Funding the Best Science

NICHD Payline Discussion
Options to Optimize…

January 2016

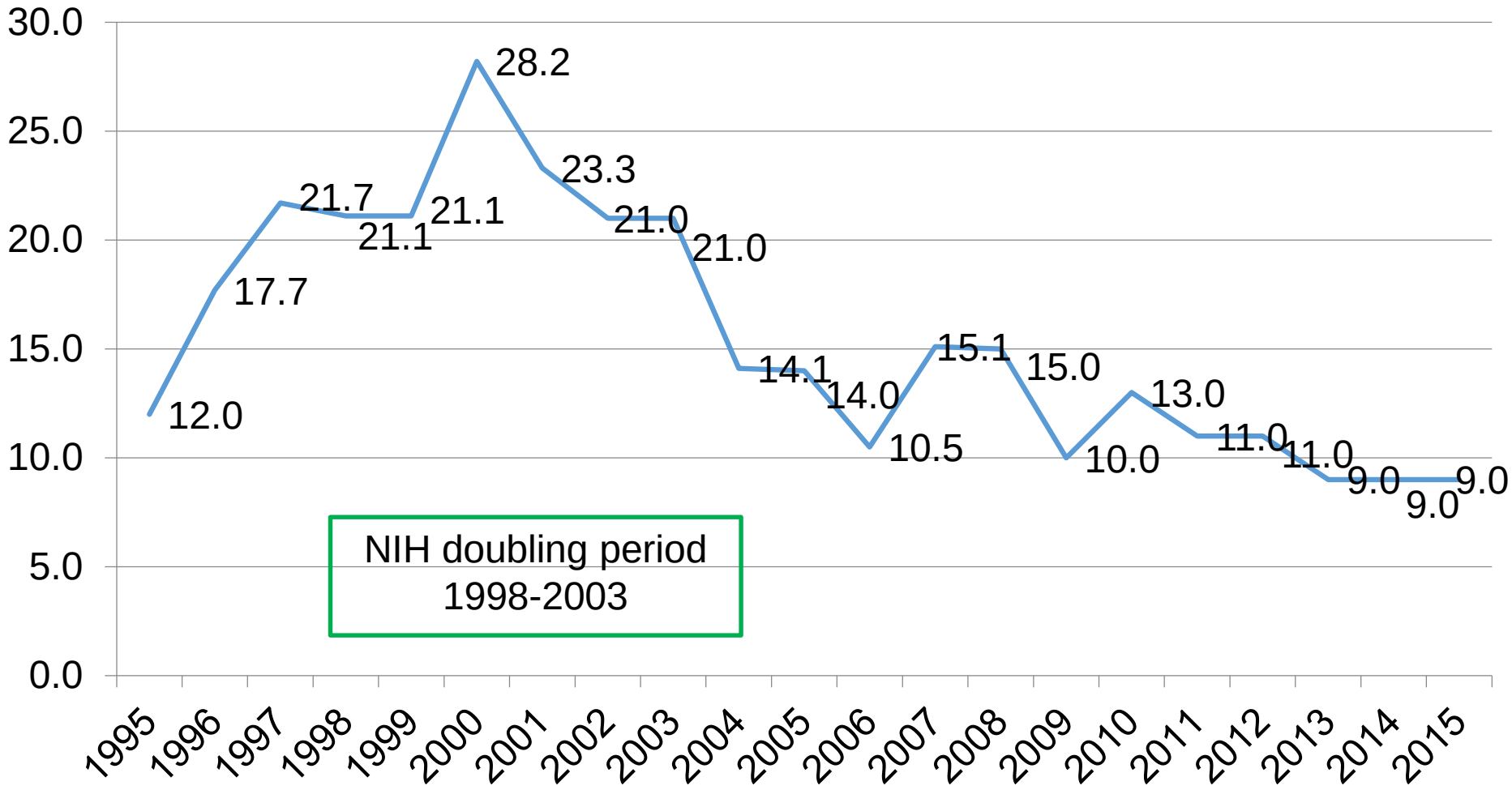
NIH *Eunice Kennedy Shriver* National Institute of Child Health and Human Development

Our grantees don’t like our payline

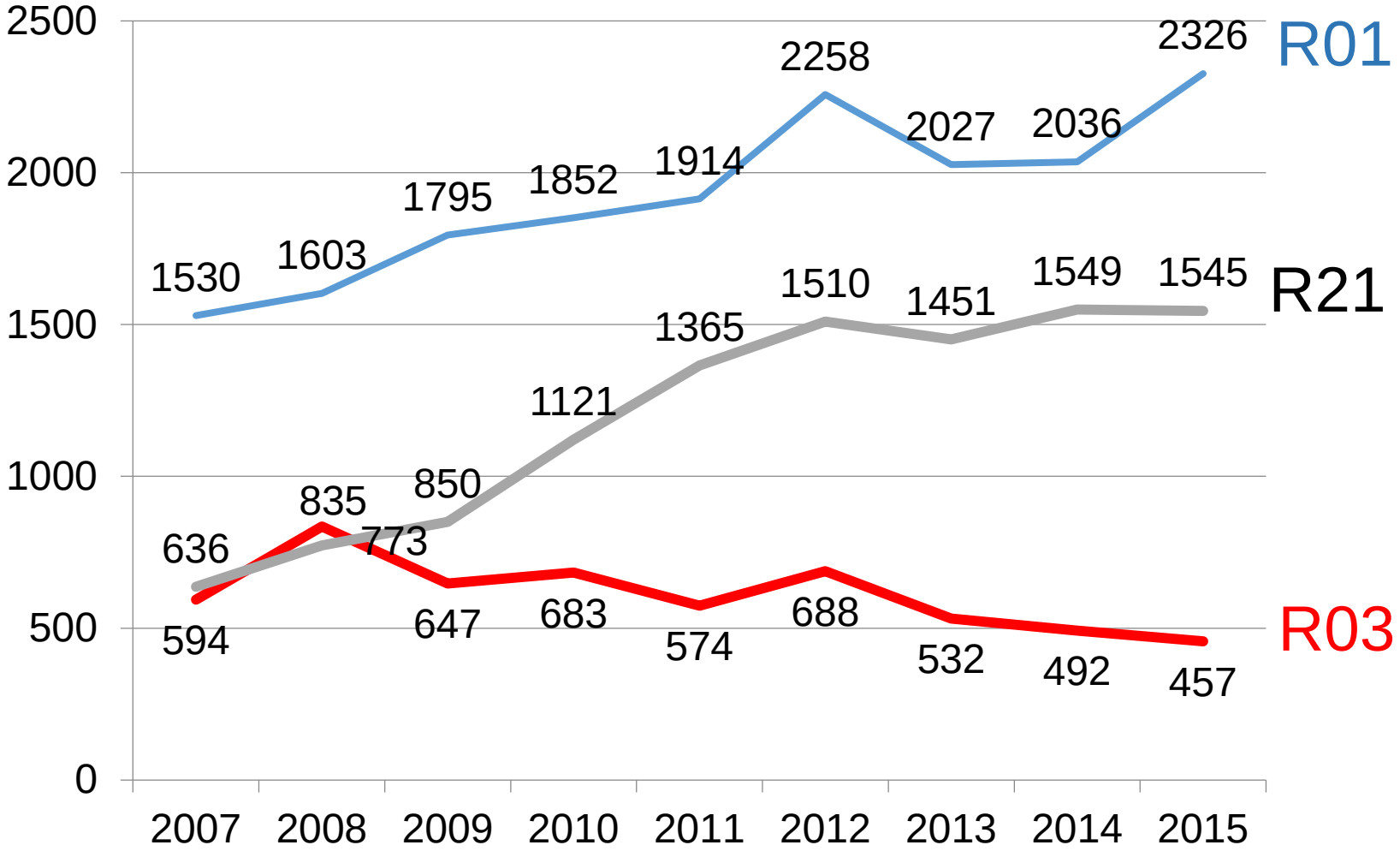
We aren’t that keen on it either
But most important is to fund the best science

