

# Consolidated Faculty Analysis Detailed Analysis Guide

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### **Introduction to CFA – Consolidated Faculty Analysis**

Welcome to your Consolidated Faculty data! This product is designed specifically for deans, assistant/associate deans, and dept heads. Its goal is to offer you a way to directly interact with a breadth of faculty related data. Its goal is to be easy or at least easier than writing your own reports. However, to be fair, this is not report writing; this is analysis. What does that mean, you ask? Well, it means that you don't have to have a specific question. You may have a question to begin with, but what you really want is to learn about your faculty and explore their data.

For example, open up CFA begin exploring your faculty their relationship to sponsored research. You observe total grants expenditures across several departments and notice that one department has a dramatically higher level of expenditures than all the others. Why is that? Do they simply have more grants? Do they have higher dollar grants? Do they have a superstar research faculty? With this tool, you can quickly and easily add FTE to see if this department is doing more or less research per FTE than other departments.

As part of the faculty performance and activity evaluation process, college human resources and financial administrators need integrated employee, payroll, pre and post-award grant, and course registration data regarding faculty so they can make decisions about promotion, tenure, and evaluate activity.

This supports the college's strategic objectives of retaining outstanding faculty and researchers by ensuring that the most productive faculty members are identified and rewarded appropriately.

This project will ensure the user a less manually-intensive process for collecting and organizing the data, allowing time and effort to be focused on analysis and decision making. It will also provide a more powerful analysis tool to support dynamic interaction with the data during the decision making process. This will be accomplished by replacing current approaches of collecting data across a number of separate reports, and in some cases manually re-entering data into spreadsheets, with DS a solution that provides a single source that integrates data spanning multiple subject areas (employee position and job, payroll, grants, student registration) to directly support analysis and OLAP capability.

## **Targeted Users**

This product is intended for use from the perspective of a college: i.e. College of Engineering faculty or College of LAS faculty not both at the same time. Although one could look at an entire campus at a time (the product does not explicitly prohibit this perspective), that broad perspective could create complications when summing and counting faculty members. Example expected users for this data are: Assistant & Associate Deans, College and Departmental business managers, and P&T decision makers.

## **Use Cases (samples – not exhaustive)**

This product is intended to answer the primary question: What are my faculty doing? This question implies that the college user is interested in the most current picture of faculty activity in the college. Therefore, this product focuses on faculty that are currently employed at the University.

Clearly stated, if a faculty member terminates during the current fiscal year, that faculty member will drop out of the data set at the refresh immediately following termination and disappear from that fiscal year as the question is no longer relevant.

Needs	Questions	Why is This Important	When is This Important	Who's Asking
Counts/ Averages	How many grants are my faculty working on grouped by department?  How many proposals have my faculty submitted this year by rank?  How many faculty do I have? How many faculty FTE?	To understand and communicate the big picture (i.e., what are faculty doing relative to eachother)  To monitor faculty productivity  To ensure my college is writing proposals	Ongoing	College & some Departmental Business Managers  Deans & Administrators
	How many Tenure track faculty do I have in my college? By department?			

Funding Source	What is the average number of jobs of a professor?  How many faculty are being paid off state funds, grant funds, service plans? Who are they?  What is the average annual salary of my assistant professors who are a PI on a grant?	Based on funding opportunities, determine who should be paid off what types of funds  Compare research faculty to each other and relative to the whole	Ongoing	
Lists	Lists of faculty by department	To support high-level questions – nothing actionable	Ongoing	College & some Departmental Business Managers  Deans & Administrators
Exploration	Is there a relationship between teaching and research?  Is there a relationship between job count and pay?  Who are my best performers in: research, teaching, etc? Why?  Are tenured or tenure track faculty more or less productive? In what way? Why?	Observe the balance of faculty resources in my college	Ongoing	College & some Departmental Business Managers  Deans & Administrators

## Grain

The grain of this product is determined to be one row per faculty, per job college, per fiscal year. A Job College is defined as one row per faculty, per college in which this person has a current, non-terminated faculty appointment, per fiscal year.

This product is intended for use from the perspective of a college: i.e. College of Engineering faculty or College of LAS faculty not both at the same time. Although one could look at an entire campus at a time (the product does not explicitly prohibit this perspective), that broad perspective could create complications when summing and counting faculty members.

