



LOYOLA
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Challenges in Faculty Compensation

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LOYOLA UNIVERSITY MEDICAL CENTER



547

Licensed beds



23,018

Discharges in FY16



43,487

ED visits in FY16



LOCATION and SERVICES

- Maywood, Illinois (suburb of Chicago)
- Level 1 Trauma and Burn Center
- William G. & Mary A. Ryan Center for Heart and Vascular Medicine
- Cardinal Bernardin Cancer Center
- One of the region's largest Transplant Centers
- Children's Hospital



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Academic Partners



Edward Hines Jr.

VA Hospital



Loyola University Chicago

Health Sciences Division

Graduate School



Loyola University Chicago

Marcella Niehoff School of Nursing



Loyola University Chicago

Stritch School of Medicine



656

Full-time LUMC faculty



104

Part-time LUMC faculty



25

Neurology faculty



2,400

Trainees*



24

Neurology Residents

3

Neurology Fellows

**Including residents, medical students, nursing students, allied health professionals, chaplains, paramedics*

National Neurology Market



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- Demand for Neurologists continues to increase at a rate higher than the supply
 - Increase of 16% demand vs.
 - Increase of 11% supply
 - *According to the Health Resources and Services Administration*
- Many practices supplementing physicians assistants/advanced nurses to offset the demand for patient care given the supply constraints

National Neurology Market



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- Traditional forms of compensation have continued to tighten within the academic environment through external pressures
 - Declining physician reimbursement
 - Amount of research funding available via government and industry
 - Academic base salaries for teaching medical students shrinking
 - Some areas of the country experiencing narrowing of networks/access to patients
- Disparity between private practice and academic practice
 - 50th Percentile MGMA private practice - \$286,000
 - 50th Percentile AAMC academic practice – Assistant - \$215,000; Associate - \$240,000; Professor \$279,000

Academic Funding Sources



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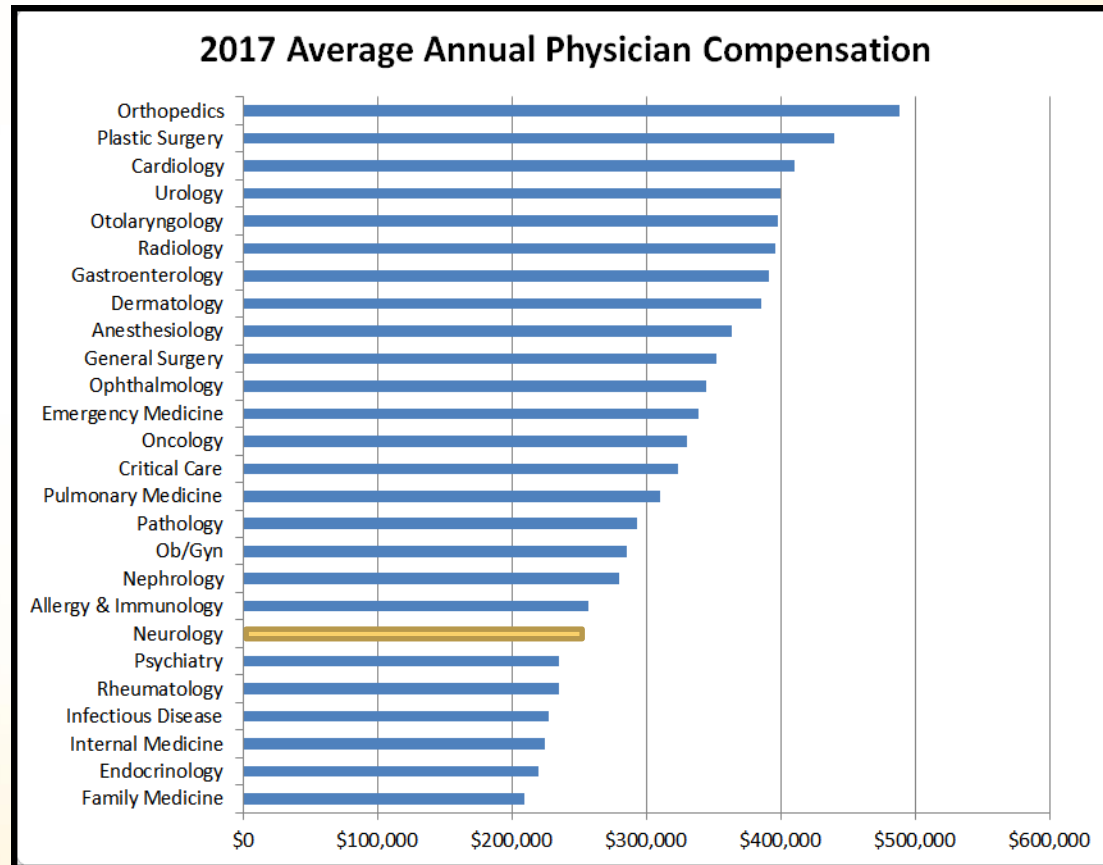
Source	Means		Future State
Professional Fees/Clinical Activity	Net Collections or RVUs	↓	Declining Reimbursement
Academic Base Salary/Stipend	University Paid	↓	Tightening of Medical School Budgets
Medical Directorships	Hospital Paid	↕	Hospitals to supplement income for expertise
Administrative Funding	Hospital Paid	↕	Hospitals to supplement income for expertise
Research Funding	Government or Industry Funded	↓	Increased difficulty in securing research dollars
Veterans Administration Hospital Coverage	Government	↕	Increased demand due to patient care demand
TeleNeurology/TeleStroke and Hospital Affiliations	External Hospital Funded	↑	Remote care increases with demand for Neurologists