Let’s talk

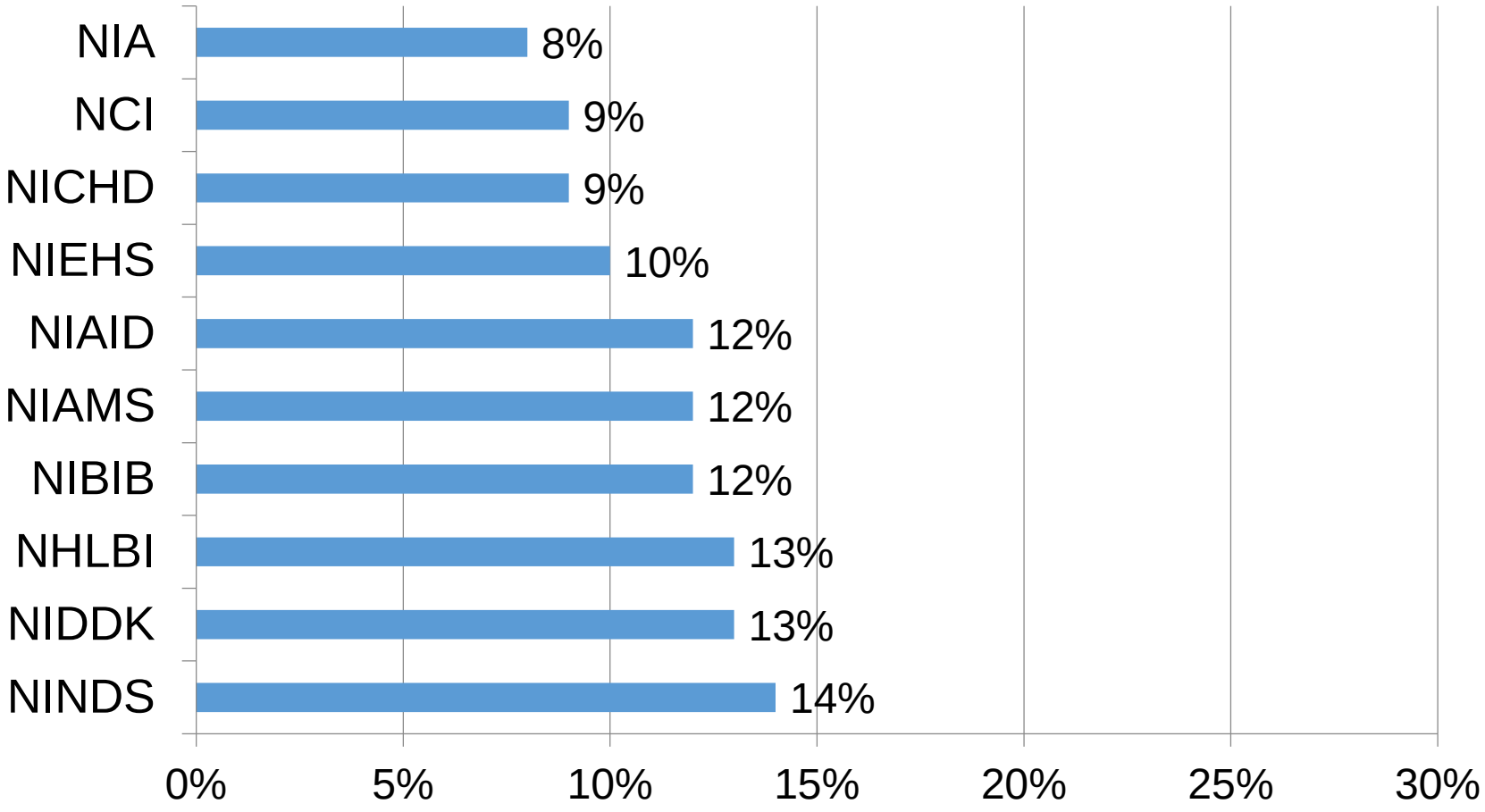
NICHD Historical Paylines, R01s



Application Trends



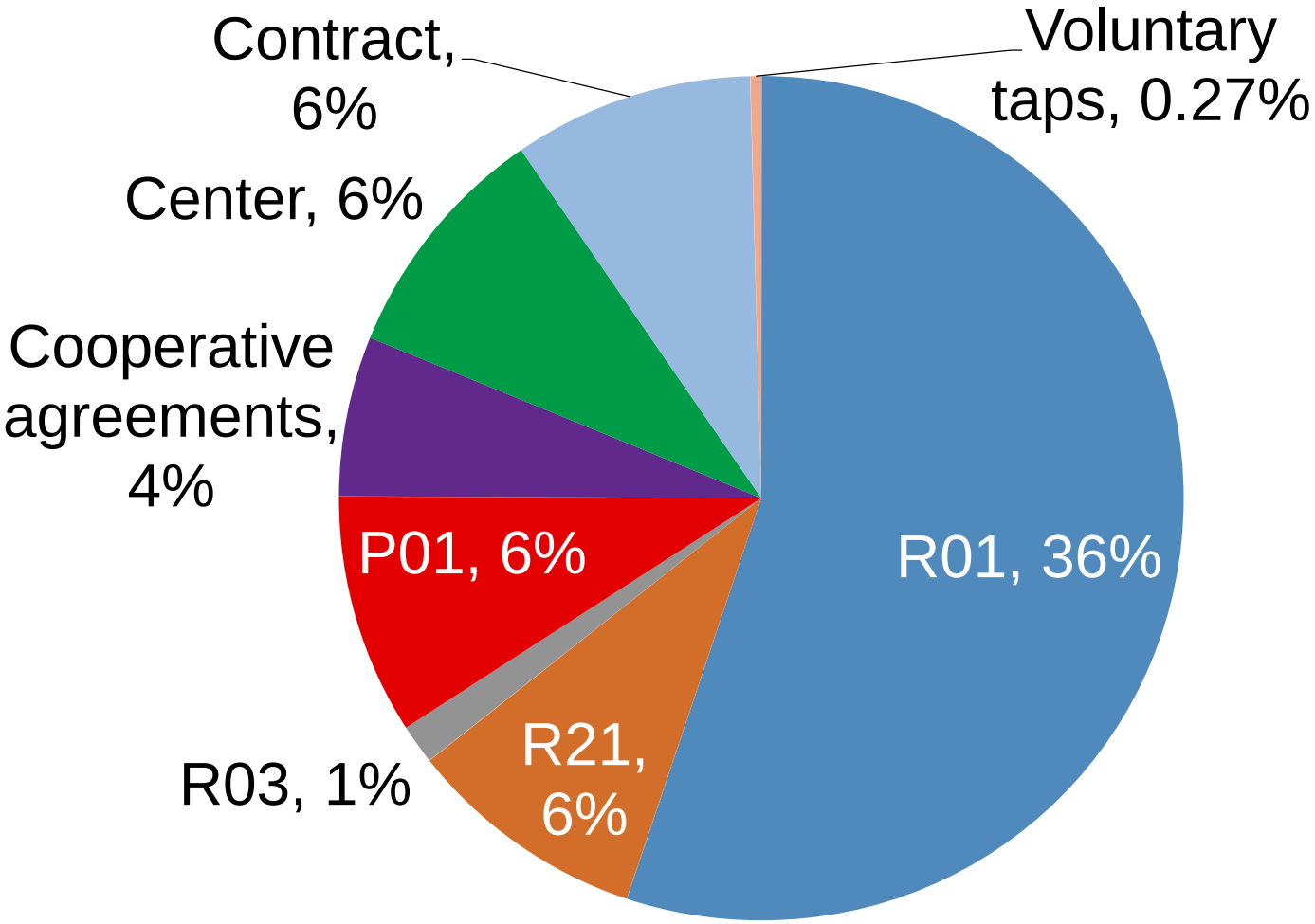
NIH R01 Paylines (2015)



Payline Components

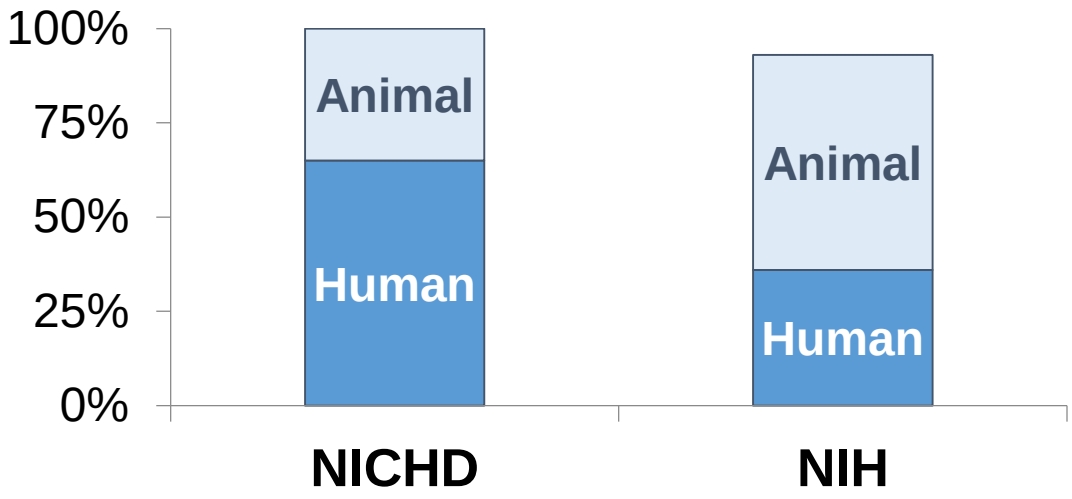
- Grants
  - RPGs
    - R01, R21, R03, P01
  - Cooperative agreements
  - Centers
  - Other
- Contracts
- “Voluntary” Taps

