.craun@research.ucla.edu)

### Moore Rhys, OHRPP Asst. Director, Education & QI

Phone: x46339

Email: [moore.rhys@research.ucla.edu](mailto:moore.rhys@research.ucla.edu)



# Extramural Fund Management

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November 14, 2019

# Agenda

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- **Closing Expired Funds**
- **ERS Listserv Changes**
- **Ascend: Expenditure Type**

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# Expired Funds

Will Murdoch

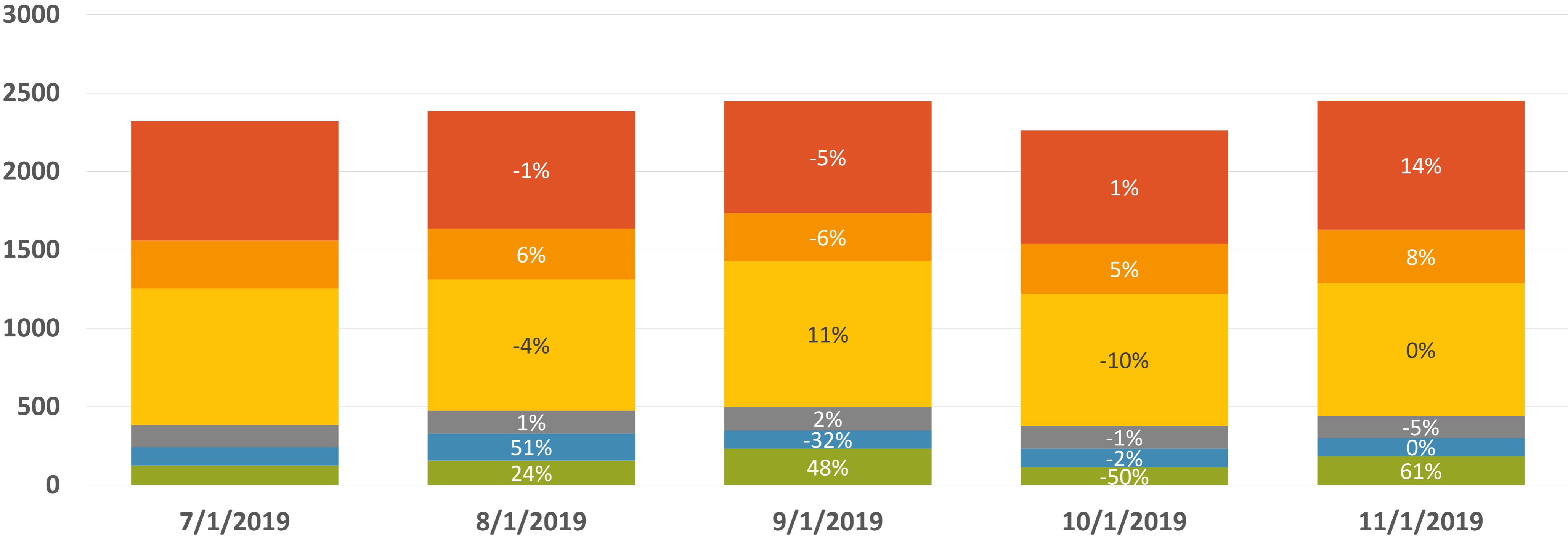
# Closing Expired Funds

- **Best Practice is to close funds 120-150 days after the fund expiration date**
  - We currently have many funds over 120 days that have yet to be closed (“Y/N’d”)
  - There are five requirements to be able to close:
    - The final financial deliverable must be completed
    - Accounts Receivable are \$zero
    - Encumbrances are cleared
    - Accounts Payable are \$zero
    - Operating Balance is \$zero
  - Some of these requirements EFM can take the lead in addressing, many others need department support
- **Expired funds left open will drive unnecessary data conversion for Ascend**
  - Goal to close expired funds by June 30, 2020, then remain caught up until Go-Live July 1, 2021

# Our Game Plan

- **ORIS provides monthly reports on Expired Funds 120 days after expiration that remain open**
  - Between 2,262 and 2,452 funds have needed attention for the last five months
- **We are tracking six categories of funds**
  - 1) All balances = \$zero
  - 2) Only open AR
  - 3) Only open encumbrances, or AP
  - 4) Only non-zero Operating Balances
  - 5) Multiple balances (AR, Encumbrance, AP, Operating Balance)
  - 6) The final financial deliverable has not been completed.
- **EFM is taking the lead to address categories 1 and 2 (10-15% of funds)**
- **We need departments attention and action to focus on categories 3 – 6 (85-90% of funds)**
  - Funds with open AR may require department's action depending on the reasons for a delay in collection.
  - Funds will “migrate” as departments complete action, and they move to those for EFM focus.