## **End of Year**

At the end of a fiscal year, June 30<sup>th</sup>, a final snap of faculty information will be taken for that year. Selected columns including financial information will be updated until the accounting year ends (usually sometime in August or September). That will be the final picture of faculty activity for that fiscal year.

The following columns will be updated until the financial fiscal year is complete:

Table: College Employee Facts
Employee Grant Expense Amount
Employee Fund Expense Amount
Employee Grant ICR Amount
Table: Employee Research Facts
Grant Expense Amount
Grant ICR Amount
Grant Fund Expense Amount
Table: Employee Payer Source
Facts
Paid to Date - State
Paid to Date - ICR

Paid to Date - Revolving
Paid to Date - Grant
Paid to Date - Service Plan
Paid to Date - Gift Trust
Paid to Date - Other

The end of year load schedule is particularly complex and very date dependant. An example end of year schedule might look like:

	Production Run	June 20	June 30	July 18	July - Oct(ish)	August 15
		Regular 3rd Saturday run	Special fiscal year-end run	Regular 3rd Saturday run	Special previous fiscal year run (when ?)	Regular 3rd Saturday run
Grants ETL	Grants (all grants datamart columns)	Pull May data	N/A - no run	Pull June data	N/A - no run	Pull July data
Regular CFA ETL	CFA (HR columns)	Pull data as of June 20th	Pull data as of June 30th	Pull data as of July 18th - FY10	N/A - no run	Pull data as of August 15th
	CFA (finance columns sourced from grants datamart)	Pull May data	Pull May data	Pull June data - FY09	N/A - no run	Pull July data

	CFA (finance columns NOT sourced from grants datamart)	Pull data as of June 20th	Pull data as of June 30th	Pull data as of July 18th - FY10	N/A - no run	Pull data as of August 15th
Annual CFA ETL	CFA 3 (update finance columns from previous fiscal year)	N/A - no run	N/A - no run	N/A - no run	FY09 - update finance columns for previous fiscal year	N/A - no run



Red boxes mix FY09 and FY10 data. Therefore, we suspend the regular CFA ETL in July.

Practically speaking, there are two distinct ETL processes for CFA. The regular CFA process runs on the third Saturday of each month, August through June. Additionally, it runs on the 30<sup>th</sup> of June to capture a final end of year picture of faculty. The Year End

CFA process runs as needed July through October to update the financial columns mentioned above until the fiscal year closes.

Because of these timing issues, no new fiscal year row will be written until August as the regular ETL process does not run in July.

## **Security**

Due to the segregation of the data by campus, the level of aggregation, and lack of sensitive data elements, this product will be wide open for designated users. Example designated user are: College Deans, Associate Deans, College Business Managers, and those involved in P&T processes.

#### Refresh

This product is refreshed monthly on the third Saturday of the month. The OLAP cube is refreshed on the following Sunday.

The current fiscal year row will be refreshed monthly within a fiscal year. In general, grant expense columns will be as of the previous month (i.e. a September refresh will pick up August data). All other columns will be as of the date of the refresh. The exception is student data is received from the respective campus institutional reporting offices. It is independent of this load schedule and will be inserted as it becomes available.

A final picture will be preserved at the end of each fiscal year as of June 30<sup>th</sup> for position/job information and as of the fiscal year close for financial information.

#### **Backfill of Data**

A point in time snap of June 30th faculty information from FY08, FY07, FY06, FY05 has been created to back fill the product for use in multi-year analysis. Any faculty member who had a current, non-terminated faculty appointment as of June 30<sup>th</sup> will be captured. If a faculty terminated mid-fiscal year, this faculty will <u>not</u> be captured. It should be noted that this data is intended to provide a multi-year comparison for use in answering questions about faculty active in the current fiscal year. It is not intended to capture the existence of any/all faculty activity over time. This is a subtle but very important distinction.