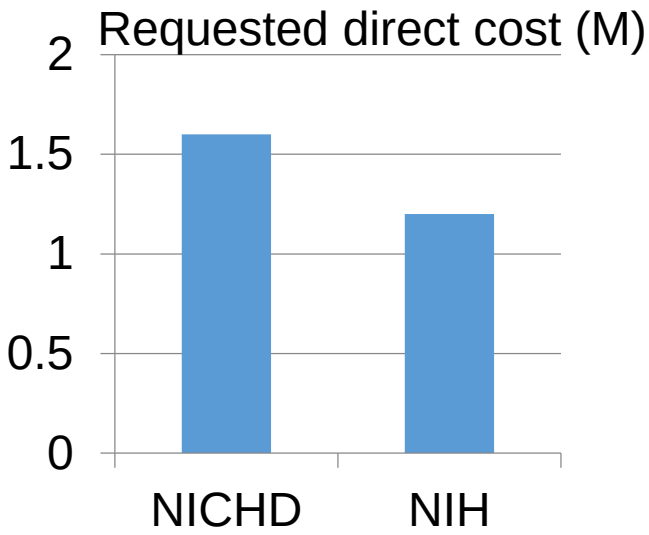
NICHD Components as % of budget



Characteristics of scored applications

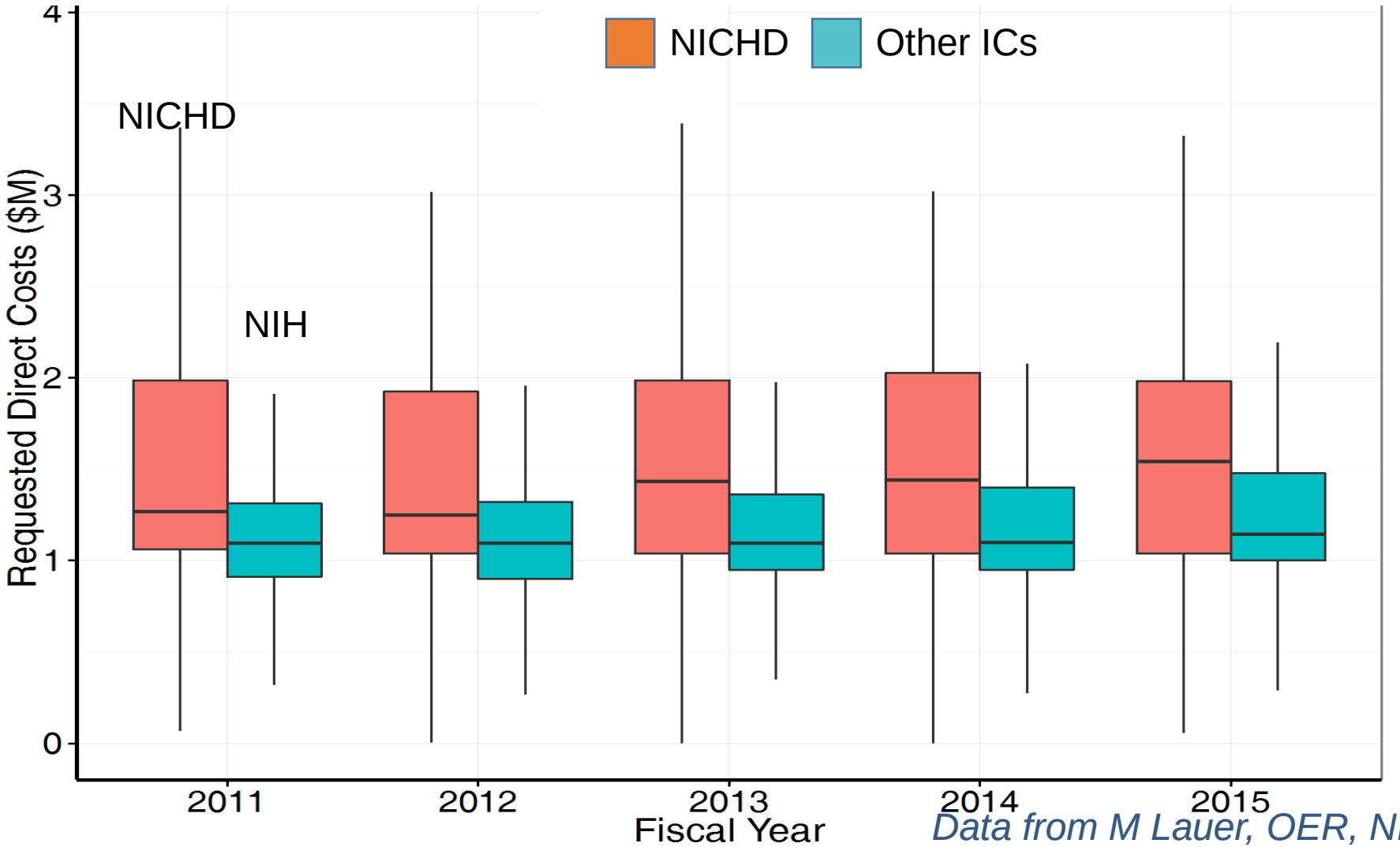
Human Study	65% (2836)	36% (26855)
Animal Study	35% (1517)	57% (42671)
Requested Direct Costs ($M)	1.2 1.6 2.4	1.2 1.2 1.8





Data from M Lauer, OER, NIH

R01 direct costs: NICHD higher and increasing



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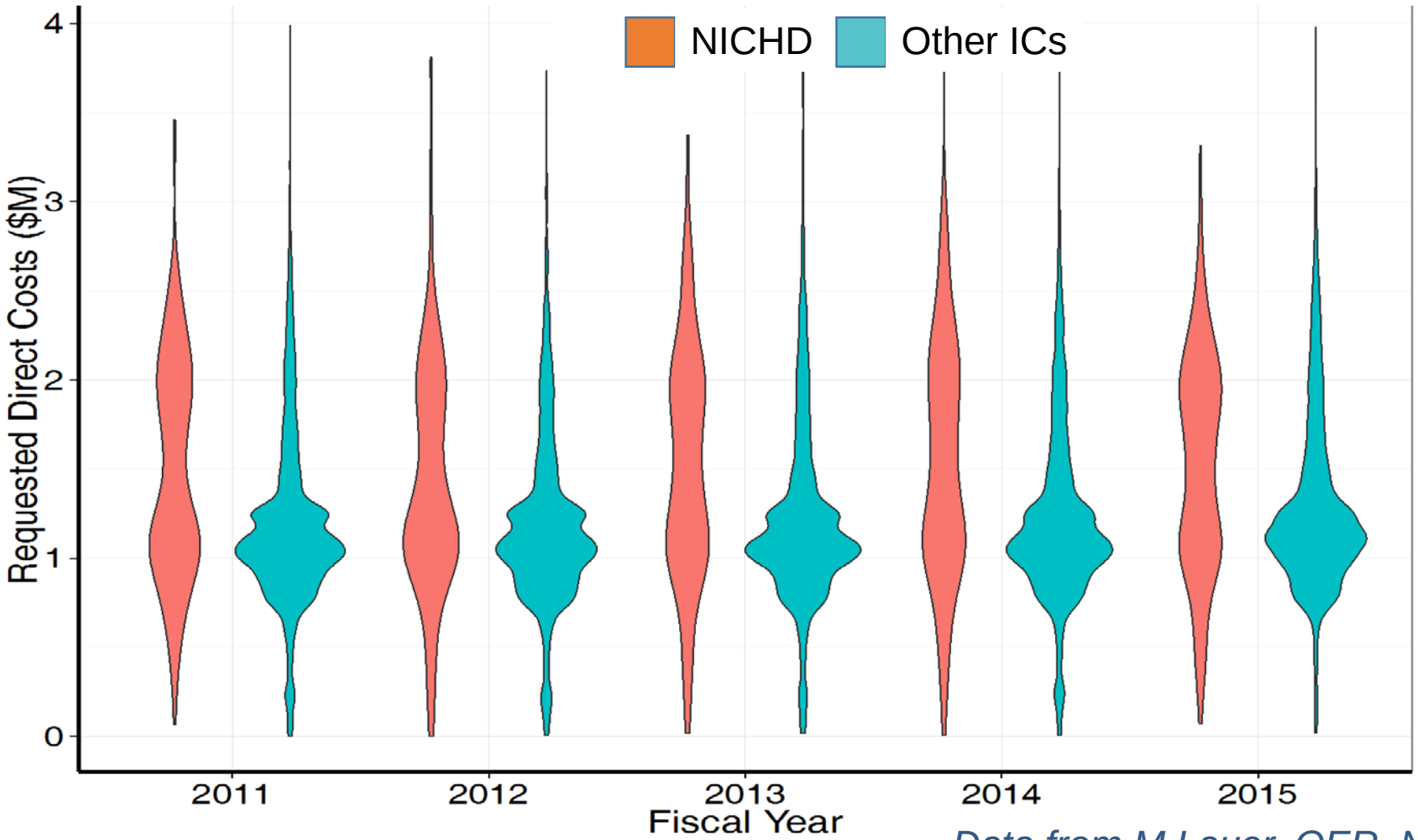
R01 direct costs: NICHD higher and bimodal