# Total number of expired funds has remained unchanged



- 1) All balances = \$0
- 2) Only open AR
- 3) Balance in one area only (Encumbrance or AP)
- 4) Only non-Zero Operating Balance
- 5) Multiple balances
- 6) Financial Deliverables in a Non-terminal status

# How can EFM Help you help us?

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- **Reports are refreshed monthly**
  - School/Department specific reports can be provided to you if requested
  - Reports include helpful information:
    - Fund End Date
    - Final Deliverable Due Date
    - Final Deliverable Status
    - AR, Encumbrance, AP, and Operating Balance totals
    - Program Type
    - Sponsor Type
    - Last PAMS comment
    - We can add in comments from EFM or Department Fund Managers
- **Contact Will Murdoch if you'd like to review the expired funds in your portfolios!**

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# ERS updates

Will Murdoch

# Current Certification Rate

- Current campus certification rate is 84% as of 11/12/19
- All outstanding reports are now past due and need to be certified ASAP

Academic Year	Fall			Winter			Spring			Summer		
	Cert Rate	Cert #	Open #	Cert Rate	Cert #	Open #	Cert Rate	Cert #	Open #	Cert Rate	Cert #	Open #
2005-2006	N/A	N/A	N/A	N/A	N/A	N/A	100%	6683	0	100%	6984	0
2006-2007	100%	6112	0	100%	6050	0	100%	6195	0	100%	6575	0
2007-2008	100%	5828	0	100%	5872	0	100%	5997	0	100%	6498	0
2008-2009	100%	5830	0	100%	5877	0	100%	6128	0	100%	7394	0
2009-2010	100%	6434	0	100%	6681	0	100%	6899	0	100%	7798	0
2010-2011	99%	6573	3	100%	6621	0	99%	6772	1	99%	7081	2
2011-2012	99%	6212	1	99%	6283	1	100%	6277	0	100%	6608	0
2012-2013	99%	5773	3	99%	5843	3	99%	5815	1	99%	6117	4
2013-2014	99%	5372	2	99%	5336	2	99%	5504	1	99%	5899	3
2014-2015	99%	5266	1	99%	5341	2	99%	5345	5	99%	5859	6
2015-2016	99%	5224	3	99%	5265	4	99%	5386	6	99%	5698	6
2016-2017	99%	5120	9	99%	5176	9	99%	5231	45	98%	5732	66
2017-2018	97%	5083	106	97%	5007	122	84%	5310	954			

**Note:** Academic Year 2017 - 2018 Spring effort reports include a modified effort reporting period of: April to July 2018 for 11/12 Academics, April to July 2018 for Non-Academics, and March to July 2018 for 9/12 Academics

# ERS Listserve Change

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- **What is the ERS Past Due and Open Effort Report Listserv?**
  - The Listserv distributes an Excel file to designated departmental contacts that lists all outstanding open and past due effort reports by individual.
  - A new Excel file is generated and sent to each department via the Listserv on the 15th day of each month.
- **What is changing with the Listserv?**
  - Previously departments could add/remove any individual in their department to/from the Listserv by reaching out to the ERS Help Desk.
  - As announced at September 2019 RAF, moving forward the Listserv will now be automated to only include current ERS Coordinators from each department. Departments no longer need to add/remove individuals by reaching out to the ERS Help Desk.
  - This change is effective November 15<sup>th</sup>, 2019.