Disparity of Specialists



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Medscape 2017 Physician Compensation Survey



Academic Clinical Compensation Models



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- Fixed Model = Academic Salary + Clinical Salary + Administrative/Hospital Support Salary
- Productivity Model = Pay based on clinical production – \$/RVU
- Academic Productivity Model = Small Academic Base Salary + Clinical Base Salary + RVU/Productivity Incentive

Academic Clinical Compensation Models



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■ Hybrid Productivity Model Example =

- 80-90% Salary (academic + clinical) paid monthly
- Remaining 10-20% “withhold” paid at year end provided targets achieved
- Bonus potential based upon exceeding targets
- Targets examples include teaching, citizenship, publishing, clinical (RVUs)

■ New Faculty Model

- Fixed salary for X number of years to grow practice
- Some models encourage similar sub-specialists to share new patients through reduced productivity targets

Academic Clinical Compensation Models

Timeline from 1980s to Present



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- Compensation largely based on physician net collections
- Overhead covered by “taxation” – i.e. Dean’s Tax, Ambulatory Practice Tax, etc.
- Teaching salaries paid by Medical School
- Bonus paid through difference of net collections less taxes

- Compensation models with wRVU based targets to determine salaries and bonuses
- Bonus based on variety of sources with academic activities and clinical efforts
- Teaching salaries within compensation package
- Hospital administrative salaries more prevalent either through additional compensation or a “buy-out” of physician’s time

1980s

1990s

2000s

2010s

- Compensation models formed with salaries based on clinical activity targets measured by wRVUs/RVUs – less emphasis on collections
- Bonus based on various models through exceeding net collection targets, wRVUs targets, or combination
- Teaching salaries from Medical School exist, but begin to be funded through clinical resources
- Withhold pools created from a portion of salary and assigned to Chairman for payment based on predetermined academic achievements, stewardship, and/or citizenship



Other Compensation Sources

■ On-Call Compensation

- Call pay for hours above and beyond normal call allocation
- Call pay for system hospital coverage

■ TeleNeurology/TeleStroke Compensation

- Additional payment for coverage time for Tele-services
- Funding sources could either be internal or external

■ Affiliations Compensation

- Specialty services coverage at area hospitals – clinics and/or inpatient services
- Leadership/Management positions at area hospitals for specialty services

■ Clinical Trials Research Compensation

What is a Patient Worth to a Hospital?



