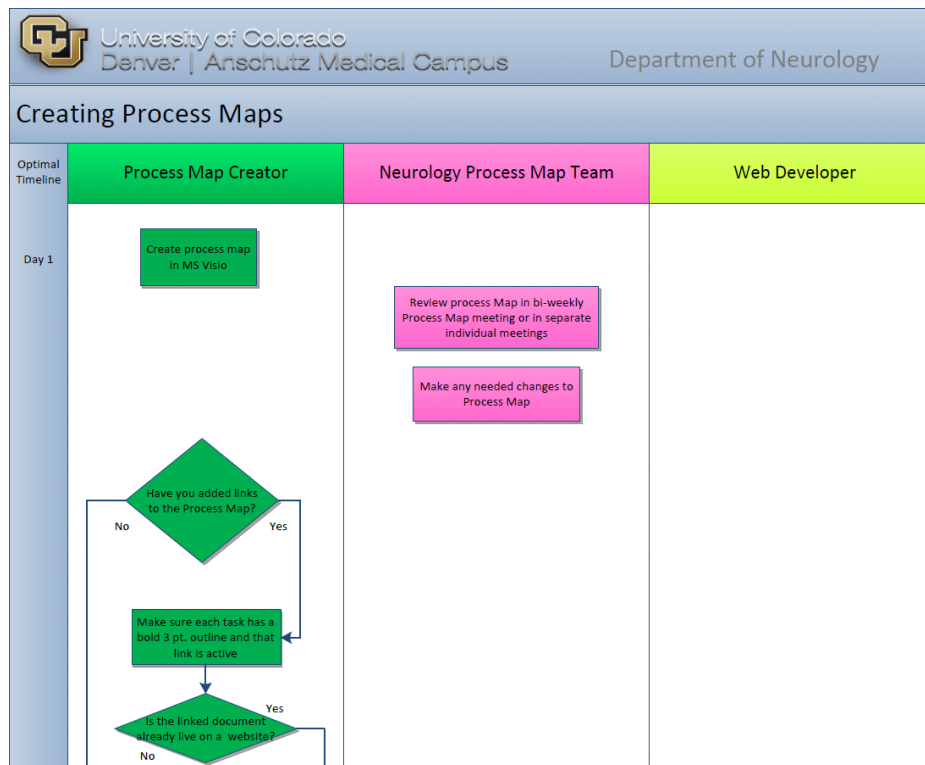


## What is Process Mapping?

The Department of Neurology at the Anschutz Medical Campus, like many other School of Medicine departments, has seen incredible growth in clinical and grant revenue over the last several years, requiring the hire of 9 additional faculty and the creation of 12 new administrative positions in the past 3 years alone. Additionally, the very nature of working in an academic medical community means that employee turnover can be quite high, as employees gain experience in the department's clinics and/or labs, and then move on to medical school or graduate school. Like many departments, there is little training documentation in the department - institutional knowledge is slowly gained, highly valued as it is used in daily work, but then is lost when employees retire, transfer to other departments, or leave the university's employment, and new employees struggle to figure out the best way to perform their job functions, reinventing the wheel each time.

Last fall, Kathy Illian, MA who is the department's Director of Finance and Administration, and Leah Lleras, BA, the department's Manager of Human Resources and Faculty Affairs, decided that creating a Succession Plan was a high priority for the department, so that even in a time of rapid expansion and fast-paced activity, the Department's administrative needs would be met at all times. Out of this discussion came the Process Mapping project.

Process Maps are essentially swim lane diagrams that describe in a visual fashion the tasks, decisions, and timeline of specific departmental functions, by each participant in the function:



They are created in Microsoft Visio (flow-charting software), converted to PDF, and loaded on the Neurology Intranet with links to additional forms, supplemental documentation, screenshots, videos, and even audio files as appropriate. The maps are reviewed, edited, and approved for publishing by the entire administrative staff in twice-monthly meetings. This mass review is critical as it ensures that there is no assumption of prior knowledge - the map should be clear enough that an employee on the very first day of work could perform the function using the process map as a guide. The Process Map team uses a standard template, and they color code each 'role' and all of that role's functions. They use the same color coding on all maps for consistency, and use a naming convention for the files that clearly identifies the administrative unit and the function being described. The goals of Process Mapping are to shorten the learning curve for (and instill confidence in) employees who have taken on new positions, to capture the institutional knowledge of the longer-term employees, and most importantly, to provide checklists for critical functions to ensure deadlines are met.