# ERS Coordinator Role

- **What is the role of an ERS Coordinator?**
  - While ERS coordination duties will vary by department, typical duties include:
    - Receiving ERS notifications and distributing the information in those notifications to the appropriate individuals within their department or area of responsibility. This includes the Past Due and Open Effort Report Listserv.
    - Tracking status of effort reports (e.g., open, certified, re-opened) and reporting to administrators.
    - Identifying incomplete and/or late Effort Reports and notifying appropriate individuals to take action.
- **Who is responsible for designating individuals as ERS Coordinator?**
  - Departments are responsible for designating at least one ERS Coordinator within their department. Departments may choose to assign multiple ERS Coordinators, and ERS Coordinators may include senior-level individuals within the department.
- **How is the ERS Coordinator function assigned in ERS?**
  - Department DSAs manage and grant access to specific ERS roles via DACSS, including the ERS Coordinator role. DSAs coordinate with department administrators on granting this access.

# ERS Updates

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- **What else should I know about this change?**
  - If your department does not have an ERS Coordinator assigned, EFM will reach out to inform appropriate department contacts.
  - If you are unsure who current ERS Coordinator(s) in your department are, a list can be found here:
    - <https://efm.research.ucla.edu/wp-content/uploads/ers-coordinators-list.xlsx>
  - Contact your DSA if your department needs to assign or update ERS Coordinator role in DACSS.
  - ERS Coordinators do *not* have access to view payroll details within ERS, unless this access is granted by the DSA. Ability to view payroll details is a separate role in ERS that DSAs can assign via DACSS. Contact your DSA or [ershelp@research.ucla.edu](mailto:ershelp@research.ucla.edu) if you have any questions.

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# Ascend: Expenditure Type

Yoon Lee

# Follow-up from the last RAF in October 2019

- **Questions from last RAF in October 2019 about Expense Approval Workflow**
  - Even when an invoice is the same amount as the amount in the approved requisition, does it still require approval for payment?
  - Where do I see the list of requisitions and invoices requiring my approval?
  - What parameters are available for me to filter requisitions and invoices to find the ones that require my approval when I am one of financial unit managers?
  - What parameters are available for me as PPM Project Manager to sort/filter requisitions and invoices that require my approval?
- **Helpful resources to find answers**
  - Webinar: How will approval workflow be used in Oracle Cloud? <https://vimeo.com/362566382>
  - If you are BPE or Specialist, attend a BPA2 session for P2P in December 2019 to learn more.
  - Ascend Workflow Leads: Hemkant Patil and Kelsey Eichman
  - Expense approval workflow webinar was stated in the UCLA Ascend Trail Mix Newsletter sent October 24, 2019
    - To stay informed, sign up for Trail Mix at <https://www.ascend.ucla.edu/newsletters>

# Expenditure Types in PPM

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- **February 14, 2019, at RAF:**
  - Expenditure categories and types in PPM (Project Portfolio Management) were introduced.
    - Similarities and differences were highlighted compared to sub-object codes in today's Financial system.
  - Designing principles and the initial analysis was shared.
- **February 20, 2019, via ORA listerv:**
  - The initial draft of expenditure categories and types were distributed to campus for feedback.
  - This list was based on review of 120 open funds for the 3 pilot departments.
    - Consolidated 246 object codes to 75 Expenditure Types following the design principles.
    - 10 expenditure categories were established.
- **Thank you all for providing feedback!**

# Expenditure Types in PPM

Summary from February 2019 RAF

- **Expenditure Types will be used like object codes today.**
  - To describe the nature of expenses.
  - To indicate allowability of costs.
  - To establish F&A bases.
- **Expenditure Types in Sub-ledger will be mapped to Expense Accounts in General Ledger.**
- **Designing Principles:**
  - Support accurate financial and management reporting with the minimum number of expenditure types.
  - Support accurate mapping to expenses accounts in General Ledger.
    - Expenditure types must not be more general than expense accounts in GL for mapping.
  - Support effective and efficient compliance monitoring.
    - Allowability
    - F&A assessment

# Expenditure Types in PPM

## Progress and Benefits

- **Completed a few rounds of reviews of 1,013 object costs for all funds across campus.**
  - Eliminated 494 object codes that were never used for the fiscal year of FY17-18.
  - Consolidated 519 object codes into 216 expenditure types.
  - Continue to monitor use of object codes outside 519 at each conversion practice cycle to catch all.