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- Develop financial models to illustrate the total value of a patient to the hospital
 - Advanced financial modeling allows for the institution to determine the total value of the patient from the physician to include all ancillary testing and downstream revenues
 - Physician and departmental financial value can be based by programmatic groupings of like conditions (i.e. stroke)
 - DRG based financials for inpatient encounters to assess impact of
 - Collections
 - Contribution Margin (net revenue less direct expenses)
 - Net Profit (contribution margin less indirect expenses)
 - Physician based financials for outpatient encounters
 - Similar collections, contribution margins, net profit
 - Based on all facility and professional fees associated with the outpatient encounter
 - Includes all ancillary testing associated with principal visit

What is a Patient Worth to a Hospital?



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- Programs frequently reviewed (monthly financials/quarterly meeting)
 - Targets established annually via external industry benchmarks
 - Comparable visual summaries given – red/yellow/green indicators (green good)

	Volume	Quality	Access	Service	Financial
Epilepsy	●	●	●	●	●
Headache	●	●	●	●	●
Movement Disorders	●	●	●	●	●
Pediatric Neurology	●	●	●	●	●
Sleep Disorders	●	●	●	●	●
Stroke	●	●	●	●	●

Department Size Matters



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Challenges exist in both large and small Neurology Departments. Many challenges are similar regardless of size. *However, many are unique depending on the size of the department.*

Smaller Departments

- Sub-Specialties with “N” of one physician
 - Clinical demand for these physicians is extremely high
 - Other academic responsibilities may suffer due to time constraints of clinical practice
 - Lacking of intra-departmental colleague interactions for patient care discussions
 - On-Call obligations may be high due to lack of certain sub-specialists
- Physician may need to cover other sub-specialties within the department due to limited or no physicians availability
- Research Funding/Research Support
 - Challenge of maintaining staff to support clinical trial research with funding sources diminishing
 - Smaller departments rely on shared services and shared space for research



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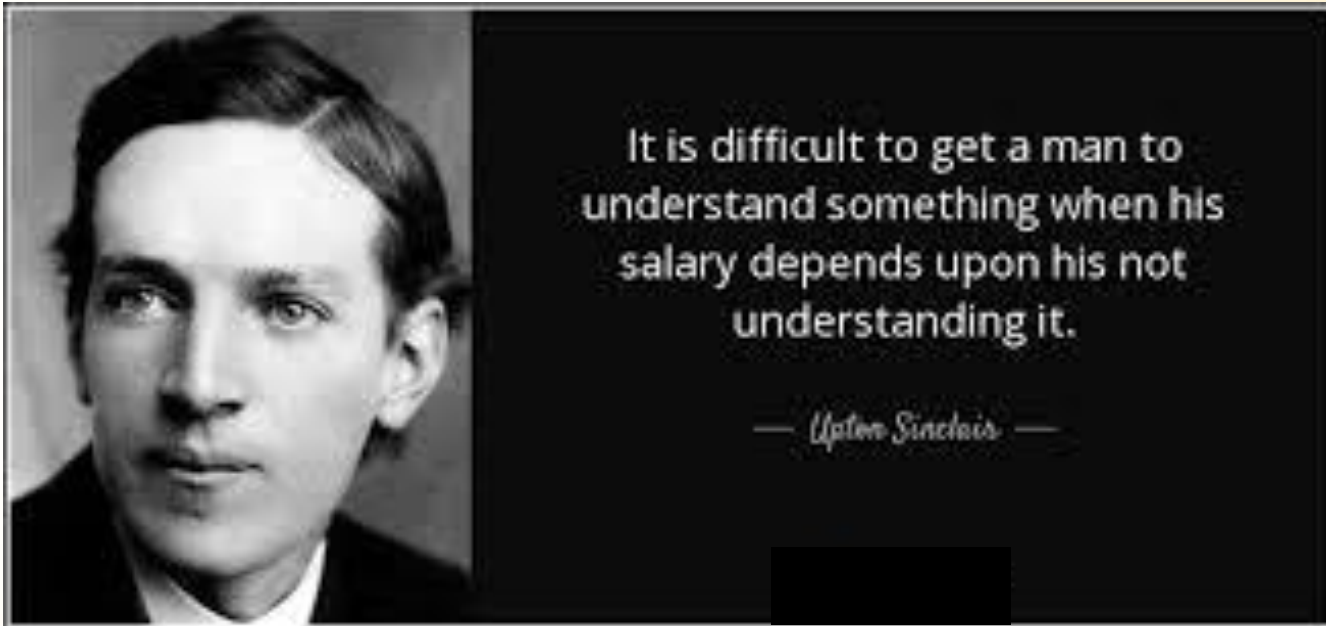
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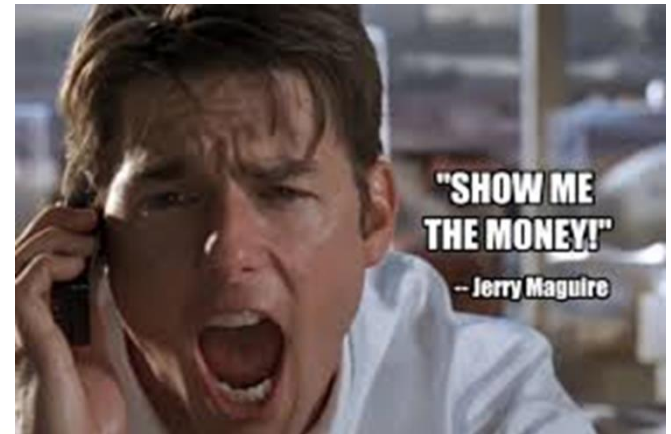
Neurology Residents