### **What can Process Maps do to help CU?**

Most training materials are a 'wall of words' - often inside a Word document or a Power Point slideshow. Bullets and indents might attempt to parse information into meaningful sections, but at the end of the day the training material is just words. There is overwhelming evidence, supported by the last 15 years of global research into technology and adult learning, that people learn better from pictures and words than from just words alone. By using only words, the opportunity to transfer knowledge more quickly and with better retention is lost. In addition to improving the speed with which one becomes proficient in a job, the process map serves easily as a printable checklist, which can be annotated with notes and reminders for each instance of its use. Process maps also provide, at a glance, an overall indication of the complexity of a process, the optimal timeline and deadlines, and the extent of the involvement of the participants - valuable information when allocating resources.

Unanticipated, but welcome outcomes of the Process Mapping project are:

- It teaches and encourages 'systems' thinking
- It fosters a team spirit
- It offers an opportunity for all employees regardless of position/professional level to practice critical thinking and problem-solving
- It teaches information design and a rather unique software program that most of the Process Map team have enjoyed learning
- It creates cross-training opportunities
- Perhaps the most important unseen benefit of the Process Mapping project is that it quite often reveals flaws in existing processes, which can then be revised.

## Implementation Status

By June 30, 2013 we will have 50 process maps on our website, with an additional 75 links to supporting documentation. Each administrative unit is tasked with completing 2 process maps per month, so by year's end we hope to have an additional 80 process maps live. We have hired a full-time student worker to assist with this project, and it is a project we expect will never end.

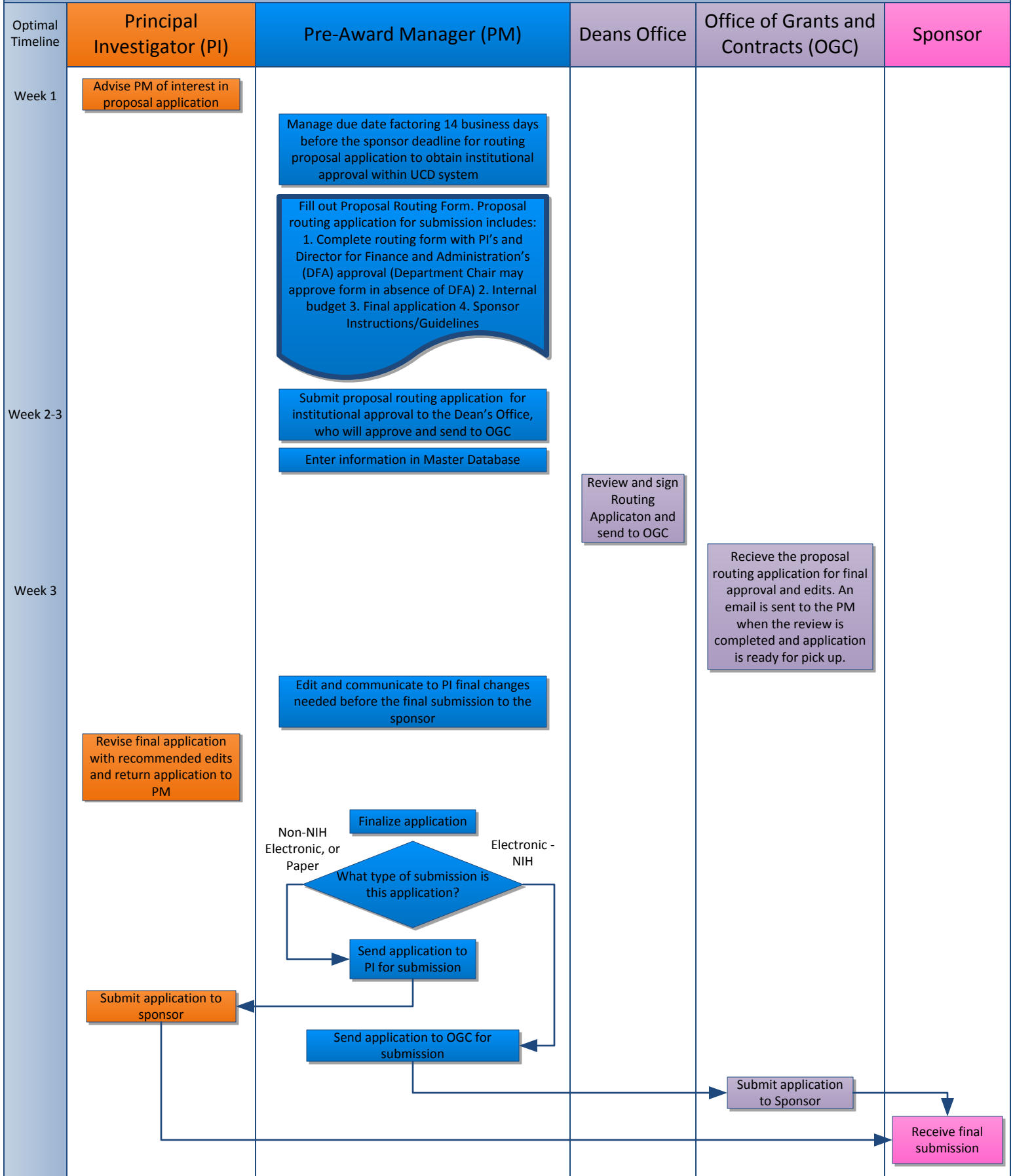
NOTE: All of our process maps are on our Intranet, and so these documents and many of their links are not accessible outside of the campus network. For the purpose of this submission, we have loaded one on our public site:

<http://www.ucdenver.edu/academics/colleges/medicalschoo/departments/neurology/Documents/hr-newProviderCredentialing-Internet.pdf>

Also included below are some of the various Process Maps already live, as well as our standard template, color-coding guide, and a tips sheet.



## Routing a New Grant Application





## Processing a UPI Accounts Payable Voucher

Optimal  
Timeline

When  
End User  
incurs  
expense

By 4 pm  
each  
Friday

End User

Send original receipts and supporting documentation to FM via hand-delivery or intercampus mail

FM

Review and sort documents

Open the AP Voucher Form via the UPI Intranet

Complete the blank fields in the AP Voucher form that relate to the reimbursement

Locate the GL Account Code in the UPI Finance Department's Reference Guide (hard copy)

Locate the Fund Number and Program Code on the Neurology Department Accounts spreadsheet or in PeopleSoft under Chartfields - Speedtype

Attach the receipts and backup documentation to the AP Voucher and submit to DFA for approval

Scan the AP Voucher Form, receipts, and backup documentation and email to [Accounts.Payable@upicolor.org](mailto:Accounts.Payable@upicolor.org)

Once UPI sends a confirmation receipt email, File AP Voucher Form, receipts and backup documentation in appropriate UPI financial folder

DFA

Review expenses, fund number, program and receipts

Can the report be approved?

Yes

No

Sign the AP Voucher form and return to FM

Return the AP Voucher Form to FM with the concerns or questions



Title

Optimal Timeline	Role	Role	Role	Role	Role
Day 1					

Color Codes and Current Incumbents. Please use these colors and the design title "Office colors" for your process maps.