- **Expanded the Expenditure Type length from 15 to 40 characters to be more descriptive.**

Previously with 15 character limit	Current plan with 40 characters
STUD Award-Pay	Student Award – Payment
STUAWD Fee Off	Student Award – Fee Offset
PST DOC INS Off	Post Doc Mandatory Insurance Fee Offset
SCLRSHP CRED	Scholarship Allowance Credit

- **Expenditure types will be used only for Extramurally Sponsored Projects (C&G).**
  - Expenditure type is “E” as in “POETAF” and C&G has its own “expenditure type list” different from those of capital and internal funded projects. Expenses for non-project funds in GL will be identified by “Expense account” in CoA.
  - Allows ORA to manage the expenditure type list to meet C&G reporting needs and compliance requirements.
- **Expenditure types will be mapped to the invoice line for certain sponsor’s specific templates.**
  - We are developing the top 10 invoice and financial report templates in Oracle that will populate the data available in the system including award demographic information and actual expenses per expenditure category.

# Expenditure Categories in PPM

## Progress and Benefits

- **10 expenditure categories remain with updated descriptions.**
  - (1) Salary and wages, (2) Employee Benefits, (3) Materials and Supplies, (4) Travel and Transit, (5) Services, (6) Equipment, (7) Stipends, Tuition and Fees, (8) Subawards, (9) Other Direct costs, and (10) Facilities and Administration Costs
- **Enables more consistent reporting of expense grouping.**
  - Only one expenditure category will be applicable to each expenditure type unlike today, more than one sub code are applicable to an object code.
  - These 10 expenditure categories will be used for UCLA standard invoice template.
  - Each Expenditure Type will be mapped to its corresponding expenditure category as defined by UCLA.
- **Sponsor's specific templates will follow expenditure categories required by the sponsor.**
  - Each Expenditure Type will be mapped to its corresponding sponsor's expenditure category for the templates that will be available in Oracle.

# Expenditure Types in PPM

Allowable, Warning, and Unallowable object codes

- **Current: All object codes are grouped in one of three following categories for its restriction.**
  - Allowable, warning, or unallowable

- **Future:**

Current State: Object code	Future State: Expenditure Type
<b>Allowable:</b> FS allows a cost with this object code to be processed to C&G funds.	Allowable object codes will be consolidated into a smaller number of Expenditure Types that can be selected for an expense to a C&G project.
<b>Warning:</b> FS allows a cost with this object code to be processed to C&G funds with “warning” at initiation.	Warning object codes will be included in the allowable Expenditure Type list with clearer descriptions to highlight that it is for the direct benefit of the project.
<b>Unallowable:</b> FS does NOT allow a cost with this object code to be processed to C&G funds. A cost with an unallowable object code must be charged to a non-C&G fund first and transferred to the applicable C&G fund via financial journal by EFM when warranted.	Unallowable object codes will not be available in the allowable Expenditure Type list to select for a cost to charge a C&G project. Such costs must be charged to a non-C&G funding source first and need to be moved to the applicable C&G project through the cost transfer system. Unallowable Expenditure Types will be available in the Cost transfer System for selection and all cost transfers with unallowable expenditure types will require EFM’s approval.

# Expenditure Types and Categories in PPM

Departmental perspective is critical to finalize the expenditure types and your feedback by November 30, 2019 is appreciated.

- **Questions that can guide your review:**
  - Is this list complete for my invoicing and reporting needs?
    - Does this list includes expenditure types that are equivalent to the current object codes that I am frequently using?
  - Is each expenditure type descriptive enough for accurate selection?
    - Can you identify which expenditure type you will choose for object codes you are frequently using?
  - Is this list too general?
    - Does this list includes expenditure types that are frequently required by sponsor for separate line reporting in the invoice or financial report?
- **An updated expenditure type list will be sent to PAMS Listserv and ORA Listserv. Please send your feedback to [yoona.lee@research.ucla.edu](mailto:yoona.lee@research.ucla.edu) by 11/30/19.**

# Any Questions?

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## Contact Information

### EFM Website

<http://ora.research.ucla.edu/efm/>

### Yoon Lee

Phone: X40375

Email: [yun.lee@research.ucla.edu](mailto:yun.lee@research.ucla.edu)