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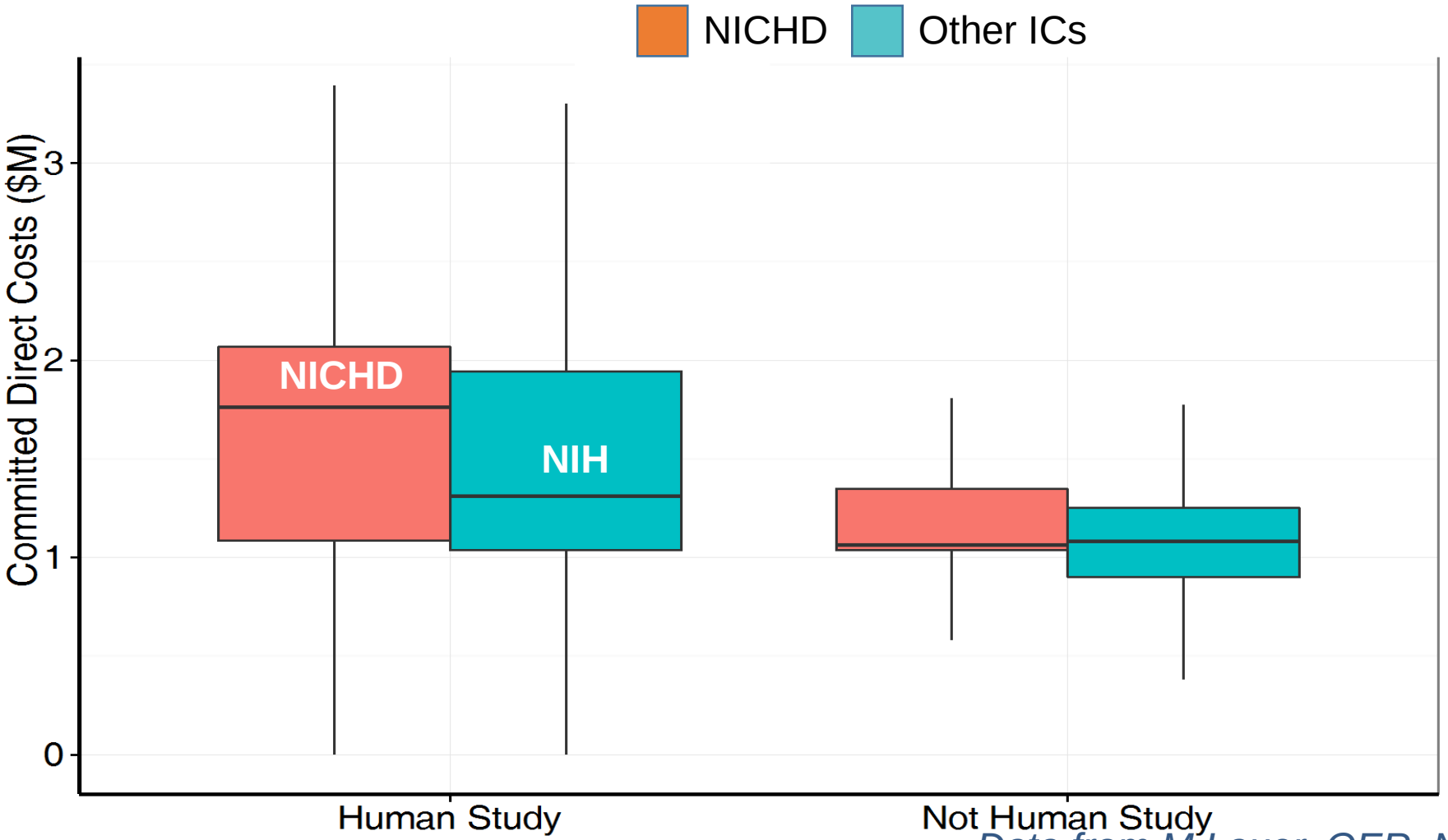
NICHD budgets higher for human studies



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Summary of NICHD funding

- Payline declined, applications increasing
- No change over time in scores
- Compared to other ICs:
  - More human subjects studies and fewer animal studies
  - Higher requested budgets
    - Increasing over time
    - Higher budgets for human subjects work

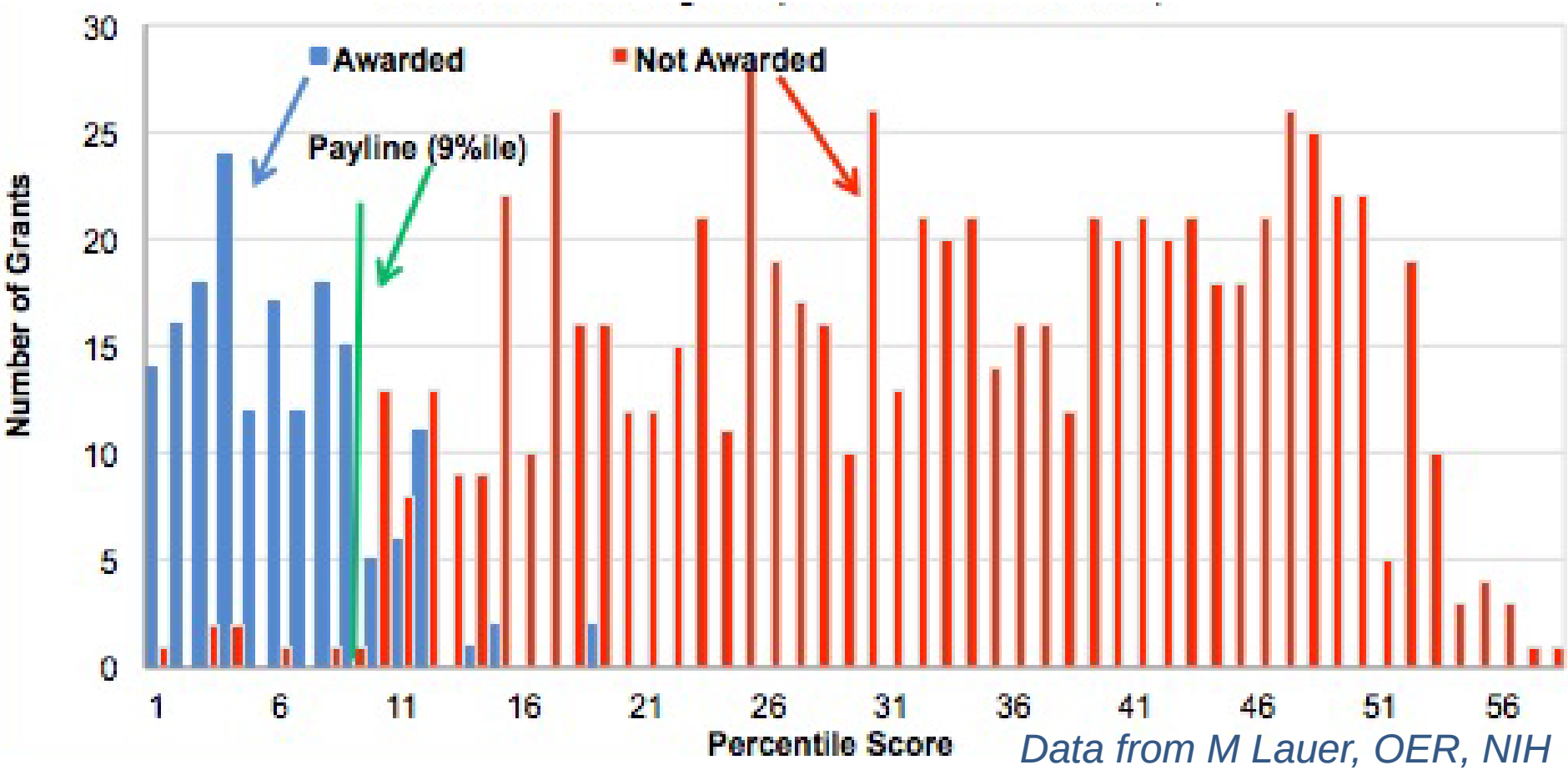
NIH Leadership Forum

October 2015

- Best practices for making funding decisions
- Efficiency of funding

Spectrum of R01 Grants Awarded

FY 2015; NICHD Unsolicited R01/R37 grants (includes PAs but not RFAs)