Because some EDW tables and columns used as the source for current year data are not available for FY05-FY08 the follow source changes were made:

• Employee Payer Source Fact columns were sourced from Payroll Accounting Detail table (rather than OL Expense Source Detail)

It is also important to note that the source for ICR data begins mid-year 2006. Therefore, there are no ICR amounts available for 2005 and 2006 is a partial years data

#### **Data Retention**

At this time, we plan to retain all years of data until we experience degraded product performance or a user request for archive.

#### **Business Rules**

The CFA products will only include faculty. Specifically, faculty are defined as current non-terminated faculty is defined as an employee with a job detail record where the job detail status is different from 'Terminated' and the job detail data status description is 'Current' and the job detail e-class or the position e-class or the employee e-class starts with 'A.' Given the population focus on faculty, this product is not intended to evaluate proposal activity or grant activity in a college. One reason for this is that research could be performed by university staff that are not faculty and as such, would not be included in this data set.

This product is not intended to provide a historical picture of faculty persons who were ever employed in a college. Although that is valuable information, an administrator would no longer be looking at the activity of a terminated faculty for the purpose of making determinations about faculty activity, productivity, promotion, or tenure.

## **Primary Organization logic:**

- 1. If a person has only one job, that is the primary.
- 2. If a person has more than one job, choose the job with the greatest FTE.
- 3. If 2 or more jobs have the same FTE, then of the remaining jobs (i.e., with the most FTE) pick tenured jobs over tenure-track jobs over non-tenured jobs.
- 4. If 2 or more jobs have the same best tenure 'status', then of the remaining jobs, pick the job in the same org as the employee's home org.
- 5. If this doesn't resolve to a single job, then of the remaining jobs pick the job with the highest salary.
- **6.** If this doesn't resolve to a single job, then as a tiebreaker choose the job with the highest alphabetical posn\_cls\_cd + posn\_nbr + job\_suffix

Important: College of Medicine will have NO student data. This includes College of Medicine at Chicago, Peoria, Rockford, and Urbana. This data is not entered into the Banner source.

# Data Elements and related logic

Column title	Description
UIN	The 9 digit UIN of the faculty member. To be included in this data set, the employee must have a faculty e-
	class code on his/her position, job, or employee record. The faculty member must also have a current-active
	position, job, job detail, and employee record. Finally, the faculty member must not be terminated.
Name	The concatenated name of the faculty with last name first
Fiscal Year	The four digit state fiscal year of this row
Chart	The name of the job detail chart (Urbana, Chicago, or Springfield) for this faculty
Home College	The name of the college related to the employee detail org for this faculty member – commonly known as home college.
Home Dept	The name of the department related to the employee detail org for this faculty member – commonly known
	as home department. This field is displayed with the two-character college code preceding the department name.
Home Org	The name of the employee detail org for this faculty member – commonly known as home organization, this is
	the six digit organization that 'owns' this faculty employee. This field is displayed with the two-character
	college code preceding the organization name.
Job College	One row per faculty, per fiscal year, per college in which this person has a faculty appointment.
Primary Org	The primary organization within each Job College for this faculty member. The primary Org is an EDW
	calculated field. See additional logic.
All Depts	A listing of all departments (in alphabetical order & separated by commas) in which the faculty member has
	a non-terminated job.
Rank Desc	The greatest rank for this faculty across all current jobs. Rank order is: Professor, Associate Professor, Assistant
	Professor or Research Professor, Research Assoc Professor.
Years in Rank	
Tenure Desc	The greatest tenure for this faculty across all current jobs. Order is: Indefinite Tenure, Probationary/On Tenure Track, Initial/Partial Term, Q Probation, Terminal Year.
Tenure Track Year	The related tenure track year (single digit) for the chosen tenure description record above.
Paid from State	The sum of payroll, in dollars, this person has actually been paid (to date) from state funds this fiscal year.
	Included fund types are: 1A and 1B
Paid from ICR	The sum of payroll, in dollars, this person has actually been paid (to date) from ICR funds this fiscal year.
	Included fund type is: 2C
Paid from Revolving	The sum of payroll, in dollars, this person has actually been paid (to date) from revolving funds this fiscal year.