3

Neurology Fellows

**Including residents, medical students, nursing students, allied health professionals, chaplains, paramedics*





DAN ARIELY

New York Times Bestselling Author of *Predictably Irrational*

THE UPSIDE OF IRRATIONALITY

*The Unexpected Benefits
of Defying Logic
at Work and at Home*

the upside of irrationality

try to do when they pay executives very high bonuses. If senior vice presidents were paid to lay bricks, motivating them through high bonuses would make sense. But people who receive bonus-based incentives for thinking about mergers and acquisitions or coming up with complicated financial instruments could be far less effective than we tend to think—and there may even be negative consequences to really large bonuses.

To summarize, using money to motivate people can be a double-edged sword. For tasks that require cognitive ability, low to moderate performance-based incentives can help. But when the incentive level is very high, it can command too much attention and thereby distract the person's mind with thoughts about the reward. This can create stress and ultimately reduce the level of performance.

AT THIS POINT, a rational economist might argue that the experimental results don't really apply to executive compensation. He might say something like "Well, in the real world, overpaying would never be an issue because employers and compensation boards would take lowered performance into account and never offer bonuses that could make motivation inefficient. After all," the rational economist might claim, "employers are perfectly rational. They know which incentives help employees perform better and which incentives don't."^{*}

This is a perfectly reasonable argument. Indeed, it is possible that people intuitively understand the negative consequence of high bonuses and would therefore never offer them. On the other hand, much like many of our other ir-

^{*}I suspect that economists who fully believe in the rationality of businesses have never worked a day outside academia.

Compensation Committee



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- E&M, Procedure-based faculty
 - i.e. ENT, Cardiology, Surgery, GI, Medical Specialties, **Neurology**
etc
- Primary Care
 - i.e. Primary Care, Family Medicine
- Hospital-based faculty
 - i.e. ED, Pathology, Anesthesia, Radiology, Hospitalist, Other
Coverage Based Groups
- Research-intensive faculty

Compensation Committee



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- **Key Plan Elements**
 - Guaranteed Base plus Incentive tied to quality
 - Activities/accomplishments tied to Base Compensation
 - Behavioral/Professionalism Expectations required to earn incentive

Compensation Committee



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- **How the base is set:**

- Benchmarks (productivity and compensation) to set base compensation.
- Base compensation includes up to 5% at risk for activities in five (5) categories earned during same period as RVUs.
 - Research/Scholarly activity
 - Educational activity
 - Community service
 - Professional medical/Societal service
 - Uncompensated committee/leadership or Departmental leadership positions
- Less than 5 points will result in base clinical compensation reduction by 1% per point not earned.
- Earning more than 5 points will not result in compensation increasing over 100% of the benchmark.