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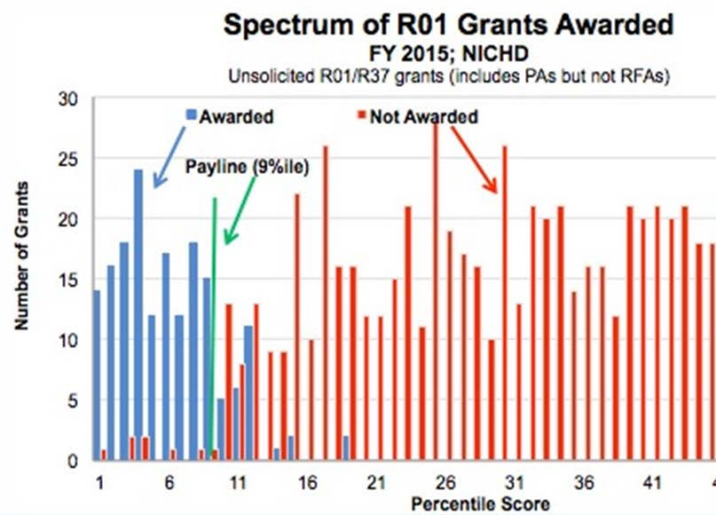
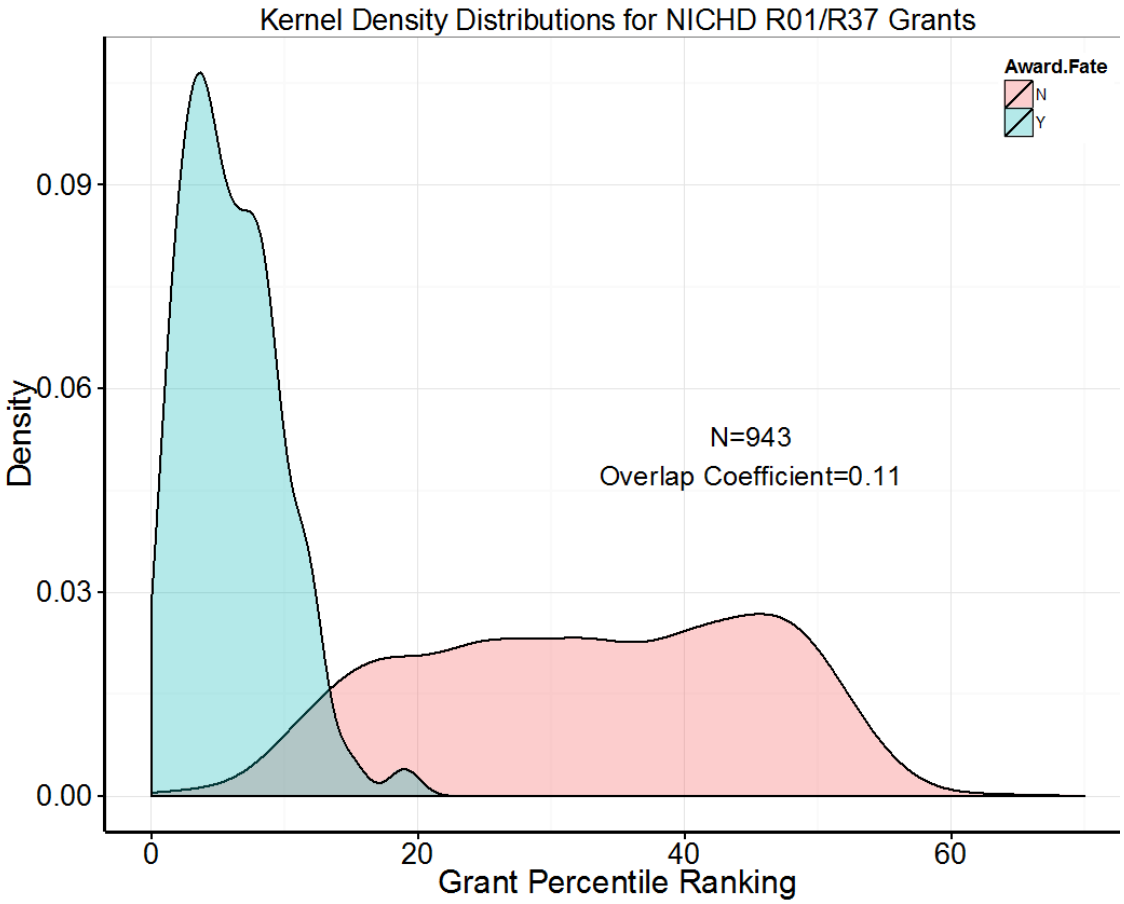
NICHD