	Included fund types are: 3A, 3E, 3F, 3J, 3M, 3Q
Paid from Grant	The sum of payroll, in dollars, this person has actually been paid (to date) from grant funds this fiscal year.
	Included fund types are: 4A, 4C, 4E or 4G
Paid from Service	The sum of payroll, in dollars, this person has actually been paid (to date) from service plan funds this fiscal
Plan	year. Included fund types are: 45, 4T, 4U or 4W
Paid from Gift-	The sum of payroll, in dollars, this person has actually been paid (to date) from gift-endowment-trust funds this
Endow-Trust	fiscal year. Included fund types are: 4J, 4K, 4M, 4N, 6A, 6D, 6G, 6J, 6M, 6P
Paid from Other	The sum of payroll, in dollars, this person has actually been paid (to date) from any funds not delineated above this fiscal year.
Total Annual Salary in	Total expected salary dollars across all current, non-terminated jobs within a job college.
my college	
Total Annual Salary	Total expected salary dollars across all current, non-terminated jobs.
Total Job count	Count of all current, non-terminated jobs for this faculty employee. This is created by counting unique
	position number-job suffix combinations.
Job count in my	Count of all current, non-terminated jobs for this faculty employee in a job college. This is created by
College	counting unique position number-job suffix combinations within a job college.
Years of Service	
Total FTE	The current FTE for this faculty employee across all current, non-terminated jobs. This count excludes summer FTE. FTE should NOT be used when looking across college rows for a faculty as double counting will occur.
FTE in my College	The current FTE for this faculty employee across all current, non-terminated jobs in a job college. This count
	excludes summer FTE. If this number is greater than 1, then the number will default to 1.
Summer FTE in my	The current FTE for this faculty employee across all current, non-terminated jobs in a college where the job
College	detail employee class code is 'MM' and the job suffix is 'S*' – Summer. If the Summer FTE is greater than 1,
	then the number will default to 1.
Extended Leave	An employee having a job detail status description beginning with the word Leave will have this indicator set
indicator	to 'Y'. Intended use: to inform when an employee is out on some type of leave.
Proposals in my	Count of proposals submitted to date, within a fiscal year, for each job college for a principal investigator.
College	Proposals are counted by Original Submission Date, where available. When no original submission date is
	present, the four digit year on the proposal number is used.
Total Proposals	Count of proposals submitted to date, within a fiscal year, by a principal investigator. Proposals are counted
	by Original Submission Date, where available. When no original submission date is present, the four digit year
	on the proposal number is used.
Proposal Co I listings	Count of times this faculty is listed as a co-investigator on proposals within a fiscal year. Proposals are counted

	by Original Submission Date, where available. When no original submission date is present, the four digit year on the proposal number is used.
Proposal dollars requested in my College	Total proposal dollars requested to date, within a fiscal year, for each job college for a principal investigator.
Total proposal Dollars requested	Total proposal dollars requested to date, within a fiscal year, for a principal investigator.
Proposal dollars expected in my college	Total proposal dollars expected to date, within a fiscal year, for each job college for a principal investigator.
Proposal dollars expected	Total proposal dollars expected to date, within a fiscal year, for a principal investigator.
Grants in my College	Count of grants not yet ended for this principal investigator by responsible college. The grant(s) may or may not be currently 'active'. The grant end date must fall be greater than or equal to the refresh date. When no grant end date is available, the grant termination date will be used.
Total Grants	Count of grants not yet ended for this principal investigator. The grant(s) may or may not be currently active. The grant end date must fall be greater than or equal to the refresh date. When no grant end date is available, the grant termination date will be used.
Grant Co I listings	Count of times this faculty is listed as a co-investigator on not yet ended grants. The grant end date must be greater than or equal to the refresh date. When no grant end date is available, the grant termination date will be used.
Grant Fund Expenses	Total grant fund expenses within a fiscal year where the faculty is listed as the principal investigator on a grant fund. These grant expenses may or may not be within your college. These grants may or may not be currently active.
Grant Expenses in my college	Total grant expenses within a fiscal year where the faculty is listed as the principal investigator on the grant and the responsible organization on the grant is in my college. These grants may or may not be currently active. There may be expenses from a grant(s) that are not reflected in the grant count above.
Grant Fund expenses in my college	Total grant fund expenses within a fiscal year where the faculty is listed as the principal investigator on a grant fund. These grant expenses are summed by job college. These grants may or may not be currently active.