Compensation Committee



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- It is the **expectation** that faculty are successful in these activities
- The total number of points required is 5 as an **expectation** for compensation at 100% benchmark
- It is possible to earn up to 3 points in one category to offset a category with zero points
- It is an **expectation** that Faculty earn points in at least 3 of the 5 categories for compensation at the benchmark
- Measurement period is the same as the wRVU measurement period.

Compensation Committee



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- It is also an **expectation** that faculty complete the following tasks during the fiscal year:
 - Close charts in a timely manner
 - Complete resident evaluations in a timely manner
 - Complete student evaluations in a timely manner
 - Dictate operative/procedure notes in timely manner
 - ~2 Department-specific expectations
- Failure to complete these expectations will result in faculty not being eligible quality-based incentive.

Compensation Committee



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- **Incentive Compensation**

- Quality incentive is earned during the contract year and paid at the end of the contract year.
- Only publicly reported quality data will be used
- Will consist of Institutional approved scorecard metrics that can be tailored to specialty. For example:
 - Surgical quality initiatives : ERAS, SSI
 - IP sensitive Medical Specialties: Readmission, HAI,
 - OP sensitive Primary Care: PNO Audit, Pop Health Quality Measures
- Dollars per point earned TBD

Clinical Department Chair Incentive Compensation Plan



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- The plan provides the opportunity for Chairs to earn annual, performance-based, lump sum cash awards as part of their total compensation program. The plan is intended to:
 - Link the Chair compensation program as closely as possible to institutional/departmental and individual goals;
 - Encourage and reward superior performance;
 - Focus participants' attention on mission-critical, operation-clinical and academic performance goals and measures;
 - Attract and retain performance-oriented Chairs;
 - Serve as a means to communicate success; and
 - Maintain the competitiveness of the Institution's total compensation program for Chairs

Clinical Department Chair Incentive Compensation Plan

Example Incentive Award Calculation: Participants must (1) have worked at least six months in an eligible position; (2) have achieved a "Meets Expectation" or equivalent rating during the Plan year; and (3) be actively working in an eligible position as of June 30th (the last day of the Plan year).

The following is an example of how you may wish to calculate incentive award payouts. The performance categories and weights are included for illustration purposes only. A Chair earning \$200,000 was used for this example.

Performance Category	Weight	Performance Levels (as a % of salary)			Actual Year-End Results	Award Percent	Incentive Award	
		Threshold (5.0%)	Target (7.5%)	Maximum (10.0%)			Weight x % Achieved	Multiplied by Salary
Composite Score Goal	50%	Goal(s) and performance standards inserted here.			Threshold	5.0%	2.5% (50% x 5%)	\$5,000
Departmental Graduate Medical Education Goal	16.67%	Goal(s) and performance standards inserted here.			Target	7.5%	1.25% (16.67% x 7.5%)	\$2,500
Clinical Programs Goal	16.67%	Goal(s) and performance standards inserted here.			Target	7.5%	1.25% (16.67% x 7.5%)	\$2,500
Faculty/Academic Goals	16.66%	Goal(s) and performance standards inserted here.			Maximum	10.0%	1.66% (16.66% x 10%)	\$3,332
Total:	100%						6.66%	\$13,332

Assumptions:

- Chair
- \$200,000 annual base salary
- 7.5% target incentive opportunity (5.0% threshold; 10.0% maximum)

The Academic RVU: A System for Measuring Academic Productivity

Reuben Mezrich, MD, PhD, Paul G. Nagy, PhD



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Despite the importance of teaching, research, and related activities to the mission of academic medical departments, no useful and widely agreed-on metrics exist with which to assess the value of individual faculty members' contributions in these areas. Taking the concept of the clinical relative value unit (RVU) as a model, the authors describe the development of an academic RVU (aRVU) system that assigns weights to and creates formulas for assessing productivity in publications, teaching, administrative and community service, and research. The resulting aRVU schema was implemented on a Web-based system that incorporates a number of novel tools, including a curriculum vitae manager that automatically maintains and calculates total aRVU scores and breaks out component elements for each individual and for the department as a whole. The benefits and limitations of this system are discussed, as well as the potential advantages in sharing this approach with other radiology departments and other medical disciplines. Wide acceptance and implementation would make the aRVU the appropriate counterpoint to the clinical work RVU in academic medicine.