### ERS Help Desk

Email: [ershelf@research.ucla.edu](mailto:ershelf@research.ucla.edu)

### Will Murdoch

Phone: X65151

Email: [Wallace.murdoch@research.ucla.edu](mailto:Wallace.murdoch@research.ucla.edu)



# Centennial Celebration Trivia

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# Centennial Trivia

## Trivia Rules

- 1) Raise your hand to answer the question— please do not shout out your guess!**
- 2) Those who answer correctly will receive an extra raffle ticket!**
- 3) True/False questions are for all to answer.**

# Centennial Trivia

**In 1919, Assembly Bill 626 birthed the Southern Branch of the University of California. Where was the campus originally located?:**

- A. Hollywood**
- B. Burbank**
- C. Beverly Hills**
- D. Westwood**

## HOLLYWOOD



**Southern Branch of the University of California was located where Los Angeles City College (LACC) is today!**

# Centennial Trivia

**This center in the UCLA Psychology department is the legacy of Associate Professor Grace Maxwell Fernald who founded the first clinic school in the U.S. for children and adults with learning disabilities in 1921.**

- A. Center for Mental Health in Schools**
- B. Child Study Center**
- C. Center for Culture, Brain, and Development**
- D. UCLA Behavioral Testing Core**

# Centennial Trivia

This center in the UCLA Psychology department is the legacy of Associate Professor Grace Maxwell Fernald who founded the first clinic school in the U.S. for children and adults with learning disabilities in 1921.

- A. Center for Mental Health in Schools**
- B. FERNALD Child Study Center**
- C. Center for Culture, Brain, and Development**
- D. UCLA Behavioral Testing Core**

# Centennial Trivia

**In 1960, Professor of Chemistry Willard F. Libby won the first Nobel Prize for science awarded to a UCLA faculty member for his work in developing:**

- A. chemotherapy**
- B. radiocarbon dating**
- C. protein crystallography**
- D. molecular orbital theory**

# Centennial Trivia

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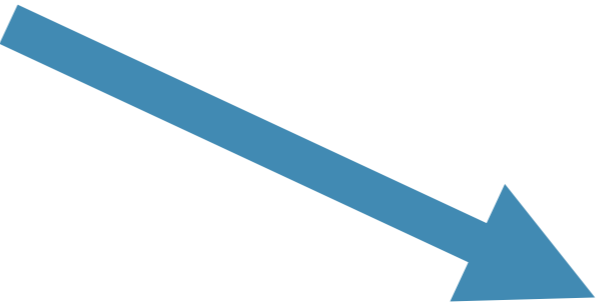
# Centennial Trivia

**What location on campus is credited as the “birthplace of the internet”?**

- A. Engineering I, Room 3420**
- B. Engineering II and III, Room 3420**
- C. Engineering IV, Room 3420**
- D. where the parapsychology lab used to be (c. 1968-1978)**

# Centennial Trivia

What location on campus is credited as the “birthplace of the internet”?

- A. Engineering I, Room 3420
- B. Engineering II and III, Room 3420**  **Boelter Hall**
- C. Engineering IV, Room 3420
- D. where the parapsychology lab used to be (c. 1968-1978)  **Fifth floor of Semel Institute**

## True or False?:

**Before costumed student mascots took over the job in the mid-1960s, live bears were used as mascots at UCLA home football games.**

# Centennial Trivia

True or False?:

**Before costumed student mascots took over the job in the mid-1960s, live bears were used as mascots at UCLA home football games.**

# Centennial Trivia

**Which University received the world's first internet transmission from Professor Leonard Kleinrock and his research team at UCLA on October 29, 1969?**



- A. Stanford University**
- B. USC**
- C. Yale University**
- D. Cal Tech**
- E. MIT**

# Centennial Trivia

**Which University received the world's first internet transmission from Professor Leonard Kleinrock and his research team at UCLA on October 29, 1969?**



- A. Stanford University**
- B. USC**
- C. Yale University**
- D. Cal Tech**
- E. MIT**

# Centennial Trivia

## True or False?:

**In 1964, while Director of UCLA's Tissue Typing Lab, Paul Terasaki devised a procedure to evaluate the compatibility of organ donors and organ recipients. The method, now the international standard for tissue typing, has been used in approximately 250,000 transplants.**

