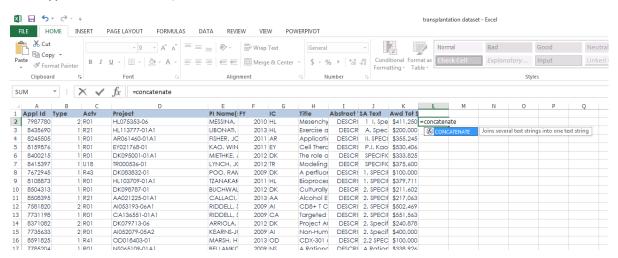# OPA Excel Tips: Merging cells (concatenation)

Sometimes it is useful to merge the values from two or more cells in a spreadsheet (Example 1), or to add additional text to a cell value e.g. to create a list of ApplIDs separated by commas (Example 2). The "Concatenate" function in Excel can be used for this.
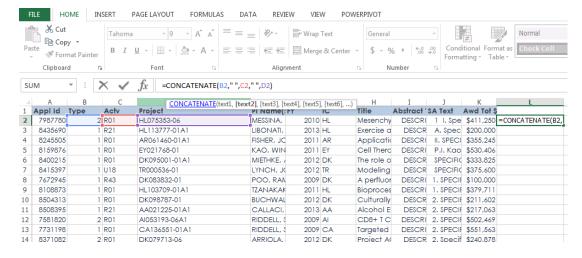
Example 1: Creating complete grant numbers.

In this example the Transplantation dataset is used. The dataset contains all the information contained in a complete project number but spread across three columns. The 'Concatenate' function within Excel can be used to merge these cells together into a new cell.

First type "=concatenate(" in a new cell.

Select the cells you wish to combine, separating each cell with a ",". It is also possible to include text in between cell values. In the example below, a space (" ") is inserted between Type and Activity Code and between Activity Code and Project number. Other values could be entered between the quotation marks.

Once the formula is entered, the merged value appears in the new cell.

Copying the formula and pasting to the whole column creates complete grant number for each row in the spreadsheet.

Example 2: Creating a list of Comma Separated Values.

To create a list of ApplIDs separated by commas, type "=concatenate(" in a new cell at the top of the list. Select the cell containing the ApplID, add a comma, then add the text you wish to include "," before closing the brackets.

FILE | **HOME** | INSERT | PAGE LAYOUT | FORMULAS | DATA | REVIEW | VIEW | POWERPIVOT

L2: =concatenate(A2,",")

CONCATENATE(text1, [text2], [text3], …)

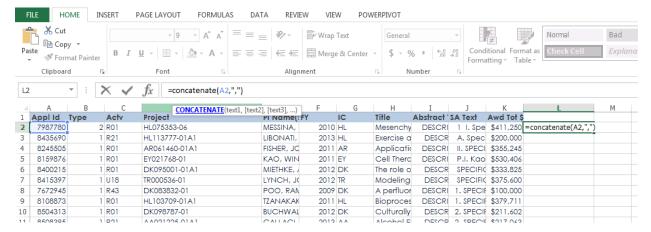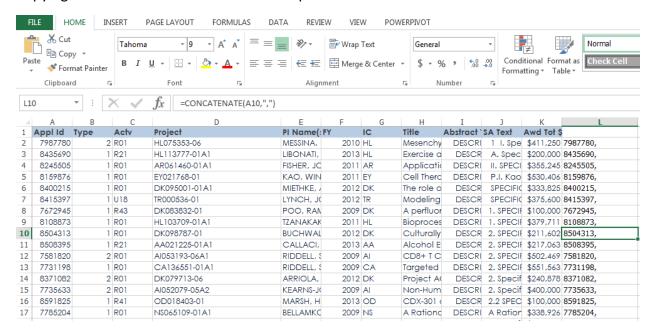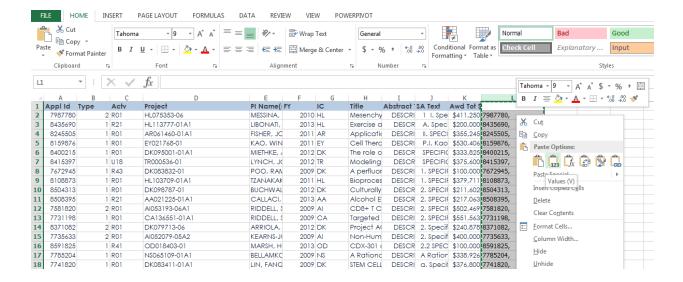|	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Appl Id	Type	Actv	Project	PI Name(:	FY	IC	Title	Abstract	SA Text	Awd Tot $		
2	7987780	2	R01	HL075353-06	MESSINA,	2010	HL	Mesenchy	DESCRI	1 I. Spe	$411,250	=concatenate(A2,",")	
3	8435690	1	R21	HL113777-01A1	LIBONATI,	2013	HL	Exercise a	DESCR	A. Spec	$200,000		
4	8245505	1	R01	AR061460-01A1	FISHER, JC	2011	AR	Applicatic	DESCRI	II. SPECI	$355,245		
5	8159876	1	R01	EY021768-01	KAO, WIN	2011	EY	Cell Therc	DESCRI	P.I. Kao	$530,406		
6	8400215	1	R01	DK095001-01A1	MIETHKE,	2012	DK	The role o	DESCR	SPECIFIC	$333,825		
7	8415397	1	U18	TR000536-01	LYNCH, JC	2012	TR	Modeling	DESCR	SPECIFIC	$375,600		
8	7672945	1	R43	DK083832-01	POO, RAN	2009	DK	A perfluor	DESCRI	1. SPECIF	$100,000		
9	8108873	1	R01	HL103709-01A1	TZANAKAK	2011	HL	Bioproces	DESCRI	1. SPECIF	$379,711		
10	8504313	1	R01	DK098787-01	BUCHWAL	2012	DK	Culturally	DESCR	2. SPECIF	$211,602		
11	8508395	1	R21	AA021225-01A1	CALLACI,	2013	AA	Alcohol E	DESCR	2. SPECIF	$217,063		