Key Words: Academic radiology, relative value units, administration, productivity, teaching

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INTRODUCTION

All academic medical departments have a tripartite mission: clinical care, teaching, and research. Resources that can be devoted to the pursuit of these missions—people, equipment, time, and money—are limited, and competition for these resources is constantly increasing. The allocation of resources must be guided first by the goals of an organization and then by the success of the organization and its members in achieving those goals. Given the pressures to allocate limited resources wisely, measures of success should be objective, transparent, and, when possible, consistent across institutional and disciplinary boundaries.

Such consistencies have already been addressed with objective measures describing success in clinical care. The relative value unit (RVU), developed by Medicare to guide reimbursements, assigns a value to each clinical activity. By summing these RVUs, the total activity of an institution, department, or individual can be measured and analyzed [1]. The values are arbitrary (and many would say unfair) but for some purposes can be quite valuable, such as for measuring change in activity or productivity from one year to the next or the relative productivity of individuals performing similar activities

in a single division or at different institutions. Although criticized for a lack of quality assurance mechanisms and cost-effectiveness metrics, the relative value scale for radiologic procedures developed in 1988 provided a reliable and consistent set of measures of performance across the range of increasingly complex imaging procedures [2].

The introduction of accepted RVU metrics into medicine also provided a basis for new types of analyses that assess how academic physicians allot their time. Some studies have used RVUs to investigate whether intensive clinical schedules take a toll on academic duties or whether educational and research commitments shortchange clinical productivity [3-6]. Attempts to realistically evaluate academic production have yielded few significant results, in large part because of the absence of RVU-type metrics to assess nondclinical performance [7-10].

Yet the need for such metrics is urgent. Clinical workloads in radiology are increasing, and department chairs often must rely on current and projected clinical productivity data when making academic hiring and staffing decisions [11,12]. Useful as such statistics are, they ignore what should be a significant part of each faculty member's activities. No metrics are available to assess the totality of academic activities or to gauge one academic activity relative to another. Is time devoted to teaching more or less valuable than time devoted to research? Is time spent on committees more or less valuable than time spent writing research proposals? How does one allocate resources to these activities?

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Division Director
Chief Of Service
Vice-Chair
Senior Associate Dean
EEG lab director
EMG lab director
SUBTOTAL

Committees, letters, etc

Letters of recommendation PER LETTER
Committee membership - Loyola
Committee membership - State
Committee membership - National
National (Advisory) board member (w/o compensation)
Committee chair
Committee co-chair
SUBTOTAL

TEACHING...

Attendance @ Department Conferences

Grand Rounds /per conference
Case conference / per conference
SUBTOTAL

Faculty related / lecturing

Faculty Development activities (Dept. or Institution)
Mentoring junior faculty
Grand rounds presenter, at Loyola
Grand rounds presenter, elsewhere
Grand rounds/lecture prep time

Lectures (to students, residents, support staff, etc) / per hour
include hours of preparation time
SUBTOTAL

Resident related

Residency program director
Associate program director
Fellowship program director
Education committee member
Supervising attending @ morning didactic, PER DAY
Supervising attending at noon conference, PER CONF
Supervising attending at journal club, PER CONF
Supervising attending at divisional conference, PER CONF
Residency interviewing PER DAY
Fellowship interviewing PER DAY
Ongoing resident mentoring / PER RESIDENT PER YEAR
SUBTOTAL

Student Related

Clerkship director
Medical student block
Teaching attending / PER MONTH
Student examinations PER EXAM DAY
Medical school interviewing PER DAY
Ongoing student mentoring / PER STUDENT PER YEAR
Foundations of Medicine Clinical Educator (MS1/MS2)
SUBTOTAL

RESEARCH...