Total Grant Expenses	Total grant expenses within a fiscal year where the faculty is listed as the principal investigator on the grant. These grant expenses may or may not be within your college. These grants may or may not be currently active. There may be expenses from a grant(s) that are not reflected in the grant count above.
Total ICR	Total Indirect Cost Revenue within a fiscal year where the faculty is listed as the principal investigator on the grant. These revenue dollars may or may not be within your college. This is total IC Revenue generated for the principal investigator's grants. This includes all revenue generated for distribution: for the University, a college, and departmental orgs. There may be revenue from a grant(s) that are not reflected in the grant count above.
ICR in my College	Total Indirect Cost Revenue within a fiscal year where the faculty is listed as the principal investigator on the grant and the revenue organization is in your college. Your college may or may not be responsible for this faculty's grant(s).
Grant Grads and PreDocs	Unique count of Grads and PreDocs (GA or GB e-class) who are being paid off 'active' grants where this faculty member is the principal investigator. An active grant is defined as: a grant whose end date is greater than or equal to the refresh date. When no grant end date is available, the grant termination date will be used.
Grant PostDocs and Interns	Unique count of PostDocs and Interns (PA or PB e-class) who are being paid off 'active' grants where this faculty member is the principal investigator. An active grant is defined as: a grant whose end date is greater than or equal to the refresh date. When no grant end date is available, the grant termination date will be used.
Grant Academic Prof	Unique count of Academic Professionals (B% e-class) who are being paid off 'active' grants where this faculty member is the principal investigator. An active grant is defined as: a grant whose end date is greater than or equal to the refresh date. When no grant end date is available, the grant termination date will be used.
Grant Others	Unique count of all others who are being paid off 'active' grants where this faculty member is the principal investigator. An active grant is defined as: a grant whose end date is greater than or equal to the refresh date. When no grant end date is available, the grant termination date will be used.
Fall Courses	A count of courses taught in the fall semester by this faculty member. This does not include Independent study as it is counted separately. This data is supplied by the offices of institutional research at Chicago, Urbana, and Springfield.
Fall Credit Hours	The number of credit hours in the fall semester associated with this faculty member. This does not include Independent study as it is counted separately. This data is supplied by the offices of institutional research at Chicago, Urbana, and Springfield.

Fall Student count	The number of students in the fall semester associated with this faculty member. This does not include Independent study as it is counted separately. This data is supplied by the offices of institutional research at Chicago, Urbana, and Springfield.
Fall Contact hours	The number of contact hours in the fall semester associated with this faculty member. This does not include Independent study as it is counted separately. This data is supplied by the offices of institutional research at Chicago and Urbana. For Urbana/Champaign, this field represents IUs. This field does not apply to Springfield.
Spring Courses	A count of courses taught in the spring semester by this faculty member. This does not include Independent study as it is counted separately. This data is supplied by the offices of institutional research at Chicago, Urbana, and Springfield.
Spring Credit Hours	The number of credit hours in the spring semester associated with this faculty member. This does not include Independent study as it is counted separately. This data is supplied by the offices of institutional research at Chicago, Urbana, and Springfield.
Spring Student count	The number of students in the spring semester associated with this faculty member. This does not include Independent study as it is counted separately. This data is supplied by the offices of institutional research at Chicago, Urbana, and Springfield.
Spring Contact hours	The number of contact hours in the spring semester associated with this faculty member. This does not include Independent study as it is counted separately. This data is supplied by the offices of institutional research at Chicago and Urbana. For Urbana/Champaign, this field represents IUs. This field does not apply to Springfield.
Summer Courses	A count of courses taught in the summer semester by this faculty member. This does not include Independent study as it is counted separately. This data is supplied by the offices of institutional research at Chicago, Urbana, and Springfield.
Summer Credit Hours	The number of credit hours in the summer semester associated with this faculty member. This does not include Independent study as it is counted separately. This data is supplied by the offices of institutional research at Chicago, Urbana, and Springfield.
Summer Student Count	The number of students in the summer semester associated with this faculty member. This does not include Independent study as it is counted separately. This data is supplied by the offices of institutional research at Chicago, Urbana, and Springfield.
Summer Contact hours	The number of contact hours in the summer semester associated with this faculty member. This does not include Independent study as it is counted separately. This data is supplied by the offices of institutional research at Chicago and Urbana. For Urbana/Champaign, this field represents IUs. This field does not apply to Springfield.
Independent Study Fall Courses	A count of independent study courses taught in the fall semester by this faculty member. This data is supplied by the offices of institutional research at Chicago, Urbana, and Springfield.
Independent Study	The number of independent study credit hours in the fall semester associated with this faculty member. This