Copying the formula to the rest of the data produces the results below.

FILE | **HOME** | INSERT | PAGE LAYOUT | FORMULAS | DATA | REVIEW | VIEW | POWERPIVOT

L10: =CONCATENATE(A10,",")

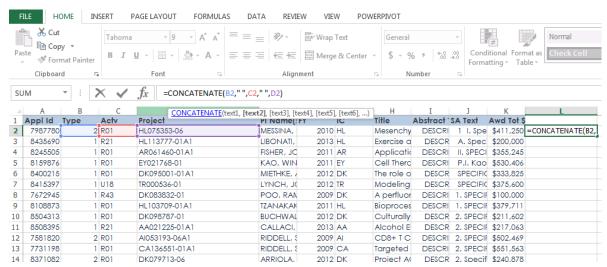|	A	B	C	D	E	F	G	H	I	J	K	L
1	Appl Id	Type	Actv	Project	PI Name(:	FY	IC	Title	Abstract	SA Text	Awd Tot $	
2	7987780	2	R01	HL075353-06	MESSINA,	2010	HL	Mesenchy	DESCRI	1 I. Spe	$411,250	7987780,
3	8435690	1	R21	HL113777-01A1	LIBONATI,	2013	HL	Exercise a	DESCR	A. Spec	$200,000	8435690,
4	8245505	1	R01	AR061460-01A1	FISHER, JC	2011	AR	Applicatic	DESCRI	II. SPECI	$355,245	8245505,
5	8159876	1	R01	EY021768-01	KAO, WIN	2011	EY	Cell Therc	DESCRI	P.I. Kao	$530,406	8159876,
6	8400215	1	R01	DK095001-01A1	MIETHKE,	2012	DK	The role o	DESCR	SPECIFIC	$333,825	8400215,
7	8415397	1	U18	TR000536-01	LYNCH, JC	2012	TR	Modeling	DESCR	SPECIFIC	$375,600	8415397,
8	7672945	1	R43	DK083832-01	POO, RAN	2009	DK	A perfluor	DESCRI	1. SPECIF	$100,000	7672945,
9	8108873	1	R01	HL103709-01A1	TZANAKAK	2011	HL	Bioproces	DESCRI	1. SPECIF	$379,711	8108873,
10	8504313	1	R01	DK098787-01	BUCHWAL	2012	DK	Culturally	DESCR	2. SPECIF	$211,602	8504313,
11	8508395	1	R21	AA021225-01A1	CALLACI,	2013	AA	Alcohol E	DESCR	2. SPECIF	$217,063	8508395,
12	7581820	2	R01	AI053193-06A1	RIDDELL, S	2009	AI	CD8+ T C	DESCRI	2. SPECIF	$502,469	7581820,
13	7731198	1	R01	CA136551-01A1	RIDDELL, S	2009	CA	Targeted	DESCRI	2. SPECIF	$551,563	7731198,
14	8371082	2	R01	DK079713-06	ARRIOLA,	2012	DK	Project Ac	DESCR	2. Specif	$240,878	8371082,
15	7735633	2	R01	AI052079-05A2	KEARNS-JC	2009	AI	Non-Hum	DESCRI	2. Specif	$400,000	7735633,
16	8591825	1	R41	OD018403-01	MARSH, H	2013	OD	CDX-301 c	DESCR	2.2 SPEC	$100,000	8591825,
17	7785204	1	R01	NS065109-01A1	BELLAMKC	2009	NS	A Rationc	DESCRI	A Ration	$338,926	7785204,

Note that you may want to remove the formula in the new column. This can be done by clicking on the column header 'L', right click, select 'Copy' then 'Paste Special' and select the 'Values' option (the icon with the number on it). This will remove the formula from the spreadsheet.

This column of data can then be copied and saved as a new dataset, or pasted into a search tool that requires a list of identifying codes separated by commas.

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More help

As with other functions in Excel, clicking on the word "Concatenate" brings up a link to the help text.

Clicking on the link brings up the Excel help text:

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