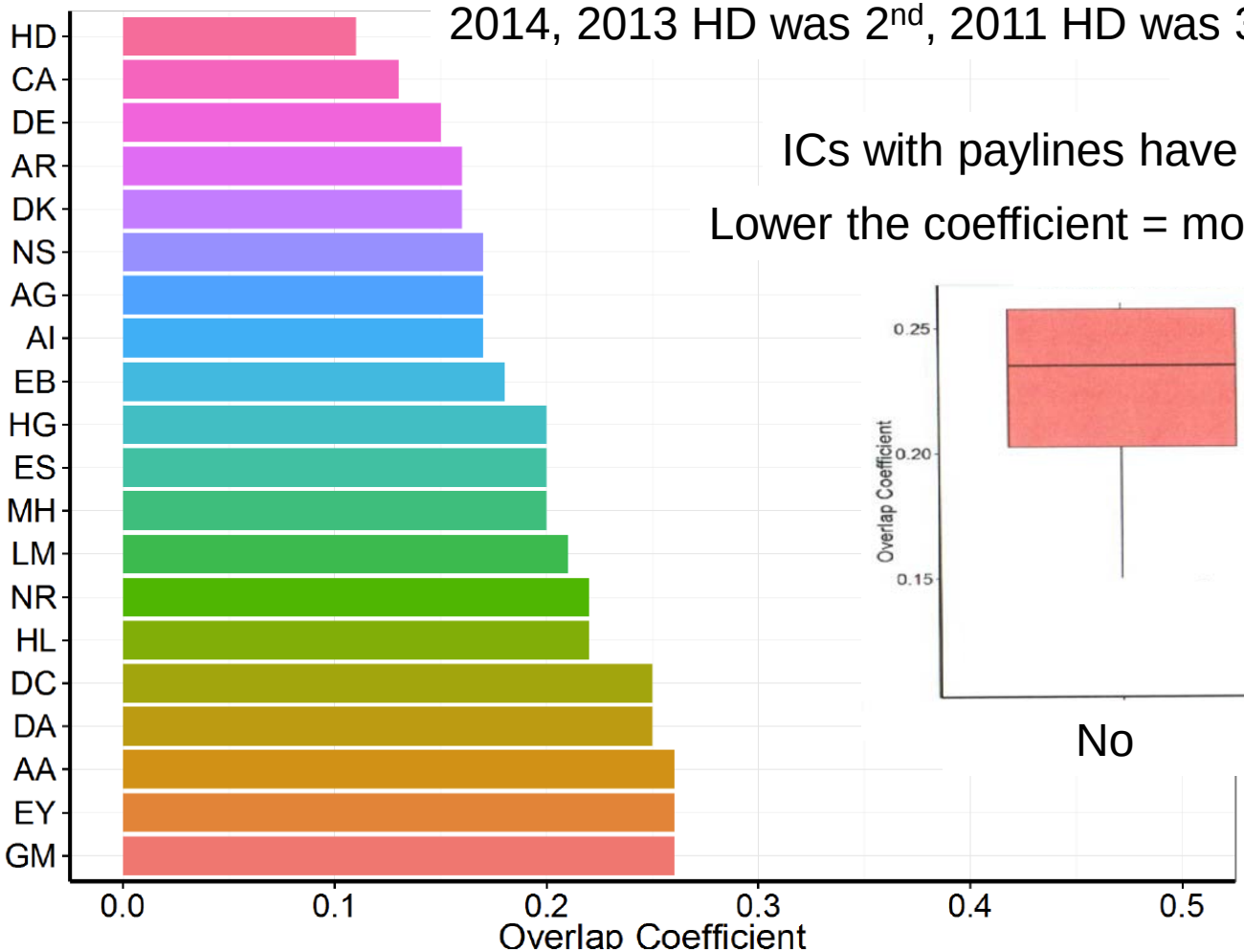




Data from M Lauer, OER, NIH

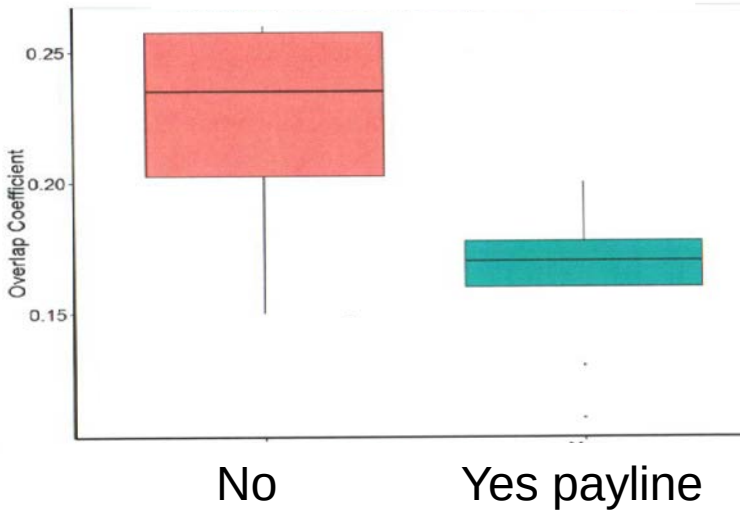
NIH Award Overlap Coefficients (2015)

2014, 2013 HD was 2nd, 2011 HD was 3rd



ICs with paylines have lower coefficients

Lower the coefficient = more adherent to payline



Data from M Lauer, OER, NIH

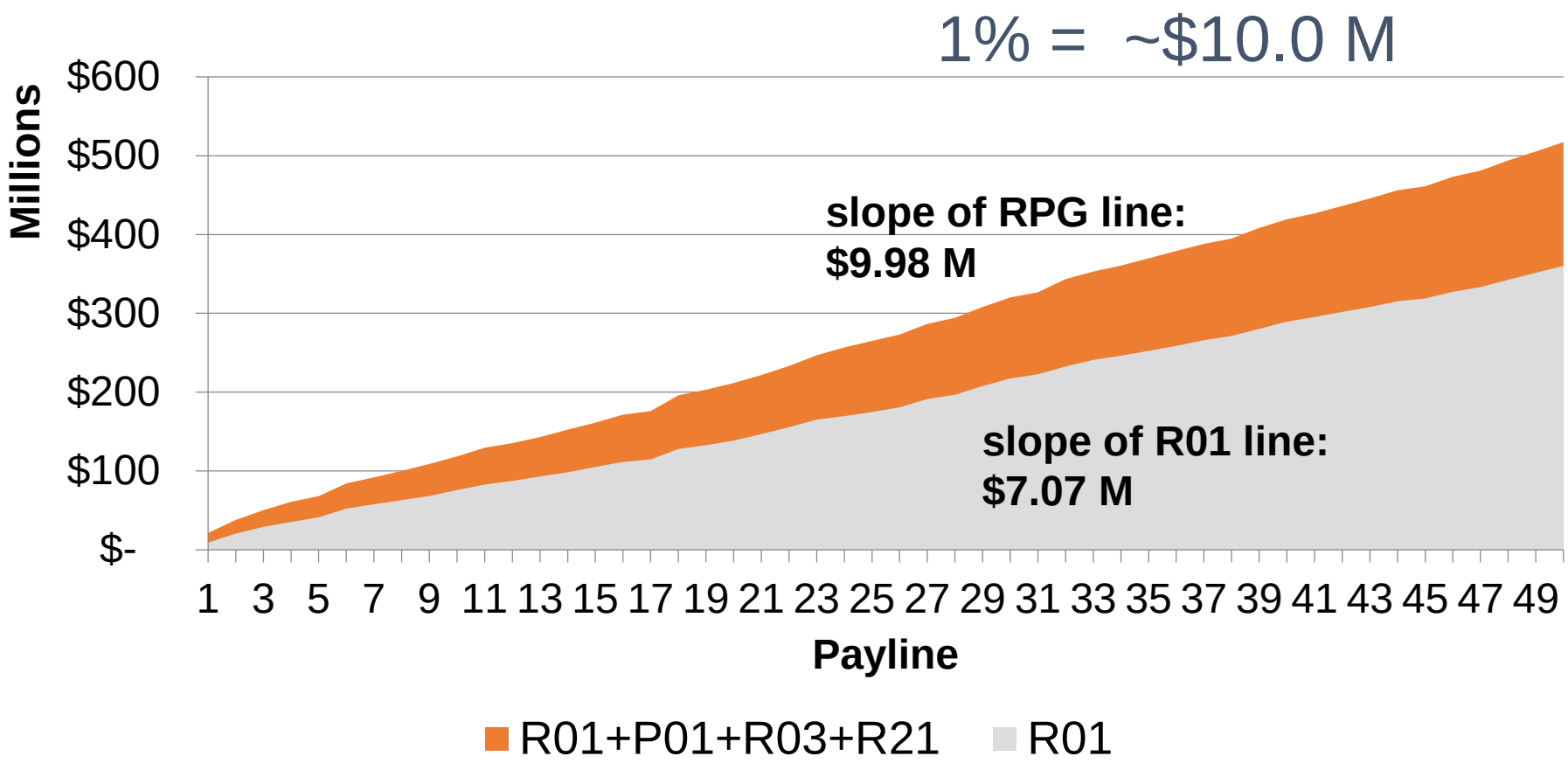
NIH Findings

- NIH Strategic plan discusses funding strategy
- ICs are more similar than different; more consistency across ICs than expected
- Recommendations
  - Consider PI minimum time
  - Consider limit # grants/PI
  - Select pay – best science

NICHD

What is needed to fund the best science?

NICHD Funding Level and Payline



based on 2014 data

Implementation

- Tighten referral guidelines
- Tighten transfer acceptance
- Clinical trials by FOA
- Stricter methods for large grant acceptance
- Limit PA, PAR, and secondary assignments

Additional Considerations

- Stringent on > $1M applicants
- Limit long-standing grants
- Limit duration of awards
- P01s by FOA (no parent FOA)
- Limit mechanisms
- Examine larger programs to find savings
- Limit # awards to a PI; Require higher % effort