Fall Credit Hours	data is supplied by the offices of institutional research at Chicago, Urbana, and Springfield.
Independent Study	The number of independent study students in the fall semester associated with this faculty member. This data
Fall Student count	is supplied by the offices of institutional research at Chicago, Urbana, and Springfield.
Independent Study	The number of independent study contact hours in the fall semester associated with this faculty member. This
Fall Contact hours	data is supplied by the offices of institutional research at Chicago and Urbana. For Urbana/Champaign, this
	field represents IUs. This field does not apply to Springfield.
Independent Study	A count of independent study courses taught in the spring semester by this faculty member. This data is
Spring Courses	supplied by the offices of institutional research at Chicago, Urbana, and Springfield.
Independent Study	The number of independent study credit hours in the spring semester associated with this faculty member.
Spring Credit Hours	This data is supplied by the offices of institutional research at Chicago, Urbana, and Springfield.
Independent Study	The number of independent study students in the spring semester associated with this faculty member. This
Spring Student count	data is supplied by the offices of institutional research at Chicago, Urbana, and Springfield.
Independent Study	The number of independent study contact hours in the spring semester associated with this faculty member.
Spring Contact hours	This data is supplied by the offices of institutional research at Chicago and Urbana. For Urbana/Champaign,
	this field represents IUs. This field does not apply to Springfield.
Independent Study	A count of independent study courses taught in the summer semester by this faculty member. This data is
Summer Courses	supplied by the offices of institutional research at Chicago, Urbana, and Springfield.
Independent Study	The number of independent study credit hours in the summer semester associated with this faculty member.
Summer Credit Hours	This data is supplied by the offices of institutional research at Chicago, Urbana, and Springfield.
Independent Study	The number of independent study students in the summer semester associated with this faculty member. This
Summer Student	data is supplied by the offices of institutional research at Chicago, Urbana, and Springfield.
count	
Independent Study	The number of independent study contact hours in the summer semester associated with this faculty
Summer Contact	member. This data is supplied by the offices of institutional research at Chicago and Urbana. For
hours	Urbana/Champaign, this field represents IUs. This field does not apply to Springfield.
Non-Instructional	The number of hours a UIS faculty member is released from a portion of instructional duties so that the faculty
Assignment Hours	member can engage in one or more of the following: administration, research, governance, curriculum
	development, public service, or program development. This field does not apply to Urbana or Chicago.
Headcount	A one in this column facilitates counting faculty within a chart and college. The headcount should NOT be
	used when looking across college rows for a faculty as double counting will occur.

# Additional information:

1. Indefinite Tenure – these are faculty who have already received tenure at the University of Illinois.

- 2. Probationary/On Tenure Track these are generally assistant professors who are tenure eligible or 'tenure track' faculty.
- 3. Initial/Partial term these are generally assistant professors who were hired late in the academic semester. Because of the hiring timeline, it would be detrimental to that faculty member to count that partial year as their first year of six total years to build to a tenure status.
- 4. Q Probation these are generally associate professors on termed appointments often 2, 3, or 4 years in duration.
- 5. Terminal Year these are generally assistant professors who have been given a notice of non-reappointment and will not be receiving tenure from the University of Illinois
- 6. Multi Year Contract Agreement these are individuals who are not tenurable and not academic professionals who are on an up to three year contract.
- 7. W Agreement Waive Tenure Right these are individuals who have titles that make them appear to be tenurable but are not tenured. This is generally used by the college of medicine in Chicago.

When individuals ask for Tenure/Tenure Track faculty, they are talking about groups one, two, and three. Groups two, three and four would be best described as tenure eligible. Groups five, six and seven are not tenurable faculty.