# Centennial Trivia

True or False?:

In 1964, while Director of UCLA's Tissue Typing Lab, Paul Terasaki devised a procedure to evaluate the compatibility of organ donors and organ recipients. **The method, now the international standard for tissue typing, has been used in more than 1 MILLION transplants.**

# Centennial Trivia

**UCLA Medical Center Assistant Professor Michael Gottlieb made history when he first diagnosed an unknown affliction later to be called:**

- A. Parkinson's Disease**
- B. Autism**
- C. ADHD**
- D. AIDS**
- E. Depression**



# Centennial Trivia

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- A. Parkinson's Disease
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- C. ADHD
- D. AIDS**
- E. Depression



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# Centennial Trivia

***Living Proof* is a 2008 Lifetime Television film based on the true life story of UCLA faculty member Dennis Slamon who helped develop the breast cancer drug Herceptin. The role of Dr. Slamon is played by \_\_\_\_\_.**

- A. Anthony Edwards**
- B. Harry Connick, Jr.**
- C. Rob Lowe**
- D. Noah Wyle**



# Centennial Trivia

*Living Proof* is a 2008 Lifetime Television film based on the true life story of UCLA faculty member Dennis Slamon who helped develop the breast cancer drug Herceptin. The role of Dr. Slamon is played by \_\_\_\_\_.

- A. Anthony Edwards
- B. Harry Connick, Jr.
- C. Rob Lowe
- D. Noah Wyle



# Centennial Trivia

**Dr. Gail Wyatt is:**



- A. the first ethnic minority to receive training as a sexologist.**
- B. the first African American woman in California to receive a license to practice Psychology.**
- C. the first African American woman Ph.D. to reach full Professor in a school of medicine.**
- D. A and B only**
- E. A, B and C**

# Centennial Trivia

**Dr. Gail Wyatt is:**



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- B. the first African American woman in California to receive a license to practice Psychology.**
- C. the first African American woman Ph.D. to reach full Professor in a school of medicine.**
- D. A and B only**
- E. A, B and C**



# Centennial Trivia

Dr. Dennis Hong is the founder of RoMeLa, a state-of-the-art research facility at UCLA with an emphasis on studying \_\_\_\_\_.

- A. Really cool lasers
- B. Electric utility grids
- C. Robotics
- D. Regenerative medicine
- E. Rome, Italy