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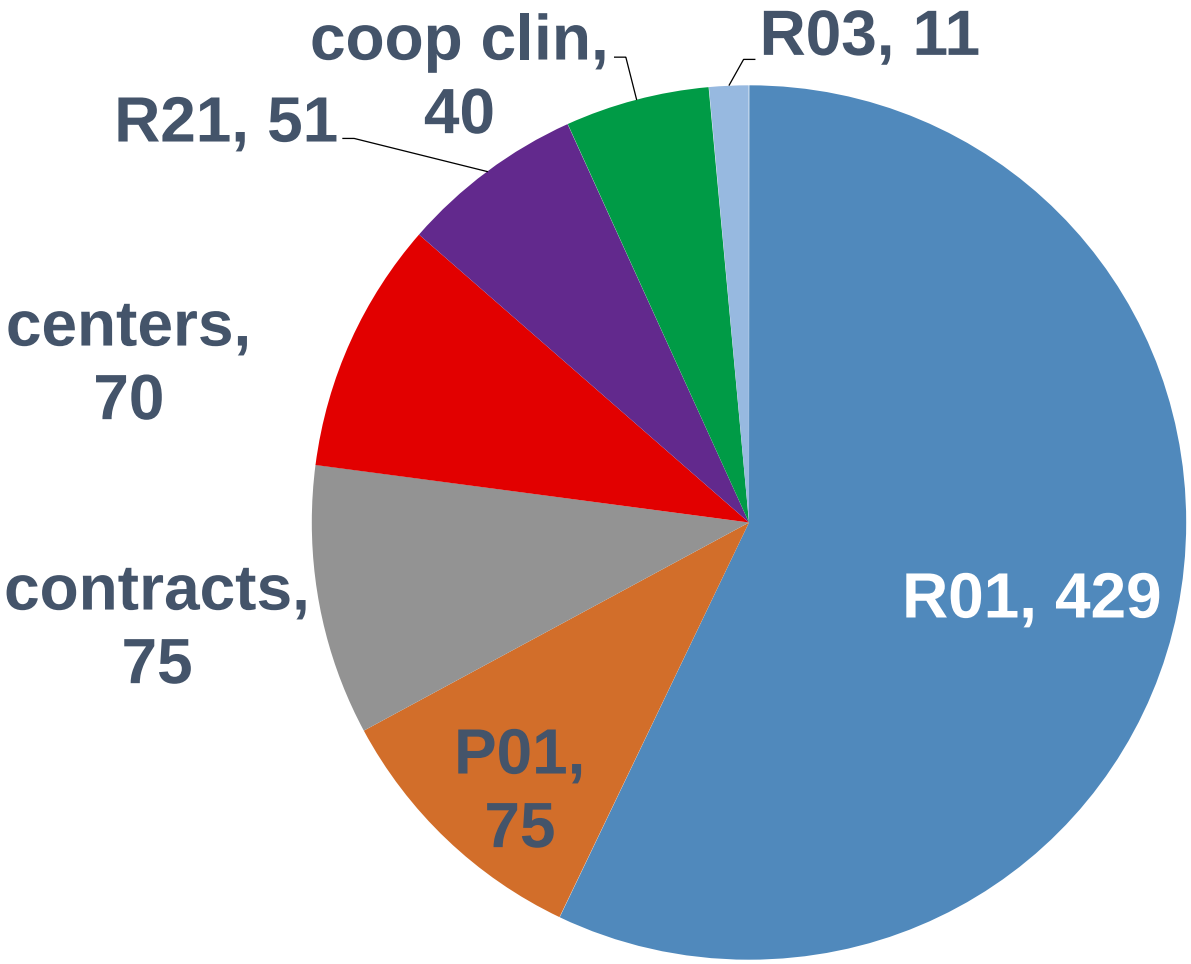
2014 NICHD Funding by Mechanism (M)



~$10M to move payline by 1%

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Top NICHD programs by FY 15 Funding

Westat Pediatric-Maternal HIV/AIDS
Adolescent Medicine Trials Network
IDD Centers
NCTRI (formerly SCCPRIR)
Maternal Fetal Medicine Units
Neonatal Research Network
Human structural birth defects
Leadership for HIV/AIDS clinical trials
Autism Centers of Excellence
Population Research Infrastructure
Contraceptive Clinical Trials Network
Pediatric HIV/AIDS cohort study
Learning disabilities centers and hubs
Global Network
Pelvic floor disorders network

Top 15 programs: $196.4 M (16% of total budget)

Non AIDS $119.7 M (10% of total budget)

Program totals include all FOAs related to program. Based on data downloaded from IMPAC II FY 2015 frozen (IRDB) files. Contracts data supplied by FMB.

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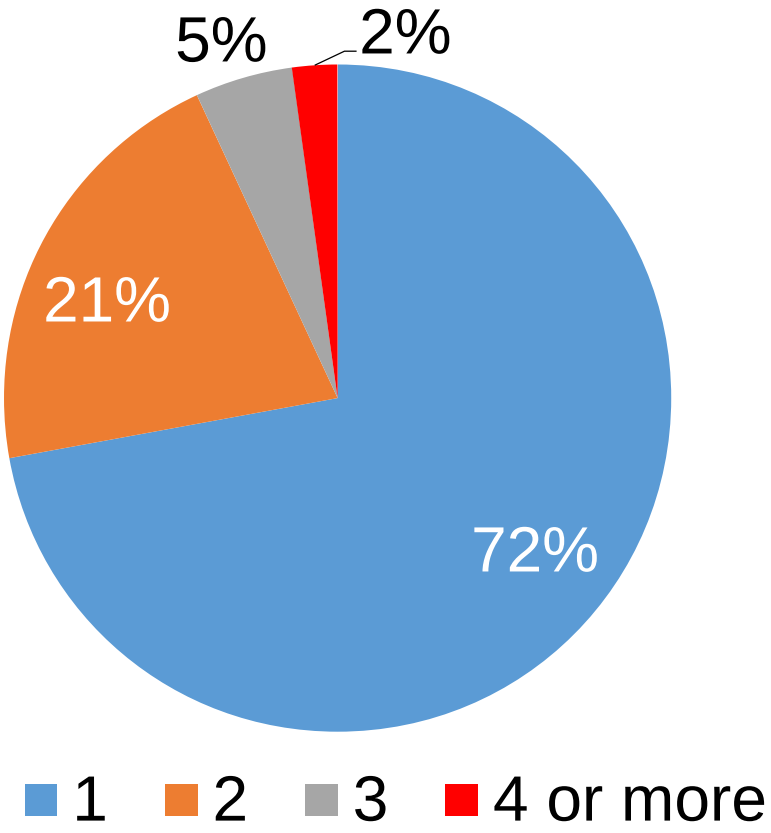
NICHD R01s FY2014 (n=1225)