This title bar and the timeline bar should be →

Color code:  
Red: 154  
Green: 179  
Blue: 209

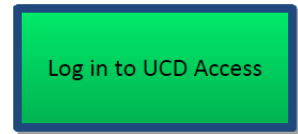
DFA or Dept Chair	Dept HR & Faculty Affairs	Finance Manager	IT Professional /web developer	Pre-Award Manager (PM)	Post Award Manager (PAM)	Clinical Financial Analyst	Education Manager	Residency Coordinator	Fellowship & Med Student Coordinator	Clinical Research Operations Manager	Clinical Research Budget Manager	Regulatory Coordinator	Clinical Research Contract & Billing Specialist	Provider Support (UPI Admin Assistants)	PI/ Provider/ Supervisor/ Program Director	Other Neuro personnel	Outside Agency or Neurology Team	Other UCD Dept	Electronic Systems
Current Incumbents: Kathy Giere Ken Tyler, MD	Current Incumbent: Leah Lleras	Current Incumbent: Ethan Maxwell	Current Incumbent: David Vu	Current Incumbent: Polly Serrano	Current Incumbent: Pat Plummer	Current Incumbent: Mary O'Connell	Current Incumbent: Alina Rich	Current Incumbent: Amber Ward	Current Incumbent: Vacant	Current Incumbent: Haley Steinert	Current Incumbent: Bev Roush	Current Incumbents: April Bryant and Eric Cruz	Current Incumbent: Eric Winters	Current Incumbents: Linda Friedman Janet Jones Jerri Lusk Marylyn Papst Angie Roslawski Marcia Sabo Kim Sowa Diane Strong	Current Incumbent: Anyone who is a PI, provider, Program Director or supervisor	Current Incumbent: Anyone other Neuro employee is involved in the process but not listed here	Current Incumbent: Any agency outside of the University System OR Neurology Team	Current Incumbent: Any UCD department other than Neurology (OGC, GME, HR, etc)	Current Incumbent: Any electronic system
Color code: Red: 0 Green: 102 Blue: 102	Color code: Red: 179 Green: 67 Blue: 64	Color code: Red: 101 Green: 124 Blue: 52	Color code: Red: 204 Green: 255 Blue: 51	Color code: Red: 0 Green: 112 Blue: 192	Color code: Red: 255 Green: 204 Blue: 102	Color code: Red: 0 Green: 176 Blue: 240	Color code: Red: 51 Green: 51 Blue: 153	Color code: Red: 255 Green: 192 Blue: 0	Color code: Red: 112 Green: 48 Blue: 160	Color code: Red: 102 Green: 102 Blue: 255	Color code: Red: 255 Green: 255 Blue: 0	Color code: Red: 255 Green: 51 Blue: 0	Color code: Red: 153 Green: 51 Blue: 102	Color code: Red: 165 Green: 192 Blue: 107	Color code: Red: 237 Green: 111 Blue: 9	Color code: Red: 0 Green: 176 Blue: 80	Color code: Red: 255 Green: 102 Blue: 204	Color code: Red: 171 Green: 154 Blue: 192	Color code: Red: 127 Green: 127 Blue: 127

To use these colors, on the home tab click "Fill", then "More Colors", then "Custom", then type in the numbers listed for Red, Green, and Blue

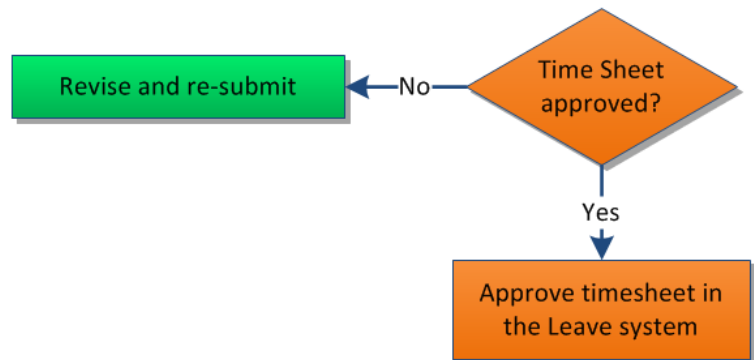
## TIPS ON CREATING PROCESS MAPS

When should you create a process map? If you were training your replacement (who is brand new to the University), is this task something you would show him/her how to do? If yes, create a process map.

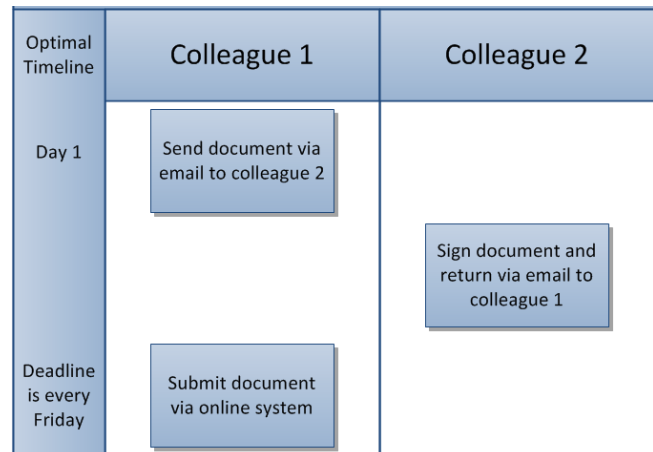
- When using a hyperlink, the border around the task box should be weighted to 3 pt.



- When mapping a decision, use the diamond “decision” task box and connectors.



- Add all relevant deadlines to the Optimal Timeline.
- If one task must happen before the next can occur, the first task should appear above the second.



- When linking to a document (.doc, .xls, .pdf, etc) use the “document” task box



- Follow the color code system that has been established for the department, saved in the G:\processMaps folder titled “colorCodeAndCurrentIncumbentsForProcessMapping”
- Use the template process map saved in the G:\processMaps folder titled “ed-processMapTemplate”