**RoMeLa**  
ROBOTICS & MECHANISMS LABORATORY

# Centennial Trivia

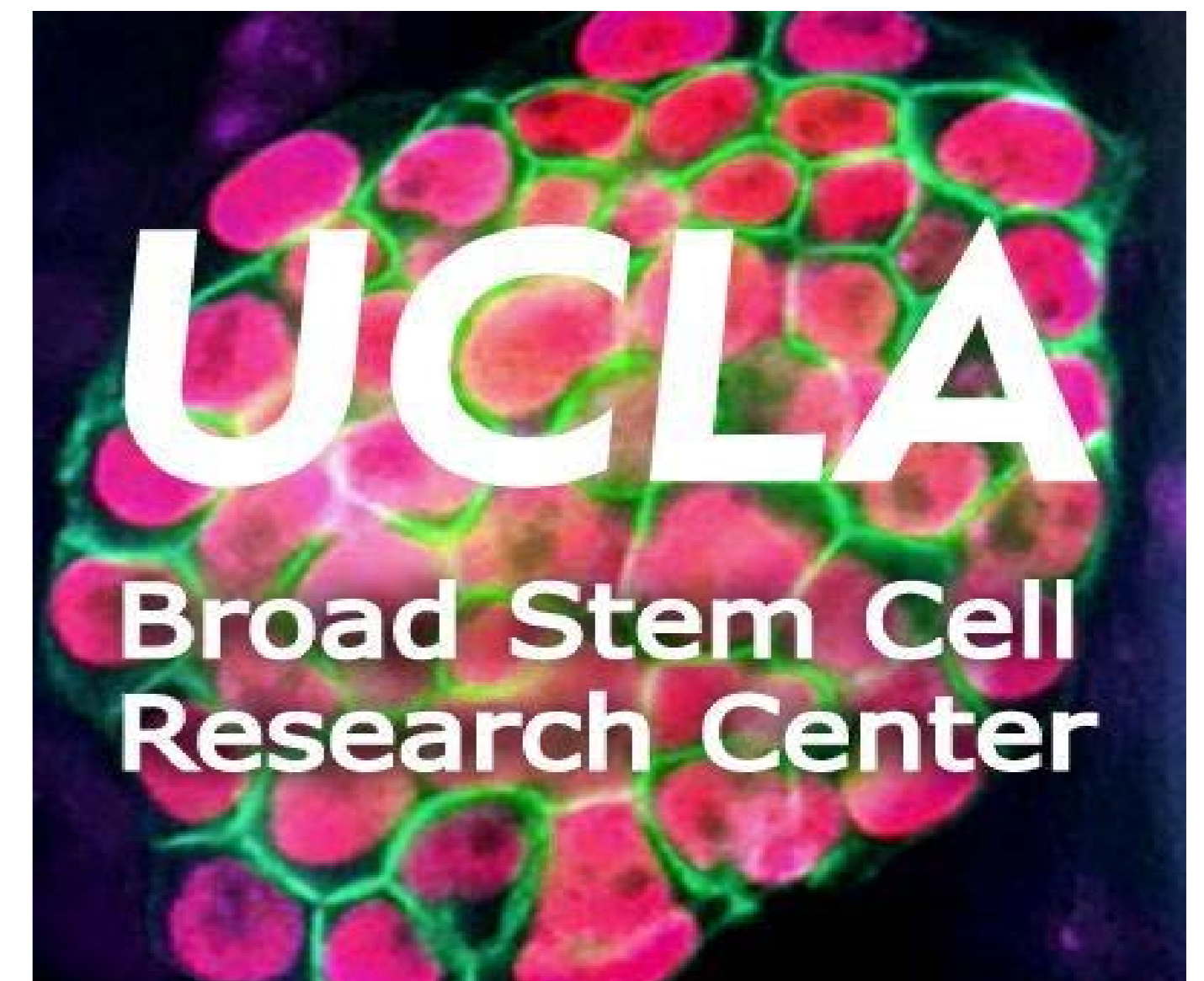
**Distinguished Professor Owen Witte has published findings about human leukemia that have led to breakthroughs in chemotherapy, and is also the founding director of this UCLA research center:**

- A. CPRA**
- B. CHPR**
- C. JCCC**
- D. BSCRC**

# Centennial Trivia

Distinguished Professor Owen Witte has published findings about human leukemia that have led to breakthroughs in chemotherapy, and is also the founding director of this UCLA research center:

- A. CPRA (Center for Policy Research on Aging)
- B. CHPR (California HIV/AIDS Research Program)
- C. JCCC (Jonsson Comprehensive Cancer Center)
- D. **BSCRC** (Broad Stem Cell Research Center)



# Centennial Trivia

**Charles Sawyers and Michael Jung discovered enzalutamide, a nonsteroidal antiandrogen (NSAA) medication, which is primarily used in the treatment of:**

- A. pancreatic cancer**
- B. ovarian cancer**
- C. colon cancer**
- D. prostate cancer**

# Centennial Trivia

Charles Sawyers and Michael Jung discovered enzalutamide, a nonsteroidal antiandrogen (NSAA) medication, which is primarily used in the treatment of:

- A. pancreatic cancer
- B. ovarian cancer
- C. colon cancer
- D. prostate cancer



# Centennial Trivia

In 2012, UCLA astrophysicist Andrea Ghez became the first woman to win the internationally renowned Crafoord Prize from the Royal Swedish Academy of Sciences for her role in discovering that a \_\_\_\_\_ exists at the center of the Milky Way galaxy.



- A. black hole**
- B. supermassive black hole**
- C. white dwarf star**
- D. star cluster**

# Centennial Trivia

In 2012, UCLA astrophysicist Andrea Ghez became the first woman to win the internationally renowned Crafoord Prize from the Royal Swedish Academy of Sciences for her role in discovering that a \_\_\_\_\_ exists at the center of the Milky Way galaxy.



- A. black hole
- B. supermassive black hole
- C. white dwarf star
- D. star cluster