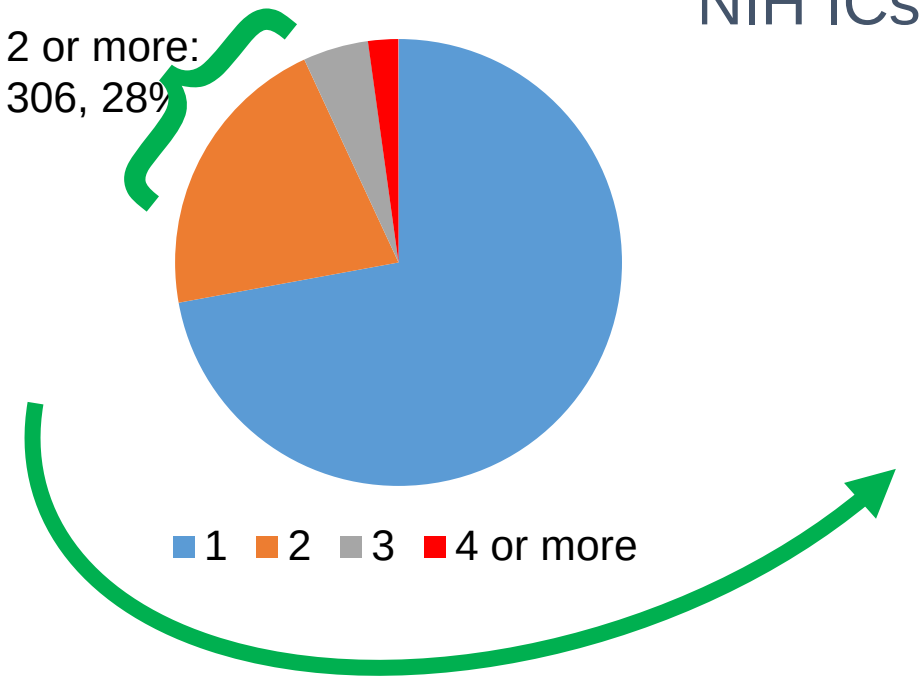


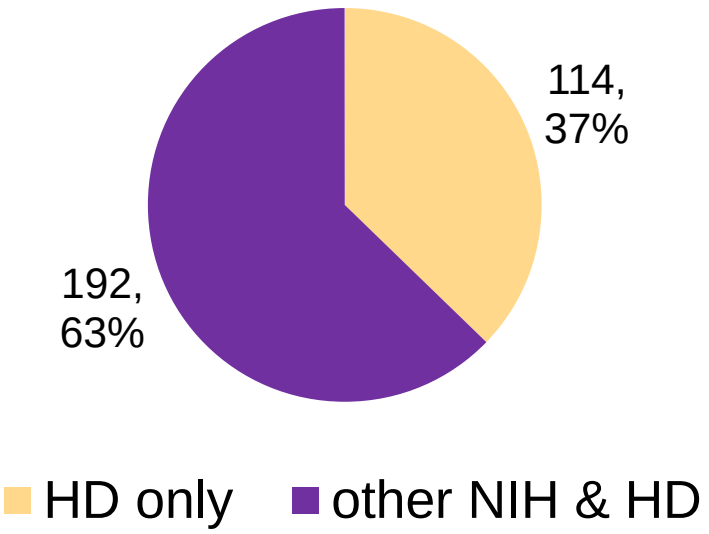
17.5% had R01s from other ICs

NICHD R01 PIs with multiple NIH R01s

306 NICHD PIs with ≥ 2 R01s

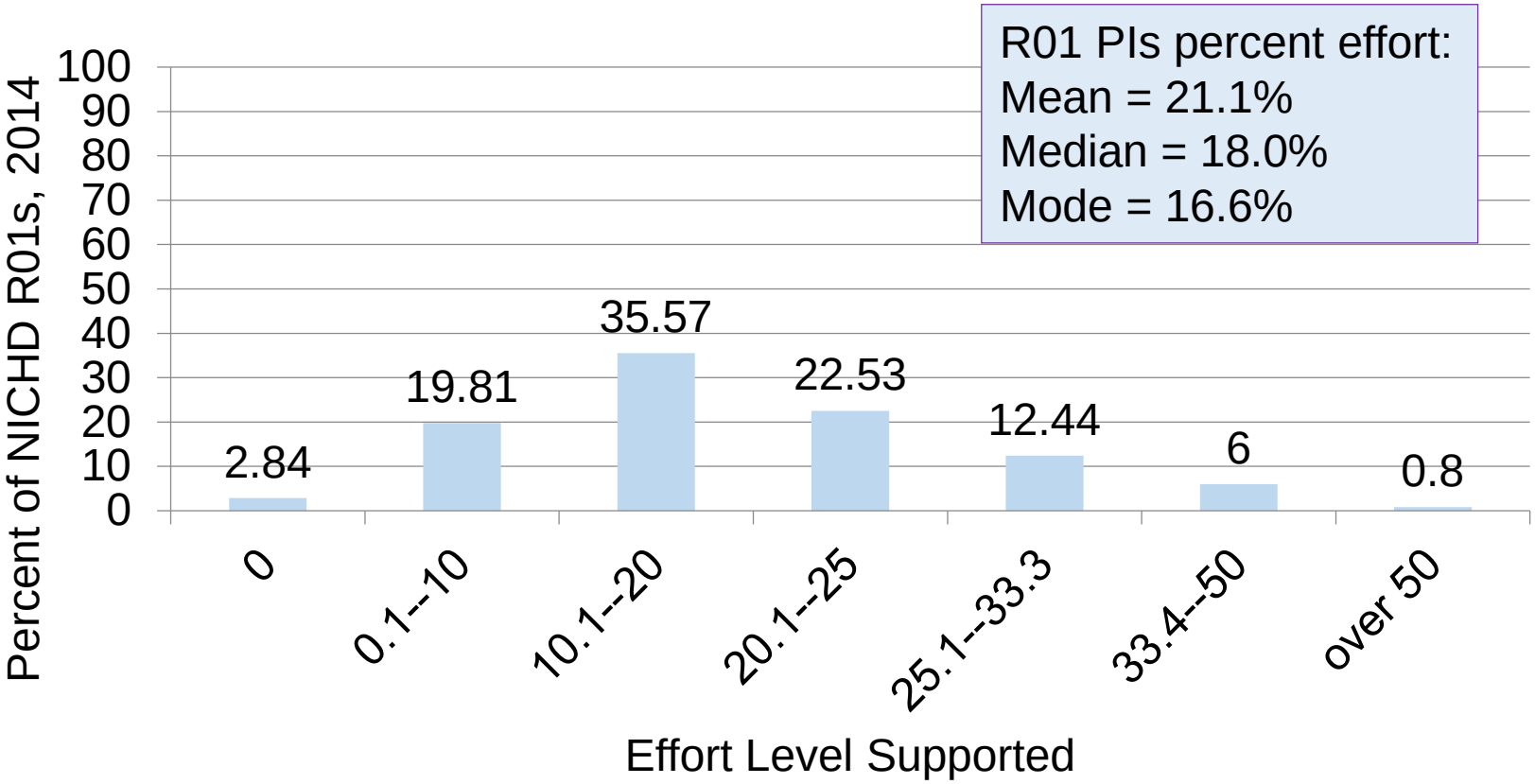
- 37% (n=114) only NICHD RO1s
- 63% (n=192) had R01s from other NIH ICs as well as from NICHD





FY2014

PI Percent Effort Supported on NICHD R01s, 2014

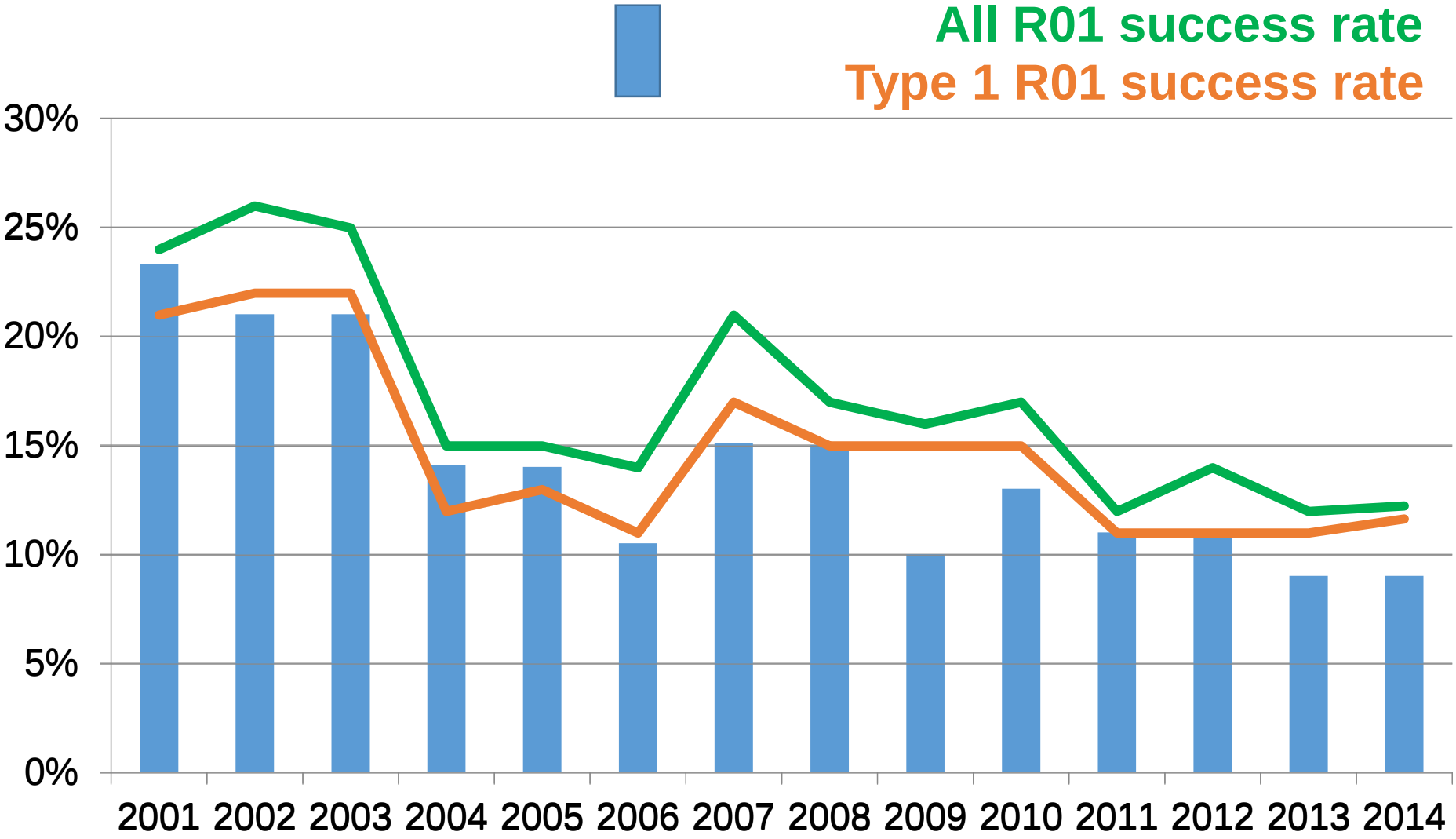


Funding the Best Science

-Flexibility for discretionary funding

-Identify savings by being more strategic about our investments in:

- Mechanisms
- # awards / investigator
- Large programs
- Acceptance of large grants
- > 1M reviews
- Participation in FOAs

Goal: Funding the Best Science

NICHD: R01 Payline & Success Rates