Investigator initiated grant submissions

to NIH/NSF (non funded) PER GRANT
to NIH/NSF (funded) PER GRANT
to other agency (not funded)
to other agency (funded) PER GRANT
to Pharma (not funded) PER GRANT
to Pharma (funded) PER GRANT
to Loyola (not-funded) PER GRANT
to Loyola (funded) PER GRANT
Maximum RVU for non-funded grant submissions
SUBTOTAL

Other research related

NIH study section PER SESSION

Non-profit grant reviewer PER SESSION

Patent

SUBTOTAL

Scientific Journal Positions

Editor-in-chief

Associate Editor

Editorial board member

Ad-hoc manuscript review / per manuscript

SUBTOTAL

**Peer-reviewed Publications (multiply value by $\sqrt{\text{Impact factor}}$)
values are per publication**

Data publication - 1st author

Data publication - 2nd author

Data publication - 3rd author

Data publication - \geq 4th author

Data publication - Senior author

Review - first author

Review - second author

Review - third author

Review - fourth or higher

Editorial 1st author

Editorial 2nd author

Editorial senior author

Web-based data publication - 1st author

Web-based data publication- 2nd author

Web-based data publication- 3rd author

Web-based data publication \geq 4th author

Web-based data publication - senior author

SUBTOTAL

**NOT Peer-reviewed Publications
values are per publication**

Data publication - 1st author

Data publication - 2nd author

Data publication - 3rd author

Data publication - \geq 4th author

Data publication - Senior author

Editorial 1st author

Editorial 2nd author

Editorial senior author

OTHER PUBLICATIONS

Book Review

Book- senior editor

Book - second editor

Book - 3rd editor

Multimedia- 1st author

Multimedia- 2nd author

Multimedia - 3rd author

Multimedia - 4th author or higher

Book chapter - first author

Book chapter - second author

Book chapter - third author

Book chapter - fourth or higher

Book chapter senior author

Peer-reviewed published abstract 1st author

Peer reviewed published abstract 2nd author

Peer-reviewed published abstract 3rd author

Peer reviewed published abstract 4th or higher

Peer reviewed published abstract senior author

As a Chairperson you are not a



What is a Patient Worth to a Hospital?



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- Programs frequently reviewed (monthly financials/quarterly meeting)
 - Targets established annually via external industry benchmarks
 - Comparable visual summaries given – red/yellow/green indicators (green good)

	Volume	Quality	Access	Service	Financial
Epilepsy	●	●	●	●	●
Headache	●	●	●	●	●
Movement Disorders	●	●	●	●	●
Pediatric Neurology	●	●	●	●	●
Sleep Disorders	●	●	●	●	●
Stroke	●	●	●	●	●

Compensation Committee

- Example #1
 - In calendar year 2017 Dr. Smith generates 5,000 wRVU's and is a 1.0 CFTE. Those wRVU = the 50th %tile and comp at the 50th %tile is \$200,000. Dr. Smith's FY19 comp is \$200,000.
 - During calendar year 2018, Dr. Smith again generates 5,000 wRVU, CFTE is 1.0 and that is the 50th %tile. If the 50th %tile = \$200,000.
 - Academic compensation is \$30,000
 - Clinic compensation = (Total Compensation – Academic Compensation) = \$170,000
 - Dr. Smith earned 5 points in 3 different categories in calendar year 2018. Dr. Smith has therefore met the **expectations** for 100% the benchmark.
 - Dr. Smith's compensation in FY20 is \$200,000 = \$30,000 (Academic Compensation) + 170,000 (Clinical Compensation)



Compensation Committee

- Example #2
 - In calendar year 2017 Dr. Jones generates 8,500 wRVU's and is a 1.0 CFTE. Those wRVU = the 70th %tile and comp at the 70th %tile is \$350,000. Dr. Jones FY19 comp is \$350,000.
 - During calendar year 2018, Dr. Jones again generates 8,500 wRVU, CFTE is 1.0 and that is the 70th %tile. If the 70th %tile = \$350,000.
 - Academic Compensation is \$40,000
 - Clinical Compensation = (Total Compensation – Academic Compensation) = \$310,000
 - Dr. Jones earned 3 total points in 3 different categories in calendar year 2018. Therefore Dr. Jones is 2 points **below expectations** thereby decreasing clinical comp by 2%
 - Dr. Jones' compensation in FY20 is \$343,800
\$40,000 (Academic Compensation) + \$303,800 (\$310,000 - \$6,200)